



MIGRATION ADVISORY COMMITTEE

# Review of the Shortage Occupation List: 2020



September 2020

Migration Advisory Committee

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**Review of the Shortage Occupation List, 2020**  
**Migration Advisory Committee**  
**September 2020**

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# Executive Summary

## Background to this review of the Shortage Occupation List

On 17 March 2020 the Home Secretary commissioned the Migration Advisory Committee (MAC) to undertake a review of the composition of the Shortage Occupation List (SOL), with a focus on those occupations skilled to at least Regulated Qualifications Framework (RQF) level 3 (RQF3 broadly, A-levels) and equivalents in the Devolved Nations<sup>1</sup>.

It is important to note that the evidence gathering and report writing for this commission have been conducted against the backdrop of the COVID-19 pandemic, with the UK lockdown starting around a week after the commission was received. This period has been characterised, alongside a global public health emergency, by an unprecedented series of economic events, such as large declines in GDP and business confidence, widespread use of furlough arrangements, a rapid move to online shopping and corresponding use of delivery services, the need for key workers and a large increase in the number of employees working remotely. All these events have, naturally, made it harder for many employers to engage with us and for them to be able to realistically understand their current, and future, need for workers (both domestic and migrant) at all skill levels. That has influenced the number and nature of responses we received to our Call for Evidence. We are hugely grateful to everyone who has taken the time to give us information. We must also, however, note the uncertainty these events have introduced to our analysis. We include recommendations in this report on the frequency of future SOL reviews that will be particularly valuable given this current uncertainty. It has also made us relatively more willing to recommend some occupations for inclusion on the SOL; not necessarily because the data tells us about a rapid change in their circumstances, but in some cases because it is 'sensible' to do so. That is something we would expect to consider again during subsequent SOL reviews.

## The new migration system, salary thresholds and the impact of the SOL

Once the UK has completed its transition period, having already left the EU, a points-based Skilled Worker route will be introduced as part of the new immigration system, from 1 January 2021. This route will include an element of tradeable points, where any occupation on the SOL will be allocated 20 tradeable points; this effectively reduces the relevant salary thresholds by 20 per cent<sup>2</sup>. This reduction is subject to a lower salary limit of £20,480, not being an occupation subject to national pay scales

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<sup>1</sup> <https://www.gov.uk/what-different-qualification-levels-mean/list-of-qualification-levels>

<sup>2</sup> <https://www.gov.uk/government/publications/the-uks-points-based-immigration-system-policy-statement/the-uks-points-based-immigration-system-policy-statement>

and to no other reduction in salary thresholds as a result of having a relevant PhD or being a new entrant.

Salary thresholds in the new immigration system are based on the MAC's recommendations from our January 2020 report *A Points-Based System and Salary Thresholds for Immigration*. This means the salary thresholds will be set at the higher of either:

- 1 a general threshold of £25,600, which is the 25th percentile of the full-time pay distribution for all occupations which are eligible for the route, or
- 2 the 25th percentile of the relevant occupational pay distribution, calculated from ASHE data.

Occupations that are subject to national pay scales (e.g. nurses, teachers) must instead pay on those scales, but are not subject to either of the above thresholds. In addition to this, new entrants to the labour market have a lower salary threshold, which the Government's February 2020 policy statement said can be as low as £20,480 for some occupations.

This 20 per cent reduction in salary thresholds fundamentally alters the nature of the SOL. The main benefits to an occupation from being on the SOL used to be lower visa fees, exemption from the cap on skilled worker immigration, exemption from the settlement threshold and exemption from the Resident Labour Market Test (RLMT) - the requirement to advertise domestically before recruiting a migrant - which made it faster to fill vacancies. In the new system the RLMT will be removed and the cap suspended, so the key benefit to being on the SOL becomes lower salary thresholds.

We previously said, in our January 2020 report, that we do “...*not support lower salary thresholds for occupations on the SOL: there should be upward pressure on wages in jobs in shortage...*”. That having been said, it is our view that there may be more of a case for reductions in salary thresholds when the general threshold is the binding constraint, and binds at a high percentile of the occupational distribution; in these cases, a lower salary threshold may mean it is possible for employers to recruit at a lower wage rate within that occupation. For those occupations where the occupational salary threshold is the binding constraint, we remain concerned that further reductions from the 25<sup>th</sup> percentile reduces pressure for pay to increase and may, instead, result in downward pressure on wages; but we have made our recommendations given the Government's announced policy in February 2020.

## Occupational skill levels and the SOL methodology

The SOL shows which occupations, amongst those eligible for the Skilled Worker route, are in 'shortage' i.e. where employers find it problematic to secure adequate numbers of workers with the required skills to fill their vacancies **and** where we judge

that migration is a sensible response to that shortage. These occupations are then subject to different, more favourable, migration arrangements, enabling employers to access a wider pool of suitable workers, more quickly.

An occupation's skill level is based on the length of time it would take to train a new entrant to become fully competent in the performance of the tasks associated with a job. In its report *SOC 2010 volume 1: structure and descriptions of unit groups*, the Office for National Statistics (ONS) describes its skill level measure as follows:

*“Skill level is defined with respect to the duration of training and/or work experience recognised in the field of employment concerned as being normally required in order to perform the activities related to a job in a competent and efficient manner... Skill levels are approximated by the length of time deemed necessary for a person to become fully competent in the performance of the tasks associated with a job. This, in turn, is a function of the time taken to gain necessary formal qualifications or the required amount of work-based training. Apart from formal training and qualifications, some tasks require varying types of experience, possibly in other tasks, for competence to be acquired.”*

It is important to remember, throughout this report, that skill levels refer to the occupation rather than the person employed in that occupation, and they also do not represent a judgement of the societal, or economic, value of that occupation.

The MAC SOL methodology, first described in 2008 and revisited and revised over the last 12 years, uses three broad criteria to decide which occupations should go onto the SOL. It asks whether:

- 1 the occupation is skilled at the required level set by the Government – this is determined by using a combination of national datasets and evidence from stakeholders
- 2 the occupation is in shortage – this is based on nine indicators, from a range of datasets, which look at wages, vacancies and employment, combined with evidence from stakeholders
- 3 it is sensible to fill this shortage with migrant workers – this considers whether putting the job on the SOL is likely to be the most effective and appropriate response to shortage. Evidence from stakeholders contributes to this decision.

Further details about the methodology used are given in Chapter 2.

## **Evidence gathering and research to support this SOL review**

Alongside our analysis of indicators of shortage, we carried out a Call for Evidence (CfE) to ask employers, representative organisations, government departments and

others structured questions about labour market shortages and potential responses. This was done using an online questionnaire; this allowed us to analyse the information in a structured way and carry out quantitative analysis of the responses and reported labour market shortages.

The CfE was launched on 13 May 2020, and was open for a period of six weeks, closing on 24 July 2020. Normally we would prefer to keep the CfE open for longer, but the Government's deadline of September for our recommendations did not allow us to do this. As we noted earlier, the number and nature of responses to the CfE have clearly, and understandably, been impacted by COVID-19. In the six weeks the CfE was open 200 respondents submitted answers to the questionnaires. A further 212 started the questionnaire but did not get to the final page and formally submit. We received further evidence from 63 organisations who provided their response directly to the MAC secretariat. A further 101 responses were made that indicated that they had limited, or no, ability to respond at this time. The only information we got from these respondents was an email address; this will allow us to follow up later, when circumstances are more normal. By way of comparison, for our 2019 SOL review the CfE questionnaire was open for over nine weeks. In that time, we received 558 unique responses via the online questionnaire and a further 15 organisations provided evidence through other means.

The CfE gave us information about how organisations recruited, what they felt was important when trying to fill job vacancies and some thoughts on what 'shortage' meant to them. When asked about their organisation's approach to recruitment, the most common response was that they "*prefer to wait for someone who has most of the skills needed, even if that means leaving a position unfilled for a while*". The next most common response was they were "*willing to compromise on some of the skills needed in order to fill a vacancy sooner*". Responses should be viewed in the context of how employers approach training and investment in staff; there is evidence of a preference in the UK for employers to buy in labour rather than train individuals within their own organisations. Respondents also told us they tended to agree with statements around having to look outside the UK to find people with the skills and, to a lesser extent, qualifications they need. Whilst respondents reported using a range of techniques to fill vacancies, recruiting non-UK nationals was both the most commonly-stated solution to overcoming vacancies, and overwhelmingly considered to be the most effective.

The CfE also presented an opportunity for employers to voice concerns about occupations ineligible for the SOL because they do not meet the Skilled Worker route requirements of having RQF3+ qualifications. We review this evidence in Chapter 6, but remain particularly concerned about the social care sector. The MAC has argued for some years now that funding social care to a level that enables higher wages to be paid, and consequently makes jobs more attractive to the domestic workforce, is the right way to address the workforce issues in the sector, rather than relying on

migrant workers to fill the gaps. The risks of this funding increase not happening in a timely manner are stark. If that does not occur, or occurs with substantial delay, we would expect the end of freedom of movement to increase the pressure on the social care sector, something that would be particularly difficult to understand at a time when so many care occupations are central to the COVID-19 pandemic frontline response.

In addition, we engaged directly with a wide range of stakeholders, from throughout the United Kingdom, at 17 virtual events. Attendances varied across these events, from 15 to 270 employers or their representatives. These engagement events helped us gather invaluable insights: including current uncertainties from the pandemic, limited understanding of how the new immigration system would operate, and the importance of key workers, who may often not be in occupations that are eligible for the Skilled Worker route. We are grateful to everyone who participated in these events and to those employers, or representative bodies, who hosted events for us.

We also commissioned a literature review on employer decision-making about how to fill skill shortages, which has been undertaken for the MAC by Professor Anne Green of the City Region Economic and Development Institute (City REDI) at the University of Birmingham and Dr David Owen at the Institute of Employment Research (IER) at Warwick University. The full literature review will be published separately by the MAC shortly, but we have used the findings to help inform our decision making<sup>3</sup>. The report finds employers are more likely to recruit labour from abroad if they are multi-national enterprises with an international business strategy and an international workforce, as their business structure requires personnel to operate across establishments in a range of countries. Employers' recruitment is also driven by labour market conditions, such as high demand for skilled labour and low supply, that may lead employers to recruit from abroad. For businesses operating in competitive product markets it may be harder, or impossible, to raise wages and therefore hiring workers from abroad might be an attractive strategy.

## **Recommendations for which occupations should be included on the SOL in the UK and Devolved Nations**

For the purposes of this report, and consistent with the broad approach underlying the new Skilled Worker route, we divided occupations into three broad groups:

- 1 RQF6+ occupations – that were already eligible for the SOL and discussed in depth in the MAC's 2019 review

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<sup>3</sup> Green, Owen et al, Employer decision-making around skill shortages, employee shortages and migration: Literature Review (forthcoming)

- 2 RQF3-5 occupations – that have become newly eligible for the SOL due to the changes introduced for the new Skilled Worker route
- 3 RQF1-2 occupations – that remain ineligible for the SOL, as they are not part of the Skilled Worker route

RQF6+ occupations were last reviewed for the SOL in 2019. Given the pressures on employers as a result of COVID-19, the MAC decided not to consider any RQF6+ occupations for removal from the SOL in this review, and we communicated this decision to stakeholders in the CfE. However, we considered any new evidence provided to us during the stakeholder engagement and CfE for any RQF6+ roles, to determine whether there is now a stronger case for inclusion. We received evidence referencing 45 unique occupation codes and, after an initial triage process, undertook a full review of 14 occupations. Amongst these we have recommended inclusion of three new occupations (SOC 1181 health services and public health managers and directors, SOC 2213 pharmacists, SOC 2221 physiotherapists) on the UK-wide SOL, one additional inclusion of a specific job title on the UK-wide SOL (2314 secondary education and teaching professionals – modern foreign language teachers only) and one occupation to be included on the Wales-only SOL (SOC 2219 health professionals n.e.c.). Chapter 7 provides more detail.

RQF3-5 occupations will become eligible for the SOL under the new Skilled Worker route. This report considers which, of the 151 occupations at this skill level, should now be included on the SOL. We have recommended around 20 entire occupations, or job titles within them, at this skill level for inclusion on the UK-wide SOL, with some further recommendations for the Devolved Nations' SOLs (see below). Examples of these include: nursing auxiliaries and assistants; residential, day and domiciliary care managers and proprietors; senior care workers; butchers; and bricklayers and masons. Chapter 6 provides more detail.

Occupations below RQF3, which are discussed in Chapter 5, have never been eligible for the current Tier 2 (General) route and will not be eligible for the new Skilled Worker route. Given the shorter training period involved (compared to RQF3-5 and RQF6+) in these occupations, the MAC thinks there is a less strong argument that immigration would be an appropriate response to shortages in these occupations. However, we received around 40 stakeholder responses (the range of occupations covered was less than half that, as there were multiple responses for some occupations) to the CfE suggesting certain occupations, or job titles within them, should be 'upgraded' to RQF3, or above. We have considered all these responses and concluded that most did not make a sufficiently compelling case; however, we have recommended reclassifying two job titles within SOC code 9119 (fishing and other elementary agricultural occupations not elsewhere classified) – vent chick sexers and deckhands on large fishing vessels (9 metres and above) – to RQF3, making them eligible (if they have at least three years full-time experience in using



their skills) for the Skilled Worker route. We have then recommended including one – deckhands on large fishing vessels (9 metres and above) – on the SOL.

All occupations are eligible for inclusion on the UK-wide SOL, but also on SOLs specific to Northern Ireland, Scotland and Wales. We considered whether any occupation not suitable for inclusion on the UK-wide SOL should be included in one of the Devolved Nations' SOLs and, for the first time, we have included occupations on each of these. We have recommended three new occupations for Scotland in addition to those already on the list, one occupation for Wales and four occupations for Northern Ireland to be included on their SOLs, either in their entirety, or in part (i.e. specific job titles); examples include health professionals n.e.c., housing officers, and childminders and related occupations. This recognises that there are differences across the nations of the UK in how shortages impact the labour market and reflects the evidence we received from our stakeholders.

As a result of this there are around 70 entire occupations, or job titles within them, that we have now recommended for inclusion on the SOL, either at a UK-wide or Devolved Nation level (including those we had previously recommended). These cover around 14 per cent of total employment, or 21 per cent of eligible RQF3+ employment; an expansion in the proportion of total employment covered (from around nine per cent) since we last reviewed the SOL in 2019. That expansion is, in part, inevitable given the wider range of occupations (RQF3+ as opposed to RQF6+) now eligible, but it still represents a considerable widening of the scope of the SOL and the Skilled Worker route.

## **The future of the SOL and timings for subsequent reviews**

We also considered what the optimal approach should be to future reviews of the SOL as, in recent years, these have become less systematic and more reactive as a result of fewer such commissions to the MAC from Home Office. We also looked at international best practice to see what lessons we could learn; Chapter 8 has more details.

There is a balance to be struck: whilst the SOL needs to be updated to keep it relevant and timely, a full SOL review imposes significant demands on employers and their representatives to engage and respond, it uses most of the relatively limited resource in the MAC secretariat for its entire duration, and much of the data we use to construct our nine shortage indicators are only updated annually<sup>4</sup> (and, even at this frequency, there is often limited change in what those data tell us). Therefore, we do not think there is much value in a SOL update more frequently than annually – new indicators would not be available, and the process burden would be too large. International

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<sup>4</sup> The Annual Survey of Hours and Earnings (ASHE), Annual Population Survey (APS) and the three-year APS are updated annually. The Employer Skills Survey (ESS) is roughly every two years, though with some planned changes to coverage and frequency. Burning Glass data are effectively real time.

evidence suggests an annual update is broadly standard, and if this is scheduled at a regular point in the year employers can plan their input accordingly; indeed, some countries use the initial employer engagement to narrow the scope and suggest where to focus attention in subsequent analysis.

Given the relatively static nature of the SOL (occupations, for example nurses, are frequently on it for many years) we also considered whether it was necessary to conduct a full review annually. We instead recommend a combination of minor and major reviews. A minor review should take place annually, with two main aims: firstly, providing an opportunity for employers and their representatives to submit new evidence that may provide a compelling case to be included on the SOL and secondly, providing an opportunity to flag occupations that may no longer need to be on the SOL. In the latter case, the MAC would provide 'notice' to the occupation to highlight that, at the next review, compelling evidence would be required to demonstrate their place on the SOL, otherwise they may be removed.

A major review should take place every three years. At each major review, all occupations would be effectively removed and reconsidered. We would hold a full CfE and stakeholder engagement process, and all eligible occupations would be invited to submit evidence to justify a place on the SOL. We believe this provides the certainty employers need, whilst also offering a degree of timeliness and responsiveness that the SOL has lacked in recent years.

In considering the timing of the next SOL review, there are several factors to consider: the longer-term impacts of COVID-19, the introduction of the new Standard Occupational Classification groupings (SOC 2020), the need to review the SOL methodology to ensure it remains appropriate in a changing labour market, and the introduction of the new immigration system in 2021. The MAC's view is that there should not be another major review of the SOL until the labour market begins to return to normality after the impacts of COVID-19; this will avoid uncertainty for employers during an unprecedented period of disruption. It will take varying periods of time, depending on the dataset, for the changes to SOC groupings to be fully reflected in our indicators; given this could take until 2024 for the final dataset, we do not feel that this offers a compelling case for delay, though the next review is likely (as this review does) to use SOC 2010 groupings. We believe the new immigration system represents such a large change that there should not be a major review of the SOL until this has been in place for at least 12 months and data shows its impacts.

This leads us to recommend that the next SOL review should be a minor review, to be completed in Autumn 2021 using existing SOC 2010 codes; this will provide an opportunity for occupations to be added to the SOL but does not allow for occupations to be removed without prior notice. Completing a minor review in 2021 ensures that occupations are not penalised as a result of (hopefully) temporary changes resulting from COVID-19 or the early stages of the new immigration system. We would expect the next major SOL review to then take place in Autumn 2022, using the SOC 2020

classifications; this will hopefully enable enough time for evaluation of the new immigration system to take place, and for the labour market to recover following COVID-19. The regular pattern of major reviews occurring every three years, with minor reviews each year in between, would then commence following the Autumn 2022 major review.

## **Members of the MAC**

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## Introduction

### MAC Commission to Review the Shortage Occupation List

- 1 On 17 March 2020 the Home Secretary commissioned the Migration Advisory Committee (MAC) to undertake a review of the composition of the Shortage Occupation List (SOL)<sup>5</sup>, with a focus on those occupations skilled at RQF3 and above<sup>6</sup> (Level 3 of the Regulated Qualification Framework and the equivalent in the Devolved Nations), reporting by September 2020. The Commissioning Letter from the Home Secretary is at Annex A.
- 2 This commission is intended to help with the design of the UK's future immigration system having already left the EU and after the end of the transition period. Currently, the earliest any such system could be introduced is January 2021.
- 3 The plans outlined in February 2020 by the Home Secretary for the new points-based immigration system introduced an element of tradeable points to the Skilled Worker route. An occupation on the SOL will be allocated 20 tradeable points<sup>7</sup>, which is equivalent to reducing the relevant salary thresholds by 20 per cent<sup>8</sup>. This fundamentally alters the nature of the SOL and, given the Government have accepted previous MAC recommendations – that the new migration system will apply to all nationalities, will cover occupations with skill levels at RQF3 and above, and will have salary thresholds set accordingly – it is sensible to review the SOL prior to the new system being introduced.

### What is the SOL and how will this change in the new immigration system?

#### Introduction

- 4 The SOL assesses which occupations are in shortage, i.e. where employers find it problematic to secure adequate numbers of workers<sup>9</sup> with the required skills to fill their vacancies **and** where we judge that migration is a sensible response to that shortage. These occupations are then subject to different, more favourable, migration

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<sup>5</sup>

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/873532/2020-03\\_Letter\\_from\\_the\\_Home\\_Secretary.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/873532/2020-03_Letter_from_the_Home_Secretary.pdf)

<sup>6</sup> <https://www.gov.uk/what-different-qualification-levels-mean/list-of-qualification-levels>

<sup>7</sup> <https://www.gov.uk/government/publications/the-uks-points-based-immigration-system-policy-statement/the-uks-points-based-immigration-system-policy-statement>

<sup>8</sup> Subject to a lower salary limit, not being an occupation subject to national pay scales and to no other reduction in salary thresholds as a result of having a relevant PhD or being a new entrant.

<sup>9</sup> Generally domestic workers or, prior to EU Exit, those workers who are free to work in the UK without additional work permits, sponsorship etc.

arrangements, enabling employers to access a wider pool of suitable workers, more quickly.

- 5 The MAC SOL methodology, first described in 2008<sup>10</sup>, uses three criteria to decide which **occupations** should go onto the SOL. It asks whether:
  - the occupation is skilled at the required level set by the Government
  - the occupation is in shortage
  - it is sensible to fill this shortage with migrant workers.
- 6 The **skilled** criterion places occupations into skill groups based on a combination of national datasets and evidence from stakeholders.
- 7 To decide whether an occupation is in **shortage** we use nine indicators which look at wages, vacancies and employment; Chapter 2 provides more detail. The shortage indicators have been reviewed several times, most recently in 2017<sup>11</sup>. These indicators are combined with evidence from stakeholders to arrive at a decision about whether an occupation is in shortage.
- 8 The **sensible** criterion then considers whether putting the job on the SOL, and hence using immigration as a remedy to that shortage, is likely to be the most effective and appropriate response to shortage. Evidence from stakeholders contributes to this decision.

## The current (pre-EU Exit) SOL arrangements

- 9 To be eligible for the SOL, a job title currently must be eligible for the Tier 2 (General) route of the Points-Based System (PBS), which only applies to non-EEA citizens. Jobs on the SOL must be skilled to the required standard, currently RQF6 and above (or the equivalent in the Devolved Nations) and be paid at a salary level indicated in the Immigration Rules Codes of Practice Appendix J<sup>12</sup>.
- 10 Jobs on the SOL currently have certain advantages in using Tier 2 (General) visas:
  - there is no need to pass the resident labour market test (RLMT), i.e. to demonstrate that an attempt has been made to recruit domestically. Not having to undertake this is potentially a saving for the employer in terms of vacancy advertising and recruitment time;

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<sup>10</sup> [https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment\\_data/file/34\\_3325/Migration-shortage.pdf](https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment_data/file/34_3325/Migration-shortage.pdf)

<sup>11</sup> [https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment\\_data/file/58\\_6110/2017\\_01\\_26\\_MAC\\_report\\_Assessing\\_Labour\\_Market\\_Shortages.pdf](https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment_data/file/58_6110/2017_01_26_MAC_report_Assessing_Labour_Market_Shortages.pdf)

<sup>12</sup> <https://www.gov.uk/guidance/immigration-rules/immigration-rules-appendix-j-codes-of-practice-for-skilled-work>

- roles on the SOL are prioritised if the Tier 2 (General) limit of 20,700 visas is reached;
- there is no requirement to meet the £35,800 salary threshold required for settlement after five years. This requirement is waived if the job title has been on the SOL at any point in those five years;
- applicants (and their families) face lower visa application fees if their occupation is on the SOL.

11 Of these current advantages, the priority when the cap is hit (as the migration limit for Tier 2 certificate of sponsorships is commonly known) has arguably been the most important benefit of being on the SOL. However, the cap has only been reached on two separate periods: once in 2015 for two months, and again from December 2017 until July 2018. The previous pressure on the Tier 2 (General) route was, in part, due to increased recruitment for overseas health professionals, but in June 2018<sup>13</sup> the then Home Secretary took the decision to remove doctors and nurses from the cap on a temporary basis, though given there is no intention to reverse this decision it has effectively become permanent.

12 Jobs on the SOL must meet the same salary thresholds as all other occupations eligible for Tier 2 (General). These salary thresholds are laid out in Appendix J of the Immigration Rules. For experienced workers, the current salary threshold is £30,000 or the 25th percentile of the relevant occupational pay distribution, whichever is higher. New entrants have a lower salary threshold which can be as low as £20,800 for some occupations, and the salary thresholds for workers in health and education are based on the national pay scales.

13 The SOL also has another, less widely known, application within the UK. Asylum seekers, who are generally not allowed to work in the UK whilst their claim is being processed, can apply for permission to work in occupations which are included on the SOL after 12 months in the UK (within certain parameters)<sup>14</sup>. The MAC previously tried to obtain data on the extent to which the SOL is being used for these purposes, but the Home Office did not keep such records.

## The new (post EU Exit) SOL arrangements

14 To be eligible for the SOL after EU Exit, a job title must be eligible for the Skilled Worker route of the PBS, which will apply to all workers (excluding domestic workers) regardless of nationality. Jobs on the SOL must be skilled to RQF3 and above (or the equivalent in the Devolved Nations) and be paid at a salary level in line with the MAC recommendations made in our January 2020 report *A Points-Based System and*

<sup>13</sup> <https://www.gov.uk/government/news/doctors-and-nurses-to-be-taken-out-of-tier-2-visa-cap>

<sup>14</sup> <https://www.gov.uk/guidance/immigration-rules/immigration-rules-part-11b>

*Salary Thresholds for Immigration*<sup>15</sup>. This means the salary thresholds will be set at a general threshold of £25,600<sup>16</sup> or the 25th percentile of the relevant occupational pay distribution, whichever is higher. New entrants<sup>17</sup> have a lower salary threshold, which the Government's February 2020 policy statement said can be as low as £20,480<sup>18</sup> for some occupations. Salary thresholds for workers in health and education are instead based on the national pay scales.

- 15 The RLMT will be removed and the Tier 2 (General) cap will be suspended in the future system, and the Government's policy statement details that SOL occupations will now be subject to a 20 per cent lower salary threshold. The lower threshold does not apply to cases already qualifying for lower thresholds as a result of having a STEM PhD or as a new entrant, nor to those occupations which have a salary threshold based on national pay scales.

## Our approach to this commission

- 16 The MAC has combined quantitative evidence on a range of indicators with quantitative and qualitative evidence from stakeholders to decide whether an occupation is in shortage and whether it is sensible to fill this shortage with migrant workers. Our analysis of key metrics is based on nine top-down indicators, which combined give an indication of labour market shortage. Chapter 2 explains this in further detail.
- 17 Alongside our analysis of the top-down indicators, we carried out a Call for Evidence (CfE) to ask questions about labour market shortages. This was done using an online questionnaire (see Annex D and Annex E) to gather the responses to the CfE which allowed us to analyse the information in a structured way.
- 18 The CfE was launched on 13 May. It was open for a period of six weeks, closing on 24 July 2020. In this time 200 respondents submitted their questionnaires. A further 212 started the questionnaire but did not get to the final page and formally submit. We received further evidence from 63 organisations who provided their response directly to the MAC secretariat via email.

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<sup>15</sup>

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/873155/PBS\\_and\\_Salary\\_Thresholds\\_Report\\_MAC\\_word\\_FINAL.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/873155/PBS_and_Salary_Thresholds_Report_MAC_word_FINAL.pdf)

<sup>16</sup> As defined by the 25th percentile of the relevant general pay distribution, where 'relevant' is the range of occupations skilled at RQF3 and above. The value of the threshold will be updated annually based on ASHE data

<sup>17</sup> The MAC recommended, and the Government accepted, that new entrants should be defined as those within five years of leaving full-time education, with any time spent on the new post-study work route counting towards the five years of new entrant threshold eligibility. New entrants should also include those who are working towards recognised professional qualifications and those who are moving directly into postdoctoral positions See paragraph 5.57 onwards in *A Points-Based System and Salary Thresholds for Immigration* MAC 2020.

<sup>18</sup> <https://www.gov.uk/government/publications/the-uks-points-based-immigration-system-policy-statement/the-uks-points-based-immigration-system-policy-statement>



- 19 We were acutely aware of the challenging context facing many organisations during the CfE period, which fell in the middle of the COVID-19 lockdown. We enabled stakeholders to respond in several ways dependent upon their circumstances. This ranged from registering their email to state that they would have responded but in the current context they were unable to do so, with light touch routes through the questionnaire or to completion of the entire question set. No question was compulsory, and we enabled the skipping of questions and sections to ensure those with limited resources to engage could provide a light touch response. Despite this nuanced approach, levels of response were well down on the previous SOL CfE.
- 20 Aware that the CfE might draw fewer responses than would be expected outside of a public health emergency, we chose to incorporate a focus on RQF3-5 occupational groups in a separate literature review being commissioned to collate and interpret the academic literature on employers and skill shortage. Some of the findings relevant to this commission have been interwoven in the later chapters. The literature review itself, undertaken by Prof. Anne Green at City-REDI, University of Birmingham, and Dr David Owen at the Institute of Employment Research at Warwick University will be published as a standalone report shortly<sup>19</sup>.
- 21 Prior to the launch of the CfE, we also engaged directly with stakeholders at 17 virtual events (see Annex C for a list of events held) with participants from around the United Kingdom. During these events we were able to inform stakeholders about the flexibility of this CfE and gather invaluable insights.

## Labour market context

### Summary

- 22 Prior to the COVID-19 pandemic, the UK labour market was the tightest it has been for some time. The employment rate was the highest on record at 76.6 per cent<sup>20</sup>, having grown steadily since the 2008 recession. Vacancies were high<sup>21</sup> and the unemployment rate was low at 3.9 per cent.
- 23 The context has changed enormously and continues to evolve rapidly. On 17 March we were commissioned by the Home Secretary to undertake this review of the shortage occupation list. On 23 March the UK entered lockdown due to COVID-19, with significant restrictions on movement and the operation of non-essential businesses. There has been a relaxation of certain restrictions in stages since mid-

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<sup>19</sup> Green, Owen et al, Employer decision-making around skill shortages, employee shortages and migration: Literature Review (forthcoming)

<sup>20</sup><https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/may2020>

<sup>21</sup> There were around 800,000 vacancies December 2019-February 2020

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/april2020>

May, which have varied across the countries of the UK, and local lockdowns have been implemented in some areas.

- 24 Since March, there has been a large drop in vacancies and total hours worked are at a record low since the consistent series began. The number of employees on payroll in the UK decreased by around 795,000 between March and August 2020<sup>22</sup>. Despite this, unemployment has not yet increased significantly.
- 25 The Coronavirus Job Retention Scheme was announced in March and has subsequently been extended until the end of October 2020<sup>23</sup>. The Government has announced a six-month Job Support Scheme from 1 November 2020<sup>24</sup>. The Self-Employment Income Support Scheme was also announced in March, with a second grant announced in May and a further extension announced until April 2021<sup>25</sup>.
- 26 With the wind down of the furlough scheme and continued low vacancies, we are likely to see an increase in unemployment, particularly from some sectors, the extent of which is uncertain. HM Treasury (HMT) publishes a monthly comparison of independent forecasts for the UK economy. The most recent data published on 16 September<sup>26</sup>, show that the average of the forecasts expect the unemployment rate in the fourth quarter of 2020 to be 8.3 per cent, 4.2 percentage points higher than currently. However, the range of estimates is between 6.2 per cent and 12.7 per cent, highlighting the extent of uncertainty at this stage.
- 27 Figure 1 shows the Office for Budget Responsibility (OBR) expected scenarios for unemployment in the UK as a result of COVID-19. Before the pandemic, it was forecast that unemployment would stay broadly constant at four per cent over the next four years. The OBR central scenario now estimates unemployment to peak at roughly 12 per cent as we move into 2021, before slowly declining. In the worst-case scenarios, by the time we move into 2025, unemployment will still be between one to two per cent higher than the forecast in March (pre COVID-19).

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<sup>22</sup><https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/september2020>

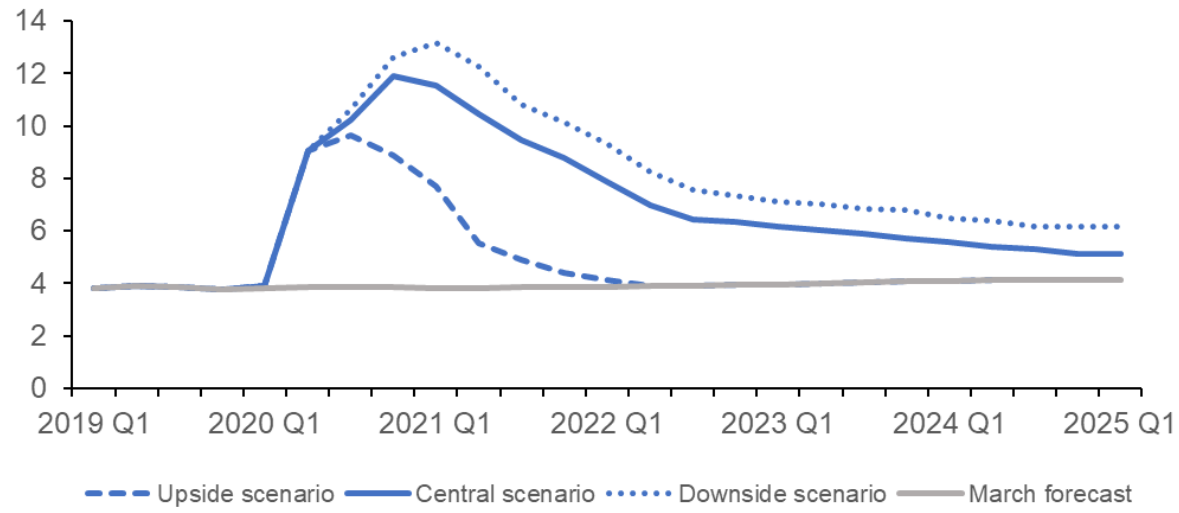
<sup>23</sup> <https://www.gov.uk/government/collections/coronavirus-job-retention-scheme>

<sup>24</sup> <https://www.gov.uk/government/publications/winter-economy-plan>

<sup>25</sup> <https://www.gov.uk/guidance/claim-a-grant-through-the-self-employment-income-support-scheme>

<sup>26</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/919323/Forecomp\\_September\\_2020.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/919323/Forecomp_September_2020.pdf)

**Figure 1: Unemployment rate (%): scenarios versus March forecast**



Source: ONS, OBR<sup>27</sup>

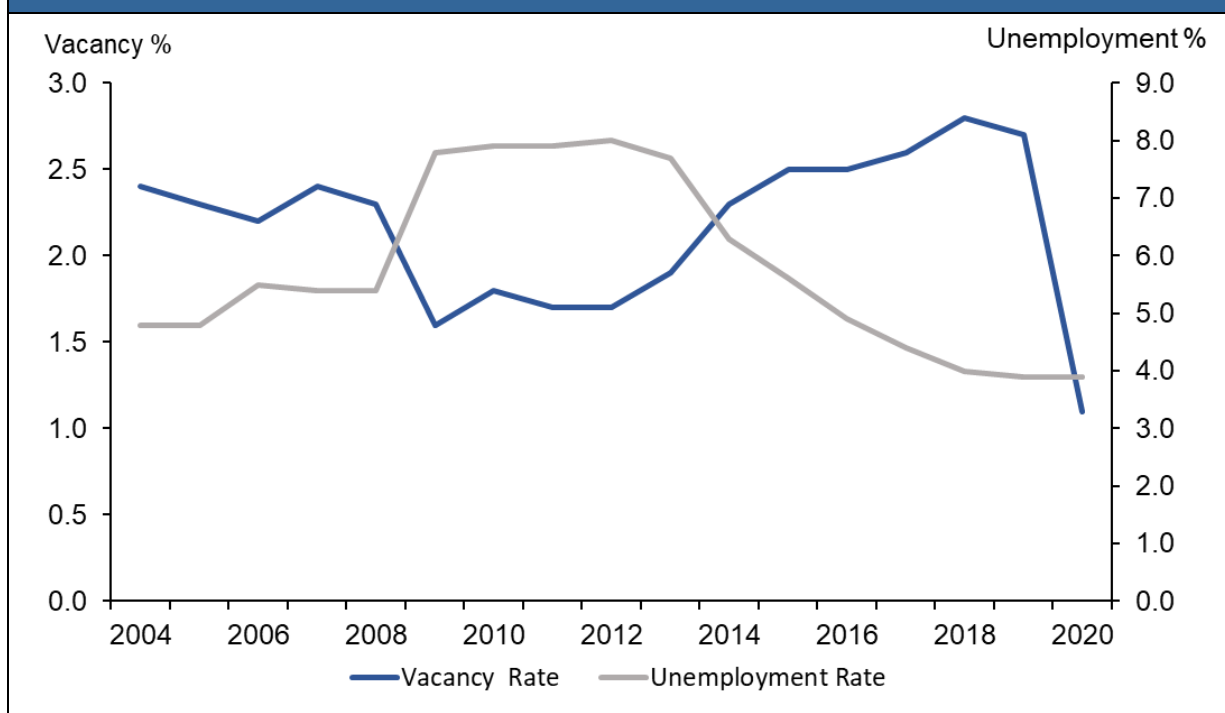
28 Given the evolving context, it is a very challenging time to undertake a review of the Shortage Occupation List (SOL). We have used additional measures of how occupations are affected by COVID-19, used stakeholder evidence on the potential impacts of COVID-19, made more use of real-time data and considered the impact of COVID-19 in our recommendations on the timing of the next SOL review.

### Labour market overview

29 Figure 2 shows the unemployment and vacancy rates in the UK over time. In recent years vacancy rates had been increasing as the unemployment rate was decreasing, creating an increasingly tight labour market. Vacancy rates have dropped dramatically due to the COVID-19 pandemic.

<sup>27</sup> <https://obr.uk/fsr/fiscal-sustainability-report-july-2020/>

Figure 2: Unemployment and vacancy rate over time (%)



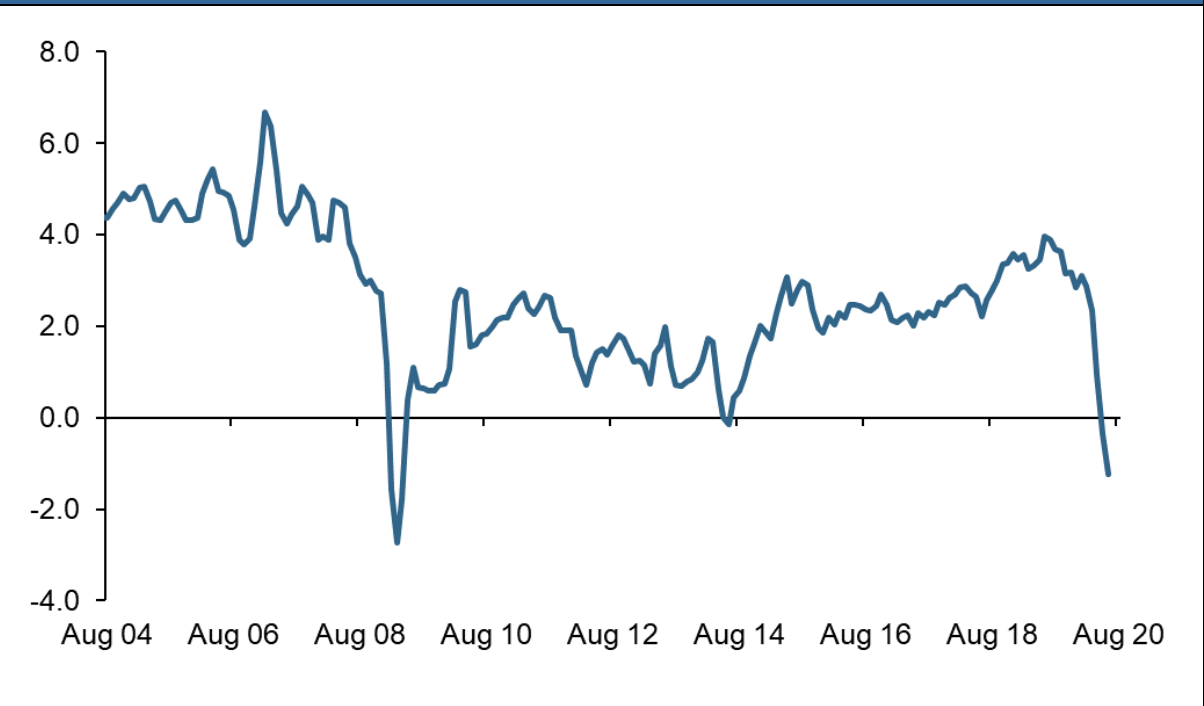
Source: ONS, Labour Force Survey and Vacancy Survey

30 Wage growth has been weak in recent years. Figure 3 shows the annual percentage change in average real weekly earnings since 2004. The low rate of growth since the Great Recession partly reflects weak productivity growth. Historically, low unemployment is linked to stronger wage growth, but this relationship seems more muted in recent years. In recent months, the UK has experienced negative wage growth. In the three months to July 2020 real weekly earnings for employees were 1.8 per cent lower than the same time the previous year<sup>28</sup> due to a reduction in weekly hours worked combined with the furlough scheme that only paid 80 per cent of an employee's salary. The rate of decline in pay growth slowed in July 2020<sup>29</sup> as employees started returning to their workplace and weekly hours worked started increasing once more. In the coming months, with the ending of the Coronavirus Job Retention Scheme, we are likely to see an increase in unemployment.

<sup>28</sup><https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/september2020#earnings-growth>

<sup>29</sup><https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/averageweeklyearningsingreatbritain/september2020>

**Figure 3: Average real weekly earnings percentage changes year on year, 3-month average (%)**



Source: ONS, Monthly Wages and Salaries Survey.

## COVID-19

- 31 Table 1 shows the total number of jobs that have been furloughed, by sector, and the percentage of employees in each sector that have been furloughed. The accommodation and food services sector of the economy has had the highest proportion of its employees furloughed with a take up rate of 77 per cent.

**Table 1: HMRC Coronavirus Job Retention Scheme data (March-July 2020)**

<b>Sector</b>	<b>Employments furloughed</b>	<b>Take-up rate</b>
Agriculture, forestry & fishing	36,600	20%
Mining, quarrying & utilities	14,800	28%
Manufacturing	1,021,500	42%
Energy Production	20,800	16%
Waste and Recycling	43,700	25%
Construction	769,300	60%
Wholesale and retail; repair of motor vehicles	1,906,100	42%
Transport & storage (inc postal)	424,100	32%
Accommodation & food services	1,693,600	77%
Information & communication	227,500	18%
Finance & insurance	76,800	7%
Property	157,800	37%
Professional, scientific & technical	632,900	29%
Business administration and support services	890,500	32%
Public administration & defence	20,400	2%
Education	341,700	10%
Health	423,200	10%
Arts, entertainment, recreation and other services	474,300	70%
Trade union, religious, political and repair	315,000	55%
Domestic employers	10,100	8%
Unknown and other	101,300	*
<b>Total</b>	<b>9,601,700</b>	<b>32%</b>

Source: Coronavirus Job Retention Scheme statistics, claims received up to 31 July 2020<sup>30</sup>

- 32 As shown in the vacancy data below, most of the sectors across the economy have seen a decrease in the number of listed vacancies. A small number of sectors have seen an increase in the number of vacancies since the start of lockdown (construction, agriculture, transport and public administration); however, the only sector that has seen an increase since August 2019 is public administration.

<sup>30</sup> <https://www.gov.uk/government/statistics/coronavirus-job-retention-scheme-statistics-august-2020>

33 The sectors of the economy that have had the biggest reduction in the number of vacancies compared to this point last year are mining, accommodation/food services and arts and entertainment, all with just below 60 per cent. This is also similar when looking at business turnover compared to this point last year, with accommodation/food services and arts and entertainment both being the two sectors that suffered the most due to COVID-19.

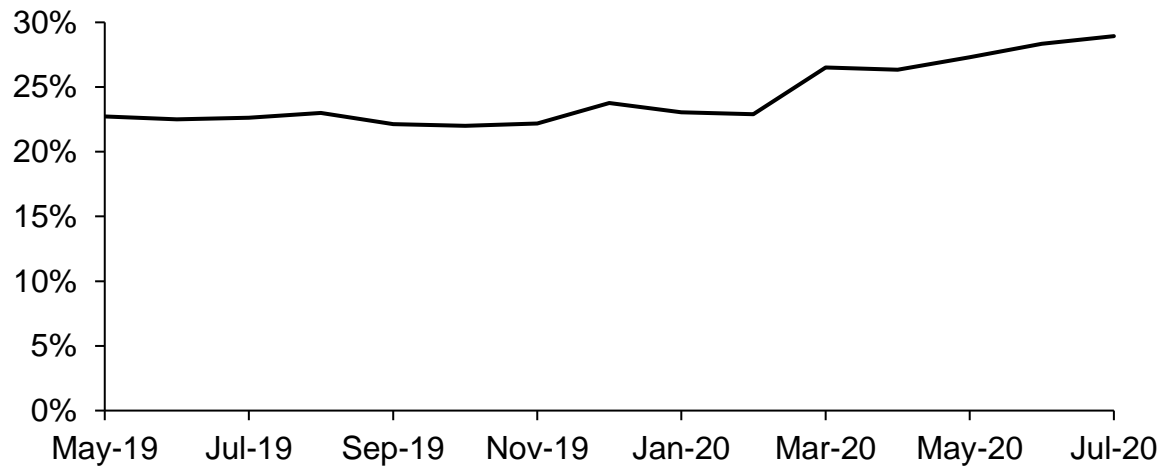
<b>Table 2: Percentage change in number of vacancies</b>		
<b>Sector</b>	<b>March to August 2020</b>	<b>August 2019 to August 2020</b>
Agriculture, forestry & fishing	7%	-20%
Mining, quarrying & utilities	-43%	-58%
Manufacturing	-20%	-31%
Energy Production	-2%	-40%
Waste and Recycling	-10%	-26%
Construction	5%	-31%
Wholesale and retail; repair of motor vehicles	-15%	-36%
Transport & storage (inc postal)	17%	-15%
Accommodation & food services	-26%	-56%
Information & communication	-19%	-33%
Finance & insurance	-27%	-29%
Property	-20%	-18%
Professional, scientific & technical	-24%	-29%
Business administration and support services	-26%	-44%
Public administration & defence	3%	3%
Education	-34%	-16%
Health	-4%	12%
Arts, entertainment, recreation and other services	-50%	-59%
Unknown and other	-21%	-35%
<b>Total</b>	<b>-19%</b>	<b>-25%</b>

Source: Burning Glass, 2019-20

34 Figure 4 is job search data from Indeed, which shows the share of people that have searched for online jobs whilst leaving the 'what' (job title) box blank, thus only searching by location. It shows an increase of about five percentage points between

March and April, as lockdown started in the UK. This indicates increased flexibility on the nature of the job that searchers are looking for, which is a result of the COVID-19 pandemic.

**Figure 4: Share of searches with 'What' box left blank (%)**



Source: Indeed, From Lockdown to Locked Out: Getting People Back to Work<sup>31</sup>

- 35 Business turnover has seen an overall decrease during the COVID-19 pandemic. An average of 60 per cent of businesses reported a decrease in turnover since the beginning of April.

<sup>31</sup> <https://www.hiringlab.org/uk/wp-content/uploads/sites/3/2020/08/IndeedUK-Lockdown-Report-1.pdf>



**Table 3: Percentage change of businesses turnover compared to this time last year**

Time period	Turnover						
	Decreased by up to 20%	Decreased between 20% and 50%	Decreased by more than 50%	Increased by up to 20%	Increased between 20% and 50%	Increased by more than 50%	Not been affected
06/04-19/04	14%	20%	23%	2%	1%	<1%	30%
20/04-03/05	14%	22%	20%	2%	1%	<1%	30%
04/05-17/05	14%	22%	26%	2%	1%	<1%	29%
18/05-31/05	19%	22%	24%	5%	2%	1%	22%
01/06-14/06	20%	22%	22%	5%	2%	1%	21%
15/06-28/06	20%	22%	16%	7%	3%	1%	25%
29/06-12/07	21%	22%	15%	6%	3%	1%	26%
13/07-26/07	21%	20%	12%	7%	3%	1%	30%

Source: ONS, Business impact of COVID-19 survey results. Table does not include “not sure” responses.

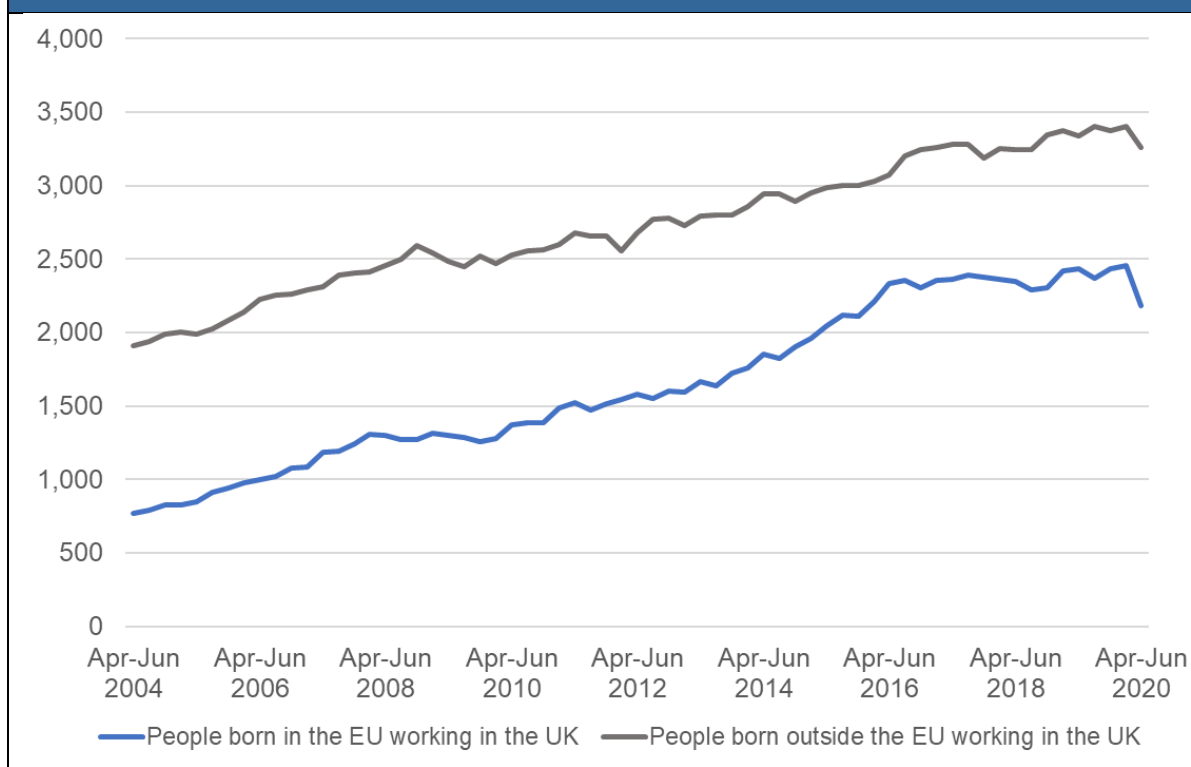
- 36 The accommodation and food service activities and arts, entertainment and recreation were the two worst affected sectors. On average 90 per cent of surveyed businesses in both sectors reported decreased turnover since the start of lockdown when comparing to this time last year. In comparison the information and communication sector of the economy was the least affected, with only 48 per cent of businesses surveyed reporting a decrease in turnover compared to this period last year.
- 37 The furlough scheme has resulted in the labour market behaving differently than in some previous recessions. Importantly, firms have thus far been able to postpone decisions about layoffs. The number of hours worked has fallen dramatically. However, one aspect of the labour market that has seen a notable change is the number of new hires being made. Hiring rates in the spring and summer had decreased to below the seasonal normal as firms tried to make do with existing staff<sup>32</sup>.

### Migrant Trends overview

- 38 The number of EU and non-EU born migrants in employment in the UK has increased over time (shown in Figure 5). From 2004 to 2020 the number of EU born in employment has increased by approximately 184 per cent, whilst those in employment born outside the EU have increased by approximately 71 per cent. In the latest data for April-June 2020, the numbers have dropped slightly.

<sup>32</sup> <http://stateofworkingbritain.blogspot.com/?m=0>

**Figure 5: The number of EU and non-EU born people working in the UK**



Source: ONS, Labour Force Survey

- 39 Due to the COVID-19 pandemic, many countries have been shutting borders, restricting travel and introducing various quarantine measures. This has reduced the number of EU and non-EU migrants coming to work in the UK in the short term. We have since seen more countries easing lockdown and border restrictions. However, the long-term effects are still uncertain.
- 40 The employment share of those born outside the EU has increased by around three percentage points since 2004. Over the same time period, the employment share of those born in the EU has also increased by approximately 4.5 percentage points. This highlights the increasing share of workers born overseas over this period. The population share of UK-born over the same time period has also fallen by more than five percentage points, with the share of EU born and non-EU born increasing by three and 2.5 percentage points respectively.

**Table 4: Change in employment and population share by country of birth**

	Employment share 2004 Q4 (%)	Employment share 2019 Q4 (%)	Population share 2004 (%)	Population share 2019 (%)
UK	90.2	82.4	91.1	85.6
EU	2.9	7.4	2.5	5.5
Non-EU	6.9	10.2	6.4	8.9

Source: ONS, Labour Force Survey

- 41 Table 5 shows the share of employment by sector and country of birth. The transport and communication sector and the distribution, hotels and restaurants sector have the lowest proportion of UK-born in employment. The manufacturing sector has the highest proportion of EU-born in employment. These sectors are therefore likely to have the most exposure to the new immigration system.

**Table 5: Share of employment by sector and country of birth**

	UK born (%)	EU born (%)	Non-EU born (%)
Agriculture, forestry and fishing	91.1	6.9	2.0
Energy and water	88.8	5.7	5.4
Manufacturing	81.9	11.0	7.1
Construction	85.4	8.9	5.7
Distribution, hotels and restaurants	79.5	9.1	11.4
Transport and communication	74.9	10.0	15.1
Banking and finance	81.0	7.7	11.3
Public admin, education and health	84.7	5.0	10.3
Other services	84.8	6.2	9.0
<b>Total</b>	<b>82.1</b>	<b>7.6</b>	<b>10.2</b>

Source: ONS, APS 2017-19

- 42 Table 6 focuses on sectors that have high rates of hiring. It shows the share of those in total employment who have been in continuous employment for 12 months or less by sector and the share of those new hires<sup>33</sup> by country of birth. Throughout the economy, around 15 per cent of employees have been employed in their current job for less than 12 months. Of those, around 80 per cent were UK-born with 10 per cent being EU born and 10 per cent non-EU born.

<sup>33</sup> New hires are defined as those in continuous employment for less than 12 months

**Table 6: Share of total employed who have been in continuous employment for 12 months or less (main job only) by sector and country of birth (16+ population, 2017-19 average)**

	12 months or less (%)	Share of new hires by country of birth		
		UK born (%)	EU born (%)	Non-EU born (%)
Agriculture, forestry and fishing	9.5	83.9	11.3	4.8
Energy and water	14.8	88.4	6.2	5.4
Manufacturing	14.6	76.5	14.2	9.3
Construction	14.7	81.9	10.4	7.6
Distribution, hotels and restaurants	23.6	77.3	11.7	11.2
Transport and communication	17.0	69.4	15.3	15.3
Banking and finance	16.8	76.1	10.3	13.6
Public admin, education and health	14.6	81.5	6.6	11.9
Other services	17.7	83.1	7.1	9.8
<b>All industries</b>	<b>15.9</b>	<b>79.3</b>	<b>10.3</b>	<b>9.9</b>

Source: ONS, APS 2017-19

- 43 The Distribution, hotels and restaurants sector has the highest proportion of those continuously employed for 12 months or less, which could be an indicator of a high staff turnover relative to other industries. Of these new hires, around 77 per cent are UK-born with around 12 per cent each being EU and non-EU born. Other sectors with a high proportion of new hires being born overseas include Transport and communication and Banking and finance.

## EU Settlement Scheme

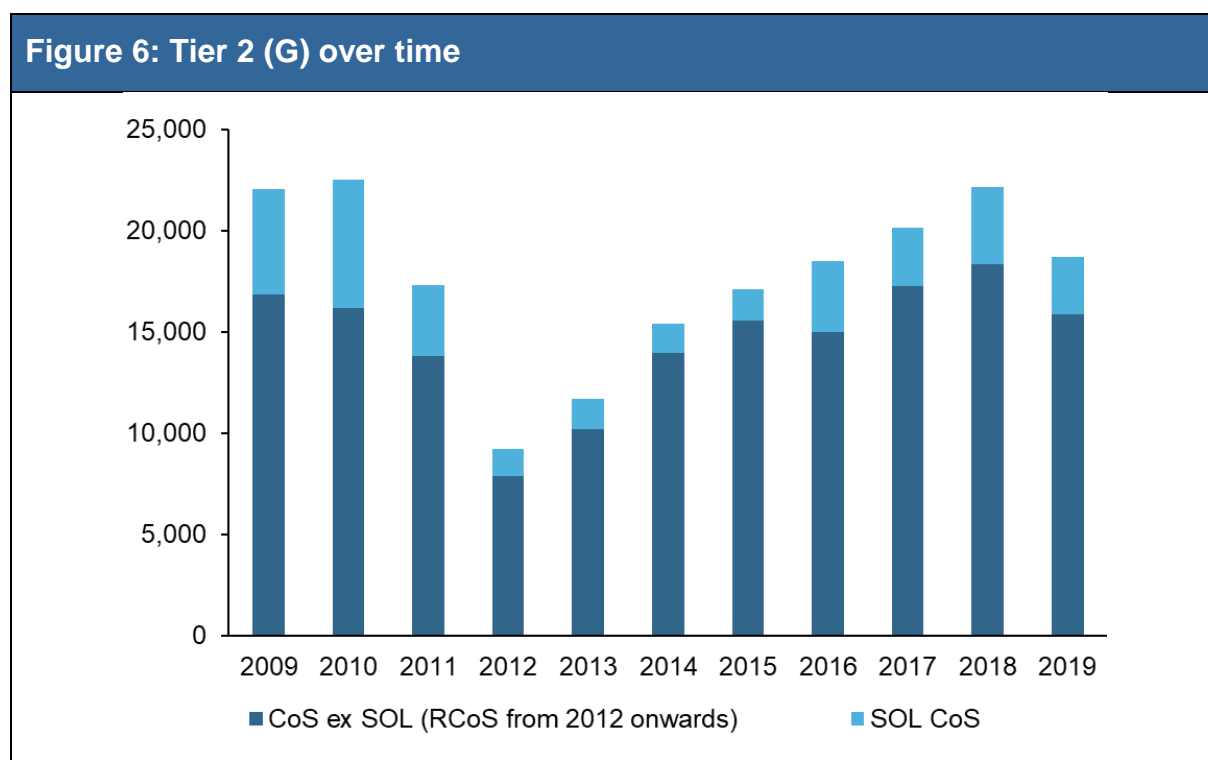
- 44 As the UK completes the transition period, having left the European Union, and the new immigration system is implemented, the number of EU settlement scheme applications has been rising. The scheme allows EU, EEA and Swiss citizens to apply to continue living in the UK after the deadline date of 30 June 2021.
- 45 As of 31 August 2020, there have been 3.71 million concluded applications to the EU settlement scheme<sup>34</sup>. Of these, 57 per cent were awarded settled status and 41 per cent awarded pre-settled status, with the rest being either rejected, withdrawn or

<sup>34</sup> <https://www.gov.uk/government/collections/eu-settlement-scheme-statistics>

invalid. The share of eligible EU citizens who have applied to the EU Settlement Scheme is not known.

## Use of Tier 2 (General)

- 46 Figure 6 shows the number of Restricted Certificates of Sponsorship (RCoS)<sup>35</sup> used since 2009, broken down by whether the job was on the Shortage Occupation List. The introduction of the skill restriction for jobs to be skilled at RQF6 and above in 2012 resulted in a decrease in the number of RCoS. Since then, the number increased from around 8,000 to 18,300 in 2018. In 2019 there was a fall of around 14 per cent compared to the previous year, with around 16,000 RCoS.
- 47 In the same year, there were around 3,000 RCoS used for occupations on the SOL. This is a decrease of around 25 per cent compared to 2018.
- 48 It is worth noting that between April and June of 2020 there were only 556 Tier 2 (General) visas issued due to COVID-19 and the restricted travel. This was down 93 per cent compared to the same period last year<sup>36</sup>.



Source: Home Office management information

- 49 The suspension of the cap for the PBS Skilled Worker route and the expansion of eligibility to RQF3-5 skilled occupations is likely to see an increase in the number of migrants from outside the EEA. This is due to the policy being less restrictive than

<sup>35</sup> RCoS is needed to enter under Tier 2 (General)

<sup>36</sup> <https://www.gov.uk/government/publications/immigration-statistics-year-ending-june-2020/why-do-people-come-to-the-uk-to-work--2>

the current Tier 2 (General) visa. However, with the end of freedom of movement for those born in the EU, numbers of EU migrants are likely to decrease as the new Skilled Worker route is more restrictive in comparison. We have previously commented on how difficult it is to forecast migration flows with any degree of accuracy.

## Skill Level

- 50 This report is focused predominantly on occupations skilled at RQF3-5. Looking at the share of total employment by skill level and sector, those in employment skilled to this level account for around 30 per cent of total employment. The sector with the highest proportion of those employed in RQF3-5 roles is Agriculture, forestry and fishing (63 per cent)<sup>37</sup>. In contrast, Distribution, hotels and restaurants is the only sector that has a majority employed in roles below RQF3.

Table 7: Share of total employment by RQF and sector			
	RQF6+ (%)	RQF3-5 (%)	RQF1-2 (%)
Agriculture, forestry and fishing	6	63	31
Energy and water	31	32	37
Manufacturing	28	35	37
Construction	22	38	40
Distribution, hotels and restaurants	8	36	56
Transport and communication	36	20	44
Banking and finance	40	29	30
Public admin, education and health	42	25	32
Other services	19	36	45
<b>Total</b>	<b>30</b>	<b>30</b>	<b>39</b>

Source: ONS, APS 2017-19

## Conclusion

- 51 As we look towards the implementation of the new points-based immigration system at the start of 2021, the future of the UK labour market and migration look uncertain. Vacancies across the economy have fallen substantially compared to this point last year, and the unemployment rate is estimated to reach around 12 per cent in the next

<sup>37</sup> Note that those living in communal accommodation are not included in the Labour Force Survey which may affect these figures

few quarters (OBR central scenario). This suggests that the labour market will be the weakest it has been since the 2008 financial crisis.

52 The number of migrants has fallen in the short term, due to COVID-19 as well as countries across the globe putting restrictions on their borders in order to prevent the spread of the virus. However, with less restrictive migration policies being implemented (suspension of the cap on the PBS Skilled Worker route) and the expansion of eligibility to include RQF3-5 skilled occupations we would expect to see an increase in migrants from outside the EEA. However, with the end of free movement for those born within the EU, we would also expect to see a drop in the number of EU-born migrants. This combination of factors makes it challenging to predict long-term migration trends.

## Terminology

53 For the purposes of this report, we will be dividing occupations into three groups:

- RQF6+ occupations
- RQF3-5 occupations
- RQF1-2 occupations

54 Which occupations falls under which category is the result of several previous MAC reports which applied the MAC's 'skilled' methodology using the data available at the time. The skilled methodology relies on three indicators, as set out in this chapter.

55 The first of these is the skill level (level 1-4) of the 2-digit occupation group that a 4-digit occupation belongs to; as defined by the ONS as part of the SOC 2010 occupational taxonomy. In its report *SOC 2010 volume 1: structure and descriptions of unit groups*, the ONS describes its skill level measure as follows:

*“Skill level is defined with respect to the duration of training and/or work experience recognised in the field of employment concerned as being normally required in order to perform the activities related to a job in a competent and efficient manner.”*

*“Skill levels are approximated by the length of time deemed necessary for a person to become fully competent in the performance of the tasks associated with a job. This, in turn, is a function of the time taken to gain necessary formal qualifications or the required amount of work-based training. Apart from formal training and qualifications, some tasks require varying types of experience, possibly in other tasks, for competence to be acquired.”*

56 The second and third indicators are the proportion of employees in an occupation who report having a certain level of formal vocational and academic qualifications (e.g. RQF3+ or RQF6+ qualifications) and the median hourly earnings of employees

in that occupation. These are calculated using two nationally representative datasets, the Labour Force Survey (LFS) and the Annual Survey of Hours and Earnings (ASHE) respectively. Using these three indicators, and setting appropriate thresholds, the MAC has previously established a list of RQF3+ occupations and a list of RQF6+ occupations, in 2008 and 2012 respectively. Those occupations which did not appear on the RQF3+ list are labelled as RQF1-2, those occupations that appeared on the RQF3+ list but not the RQF6+ list are labelled RQF3-5, and the rest are labelled RQF6+. In order to assess an occupation's level, we do also consider evidence provided by stakeholders and have previously recommended reclassification of occupations, or job titles within occupations, as a result of such evidence.

### **RQF6+ (jobs with longer training requirements)**

- 57 RQF6+ occupations were last reviewed for the SOL in 2019. Given the pressures on employers as a result of COVID-19, we have decided not to consider any RQF6+ occupations for removal from the SOL in this review, and we communicated this decision to stakeholders in the CfE. However, we have fully considered any new evidence provided to us during the stakeholder engagement for any RQF6+ roles to consider whether there is now evidence for inclusion.

### **RQF3-5 (jobs with medium training requirements)**

- 58 RQF3-5 occupations will become eligible for the SOL under the new Skilled Worker route. This report will consider which occupations at this level should now be included in the SOL.

### **RQF1-2 (jobs with shorter training requirements)**

- 59 Occupations below RQF3 have never been eligible for the current Tier 2 (General) route, that will become the Skilled Worker route in the future immigration system. In previous reports, occupations below RQF3 have been referred to as '*low-skilled*' occupations. We recognise that this term could be misinterpreted as suggesting that the MAC considers workers in these roles to be '*unskilled*'. This is inaccurate: we have always recognised that these roles, including those undertaken by many key workers, require numerous skills and personal qualities. However, the occupation is classified based on the length of time it would take to train a new entrant to become fully competent in the performance of the tasks associated with a job. Given the shorter training period involved (compared to RQF3-5 and RQF6+), the MAC considers there is a less strong argument that immigration will be an appropriate response to shortages. Where there may be exceptions, such as seasonal agricultural workers, it is for the Home Office to consider alternative routes to facilitate entry to the UK.



## Structure of this report

- 60 The report includes detailed information about the methodology used to review eligible occupations for the SOL and the evidence that we have gathered from stakeholders to feed into this. Each eligible RQF3-5 occupation is considered for inclusion on the SOL (Chapters 6), whereas the MAC has only considered RQF6+ applications where new evidence was received from stakeholders regarding inclusion (Chapter 7).
- 61 All occupations are eligible for inclusion in the UK-wide SOL, but also on SOLs specific to Northern Ireland, Scotland and Wales. Any occupations that are being included on either the UK-wide or one of the Devolved Nations' SOLs are captured in Chapters 6 and 7.
- 62 The MAC has also received evidence regarding occupations that are ineligible for the SOL. These occupations are discussed in Chapter 5.
- 63 The full recommendations can be found in Chapter 9.

# Chapter 1: The role of the Shortage Occupation List in immigration policy

## Summary

- From January 2021 under the UK's new points-based system (PBS), the SOL will confer a 20 per cent reduction in the salary threshold faced by sponsoring employers. This is a new benefit of an occupation being on the SOL.
- For those occupations where the general threshold is greater than the occupation-specific threshold, a reduction could help make the required minimum salary threshold more accessible for employers, whilst not placing downward pressure on wages.
- For occupations where the occupation-specific threshold is greater than the general threshold, a reduction risks undermining the protection robust salary thresholds provide to existing workers and potentially worsening any shortage. This risk should be monitored.
- The MAC will not consider whether the lower SOL salary threshold is appropriate or not when deciding to recommend an occupation for the SOL, as this is settled government policy. However, as part of the sensible criterion we have considered whether an occupation would effectively be priced out by the general threshold, where that is higher than the occupation-specific threshold.

## Current system

1.1 The Shortage Occupation List (SOL) currently confers the following benefits to the users of the existing Tier 2 (General) employer sponsored work migration route:

- Employers sponsoring migrants into roles on the SOL are exempted from having to pass the resident labour market test (RLMT) i.e. they are not required to demonstrate that an attempt has been made to recruit domestically<sup>38</sup>.
- Roles on the SOL are prioritised if the Tier 2 (General) annual limit of 20,700 Restricted Certificates of Sponsorship is reached. In practice this means that jobs on the SOL are unlikely to be turned down when the cap binds.
- There is no requirement for migrants to meet the higher general salary threshold required to apply for settlement after five years<sup>39</sup>. This requirement is waived if the

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<sup>38</sup> Except for employers of nurses, who still have to complete the RMLT despite nurses being on the SOL.

<sup>39</sup> This is currently set at £35,800 with planned increases paused. Migrants still have to meet the occupation-specific threshold if it is higher.

job has been on the SOL at any point in the previous six years.

- Finally, migrants and their dependents face lower visa application fees if their job is on the SOL<sup>40</sup>.

- 1.2 Separately, the SOL is also used to determine which jobs asylum seekers can apply for permission to work in after 12 months in the UK, within certain parameters.
- 1.3 Eligibility for Tier 2 (General) is generally limited to those occupations skilled to RQF6 and above<sup>41</sup>. For this reason, only occupations and job titles skilled at that level are currently on the SOL as laid out in Appendix K<sup>42</sup> of the immigration rules.
- 1.4 The MAC has been periodically asked for recommendations covering which occupations should be placed on the SOL. Since the MAC's first SOL report in 2008 the committee has published three full and seven partial SOL reviews.
- 1.5 The latest SOL review, published in May 2019, recommended a significant expansion of the jobs covered by the list – increasing coverage from around one per cent of total employment to around nine per cent. Those recommendations were accepted and came into effect on 6 October 2019.
- 1.6 Figure 1.1 below presents the annual number of Certificates of Sponsorship (CoS)<sup>43</sup> used in visa applications, split by whether the associated job was on the SOL or not. It shows a steady increase in the number of CoS for SOL occupations. In fact, although not shown in Figure 1.1, in the fourth quarter of 2019 the number of CoS for SOL occupations was larger than the number of CoS for occupations not on the SOL.
- 1.7 However, this trend cannot be understood without reference to the removal of the occupations of medical practitioners and nurses from the Tier 2 (General) cap on the 6 July 2018<sup>44</sup>. Figure 1.2 disaggregates Figure 1.1 by whether a CoS counted towards the cap or not. Those CoS subject to the cap are referred to as Restricted CoS while those that are not are referred to as Unrestricted CoS.
- 1.8 We can see a clear rise in the number of CoS for SOL occupations that were not subject to the cap, starting in 2018 and accelerating sharply in 2019. Since a key benefit of being on the SOL was the priority given in the event of the cap being hit, the reclassification of medical practitioners and nurses to unrestricted CoS meant that whilst they remained on the SOL, they were excluded from the cap anyway.

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<sup>40</sup> For example, the fees for a Tier 2 (General) visa with length greater than three years is reduced from £1,220 to £928 as a result of a job being on the SOL.

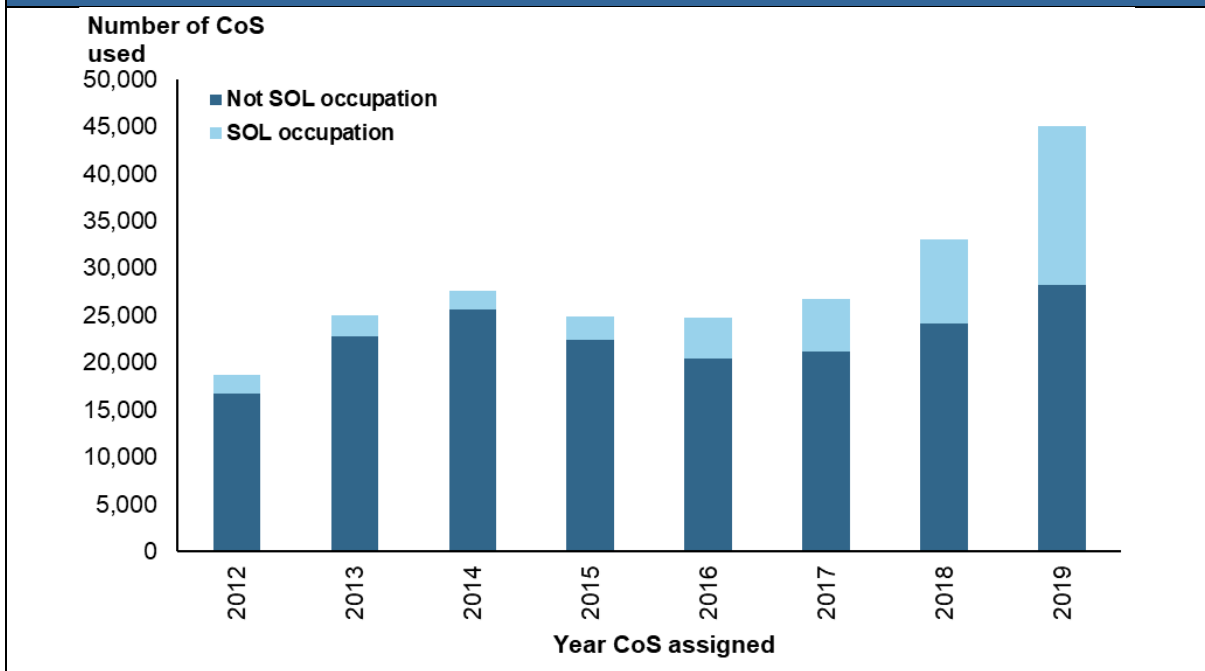
<sup>41</sup> Except for five RQF4 creative sector occupations that are also eligible.

<sup>42</sup> <https://www.gov.uk/guidance/immigration-rules/immigration-rules-appendix-k-shortage-occupation-list>

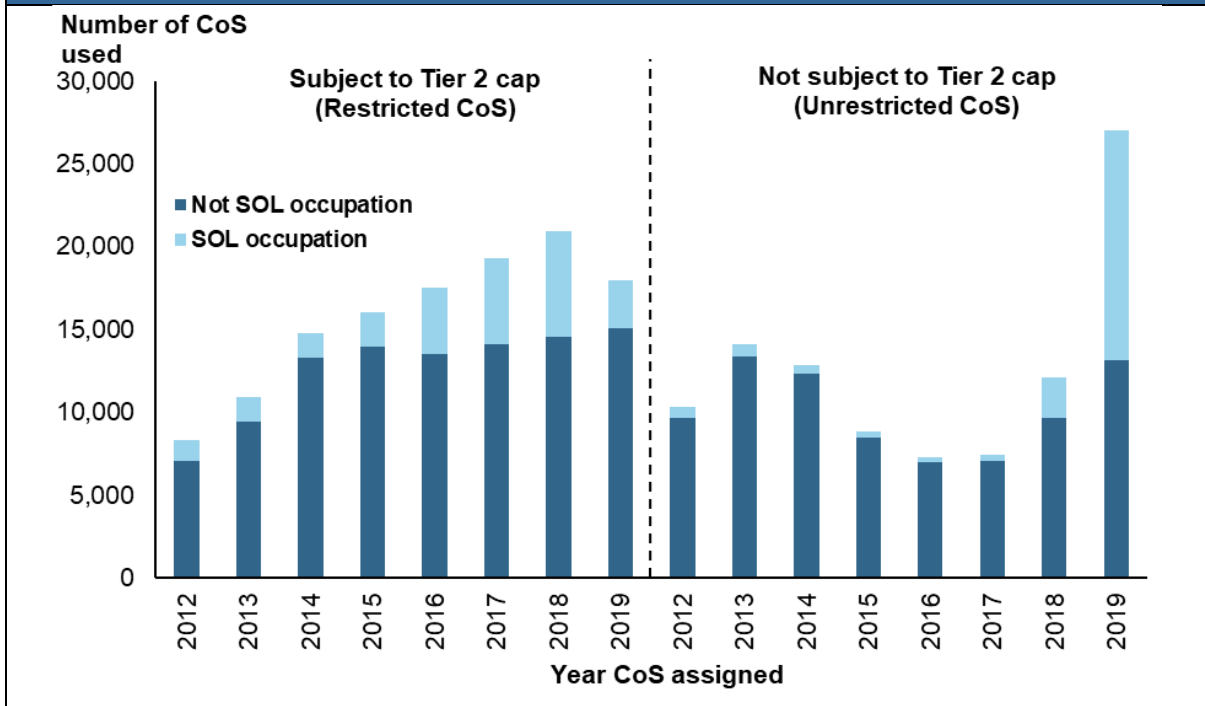
<sup>43</sup>A Certificate of Sponsorship is assigned to a migrant by their sponsoring employer, the migrant can then use the certificate number to make a visa application.

<sup>44</sup>Occupations classified in appendix J as being skilled to PhD level were also subsequently removed from the cap on the 6<sup>th</sup> October 2019.

**Figure 1.1: Number of used CoS per year by date of assignment**



**Figure 1.2: Number of used CoS per year by date of assignment and whether job was on the SOL and whether it counted against the Tier 2 (General) cap**



Notes: For both figures – only CoS related to new hires and switchers are included (extensions and changes of employment excluded); all CoS associated with occupation nurses (2231) manually added to count of SOL CoS from 15<sup>th</sup> October 2015 onwards due to concerns about reliability of SOL flag in Home Office management information. Fig 1.1 - includes restricted and unrestricted CoS.

1.9 For those occupations excluded from the cap but on the SOL (nurses, medical practitioners and some PhD occupations), the main benefit of being on the SOL -

prioritisation against the cap – has been irrelevant. Nurses also do not benefit from the RLMT exemption, limiting their benefit to lower visa fees and not having to meet the settlement threshold. PhD occupations are exempt from the settlement threshold regardless of whether they are on the SOL or not, limiting their SOL specific benefits to an exemption from doing an RLMT and lower visa fees.

- 1.10 With overlapping rules and the Government taking active steps to prevent the cap from binding, the benefits to employers and migrants of the SOL have become more limited in recent times. For most occupations the RLMT and settlement threshold exemptions as well as lower visa fees have been the main practical benefits.
- 1.11 However, in our 2018 EEA report<sup>45</sup> we recommended that under any future system, where freedom of movement no longer applies, the cap and the requirement to conduct an RLMT should be removed for all eligible occupations. With the Government accepting these recommendations in its Immigration White Paper, we subsequently recommended in our 2019 SOL report that there should be a review of what the SOL is for and whether it was needed at all.
- 1.12 In that 2019 SOL review, we noted that the removal of the cap and RLMT would leave the exemption from a higher settlement salary threshold and lower visa fees as the only remaining benefits. With the fee reduction being modest in absolute terms, the lower settlement salary threshold would come to be the main benefit associated with the SOL.
- 1.13 As noted in that review and in our most recent report<sup>46</sup>, the extent to which the existing settlement salary requirements prevent or deter settlement is unknown as the data made available are too limited. Due to this uncertainty, and for other considerations, we recommended that the settlement threshold be paused, which the Government has accepted and implemented<sup>47</sup>. We also recommended that a more comprehensive review of the rules for settlement be conducted.
- 1.14 With the publication earlier this year of the Home Office policy statement on the future points-based immigration system<sup>48</sup>, a clearer role for the SOL has now been set out.

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<sup>45</sup> <https://www.gov.uk/government/publications/migration-advisory-committee-mac-report-eea-migration>

<sup>46</sup> <https://www.gov.uk/government/publications/migration-advisory-committee-mac-report-points-based-system-and-salary-thresholds>

<sup>47</sup> <https://www.gov.uk/government/publications/statement-of-changes-to-the-immigration-rules-hc-120-12-march-2020>

<sup>48</sup> <https://www.gov.uk/government/publications/the-uks-points-based-immigration-system-policy-statement/the-uks-points-based-immigration-system-policy-statement>

## Future system

### A lower salary threshold

- 1.15 It is now clear that under the points-based Skilled Worker route, due to come into effect on the 1 January 2021, the main effect of a job being on the SOL will be to lower the salary threshold by 20 per cent to a lower bound of £20,480.
- 1.16 It is worth noting that this threshold reduction will not apply to those (largely public sector) occupations which will face salary thresholds based on pay scales. In addition, migrants and sponsors will not be able to combine the various threshold reductions available, for example the 10-20 per cent discount available for having a PhD or the 30 per cent discount for new entrants. Only the largest reduction will apply, with all thresholds subject to the absolute lower bound of £20,480.
- 1.17 In our 2019 SOL report<sup>49</sup> we responded to the idea that the SOL could be used to lower the salary thresholds for occupations deemed in shortage by saying:

*“If there is a shortage of workers in a particular occupation, there should be upward pressure on wages to encourage workers to enter this job. Lowering salary thresholds in response to a perceived shortage would be a move in the wrong direction, exacerbating rather than resolving shortages. However, it is possible that for some occupations the salary thresholds are too high to provide any effective upward pressure on wages, because they are essentially out of reach. We do not think that this situation is likely to arise for the high-skilled jobs currently eligible for Tier 2 but could do so if medium-skilled jobs are brought within Tier 2.”*

- 1.18 With RQF3-5 occupations set to be eligible for the Skilled Worker route, the rationale outlined above for lowering salary thresholds for those occupations in shortage and where the existing threshold may be ‘out of reach’ could well apply in some cases.
- 1.19 In line with MAC recommendations, the Home Office has stated that it intends to set salary thresholds for each eligible occupation as the higher of £25,600<sup>50</sup> or the 25<sup>th</sup> percentile of full-time earnings for that occupation. Under this policy it is possible that occupations where the 25<sup>th</sup> percentile of earnings is below £25,600 may face a salary threshold that mirrors the pay of workers only at the very top of that occupations earnings distribution. In such cases a lower salary threshold may be a reasonable response to shortage. Lowering the threshold could make the Skilled Worker route more accessible to employers, while maintaining a salary threshold that prevents

<sup>49</sup> <https://www.gov.uk/government/publications/full-review-of-the-shortage-occupation-list-may-2019>

<sup>50</sup> Calculated as the 25<sup>th</sup> percentile of all eligible occupations, excluding those subjects to pay scale salary thresholds.

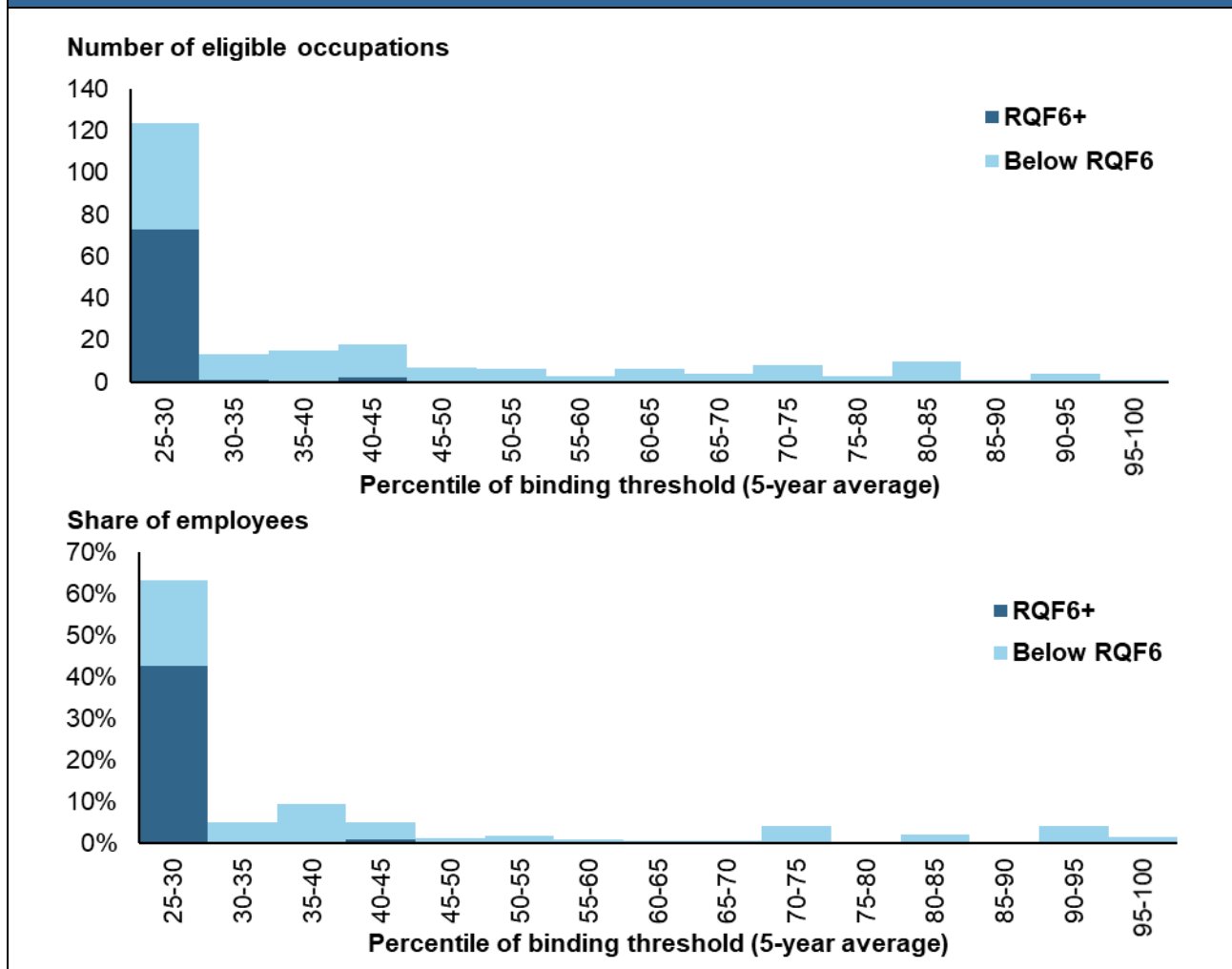
undercutting and does less to undermine efforts to encourage UK workers into those roles.

- 1.20 Figure 1.3 below shows the number of eligible 4-digit occupations<sup>51</sup> by the percentile the proposed salary threshold faced under the Skilled Worker route represents in their full-time earnings distribution, disaggregated by the skill level of the occupation. It shows that for the vast majority of RQF6+ occupations the threshold they face is at, or around, the 25<sup>th</sup> percentile. However, there is a long tail of occupations below RQF6, for whom the general threshold binds, which will face thresholds higher up their earnings distribution.
- 1.21 The lower panel in Figure 1.3 replicates the upper panel but weights each occupation by its share of the total number of employees among eligible occupations in 2019 (as given by ASHE). This shows that around 55 per cent of employees in eligible occupations are in occupations that will face a 25<sup>th</sup> percentile salary threshold.
- 1.22 There are 46 occupations where, on average between 2015 and 2019, the binding threshold they would have faced sat at, or above, median full-time earnings in that occupation, representing around 16 per cent of employees among eligible occupations in 2019. Similarly, there are 19 occupations where the threshold sat at, or above, the 75<sup>th</sup> percentile of full-time earnings in that occupation, representing around eight per cent of employees in eligible occupations.
- 1.23 In Figure 1.4 below we replicate Figure 1.3 but using the threshold that the occupation would face under a 20 per cent SOL reduction. Naturally this lowers the bite of salary thresholds, with now only 15 occupations (7 per cent of employees in eligible occupations) facing a threshold at or above median earnings, and just six occupations (5 per cent of employees in eligible occupations) facing a threshold at or above the 75<sup>th</sup> percentile. It is important to note that this means that, even with a SOL discount, there are several occupations which would be likely to face salary thresholds high enough to prevent employers from using the Skilled Worker route, except for their highest-paid roles.

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<sup>51</sup> Excluding those occupations where salary requirements are to be set using pay scales. Occupations are defined using the standard ONS SOC 2010 classifications.

**Figure 1.3: Number of occupations, and share of employees in eligible occupations, by the percentile the salary threshold they face represents in their full-time earnings distribution (5-year average ASHE)**



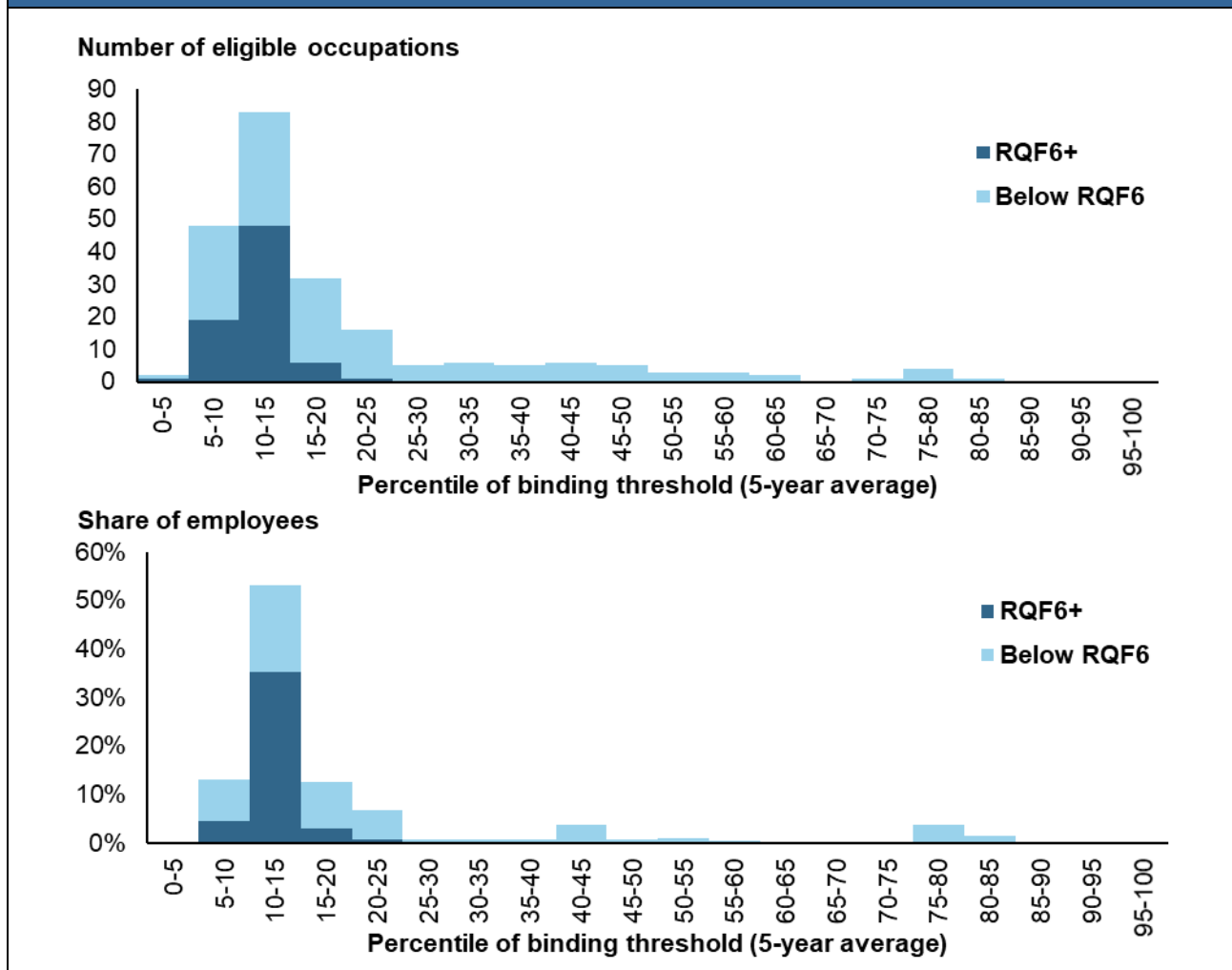
Notes: The occupation-specific and general thresholds for the years 2015-2019 were calculated using the ASHE data that would have been available at the time and in line with the published methodology<sup>52</sup>. For each year the percentile represented by the higher of the two thresholds, occupation-specific or general, was estimated over the full-time earnings distribution for each occupation. A simple average of these percentiles was taken over the five-year period for each occupation and rounded to the nearest integer. In some cases, despite the occupation-specific threshold binding, the percentile estimate was lower or higher than the 25<sup>th</sup>. This is because for some occupations the occupation-specific threshold is based on estimates other than the published 25<sup>th</sup> percentile due to a small sample size (see published methodology note<sup>53</sup>). For this reason, whenever the occupation-specific threshold was binding (i.e. higher than the general threshold) it was assumed the threshold represented the 25<sup>th</sup> percentile. In addition, in cases where the general threshold was binding but the percentile estimate was below the 25<sup>th</sup> (due to small sample sizes), it was assumed to equal to the 26<sup>th</sup> percentile. The lower panel is calculated on the same basis as upper panel but with occupations weighted by their share of total employees in eligible occupations (ASHE 2019). Occupations subject to pay scales are excluded from this analysis. Bars are five percentiles wide, inclusive of the lower bound and exclusive of the upper bound.

<sup>52</sup> <https://www.gov.uk/government/publications/calculating-salary-thresholds-technical-note>

<sup>53</sup> <https://www.gov.uk/government/publications/calculating-salary-thresholds-technical-note>



**Figure 1.4: Number of occupations, and share of employees in eligible occupations, by the percentile the salary threshold they face represents in their full-time earnings distribution after a 20 per cent reduction (5-year average ASHE)**



Notes: The same notes apply as presented under Figure 1.3. However, in contrast to Figure 1.3, no adjustment was made for those occupations where the occupation-specific threshold is binding but not based on a 25<sup>th</sup> percentile estimate.

1.24 To illustrate this, Table 1.1 lists those 19 occupations whose thresholds would have, on average between 2015 and 2019, sat at or above the 75<sup>th</sup> percentile of their full-time earnings distribution. It also displays the reduction in the bite of the threshold under a 20 per cent SOL related reduction.

1.25 For some occupations the reduction is significant. For example, without the threshold discount offered by the SOL, Senior care workers would face a threshold that has on average been equivalent to the pay of the highest earning fifth of employees in that occupation. With a SOL reduction, the threshold would be closer to median earnings, i.e. around half of full-time workers in that occupation would meet the salary requirement. Whether the occupations detailed below are recommended for inclusion on the SOL is covered in Chapter 6 of this report.

1.26 For other occupations, the reduction in salary threshold offered by the SOL is unlikely to change the usefulness of the Skilled Worker route for employers. For example, Nursery nurses and assistants would see the threshold they face fall from the equivalent of the 95<sup>th</sup> percentile of their full-time earnings distribution to the 80<sup>th</sup> percentile. It is likely that many employers of Nursery nurses and assistants would struggle to meet the salary requirements even if placed on the SOL.

**Table 1.1 – Occupations eligible for proposed Skilled Worker route that face salary thresholds at or above the 75th percentile of their full-time earnings distribution.**

Occupation	Salary thresholds		Percentiles (2015-19 average)	
	Main	SOL	Main	SOL
Nursery nurses and assistants	£25,600	£20,480	95-100	80-85
Teaching assistants	£25,600	£20,480	90-95	75-80
Educational support assistants	£25,600	£20,480	90-95	75-80
Fitness instructors	£25,600	£20,480	90-95	55-60
Fishmongers and poultry dressers	£25,600	£20,480	90-95	75-80
Playworkers	£25,600	£20,480	85-90	70-75
Bakers and flour confectioners	£25,600	£20,480	80-85	55-60
Florists	£25,600	£20,480	80-85	75-80
Gardeners and landscape gardeners	£25,600	£20,480	80-85	45-50
Groundsmen and greenkeepers	£25,600	£20,480	80-85	50-55
Animal care services occupations n.e.c.	£25,600	£20,480	80-85	60-65
Senior care workers	£25,600	£20,480	80-85	50-55
Butchers	£25,600	£20,480	80-85	40-45
Glass and ceramics makers, decorators and finishers	£25,600	£20,480	80-85	45-50
Veterinary nurses	£25,600	£20,480	80-85	45-50
Market research interviewers	£25,600	£20,480	80-85	55-60
Horticultural trades	£25,600	£20,480	75-80	50-55
Print finishing and binding workers	£25,600	£20,480	75-80	30-35
Footwear and leather working trades	£25,600	£20,480	75-80	45-50

1.27 Just as there are occupations where being on the SOL still leaves employers facing a high threshold relative to earnings in that occupation, there are other occupations where being on the SOL would result in a threshold below the 25<sup>th</sup> percentile of that

occupations earnings distribution. Table 1.2 presents the ten occupations with the lowest potential salary thresholds relative to their pay distribution if placed on the SOL. Overall, we estimate that there could be around 70 occupations which would face a threshold at or below the 10<sup>th</sup> percentile of earnings if placed on the SOL<sup>54</sup>. Some, as highlighted in Table 1.2, would face thresholds potentially lower than the 5<sup>th</sup> percentile.

- 1.28 In some cases, employers would not actually be able to make use of these lower thresholds. Senior police officers (SOC 1172), which covers inspectors and above, have their pay determined by a set of pay scales. The lowest point on the pay scale for Inspectors is £51,414<sup>55</sup>, almost £10,000 higher than the salary threshold under the SOL.
- 1.29 Interestingly, only about half of those 70 occupations facing low SOL thresholds are currently classified as skilled to RQF6+. This suggests that while the issue of the SOL not reducing thresholds enough primarily applies to below RQF6 occupations, the concern that the SOL will lower salary thresholds too much can apply to occupations of all eligible skill levels.
- 1.30 Currently the 10<sup>th</sup> percentile is used under the existing Tier 2 (General) system to establish the thresholds for 'new entrant' migrants. However, there would be no requirement under the SOL for employers facing thresholds at that low level in the new system to be sponsoring workers only at the start of their careers.

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<sup>54</sup> Applying the proposed policy to data available between 2015 and 2019 and averaging.

<sup>55</sup> <https://www.polfed.org/pay/inspector-pay-scales/>

**Table 1.2 - Ten occupations with the lowest SOL salary threshold relative to earnings distribution**

Occupation	Salary thresholds		Percentiles (2015-19 average)	
	Main	SOL	Main	SOL
Senior police officers	£52,000	£41,600	25	0-5
Inspectors of standards and regulations	£26,600	£21,300	25	0-5
Fire service officers (watch manager and below)	£32,200	£25,800	25	0-5
Insurance underwriters	£27,100	£21,700	25	0-5
Electronics engineers	£34,700	£27,800	25	5-10
Veterinarians	£32,500	£26,000	25	5-10
Metal plate workers, and riveters	£25,600	£20,500	25-30	5-10
Aircraft maintenance and related trades	£31,700	£25,400	25	5-10
Rail and rolling stock builders and repairers	£37,200	£29,800	25	5-10
Skilled metal, electrical and electronic trades supervisors	£30,300	£24,200	25	5-10

- 1.31 Given these observations, what does this mean for how we plan to assess whether an occupation should be recommended for the SOL or not? As laid out earlier, our stated position has been that we do not think a salary threshold reduction is an appropriate way to use the SOL for most higher skilled occupations. We have also identified some occupations, mostly skilled to RQF3, where a salary threshold reduction could be an appropriate response to shortage. This might suggest that we should limit our focus for this review to those occupations where we believe a salary reduction would not exacerbate shortages due to the already high bite of the non-discounted threshold.
- 1.32 We have expressed our view on reducing salary thresholds in response to shortages in previous reports, and again in this one. However, the MAC is an advisory body, it is for the Government to make policy. The Home Office policy statement on the future points-based immigration system makes it clear that it intends to lower the salary requirements for employers of occupations in shortage. Therefore, our role is to use the best possible evidence to identify which occupations face such shortages.
- 1.33 These assessments will continue to be subject to our 'sensible' criteria, but these criteria will not include a consideration of whether we believe a reduced salary threshold to be appropriate or not. As part of the sensible criteria we will consider the impact of the salary threshold on the point the threshold falls in the pay distribution for occupations where the general threshold binds (i.e. occupations where the occupation-specific threshold is lower than the general threshold of £26,500).

- 1.34 We would urge the Home Office to monitor the use of the Skilled Worker route, in particular for those occupations whose salary threshold for experienced workers will be below the 25<sup>th</sup> percentile for earnings as a result of being on the SOL. This should include monitoring of the impact on shortages in those occupations. The MAC will of course also independently conduct such monitoring.

### **Interaction of salary reduction with Devolved Nation SOLs**

- 1.35 In the MAC's 2019 SOL review we recommended establishing separate SOLs for both Wales and Northern Ireland and continuing the existing Scotland-only SOL. Several occupations were recommended, and subsequently accepted, for the Scotland-only SOL but none were identified for the Wales or Northern Ireland lists. Chapter 9 in this report details our recommendations for which occupations should be included on such lists this time.
- 1.36 For the 2019 review we were only considering occupations that met the RQF6 skills threshold, for which there exists more of a UK-wide labour market. As we are now considering occupations at RQF3-5 skill levels it is possible we will find greater shortages specific to individual Devolved Nations (DNs).
- 1.37 In practice this would mean that employers using the Skilled Worker route to fill vacancies in the same occupation but in different parts of the UK would face different minimum salary requirements.
- 1.38 In our recent report covering salary thresholds we expressed concern that regional variation in minimum salary requirements risked institutionalising some parts of the UK as 'low wage', and ultimately recommended against the introduction of salary threshold variation along such lines. The evidence that led us to that recommendation remains valid today. However, the coupling of the SOL with lower salary thresholds and the possible greater variation in shortage lists across DN's risks bringing in regional variation in salary thresholds, at least for some occupations, as a technical rather than intentional outcome.
- 1.39 In practice the risks appear small. Any regional variation in salary thresholds would be targeted at individual occupations, or in some cases job titles within those occupations, limiting the potential for categorising entire DN labour markets as lower-wage by default.
- 1.40 That said, with migrants inherently being a mobile group, employers in DN's utilising the DN-only SOLs and seeking to fill vacancies through the Skilled Worker route could find themselves competing with employers elsewhere in the UK who are required to pay migrants a higher salary. This may limit the effectiveness of DN-only SOLs for employers in some cases. This concern once again emphasises that reductions in salary thresholds make most sense for those occupations which will otherwise face requirements that are out of reach for most employers. In those cases, a DN-only SOL

could be used to expand employers' access to migrant labour in a DN where a specific shortage exists, while many employers elsewhere remain effectively priced out.

## Other SOL benefits

- 1.41 The two remaining listed benefits of the SOL for Tier 2 (General) are lower visa fees and the removal of the requirement to meet a higher general salary threshold for settlement. The Home Office's 'Further Details' policy statement<sup>56</sup> does not mention the existing settlement threshold policy, nor does it mention a link between the SOL and settlement earnings requirements. It does reiterate the current visa fee structure, with discounts on Skilled Worker route fees for SOL applications. If both these benefits are retained, the relaxing of the settlement salary threshold is the more material.

## Public sector occupations

- 1.42 Based on our previous recommendations<sup>57</sup>, there are 24 occupations in health and education where national pay scales are used to determine the salary threshold. These occupations are exempt from the general salary threshold of £25,600. The Government has said that these 24 occupations will not receive tradeable points as they will not need these additional points to offset the general salary threshold and it would not be appropriate for employers to offer salaries below the national pay scales for these occupations<sup>58</sup>.
- 1.43 Therefore, the advantages of being on the SOL for these 24 occupations are more limited as their salary threshold will not be discounted. The remaining benefits for these 24 occupations in the future system would be lower visa fees and exemption from the general settlement threshold (see above). Most of the occupations with national pay scales in the health sector are eligible for the Health and Care visa and have lower visa fees as part of the conditions of that visa. Whilst the benefits of being on the SOL are more limited for these occupations, we have applied the same SOL methodology across all eligible occupations.

## The future of SOL policy

- 1.44 With the new role for the SOL yet to come into force it is clearly premature to speculate on any further changes that might be required. As mentioned, the MAC accepts that it is settled government policy for the SOL to be primarily used as a means of reducing salary thresholds for those occupations found to be in shortage. As ever we would

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<sup>56</sup> <https://www.gov.uk/government/publications/uk-points-based-immigration-system-further-details-statement>

<sup>57</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/873155/PBS\\_and\\_Salary\\_Thresholds\\_Report\\_MAC\\_word\\_FINAL.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/873155/PBS_and_Salary_Thresholds_Report_MAC_word_FINAL.pdf)

<sup>58</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/899755/UK\\_Points-Based\\_System\\_Further\\_Details\\_Web\\_Accessible.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/899755/UK_Points-Based_System_Further_Details_Web_Accessible.pdf)

urge the Home Office to attempt to evaluate the effect of this policy choice both on the migration system itself and the wider labour market.

## Chapter 2: The SOL Methodology

### Summary

- The MAC methodology uses three criteria to decide which occupations should go onto the SOL. First, whether the occupation is skilled to the level required by the Government. Second, whether it is in shortage and third, whether it is sensible to fill this shortage with migrant workers.
- For this review of the SOL we have not revisited this methodology. We have added a further question to the sensible criteria and because of the COVID-19 pandemic we have made more use of the sensible criteria, particularly as not all the impacts of this are fully reflected in the latest available data.
- The various criteria are analysed using a combination of measures derived from national level datasets and evidence from stakeholders. We do not weight particular indicators more heavily than others; partly as they measure different causes of shortage, partly as some are timelier, so they have different strengths.
- As this SOL review covers an expanded range of occupations, we have considered the data covering these groups of occupations. While we have focussed most of our attention on RQF3-5 occupations we have considered a smaller range of occupations at RQF6+ and below RQF3; details of these are in Chapters 5 and 7.
- Our recommendations from the analysis detailed below are in Chapter 9.

### Introduction

- 2.1 The MAC methodology uses three criteria to decide which occupations should go onto the SOL. First, whether the occupation is skilled to a level required by the Government. Second, whether it is in shortage and third, whether it is sensible to fill this shortage with migrant workers.
- 2.2 The skilled criterion places occupations into skill groups based on a combination of national datasets and evidence from stakeholders. To decide whether an occupation is in shortage we use nine indicators which look at wages, vacancies and employment. The shortage indicator methodology has been reviewed several times, most recently in 2017<sup>59</sup>, and an additional indicator was added in 2019. These indicators are combined with evidence from stakeholders to arrive at a decision about whether a job, or occupation, is in shortage. The sensible criterion then considers whether it is reasonable to use migration to fill the shortage. We have added a further consideration

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<sup>59</sup>[https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment\\_data/file/586110/2017\\_01\\_26\\_MAC\\_report\\_Assessing\\_Labour\\_Market\\_Shortages.pdf](https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment_data/file/586110/2017_01_26_MAC_report_Assessing_Labour_Market_Shortages.pdf)



to the sensible criterion, detailed below, given the changes to the benefits associated with the SOL in the future immigration system.

- 2.3 In 2019, we undertook a full review of the SOL for 96 RQF6+ occupations which are currently eligible for Tier 2 (General)<sup>60</sup>. Given this was a recent exercise and bearing in mind the difficulties employers are facing at present, we have taken the approach of considering whether an RQF6+ occupation should be added to the SOL only where there is new, compelling evidence that the shortage situation has changed within that occupation; we have not considered whether any RQF6+ occupations already on the SOL should be removed. In this review we look at 151 RQF3-5 occupations. We discuss the timings for future SOL reviews in Chapter 8.

## Skilled

### Method

- 2.4 Currently, to qualify for Tier 2 (General), occupations must be skilled to RQF6 and above (equivalent to degree level) and its equivalents in the Devolved Nations. However, under the future immigration system, the minimum skill requirement for the Skilled Worker route will be changed to RQF3 (equivalent to A-level) and above<sup>61</sup>.
- 2.5 The method used to assign skill levels to occupations was first laid out in the MAC's 2008 SOL report<sup>62</sup>. This method assigns occupations to one of two groups, those at or above a chosen skill level and those below. It does this by evaluating occupations against three skilled indicators, listed below. If the values of at least two of these indicators meet certain thresholds, then an occupation is determined to be skilled at or above the chosen level.
- The skill level defined in the occupational classification hierarchy
  - Formal academic and vocational qualifications
  - Earnings
- 2.6 The Standard Occupational Classification<sup>63</sup> (SOC) hierarchies' groups the types of jobs in the UK labour market into a series of occupations, each of which is assigned a 4-digit code. These classification schemes are refreshed every ten years, we refer to the classifications currently in place as SOC 2010 and the previous classifications as SOC 2000. The Office for National Statistics (ONS) have published classifications for SOC 2020, though the existing data are still based on SOC 2010 classifications which

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<sup>60</sup> <https://www.gov.uk/tier-2-general>

<sup>61</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/866664/CCS207\\_CCS0120013106-001\\_The\\_UKs\\_Points-Based\\_Immigration\\_System\\_print.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/866664/CCS207_CCS0120013106-001_The_UKs_Points-Based_Immigration_System_print.pdf)

<sup>62</sup> <https://www.gov.uk/government/publications/recommended-shortage-occupation-lists-for-the-uk-and-scotland-sep-2008>

<sup>63</sup> <https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassification/soc>

are used throughout this report. We discuss the move to SOC 2020 further in Chapter 8.

- 2.7 Each 4-digit occupation can be combined with others into more aggregated 3-digit, 2-digit and ultimately 1-digit groupings. The SOC hierarchy is designed such that the 4-digit occupations that belong within a wider 2-digit group, all require similar levels of skill. In this case, ONS say “*skill levels are approximated by the length of time deemed necessary for a person to become fully competent in the performance of the tasks associated with their job.*”<sup>64</sup>
- 2.8 Each 2-digit group is therefore assigned one of four skill levels, starting at level 1 for those occupations where competence can be attained in the shortest time to level 4 where competence normally requires several years of training above a general education – usually requiring a degree or equivalent work experience.
- 2.9 In the 2008 MAC report, when establishing which occupations were skilled to RQF3 and above, the threshold for the SOC based indicator was set at skill level 3 or skill level 4 using the SOC 2000 hierarchy<sup>65</sup>. In 2012 the MAC established which occupations were skilled to RQF6+<sup>66</sup>. The threshold for the SOC based indicator was set at skill level 4 using the SOC 2010 hierarchy.
- 2.10 For the remaining two indicators, formal academic and vocational qualifications and earnings, these are calculated using nationally representative survey datasets. The Labour Force Survey (LFS), or the associated Annual Population Survey (APS), is used to assess the share of full-time employees within occupations who have a certain level of formal qualifications (e.g. RQF3 and above). Similarly, the Annual Survey of Hours and Earnings (ASHE) is used to assess the median hourly pay of full-time employees within an occupation.
- 2.11 The thresholds for these two indicators depend on the skill level you are looking to identify. Using the example of identifying occupations skilled to RQF3 and above, it starts by assessing the proportion of all full-time employees who have an RQF3 and above qualification. All occupations are then ranked from those with the highest share of employees with RQF3 qualifications and above to the lowest, or for the earnings indicator, those occupations with the highest median hourly earnings to those with the lowest. The cumulative employment share of total employment is then calculated starting from the highest ranked occupation in both cases. The threshold values for the qualification and earnings indicators are then found at the point where the

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<sup>64</sup><https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassification/soc/soc2010/soc2010volume1structureanddescriptionsofunitgroups>

<sup>65</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/343325/Migration-shortage.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/343325/Migration-shortage.pdf)

<sup>66</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/257273/Tier2-codesofpractise.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/257273/Tier2-codesofpractise.pdf)

cumulative employment share is equal to the overall share of employees with RQF3 and above qualifications.

- 2.12 This method for drawing the thresholds for the qualification and earnings indicators relies on the assumption that the proportion of occupations skilled at RQF3 and above is equal to the proportion of full-time employees with qualifications at that level. The justification for this assumption has been that, in equilibrium, the supply of appropriately skilled workers should match the demand for such workers.
- 2.13 Additional analysis of on-the-job training/experience, the industry and the level of innate ability required to carry out the job are also considered on a case by case basis, informed by stakeholder evidence (see Chapter 5 for more detail).

## History of occupational skill levels

- 2.14 With the skilled methodology in mind we now set out the history of how and when it has been applied, ultimately resulting in the list of occupations labelled as skilled at RQF3 and above in the current version of Appendix J of the immigration rules, also known as the codes of practice<sup>67</sup>. These are the occupations that will be eligible for the Skilled Worker route in the future immigration system.
- 2.15 Figure 2.1 presents a timeline of how the skill levels currently assigned to occupations have been developed. It highlights how some elements of assigning skills to occupations have their origins back in 2008 and even before the Tier 2 route was established. The most recent application of the top-down skilled methodology was in October 2012. While this is some time ago, the hope is that the skilled methodology tells us something fundamental about the skill requirements of each occupation. These requirements should only change if the tasks associated with the occupation change substantially. The task requirements of occupations are revisited by the ONS once every 10 years.
- 2.16 There is an additional layer of complexity when navigating the system. This is the existence of 'borderline' occupations, which are labelled as 'RQF3/Lower-skilled' in the current codes of practice. These are 4-digit occupations which are counted as RQF3 in part, with only specific named job titles within those occupations being treated as RQF3 and therefore eligible for the future Skilled Worker route.
- 2.17 These 'borderline' occupations have their origins in the work migration route that existed prior to the introduction of Tier 2. When the MAC produced a list of RQF3+ occupations in September 2008 there were several more narrowly defined jobs that were eligible for the existing work permit route, but which did not fit into one of the occupations identified. To enable migrants in the old system to extend their stay under the new Tier 2 system these jobs were made eligible and placed in the relevant

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<sup>67</sup> <https://www.gov.uk/guidance/immigration-rules/immigration-rules-appendix-j-codes-of-practice-for-skilled-work>

'borderline' occupations. Only the specific jobs previously eligible for the work permit system were made eligible for Tier 2, not the entire 4-digit occupations. These 'borderline' occupations therefore represent occupations the MAC identified as lower-skilled in 2008 but for which a few jobs within the occupation are treated as being sufficiently skilled to RQF3+. In July 2020, the Home Office confirmed that the SOC codes which previously contained 'borderline' occupations will be eligible in their entirety for the Skilled Worker route in the future immigration system<sup>68</sup>.

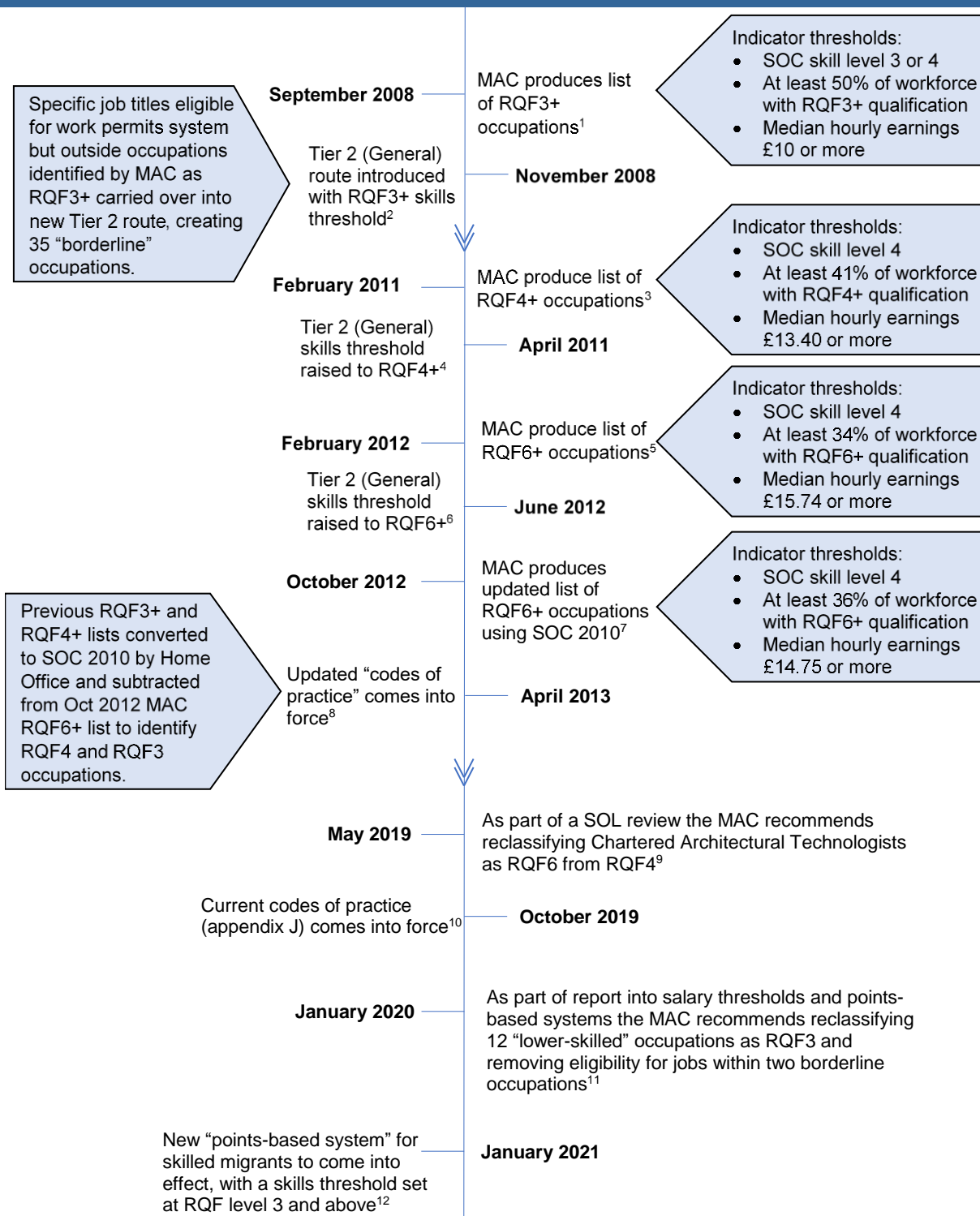
2.18 The next generation of occupational classifications, SOC 2020, has already been agreed<sup>69</sup>. However, it will take some time for the surveys that are used in our methodology (notably the APS and ASHE) to have responses coded using the new classification. We would not expect to have the required data to carry out the existing skilled methodology under SOC 2020 until late 2021 due to lags in data collection and availability. The movement to the new classifications will offer an opportunity to review the existing skills mappings.

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<sup>68</sup> <https://www.gov.uk/government/collections/uk-points-based-immigration-system-further-details>

<sup>69</sup> <https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassification/soc/soc2020>

**Figure 2.1 – Timeline of matching skill levels to occupations**



Note: The indicator threshold statistics are those that were set at the time.

- <https://www.gov.uk/government/publications/recommended-shortage-occupation-lists-for-the-uk-and-scotland-sep-2008>
- <https://www.gov.uk/government/publications/statement-of-changes-to-the-immigration-rules-hc1113-4-november-2008>
- <https://www.gov.uk/government/publications/analysis-of-the-points-based-system-tier-2-at-nqf-level-4>
- <https://www.gov.uk/government/publications/statement-of-changes-to-the-immigration-rules-hc863-16-march-2011>
- <https://www.gov.uk/government/publications/limits-on-migration-for-tier-2-general>
- <https://www.gov.uk/government/publications/statement-of-changes-to-the-immigration-rules-cm8337-april-2012>
- <https://www.gov.uk/government/publications/analysis-of-the-points-based-system-tier-2-at-nqf-level-6>
- <https://www.gov.uk/government/publications/statement-of-changes-to-the-immigration-rules-hc1039-14-march-2013>

9. <https://www.gov.uk/government/publications/full-review-of-the-shortage-occupation-list-may-2019>
10. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/899755/UK\\_Points-Based\\_System\\_Further\\_Details\\_Web\\_Accessible.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/899755/UK_Points-Based_System_Further_Details_Web_Accessible.pdf)
11. <https://www.gov.uk/government/publications/migration-advisory-committee-mac-report-points-based-system-and-salary-thresholds>
12. <https://www.gov.uk/government/publications/the-uks-points-based-immigration-system-policy-statement/the-uks-points-based-immigration-system-policy-statement>

## Previous RQF3-5 SOL recommendations

- 2.19 Between November 2008 and June 2012, RQF3-5 level occupations were either wholly or in part eligible for Tier 2 (General), and so also eligible for the SOL. While 4-digit occupations that are not skilled to RQF6+ can appear on the current SOL (e.g. chefs), it is only jobs within those occupations deemed to be skilled to RQF6+ that are placed on the SOL. We therefore focus on those jobs that were recommended for inclusion on the SOL in the reports the MAC published prior to the skills level being raised to RQF6+. The MAC published six SOL reviews while the skill requirement for Tier 2 was RQF3+ or RQF4+: these and all subsequent SOL reviews are listed in Annex F.
- 2.20 Between January 2009 and prior to the introduction of the cap and rise in the skill level requirement to RQF4+ (April 2011) the biggest users of the SOL were two ‘borderline’ occupations; chefs, cooks (5434) and care assistants and home carers (6115)<sup>70</sup>. They represented around 29 per cent and 20 per cent of SOL Certificates of Sponsorship (CoS) used over this period respectively.

## Shortage

### Method

- 2.21 To assess whether an occupation is in shortage we use several national datasets to create economic indicators of labour market conditions. These indicators are motivated by what we would expect to observe in a labour market in shortage. The economics of labour market shortages were discussed in detail in the previous SOL review<sup>71</sup>.
- 2.22 At its simplest, a shortage occurs when the demand for labour is higher than the supply at existing terms and conditions. This situation can emerge either when demand increases, or supply falls, and wages do not change fast enough to bring the labour

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<sup>70</sup> As certain jobs within these occupations were eligible for Tier 2 in their own right, not just because of their appearance on the SOL, there were also some non-SOL CoS used for these occupations. However, the numbers were significantly smaller with around 200 per year for “chefs, cooks” and 300-500 for care assistants.

<sup>71</sup>Chapter 2, P28-30,  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/806331/28\\_05\\_2019\\_Full\\_Review\\_SOL\\_Final\\_Report\\_1159.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/806331/28_05_2019_Full_Review_SOL_Final_Report_1159.pdf)

market into equilibrium. Shortages can also be more structural, occurring when demand and supply are stable, but wages are below market-clearing levels.

- 2.23 A labour market in shortage would be expected to show some symptoms, and the shortage indicators are intended to pick any such symptoms up. The methodology report in 2017<sup>72</sup> looked in detail at the indicators and methodology behind them, and so for this report we have updated the indicators with the most recent data using that methodology.
- 2.24 To determine whether an occupation qualifies against the shortage criteria, nine indicators are used, based on the MAC's 2017 review of the shortage methodology and a subsequent adjustment to one of the indicators made in the 2019 SOL review.
- 2.25 Each of these indicators are calculated for all 369 4-digit occupations, subject to a rule of thumb sample size criteria<sup>73</sup>. We rank occupations by each indicator, with values indicating those most in shortage ranked highest (lowest rank number). We then average across the ranks for each indicator to get an average rank value which is then itself used to rank occupations from overall most in shortage to least. Historically we have not weighted some indicators over others as there is no definitive objective way in which to do so. This approach generates a list of relative shortage.
- 2.26 Table 2.1 below summarises the nine indicators of shortage we use. The indicators are grouped into three categories: price-based indicators, volume-based indicators and employment-based indicators. The table describes each indicator and the datasets we use for them. The table also sets out the sample size criteria we view as sufficient in order to report a value for a certain SOC code. If the criteria were not met for a certain indicator for a SOC that value of the indicator would be set as missing.

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<sup>72</sup>[https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment\\_data/file/586110/2017\\_01\\_26\\_MAC\\_report\\_Assessing\\_Labour\\_Market\\_Shortages.pdf](https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment_data/file/586110/2017_01_26_MAC_report_Assessing_Labour_Market_Shortages.pdf)

<sup>73</sup> See last column of Table 2.3 page 32 of 2019 MAC SOL review for sample size criteria applied.

**Table 2.1: Summary of the shortage indicators**

Indicator	Data set(s) used	Description	Current sample size criteria
<b>P1:</b> Percentage change of median real pay (1 year)	ASHE & CPIH	Percentage change in inflated median pay over one year	ASHE sets its own publishing criteria.
<b>P2:</b> Percentage change of median real pay (3 years)	ASHE & CPIH	Percentage change in inflated median pay over three years	ASHE sets its own publishing criteria.
<b>P3:</b> Return to occupation	APS	Predicted hourly wage for a set of reference characteristics relative to the average predicted wage for the same characteristics over all SOC codes. Separately calculated for all three skill levels.	APS raw numbers under 25 are not reported.
<b>E1:</b> Vacancies/Employment	ESS & APS	$\frac{\text{Total vacancies (ESS)}}{\text{Total employment (APS)}}$	ESS raw numbers under 30 are not reported. APS raw numbers under 25 are not reported.
<b>E2<sup>74</sup>:</b> Vacancy postings/Employment	Burning Glass & APS	$\frac{\text{Number of job postings (Burning Glass)}}{\text{Total employment (APS)}}$	APS raw numbers under 25 are not reported. Burning Glass is admin data, so no minimum sample size required.
<b>V2:</b> Percentage change of employment level (1 year)	APS	Percentage change of employment over one year	APS raw numbers under 25 are not reported.
<b>V3:</b> Percentage change of median paid hours worked (3 years)	ASHE	Percentage change of median paid hours worked over three years	ASHE sets its own publishing criteria.
<b>V4:</b> Change in new hires (1 year)	APS	$\frac{\text{New Hires 2017}}{\text{Employment 2017}} - \frac{\text{New Hires 2016}}{\text{Employment 2016}}$	APS raw numbers under 25 are not reported.
<b>A V1:</b> Weighted stock of unemployment & inactive/Employment, unemployment and inactive	APS	$\frac{\text{Weighted stock of unemployed and inactive}}{\text{Employed, unemployed and inactive}}$	APS raw numbers under 25 are not reported.

<sup>74</sup> This indicator was known at I1 in the 2017 methodology paper. Changed to E2 in this report as it is classed as an indicator of employment.



- 2.27 There are 10 RQF3-5 occupations for which we are unable to provide a shortage rank. Due to a low sample size it was not possible to calculate the minimum number of indicators (five) needed for an occupation to be ranked under the current approach.
- 2.28 Further reasoning and theory behind each of the indicators can be found in more detail in our 2017 methodology report<sup>75</sup>. Details on the specifications for the indicators can be found in Annex B.
- 2.29 Not all the indicators are equally effective in diagnosing the different sources of shortage. Table 2.2 shows which indicators are expected to be effective for the different types of shortage.

**Table 2.2: Effectiveness of the indicators in diagnosing different types of shortages**

	Rising Demand	Falling Supply	Structural
<b>P1</b>	+	+	0
<b>P2</b>	+	+	0
<b>P3</b>	+	+	-
<b>E1</b>	+	+	+
<b>E2</b>	+	+	+
<b>V2</b>	+	-	0
<b>V3</b>	+	+	0
<b>V4</b>	+	-	0
<b>A V1</b>	+	+	+

A '+' indicates that one would expect the indicator to be satisfied for that cause of shortage, '-' that it would not be expected to be satisfied and a '0' that there is no expectation.

- 2.30 Only if the source of shortage is rising demand would all the indicators be effective. When first designed it was probably expected that rising demand would be the most common source of shortage, but it is not clear that is the case now and is unlikely to be the case for most occupations in the current circumstances. Where we have looked at the same occupations over time, many occupations presented to us as being in shortage remain the same as those described as being in shortage historically, perhaps suggesting that there are more structural reasons for shortage. Many other countries have something like a SOL and the occupations on those lists are similar

<sup>75</sup>[https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment\\_data/file/586110/2017\\_01\\_26\\_MAC\\_report\\_Assessing\\_Labour\\_Market\\_Shortages.pdf](https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment_data/file/586110/2017_01_26_MAC_report_Assessing_Labour_Market_Shortages.pdf)

The reasoning behind the newer A V1 indicator can be found in the 2019 Review of the SOL report: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/806331/28\\_05\\_2019\\_Full\\_Review\\_SOL\\_Final\\_Report\\_1159.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/806331/28_05_2019_Full_Review_SOL_Final_Report_1159.pdf)

across countries<sup>76</sup>. These pieces of evidence suggest structural shortages are quite common, though the cause is often unclear. Also, the recent fall in EEA migration may mean that the falling supply scenario is relevant to some sectors.

2.31 We investigated the effectiveness of the shortage indicators in predicting shortages in the 2019 SOL review<sup>77</sup>, where shortages were measured by either hard-to-fill or skill-shortage vacancies as reported by the Employer Skills Survey. The main conclusion was that the vacancy rate was the most consistent predictor of shortage, which is consistent with the fact that in Table 2.2 these are the indicators that would be expected to indicate shortage for all types of shortage.

2.32 As we did in last year's review (in which a more detailed explanation can be found), we have used a relative approach here, which looks to compare occupations against one another to provide a ranking of shortage, as opposed to a measure of the absolute level of shortage, which provides a binary indication as to whether an occupation is in shortage or not. These indicators are just one source of information used to help make recommendations.

### Limitations of the shortage methodology

2.33 While the shortage indicators are useful and it would be odd to consider shortages without looking at vacancies, employment and wages, they do have limitations which mean they cannot be used to diagnose shortage in isolation.

2.34 One limitation is that most of the data sources we use provide data at a 4-digit SOC level. There are extremely limited data sources available for specific job titles within a 4-digit SOC code, as many job titles will have a relatively small number of workers across the UK. For specific job titles, we rely more heavily on stakeholder evidence and data.

2.35 A second limitation is the timing of our data sources; whilst the data we have used are the most recent available<sup>78</sup>, there is a time lag in using 2018 to 2019 data to inform an analysis of shortage in 2020 and there is also a somewhat forward-looking element to the SOL since the list will apply for a period after it is set. This is a particular issue for this review, given the rapid and large changes to the economy and labour market due to COVID-19, almost all of which will not show in official data sources due to these time lags. There is also significant uncertainty about the future effects, both their size and duration.

2.36 Despite trying to mitigate the effect of small sample sizes, there is still volatility within the indicators and within movement of the ranks of SOC codes over years. This

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<sup>76</sup> For this report, we looked in at Australia, New Zealand, Canada, France, Ireland and Japan

<sup>77</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/806331/28\\_05\\_2019\\_Full\\_Review\\_SOL\\_Final\\_Report\\_1159.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/806331/28_05_2019_Full_Review_SOL_Final_Report_1159.pdf)

<sup>78</sup> 2017 ESS is the most recent available

volatility means that the timing of the data sources and timing of when we do the analysis can play a role in deciding what shortage ranking a SOC code receives.

2.37 Critically, many of these indicators are and will be affected by conditions other than job shortages. Pay, vacancies and employment will all be affected by several factors and not just job shortages; for example, public sector pay restraint may limit wage increases but might occur alongside shortages.

2.38 We use stakeholder evidence from businesses, sector bodies and government departments, based on their own first-hand experiences and their in-house data, to try and gather a fuller picture of shortages in the labour market. The stakeholder evidence is discussed and analysed in more detail in Chapter 3 and the qualitative and quantitative evidence combined in Chapters 5 to 7 to provide an assessment of shortage for all eligible occupations.

### **How the MAC uses stakeholder evidence**

2.39 Evidence from stakeholders forms an important part of our decision-making process. The evidence stakeholders give us allows us to form a more rounded picture of issues such as the employment situation, skills shortages and recruitment practices at a national, sectoral or occupational level. The stakeholder evidence the MAC uses falls into three broad groups:

- Responses to our online questionnaire;
- Written responses and other information provided by stakeholders; and
- Information from stakeholder forums

2.40 For most commissions, the MAC designs an online questionnaire, based on previous knowledge of the policy area and available information and statistics, to elicit standardised and comparable information that will be useful in the decision-making process. There are usually two questionnaires to enable questions to be tailored to both individual organisations and businesses, and representative organisations which will be representing a sectoral view or the view of several individual organisations. Typically, the types of questions asked in the questionnaire will include:

- Information about the organisation or the organisation represented; for example, 'firmographics': size, sector, location;
- Pre-coded questions which will be analysed quantitatively (for example in order to examine differences between different types of organisation, or the comparative strength of feeling respondents express towards alternative options). Where possible and sample sizes permitting, the quantitative analysis will look at key differences and similarities across factors such as sectors, locations and firm sizes;

- Open questions to elicit qualitative information; for example, on the reasons respondents hold a specific view, or the conditions within their sector, or organisation, that lead them to answer in a certain way. These are analysed and reported thematically with reference to the above firmographic factors;
- MAC questionnaires often also include questions relating to specific SOC codes (for example SOC codes in shortage, salary ranges paid), in order to enable analysis at an occupational level. Where stakeholders do not provide these specific SOC codes, it is harder to use the information they provide to make a decision relating to an individual occupation, and in these circumstances such information will typically be used instead to add to the sectoral context for decision-making.

2.41 The analysis from the online questionnaire is combined with additional evidence stakeholders send the MAC, or which has been gained from listening to stakeholders at stakeholder forums. For most commissions, this information is generally very varied in nature and may range from a short letter to a long report containing detailed statistical information and analysis. Typically, the MAC also receives a range of other information including membership surveys, presentations, industry reports and economic analysis. MAC analysts collate these responses and analyse them appropriately:

- Responses relating to a specific SOC code are pooled with the other information relating to that SOC code to enable decision-making;
- Qualitative information is analysed and reported on using broad thematic techniques and used, along with quantitative information and statistics provided, to support the sectoral, occupational or national context;
- Information is examined at occupational, sectoral and geographical level.

2.42 In assessing the strength of stakeholder evidence, the MAC looks at:

- The specificity of the information provided: does it relate explicitly to defined SOC codes to enable us to make decisions at an occupational level, or is it information (even if the information itself is detailed) that relates only to the broader sectoral, regional or national picture?
- Is the information provided (even if specific) opinion only, or is evidence provided to support the views expressed and assertions made?
- If there is evidence, what does it consist of and where/how was it obtained? Here we look at factors such as sources, sample sizes, and references to external sources;
- Who has provided the evidence? Here we assess where the information comes

from and whether it relates, for example, only or mostly to a specific region/nation, or a part of the sector under consideration. We consider whether, for example, the responses come from one or two individuals, a major representative body, or another major body such as a devolved administration. However, all responses are welcome and are considered and analysed carefully, and information provided by individual employers provides a vital and valued contribution to the decision-making process.

2.43 Once analysed, the stakeholder evidence is used to support the MAC's decision-making relating to the skilled, shortage and sensible criteria. We have illustrated our analysis with quotes extracted from the stakeholder evidence we received in response to this commission. Most of these are anonymised and indicate only the type of organisation, sector and location, unless the quote comes from a published report, a devolved administration, a local government organisation or an organisation representing businesses from several sectors, such as the British Chamber of Commerce. In these cases, the organisation has been named.

### The Sensible Criterion

2.44 Once an occupation has been identified as being sufficiently skilled and in shortage, we go on to consider whether placing that occupation on the SOL would be a sensible response. Historically we have asked ourselves the following questions:

- What are the alternatives to employing migrants in response to perceived staff shortages? Are these alternatives feasible, and have employers explored them fully? If not, what are the actual or perceived obstacles?
- How would bringing in migrants relate to skills acquisition of the UK workforce? Are there enough UK resident workers in training/education to fill shortages? Will bringing in migrants reduce employers' incentives to invest in training and upskilling of UK workers?
- How will the employment of migrants affect investment, innovation and productivity growth? Is there a particular case for employing migrants to support and maintain the UK's international competitiveness in certain sectors?
- How will our decision affect the wider UK labour market and economy? How, if at all, will access to migrant labour affect employment opportunities and conditions for the UK workforce?

2.45 In addition to these questions, the MAC have decided to add the following questions to the sensible criteria:

- What are the likely impacts of shortage in this occupation?
- Is this an occupation of high public value?

- 2.46 In response to COVID-19, demand has risen significantly for many key worker occupations. This has resulted in unexpected new shortages emerging quickly, which would not be captured in the data we have used to undertake this review. These questions are designed to consider the wider impacts of shortage in an occupation, and to identify occupations which would cause the greatest harm if shortage were to occur.
- 2.47 The extent to which membership of the SOL is a sensible response to shortage depends on the cause of that shortage. In the 2019 SOL review we wrote “*An important distinction is between where a shortage occurs because of a low supply of workers able to do the job compared to a situation where the shortage occurs because of a low supply of workers willing to do the job.*”<sup>79</sup>
- 2.48 Where it is the case that shortages stem from a low supply of workers able to do the job and the salary threshold without a SOL discount is reasonably high compared to an occupation’s earnings distribution (i.e. the general threshold is relatively high in the occupation’s earnings distribution), then a lower salary threshold might be appropriate. For occupations where it will take a significant length of time for employers to increase the supply of capable UK workers through training or other initiatives, lowering salary thresholds could make it easier for employers to hire migrants while steps are taken to improve the underlying skills mismatch in the UK labour market that generated the shortage in the first place.
- 2.49 However, even in these cases lowering the salary threshold does not come without risk. Often the skill shortages employers face are predictable. For example, looking at the age profile of a workforce might tell employers whether they will be susceptible to shortages of skilled workers as individuals retire and labour already in training, or gaining the necessary experience to replace them, does not exist. Such issues will be apparent several years before labour shortages become acute. If employers do not take appropriate actions to remedy this and then find it is made easier for them to hire migrant labour through the SOL, there is the potential that poor workforce planning is rewarded. This could result in issues of moral hazard, where employers are less motivated to address predictable drivers of shortage in a timely manner.
- 2.50 For those occupations also facing shortages driven by a low supply of workers able to do the job, but for whom the binding salary threshold is set at the 25<sup>th</sup> percentile of that occupation’s full-time earnings, the argument for being placed on the SOL is less strong. For these occupations the salary threshold should be affordable for an average employer of those occupations and lowering it is unlikely to do much to help employers’ access to the labour they need or could even result in migrants undercutting the resident workforce’s wages in some circumstances.

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<sup>79</sup> Chapter 2, P36

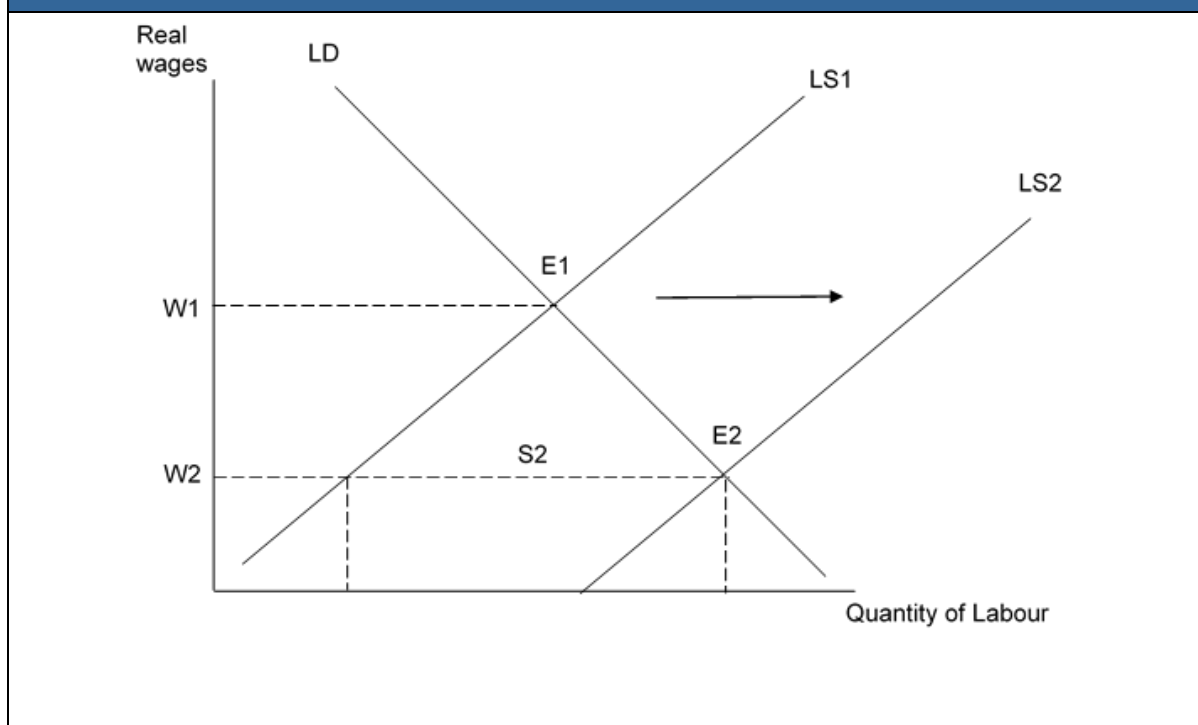
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/806331/28\\_05\\_2019\\_Full\\_Review\\_SOL\\_Final\\_Report\\_1159.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/806331/28_05_2019_Full_Review_SOL_Final_Report_1159.pdf)

- 2.51 Finally, where a shortage is driven by a low supply of workers willing to do a certain job, membership of the SOL might help those employers in the short-run but is unlikely to be helpful over the longer term and may prove detrimental to UK workers. For these occupations it is likely that the terms and conditions employers are offering make the job unattractive in comparison to other options workers may have. Making it easier to hire from abroad by lowering the salary threshold might help employers fill vacancies but the underlying issues of poor terms and conditions will likely result in that migrant labour seeking to move elsewhere in the economy – either through switching employers within the Skilled Worker route, or after receiving settlement. Fundamentally, the same factors that make an occupation unattractive to domestic workers also make it unattractive to migrant workers. It is also the case that the Skilled Worker route, with the associated administrative overheads and fees, is likely to be least attractive amongst employers facing shortages driven by poor terms and conditions.
- 2.52 Lowering salary thresholds for occupations struggling to attract labour due to poor terms and conditions also risks delaying necessary adjustments to those terms and conditions, negatively impacting existing and potential future UK workers. Furthermore, it risks embedding poor terms and conditions as a structural feature for certain occupations. In terms of wages, this also encourages a ‘race to the bottom’ scenario whereby the wage – which should help to justify the terms and conditions of such jobs – falls as migrants come in on the SOL. As a result, the wage is even lower next time we calculate it and if the job is still in shortage (which is likely given this lowered wage level resulted from being placed on the SOL) a further discount is applied such that we could see a downward wage spiral emerge.
- 2.53 Despite this there may be some special cases. It may be argued that lower salary thresholds for certain occupations could help support the UK’s international competitiveness, as they may help alleviate shortages and lower costs. However, this is not a complete argument. It could be the case that high wages persuade an employer to substitute from labour to capital – which could improve productivity and competitiveness in the long run, even given the upfront capital investment costs. In fact, the relative loss of competitiveness from solely lowering labour costs and not investing or innovating compared to international competitors could ultimately lead to reduced competitiveness and in the long run unemployment (at a greater level than that caused by the shift to capital). Finally, actively lowering the wage goes against the UK’s industrial strategy for a high skill, high wage and high productivity economy.

## **Solutions to Shortage**

- 2.54 As previously discussed, shortages occur when real wages ( $W_2$ ) are below the market-clearing value ( $W_1$ ), causing there to be a gap ( $S_2$ ) between the labour demand and supply as seen in Figure 2.2.

**Figure 2.2: Supply and demand curve showing outward expansion in labour supply**



2.55 There are three broad solutions to addressing labour market shortages:

- Increase wages. A laissez-faire approach would be to simply wait for real wages to increase to the market-clearing level, but more concerted action may be needed if the shortage is structural. Both wages and employment would rise in this case. Of course, some occupations may have limited wage flexibility.
- Decrease labour demand. An inward shift in the demand curve would bridge the shortage gap. This would turn the current real wage into the market-clearing real wage. One way in which this might happen is if employers find a way to raise productivity, getting the same output from fewer workers; for example, through use of technology. Neither employment nor wages would change in this case.
- Policies for increasing labour supply. Immigration is one way to do this, but increased training is another, as is greater labour market participation from the inactive group. Employment would rise but wages would not in this case. As this solution does not increase wages, we would expect it to be particularly attractive to employers.

2.56 Raising wages and increasing labour supply may both reduce shortages but may differ in how they resolve the problems caused by shortages.

2.57 The extent to which rising wages lead to rises in employment depends on how sensitive the supply of labour is to the wages offered, a concept that economists refer



to as elasticity. If supply is fixed (LS above would instead be vertical), perhaps because the job requires specific skills that cannot be quickly or easily obtained, the rise in wages will equalise demand and supply only because demand falls. This will benefit the workers concerned but will do nothing to increase the output of the sector. In a scenario where it is important to increase employment in the sector, an increase in supply may be the only sensible solution in this case. It is likely that the supply of labour is more constrained in the short-run than the long-run; for example, as it takes time to acquire the necessary skills to do a role. Increasing labour supply to deal with short-run shortages without raising wages does little to attract more people into the occupation which may be a better longer-run solution to shortage. Furthermore, if employers know they can simply increase the supply of labour using migrant workers, there is less of an incentive to invest in training, education and up-skilling of UK workers.

2.58 We do not think it is a sensible use of the SOL to deal with generalised shortages of labour for two reasons. First, the SOL is about giving priority to some jobs over others. To put all occupations on the SOL would be equivalent to putting none on. The SOL should be used to address damaging shortages in specific parts of the labour market.

2.59 Second, we are sceptical about the effectiveness of immigration as a solution to generalised shortages of labour. Immigration raises the supply of labour but as those new workers earn and spend money, they raise the demand for labour in other parts of the labour market<sup>80</sup>. In a specific occupation in shortage, this extra demand will almost all be outside of the sector in which they work, so employing migrants will reduce the gap between demand and supply in that job. In the labour market as a whole, the increase in demand will roughly be in line with the increase in supply. Therefore, we think immigration is not a cause of unemployment when the supply of labour is ahead of demand, but equally this means that vacancies would not be lowered by more immigration. The argument that immigration can be used to address generalised imbalances between demand and supply in the labour market is an example of the ‘lump of labour fallacy’, that evidence strongly suggests is indeed a fallacy. Some commentators who argue strongly against the view that reduced immigration would reduce unemployment in recessions, seem to argue that increased immigration can reduce the demand-supply gap in a boom. We think this is an inconsistent position; our view is that the impact is small in both cases.

## Bringing the evidence together

2.60 The indicators are useful in assessing whether there is shortage in some occupations but not others. However, they cannot be relied on exclusively in making those assessments for the reasons described in this chapter. Therefore, we rely heavily on

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<sup>80</sup> See, for example our discussion in the EEA-workers in the UK: Interim Update [https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment\\_data/file/694494/eea-workers-uk-labour-market-interim-update.pdf](https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment_data/file/694494/eea-workers-uk-labour-market-interim-update.pdf)

information from stakeholders. This information was collected through meetings with stakeholders, which were held virtually for this commission, and the Call for Evidence (CfE). Detail of our engagements can be found in Annex C and the details of the CfE can be found in Chapter 3. We are grateful to all our stakeholders who have engaged with us during this commission and responded to the CfE. We appreciate all the input they have provided, particularly during these challenging circumstances.

2.61 In addition, we also carry out desk research on each occupation to supplement the evidence from indicators and stakeholders, ensuring we have a comprehensive picture in each occupation as far as possible. We look at the evidence across the three criteria (skilled, shortage, sensible) in both the top-down indicators and bottom-up evidence before making recommendations on whether an occupation should be on the SOL. Where different sources of evidence suggest different conclusions, we have to use a degree of judgement in weighing up the evidence and we set out explicitly where we do this.

## **SOC boxes data explanation**

2.62 While recommendations for each occupation group are made on a case-by-case basis, we present the same statistics – where the data are available – and shortage indicator rank for every SOC code. These are given in the summary boxes, also referred to as SOC boxes, provided at the start of each occupation. These boxes contain the following information:

### **Employment**

- An occupation's share of total employees in the UK;
- The share of employees within an occupation that were born in the EEA (excluding those born in the UK and Republic of Ireland);
- The share of employees within an occupation that were born outside the EEA;
- The share of employees continuously employed in their role for 12 months or less, this gives a measure of labour market churn within an occupation.

2.63 These employment measures are derived from the 3-year pooled Annual Population Survey (2017-19). Shaded cells indicate a sample size of between three and 25. Where there is no value, there is a sample size of two or less.

### **Wages**

- The median annual wage of full-time employees;

- The 25<sup>th</sup> percentile annual wage of full-time employees. Where this is not available from the ONS due to quality or disclosure reasons, we have used our own methodology to estimate these using multiple years of data<sup>81</sup>.

2.64 These wage measures are derived from the Annual Survey of Hours and Earnings (2019).

### Salary Threshold

- Minimum salary threshold required under the Skilled Worker route without additional points;
- Minimum salary threshold required with SOL points.

2.65 These salary thresholds are set out in Home Office guidance<sup>82</sup> based on data from the Annual Survey of Hours and Earnings.

### Impact of COVID-19

- An occupation's exposure to disease;
- The proximity to others in that occupation;
- The share of employees furloughed;
- The percentage change in job postings between August 2019 and August 2020.

2.66 The first two COVID-19 impact measures are from the ONS<sup>83</sup>. The third measure uses the Labour Force Survey March to May COVID-19 data. The fourth measure is from Burning Glass data.

### Vacancies

- A chart showing the ratio in online job posts to employees for an occupation relative to the median ratio for all occupations eligible for the Skilled Worker route.

2.67 This vacancy measure is derived from Burning Glass.

### Shortage Indicator Rank

- The overall rank of an occupation calculated using the top down indicators of shortage (see Table 2.1 for more detail) where the rank is either for the eligible

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<sup>81</sup> <https://www.gov.uk/government/publications/calculating-salary-thresholds-technical-note>

<sup>82</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/899755/UK\\_Points-Based\\_System\\_Further\\_Details\\_Web\\_Accessible.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/899755/UK_Points-Based_System_Further_Details_Web_Accessible.pdf)

<sup>83</sup> ONS, Which occupations have the highest potential exposure to the coronavirus (COVID-19)?, <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/whichoccupationshavethehighestpotentialalexposuretothecoronaviruscovid19/2020-05-11>

occupations below RQF6 or RQF6+ occupations. Note at least five indicators need to be available for a rank to be calculated.

## Chapter 3: Cross-cutting themes

### Introduction

- 3.1 This chapter summarises the cross-cutting themes identified by stakeholders through a Call for Evidence (CfE), engagement meetings, and from analysis of submitted documents via the MAC website. In addition, it draws on the relevant findings from a literature review on employer decision-making about how to fill skill shortages, which has been undertaken for the MAC by Professor Anne Green at the University of Birmingham and Dr David Owen at the Institute of Employment Research at Warwick University. The full literature review will be published separately by the MAC shortly<sup>84</sup>. The key points identified across this body of information feature in the report in two separate ways. First, this chapter outlines the key themes that have been identified and that cut across occupational boundaries. Second, where an issue is of particular concern for a specific occupation, the information forms a part of the occupational chapters that follow, where decisions about individual occupational codes and their suitability for the SOL are determined.

### Call for Evidence

- 3.2 As with the 2019 SOL report, we used an online questionnaire (see Annex D and E) to gather the responses to our CfE. The advantage of such an approach is that it allows us to assess the information in a more structured way. In addition, respondents were able to email through additional responses, reports and information via the MAC email inbox.
- 3.3 Due to COVID-19 and a shorter deadline, we took the decision to allow respondents to only answer what they wished to (i.e. no mandatory questions). This decision was made to minimise the burden on respondents in what has been a hugely challenging time for many businesses. Unfortunately, this has inevitably had a negative impact on our ability to analyse our responses quantitatively, due to high levels of item non-response (i.e. missed questions).
- 3.4 The CfE questionnaire was open for six weeks, from May 13<sup>th</sup> to June 24<sup>th</sup>, 2020. In this time 200 respondents submitted their replies to the questionnaire. A further 212 started the questionnaire but did not get to the final page and formally submit. In addition, a further 63 organisations provided evidence through emailing documents directly to the MAC secretariat. This chapter concentrates on the online questionnaire, but some information from the emails has been included. Predominantly, the emailed information has been used as part of the occupational chapters.

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<sup>84</sup> Green, Owen et al, Employer decision-making around skill shortages, employee shortages and migration: Literature Review (forthcoming)

- 3.5 The main CfE asked respondents about four key themes:
- How they recruited;
  - Recruitment shortages;
  - Skills shortages; and
  - Occupations they believed should be added to the shortage occupation list (SOL)
- 3.6 Whilst the online questionnaire gave structure to the responses, it was not a formal statistical survey. Responses were self-selected and no assessment of representativeness was made. In addition, missing answers mean it was not feasible to look at themes in a quantitative sense, except through counts of responses.
- 3.7 Whilst we were unable to carry out any complex quantitative analysis, the CfE contains lots of rich information and we have attempted to extract all relevant evidence to inform our assessment.
- 3.8 Data from the CfE is only indicative of the perceptions of those who responded including (for representative organisations) their perceptions of the views of those they represented. Where respondents provided specific data on issues such as level of pay, these were sense checked against published going rates, but have not been externally verified.
- 3.9 In this chapter, we give a brief overview of the response to the CfE. We report: the characteristics of the respondents (type, sector, size); how, who and why they recruit; and what roles they believed support inclusion on the SOL and the associated reasons.

### **Characteristics of respondents**

- 3.10 In total we received 200 responses which formally submitted their questionnaire. The numbers that are reported in the following paragraphs will be based on these 200. The information from the 212 partially-completed questionnaires has been read, and any key themes extracted. In a formal survey setting it is likely that we would have removed these from further analysis, but because of the nature of this CfE we decided to assess these incomplete responses. We made this decision so that these respondents had not given up their time in vain and it maximised the amount of information we had to review and base our findings on.
- 3.11 A further 101 responses were made that indicated that the respondent had no or limited ability to respond at that time. These respondents supplied us with an email address, and this will allow us to follow up in more stable times.
- 3.12 We also accepted alternative evidence submissions (anything respondents thought would be of interest to us – for example letters, reports, surveys). A total of 63 respondents used this option.

- 3.13 Due to the circumstances it is difficult to make a direct comparison with the response numbers from the previous SOL. In 2019 the CfE questionnaire was open for over nine weeks. In that time, we received 558 unique responses via the online questionnaire and a further 15 organisations provided evidence through other means. Similar to this time, we also carried out several stakeholder events throughout the country where we gathered important insights.
- 3.14 Whilst it is therefore unsurprising in these times that we have seen a large drop-off in completed CfE responses (558 to 200), the two reports cover slightly different issues so are not directly comparable in any case. This report primarily focuses on occupations at Recognised Qualification Framework (RQF) Levels 3-5. When the previous full review of the Shortage Occupation List (SOL) was commissioned, jobs on the SOL needed to be skilled to RQF6 and above.
- 3.15 121 respondents were providing evidence for their own organisation and 79 were providing evidence on behalf of other organisations/their members. As mentioned, further analysis is difficult owing to small numbers, but a review of some key questions did not identify a strong difference of opinion between individuals and representative organisations.
- 3.16 Eighty-one of the 200 respondents did not reply to the questions in section B, covering sector, size and region, and so we are unable to comment on their characteristics.
- 3.17 The remaining responses covered 15 sectors of the economy. Human Health and Social Work Activities (22) and Education (20) were the only two with 20 or more responses.
- 3.18 Eighteen organisations employed less than 50 people, 32 organisations employed between 50 and 499 employees and 68 over 500 employees.
- 3.19 UK-wide (22) and London (20) were the two most common regions, but responses came from all the UK regions and nations.

## **Recruitment**

- 3.20 We asked a series of questions about how organisations recruited, and what was important when recruiting to fill job vacancies. This was in order to get a sense of how employers varied in their approaches. From Green, Owen et al's forthcoming literature review we know that:

*“when hiring a new worker an employer faces a choice of recruitment strategy. Choices and trade-offs depend on search costs and frictions, with employers being more likely to use trade-offs when search costs are higher”<sup>85</sup>.*

- 3.21 When we asked respondents to describe their organisation’s approach to recruitment, the most common response was that they *“prefer to wait for someone who has most of the skills needed, even if that means leaving a position unfilled for a while”* (108). The next most common response was that they were *“willing to compromise on some of the skills needed in order to fill a vacancy sooner”* (49). Responses to this question should be viewed in the context of how employers approach training and investment in staff, and as we will turn to later, it is clear that there was a preference in the UK for employers to buy in labour rather than train up individuals within their own organisations.
- 3.22 Over the last three years, 187 of the 200 organisations recruited UK and/or Irish workers, 190 recruited from EEA countries outside the UK/RoI and 160 recruited workers from non-EEA countries. Only three of the 200 did not respond to these questions.
- 3.23 We also asked whether organisations would recruit (in the next 12 months) from these areas. All three areas saw a slight reduction: 182 organisations expected to recruit UK and/or Irish workers, 179 organisations said they would recruit workers from EEA countries outside of the UK/RoI, and 157 organisations said they would recruit workers from non-EEA countries. So, whilst EEA countries had the biggest reduction, it is not a substantial change despite the impending end of freedom of movement.
- 3.24 119 respondents confirmed that they are currently registered as a Tier 2 (General) sponsor. 48 said that they were not registered as a Tier 2 (General) sponsor, and a further 29 were unsure.
- 3.25 Looking in combination at where respondents stated they were recruiting their employees from, and whether they are a Tier 2 sponsor, there may be a small group amongst those who responded, who are yet to formally engage with the immigration system, and so might potentially find the new system harder to navigate than others.
- 3.26 Within the last 12 months 177 respondents stated that they, or those they represented, had experienced difficulties recruiting staff. Only 14 stated that they had not experienced any difficulties.

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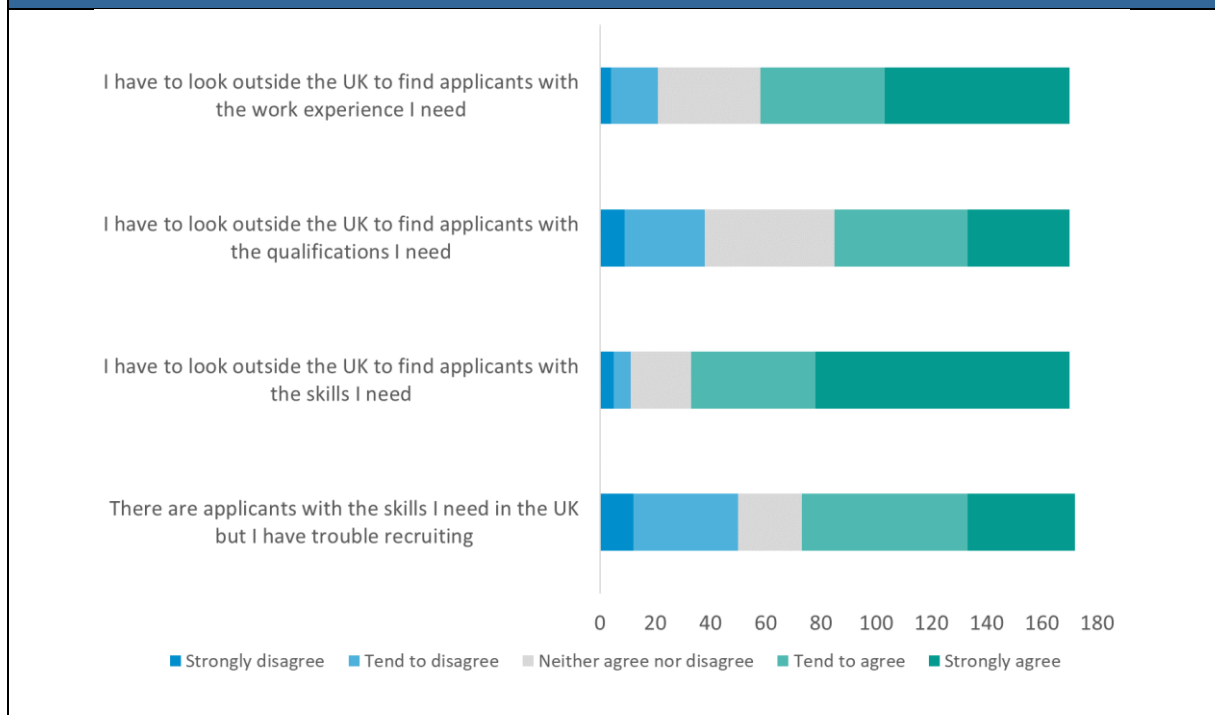
<sup>85</sup> Green, Owen et al, Employer decision-making around skill shortages, employee shortages and migration: Literature Review (forthcoming)



3.27 We asked organisations to consider, in roles they had difficulties with recruitment, how far they would agree or disagree with certain statements.

- “There are applicants with the skills I need in the UK but I have trouble recruiting these” – Agree 99 versus Disagree 50
- “I have to look outside the UK to find applicants with the skills I need” – Agree 137 versus Disagree 11
- “I have to look outside the UK to find applicants with the qualifications I need” – Agree 85 versus Disagree 38
- “I have to look outside the UK to find applicants with the work experience I need” – Agree 112 versus Disagree 21

**Figure 3.1: In general, for roles where you / organisations you represent have had difficulties in recruitment, how far would you agree or disagree with the following...?**



Call for Evidence questionnaire – question D7, count of responses

3.28 So, whilst there was more agreement than disagreement with all these statements, a lack of skills and work experience in the UK appeared to be seen as more of an issue than formal qualifications. This sheds light on how employers view skills and reflects findings in the forthcoming literature review undertaken for the MAC by Green, Owen et al<sup>86</sup>.

3.29 13 respondents said that on average it took under a month to fill a vacancy, 83 respondents one to three months, 60 respondents four to six months and 18

<sup>86</sup> Green, Owen et al, Employer decision-making around skill shortages, employee shortages and migration: Literature Review (forthcoming)

respondents over six months. As many employers also stated that they preferred to wait for the right candidate to come along to fill a vacancy, this implies that this average length of time might mask a large variation in timeframes.

3.30 When asked about the proficiency of staff in their organisation/the organisations they represented:

- 51 said that *“All staff are fully proficient at their job”*;
- 69 said that *“One or more staff are not fully proficient at their job but this is **not a major concern** for the organisation”*;
- 60 said that *“One or more staff are not fully proficient at their job and this **is a major concern** for the organisation”*; and
- 14 said *“Don't know”*.

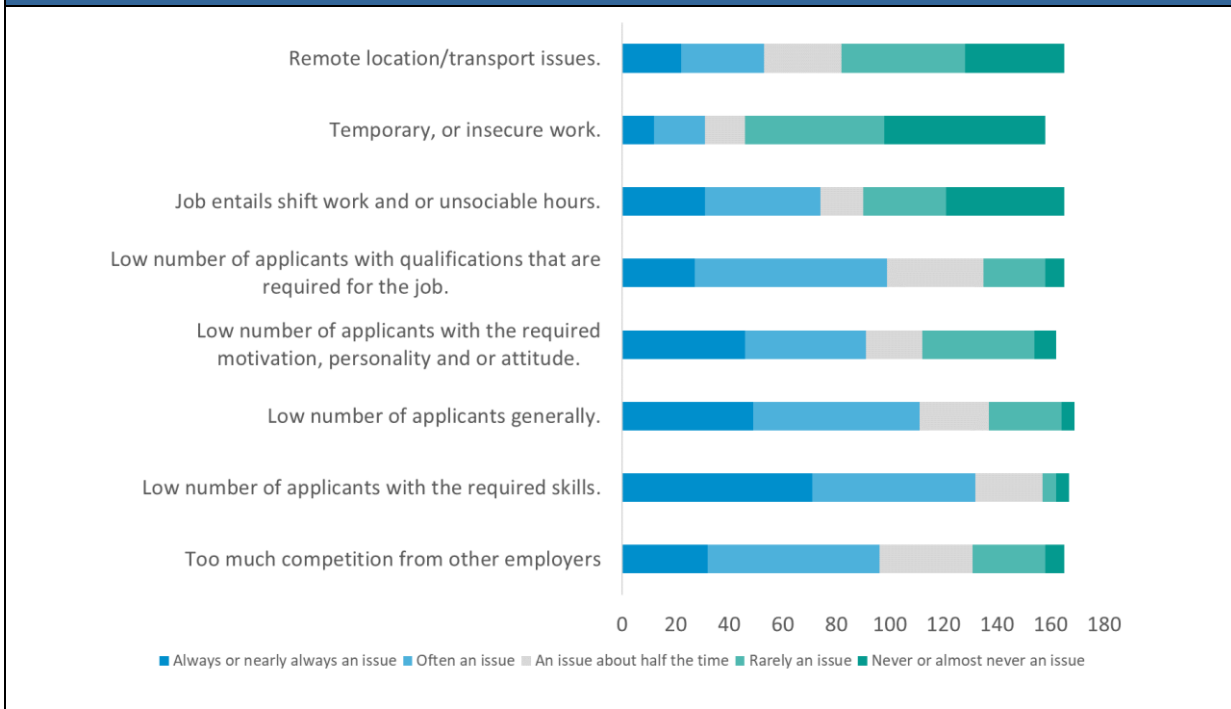
3.31 Whilst the wording of the questions is slightly different, this is a very different finding from the Employer Skills Survey<sup>87</sup> where most employers (96 per cent) in the UK considered their existing workforce to be fully proficient. This implies that the cohort of employers and representative organisations who responded to the CfE may not be representative of the wider employer population across the economy in terms of their view on the proficiency of their staff. It should be borne in mind that the views expressed in the CfE may represent more vocal organisations who responded with specific concerns in mind and therefore may not be representative of the majority.

3.32 When asked *“which of the following has your organisation/the organisations you represent done to overcome difficulties filling vacancies”* recruiting non-UK nationals was both the most commonly stated solution to overcoming vacancies (156), and overwhelming considered the most effective (147). Not as many, but still a substantial amount, considered training as the next most used solution (and it was largely considered effective). All options (see question E6 for list of options) had more people stating that they had utilised them (versus No + Don't Know + Blank), but automation was the least used (71). Only one option was overall considered ineffective – increasing advertisement/recruitment spend (69, versus 51 who considered it to be effective).

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<sup>87</sup> <https://www.gov.uk/government/publications/employer-skills-survey-2017-uk-report> Table 112

**Figure 3.2: To what extent do the following cause problems in recruitment for your organisations / the organisations you represent...?**



Call for Evidence questionnaire – question E2, count of responses

3.33 It appears that organisations were focusing more on immigration, rather than training, to address difficulties in filling vacancies.

*“It could be asked, that if this is a well understood problem, then why haven’t employers responded with more training. In a separate study we investigated this and found the average forward business confidence in the rail supply chain was 11-23 months (it was higher in more ‘stable’ sectors such as utilities). The return on investment for a Level 3 apprentice is 3.3 years, so if you have only 2 years of confidence it would be irrational to make the investment.”*

Strategic Transport Apprenticeship Taskforce (DfT) Attachment

3.34 This echoes findings in the forthcoming literature review undertaken for the MAC which referenced various studies, including Lyons et. al, 2020, who found that *“relative to European competitors, there has been a tendency in the UK to recruit rather than train.”*<sup>88</sup>

## Shortage Occupation List

3.35 We asked whether or not respondents would like to provide examples of specific jobs that they thought should be added to the Shortage Occupation List (SOL). A few partial

<sup>88</sup> Green, Owen et al, Employer decision-making around skill shortages, employee shortages and migration: Literature Review (forthcoming)

completers did fill in this section and they have been included in the following analysis, but they represent less than two per cent of the jobs submitted.

- 3.36 All respondents were asked to outline up to 10 job titles for which their organisation had experienced difficulties in recruiting suitable workers over the past 12 months.
- 3.37 In total there were 200 unique job titles submitted. Many of these were mentioned multiple times, so we received 849 pieces of information relating to job titles. The following paragraphs will report the total number of responses received for an occupation followed by the unique number of different SOC occupations represented in brackets. i.e. 849 (200).
- 3.38 This report primarily focuses on occupations at RQF3-5. There were 377 (85) submissions for jobs at this level, of which 36 (4) are already on the SOL.
- 3.39 Information was also submitted for jobs outside the range RQF3-5. There were 185 (45) submissions of job roles below RQF3. Chapter 5 considers these roles in more detail. RQF6+ had 270 (66) submissions, of which 113 (39) are not currently on the SOL. Chapter 7 considers these roles in more detail.
- 3.40 Some of the codes submitted were not valid. It is not obvious why these 17 (4) codes were included, but they will not be analysed further.

### **Why employers in occupations at RQF3-5 believe they should be placed on the SOL**

- 3.41 A lack of an available domestic workforce is the key reason for wanting to be on the SOL. This was described in many ways, such as: that there was a shortage of qualified workers; that it was difficult to find suitable candidates; that there were not enough workers in the UK; that there were insufficient numbers with the right skills; or a low number of candidates were applying.

*“There is a lack of available staff in the UK to recruit from, and skilled butchers are in high demand across the whole of Europe. UK nationals that are qualified butchers are in very short supply. Whilst the biggest businesses have created training programmes with some success, these do not produce enough skilled workers to fill the shortage in the UK. Therefore, recruiting from abroad must be maintained as an option.”*

Representative Organisation; Food Production Sector; UK-wide

- 3.42 Some organisations put this down to their specific location, saying that jobs in remote or less centralised locations suffered from a particular shortage in people willing to do the job: the local population was not large enough, local employment rates were high (though this may subsequently have been impacted by the effects of COVID-19) and people were unwilling to relocate within the UK for the jobs on offer.

*“From our experience, recruitment difficulties have occurred for this role when hiring for remote locations, for example in the islands and in the South-West of Scotland. We do not experience the same difficulties when hiring for more centralised regions, such as the Central Belt of Scotland.”*

Individual organisation; Arts, Entertainment and Recreation; Scotland

*“We have struggled to recruit (at RQF3-5) in the South West and are often unable to make an appointment.”*

Individual organisation; Education; South West England

- 3.43 An aging workforce also came up as a building pressure, coupled with a lack of young people considering certain industries as a career path.

*“Technicians have been an issue for a number of years, as they are an aging workforce and it is not a role that is considered by the upcoming workforce.”*

Individual organisation; Education; East Midlands

*“Quite simply, the industry is screaming out for suitably skilled drivers, willing to do the job. With an average age of 57 years old and companies (and statistics) advising [that] European migrant drivers are returning home over concerns with Brexit and/or the poor exchange rate devaluing wages paid in the UK, where will they come from?”*

Representative Organisation; Transportation and Storage; UK-wide

- 3.44 The skills of those applying was often stated as a major barrier, whether it was a shortage of formal qualifications; that the role requires months to years of training; or that the role was too specialised for the general workforce.

*“Training is a long-term solution for the workforce and without immediate access to migrant labour, the construction industry will face crippling skills shortages that will result in many projects delayed and UK productivity decrease. Without immediate support to retain a skilled workforce, the ability of the construction industry to support the UK’s economic recovery and deliver the Government’s levelling up agenda and national infrastructure priorities will be severely impeded.”*

Representative Organisation; Construction; UK-wide

*“One of the most consistent messages we hear from small businesses is their struggle to recruit, at all skill levels. Consequently, they are afflicted by skills shortages which stunt their productivity, at real cost to both themselves and the whole UK economy. Small businesses have taken reasonable steps in dealing with skills shortages, extending links to further education, apprenticeships, and upskilling and re-training staff.”*

Federation of Small Businesses, Response to MAC consultation

3.45 There is also an issue that perhaps can be summarised as (perceived) willingness on behalf of the (potential) employee. Certain roles were said to be physically tough (for example, working in abattoirs, or in seafood production), have considerable pressure and unsocial hours (for example, senior carers) or be seasonal (for example, roles across the agriculture, forestry and fishing sector), and employers said that the UK workforce was not willing to carry these out at the current level of pay. These issues are discussed further in Chapter 5.

*“Shortage of local people who are willing to do the job, especially in areas of low unemployment. UK workers do not want to do these jobs.”*

Representative organisation; Food Production Sector; Scotland

3.46 Amongst some organisations there was a concern that they will be at a competitive disadvantage due to the ending of freedom of movement and that they might have to consider moving abroad. This was particularly a concern of Northern Irish organisations, given that Northern Ireland will be sharing a land border with the EU.

*“Ultimately, if we are unable to fulfil our recruitment requirements, we will have no option but to move production abroad.”*

Individual Organisation; Food Production Sector; East of England

*“The current shortage of workers in this sector despite having access to EU labour force. ... A land border with another EU country where they have access to EU workers and NI does not.”*

Representative Organisation; Transportation and Storage; UK-wide

## **Why employers in occupations at RQF6+ believe they should be placed on the SOL**

3.47 Despite the difference in skill levels, organisations with roles at RQF6+ that are not currently on the SOL, state similar reasons to those below RQF6+ as to why they should be placed on the SOL.

3.48 Willingness to do a job on the part of recruits did not feature as heavily, but it was mentioned. This is not a surprise as these jobs are less likely to be as physically demanding and in many instances were less likely to involve the unsociable hours and conditions of some others below RQF6+.

3.49 The key reason given for the highest skill level, perhaps unsurprisingly, was a shortage of specialised skills.

*“Insufficient numbers of individuals in the UK with this required skillset.”*

Individual Organisation; Food Production Sector; UK-wide

- 3.50 This might also explain why a number of organisations stated that they had a lack of applicants.

*“We struggle to attract the right number and quality of recruits in the UK market and rely on applicants from both Europe and Outside the EU to meet business requirements.”*

Individual Organisation; Manufacturing; Wales

### Further points from the literature review

- 3.51 The literature review by Green, Owen et al (forthcoming) examining employer decision making around skill/employee shortages and migration found that there was a limited literature on RQF3-5 occupations, with the available literature focusing on sector or skill type<sup>89</sup>.
- 3.52 They identified two mechanisms that generally affected employers’ strategy of recruiting labour from abroad.
- 3.53 Firstly, there were internal mechanisms, such as whether a business has an international orientation as reflected by an international business strategy and an international workforce. The literature identified that multinational enterprises are likely to recruit abroad because their business structure requires personnel to operate across establishments in a range of countries. International recruitment and circulation of staff allows the transfer of knowledge and helps foster a global business culture. Enterprises that have a high level of foreign workers and high level of exporting may also be hypothesised to be positively associated with recruitment from abroad.
- 3.54 The second mechanism is external, including labour market conditions such as high demands of skilled labour and low supply that may lead to employers to recruit from abroad. For businesses operating in competitive markets it may not be possible to raise wages and therefore hiring workers from abroad might be an attractive strategy.

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<sup>89</sup> Green, Owen et al, Employer decision-making around skill shortages, employee shortages and migration: Literature Review (forthcoming)

## Conclusion

- 3.55 Despite the challenges, organisations supplied us with some detailed information allowing us to investigate how, who and why they recruit; and what roles and associated reasons they believe that certain roles should be on the SOL.
- 3.56 This chapter concentrated on overall themes. The following chapters look at specific RQF3-5 occupations, submissions that covered those below RQF3 (with a focus on social care) and RQF6+.
- 3.57 This chapter also reports on the opinions of those who were able to respond. It is impossible to say if these accurately reflect all organisations and they do not necessarily reflect the opinion of the MAC.
- 3.58 The key reasons given for wanting to be on the SOL were:
- A lack of a suitably skilled workforce in the UK;
  - An unwillingness of the UK workforce to consider certain roles due to: physical demands; unsocial hours; an unwillingness to relocate; or seasonality of these roles; and
  - That training alone is not a viable solution due to the time it takes and lack of long-term certainty.
- 3.59 Historically, employers within the UK tend to prefer to recruit rather than train their existing workforce, although 130 respondents said that they had utilised increased training of their existing workforce and 89 had found that effective.
- 3.60 A combination of geographic (rural, isolated) and demographic (high employment, lack of young people wanting to do the job) challenges caused specific problems to certain organisations.
- 3.61 We would expect that increasing wages to a certain point will overcome shortages over time. 129 respondents stated that they had attempted to offer increased salaries, with 76 saying that they had found this to be an effective strategy.



## Chapter 4: Devolved Nations and the SOL

### Summary

- The last SOL report in 2019 recommended the establishment of separate SOLs for Northern Ireland and Wales to sit alongside the existing Scotland-only and UK-wide SOLs.
- No occupations were entered onto the SOLs for Wales and Northern Ireland in 2019. This was because the previous SOLs related to RQF6+ jobs, and any shortages in these occupations generally tend to be experienced UK-wide.
- Data and sample size limitations mean that we are more reliant on stakeholder evidence to make recommendations for the devolved-nation-only SOLs.
- We received contributions from the Scottish Government, Welsh Government and the Northern Ireland Executive.
- These were analysed, along with contributions from other stakeholders based in these administrations, and recommendations were made for the DN-only SOLs.

### The devolved nations and immigration

- 4.1 Immigration within the devolved nations is reserved to the UK Government. However, each of the Devolved Administrations has at times called for a more specific or nuanced approach to meet the needs of the separate devolved nations.

#### Scotland

- 4.2 The Scottish Government has previously made representations calling for a different approach to immigration in Scotland, in order to meet several challenges which (while they may apply in other areas of the UK) may affect Scotland disproportionately. In particular, it envisages a prominent role for migration in helping to address:
- Demographic change – and in particular a decline in working age population, compared to that of the UK as a whole;
  - Supporting rural areas and communities;
  - Supporting sectors of particular importance to Scotland's economy, such as agriculture and travel and tourism; and
  - Ensuring future economic growth.
- 4.3 It emphasises the contribution of those who have migrated to Scotland in the past and indicates that it would have preferred to see a continuation of freedom of movement. The reasons given for this are both to counteract the independent Expert Advisory

Group on Migration's (EAG's)<sup>90</sup> predicted fall in migration to Scotland (of around thirty to fifty per cent) leading to a decline in Scotland's working age population (around three to five per cent, that the EAG projects as a consequence of the end of freedom of movement, and in order for Scotland to "*remain a diverse and outward-looking country that is open to the world*").

4.4 The Scottish Government has made several proposals for ways in which it believes its needs could be addressed, including the devolution of further UK Government powers to Scotland to determine and vary immigration criteria and thresholds. However, the Scottish Government has also suggested more limited changes to work within the current system where immigration is a reserved matter, for example the introduction of a Scottish Visa, or the introduction of migration schemes aimed at remote or rural areas (a previous MAC recommendation – this, along with other MAC recommendations relating to the DNs, is discussed further below).

4.5 Other changes the Scottish Government has called for<sup>91 92</sup> include:

- A difference in salary thresholds in Scotland, or at least salary thresholds set low enough to take account of the lower salaries paid in rural areas;
- An improvement to the rights of people in Scotland to bring close family into the country with them;
- A review of the immigration skills charge;
- A formal role for Scottish Ministers in deciding on the Scotland SOL; and
- A reintroduction of the post-study work visa.

## Northern Ireland

4.6 The Northern Ireland Executive has also made representations about the needs of Northern Ireland within a UK-wide immigration system. In particular, the Northern Ireland Executive aims to ensure the future immigration system:

- Protects the interest of Northern Ireland, given that it is the only part of the UK to share a land border with Europe. The Northern Ireland Executive maintains that it is important for business owners and employers in Northern Ireland to continue to be able to access migrant labour in order to compete effectively with businesses in the Republic of Ireland, which, as part of the EU, will continue to be able to access the pool of labour available under Freedom of Movement;

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<sup>90</sup> <https://www.gov.scot/publications/uk-immigration-policy-leaving-eu-impacts-scotlands-economy-population-society/>

<sup>91</sup> <https://www.gov.scot/publications/scotlands-population-needs-migration-policy/pages/1/>

<sup>92</sup>

<https://www.gov.scot/binaries/content/documents/govscot/publications/publication/2020/01/migration-helping-scotland-prosper/documents/migration-helping-scotland-prosper/migration-helping-scotland-prosper/govscot%3Adocument/migration-helping-scotland-prosper.pdf>

- Acknowledges the lower salaries paid in Northern Ireland: the Northern Ireland Executive has underlined that salaries are lower in Northern Ireland than elsewhere in the UK<sup>93</sup>, and that a system relying on salary thresholds will consequently affect a greater proportion of otherwise-equivalent jobs in Northern Ireland than in the UK as a whole. The Northern Ireland Executive has been clear in its requests for the immigration system to address this issue, whether by tailoring salary thresholds, or by maximising use of the SOL to provide Northern Irish businesses with a salary discount that reflects the different starting points in terms of salaries paid;
- Supports key sectors of importance to Northern Ireland by enabling Northern Irish businesses to access a continuing flow of workers with the specific skills they need; for example, through salary thresholds or increased use of the SOL:
  - Sectors of existing importance to Northern Ireland, for example agri-food; and
  - Sectors the Northern Ireland Executive wishes to prioritise in its plans for future growth, such as digital, life and health sciences, advanced manufacturing and clean energy.

## Wales

- 4.7 The Welsh Government has stated its opposition to the planned immigration system, and in its response to the current MAC commission reiterated that it would have preferred to see the current programme of changes being suspended until the longer-term effects of the COVID-19 pandemic on the economy are known.
- 4.8 Previous submissions from the Welsh Government have referred to demographic factors affecting Wales, including an ageing population, and consequently a projected decline in its working-age population. The Welsh Government envisages a continuing role for migration in order to address this.
- 4.9 The Welsh Government has also previously opposed the levels at which salary thresholds were set, stating that these were too high to enable recruitment through Tier 2 (General) for many Welsh employers.
- 4.10 The Welsh Government has welcomed a SOL for Wales and stressed the importance of using this to support the key sectors of most importance to both the current and (planned) future Welsh economy, and in ensuring the right skills were available to Welsh employers.

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<sup>93</sup>

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/regionbyoccupation2digitsocashetable3>

## The devolved nations and the MAC

- 4.11 The MAC is very conscious of the challenges faced by the devolved nations in relation to migration, particularly migration for work and study. For this and previous commissions, we have devoted a substantial amount of analytical time, and also space in the reports, to understanding the impact on the devolved nations in relation to both the UK as a whole and to England (as the largest nation of the UK, and therefore with a potential distorting impact on the data for the UK as a whole).
- 4.12 A range of previous recommendations have been made by the MAC, either in respect of the devolved nations or on matters that have a bearing on one or more of these countries.
- 4.13 MAC recommendations that **have been accepted** include:
- The inclusion of various roles on the Scotland-only SOL;
  - The creation of Wales-only and Northern Ireland only SOLs. As the previous SOL dealt primarily with occupations at RQF6+, and shortages in these occupations are more often experienced UK-wide, in the short time since these were created no occupations have been placed on these lists. However, the present report does make recommendations for these lists;
  - Recommendations for minimum salary thresholds, and against varying salary thresholds by geographical area.
- 4.14 MAC recommendations that **have not been accepted** include:
- A pilot aimed at encouraging migration to remote and rural areas, which responded to points made by the Scottish Government in particular (but also by the other devolved nations and rural stakeholders in England) about difficulties recruiting in these areas.
- 4.15 The MAC strongly welcomes the suggestions on further engagement made by the Devolved Administrations. We are actively seeking to recruit secretariat members based in the devolved nations and the recent appointment process for committee members emphasised the importance of understanding the issues facing the Devolved Administrations. We are committed to further ongoing engagement (including engagement outside commissions) with stakeholders in both the devolved nations and the individual administrations, in order to ensure MAC recommendations deliver for the whole of the UK.

## Overview of SOL history and policy as it relates to the devolved nations

- 4.16 As discussed previously, in the 2019 SOL report the MAC recommended separate SOLs for Northern Ireland and Wales alongside the continuation of the Scotland-only SOL. The report highlighted that RQF6+ occupations tended to have more of a UK-wide labour market i.e. graduate-level occupations in shortage in Northern Ireland, Wales and Scotland were also likely to be in shortage across the whole of the UK.
- 4.17 For this reason, no occupations were recommended for either the Northern Ireland or Wales-only SOLs. Table 4.1 shows the list of current occupations on the Scotland-only SOL.

Table 4.1: Scotland only Shortage occupation list	
Standard Occupational Classification (SOC) code and description	Job titles included on the Scotland on Shortage Occupation List and further criteria
2111 Chemical scientists	Only the following jobs in this occupation code: <ul style="list-style-type: none"> <li>• <b>Chemical scientists within the nuclear industry</b></li> </ul>
2314 Secondary education teaching professionals	Only the following jobs in this occupation code: <ul style="list-style-type: none"> <li>• <b>Gaelic teachers</b></li> </ul>
2315 Primary and nursery education teaching professionals	Only the following jobs in this occupation code: <ul style="list-style-type: none"> <li>• <b>Gaelic-medium teachers</b></li> </ul>

- 4.18 For this review, each Devolved Nation has a separate SOL. Those occupations placed on a DN-only SOL will receive the same benefits as being put on the UK-wide SOL, however will be entitled to those benefits for that occupation in that nation only. This effectively brings in an element of regional variation for a limited number of occupations who are on a DN-only SOL. If an occupation was on a DN-only SOL and not the UK-wide SOL, effectively it would have a 20 per cent lower salary threshold than the rest of the UK. Any occupation recommended for the UK-wide SOL will have use of the SOL in all parts of the UK.

### Evidence received from Devolved Administrations

- 4.19 We received evidence from each of the Devolved Administrations in response to this commission.

- The Scottish Government included analysis of salaries compared to the UK at the 4-digit SOC code level and a report by the independent Expert Advisory Group on Migration and Population, as well as contextual information and sectoral evidence received from stakeholders;
- The Northern Ireland Executive included contextual analysis by Oxford Economics on the projected impact of the planned changes to the immigration system on Northern Ireland, along with analysis of ASHE data relating to all occupations in Northern Ireland by skill level, and the number of hard-to-fill vacancies at the 4-digit SOC code level. The Northern Ireland Executive also provided contextual information and reported on sectoral evidence it had received from stakeholders;
- The Welsh Government analysed the occupations at the 3-digit SOC code level, rather than at the 4-digit level, due to sample sizes. As discussed in paragraph 20, there is a limited availability of data at the 4-digit SOC level at a more granular level of geography. This limits the conclusions we can draw when considering the 4-digit level based on data. The Welsh Government also reported on sectoral evidence it had received from stakeholder engagement.

## Approach to Devolved Nation SOLs

4.20 The SOL is based on occupations using 4-digit occupation codes, as this is the basis for determining eligibility of occupations for the Skilled Worker route. Unfortunately, there is very limited data available at this 4-digit level by geography due to small sample sizes in surveys, or there is large variability in the data over time driven by sampling rather than real changes in circumstances.

4.21 Given these data challenges, we are more reliant on stakeholder evidence to make our decisions on the DN-only SOLs. Below we summarise the overarching evidence we received in the Call for Evidence (CfE) from stakeholders in the DNs. Our recommendations on specific occupations relating to the DN-only SOLs are in Chapter 6 as part of the detailed sections on specific occupations. In this report we have recommended the addition of occupations to the DN-only SOLs for Northern Ireland, Scotland and Wales. A full list can be found in the Recommendations Chapter on pages 647-648.

## Labour Market summary

4.22 Figures 4.1 and 4.2 show the number of job postings<sup>94</sup> over the last 12 months (presented in two charts to enable trends to be viewed clearly, given the different scales used), firstly for Scotland, Northern Ireland and Wales, and then for the whole

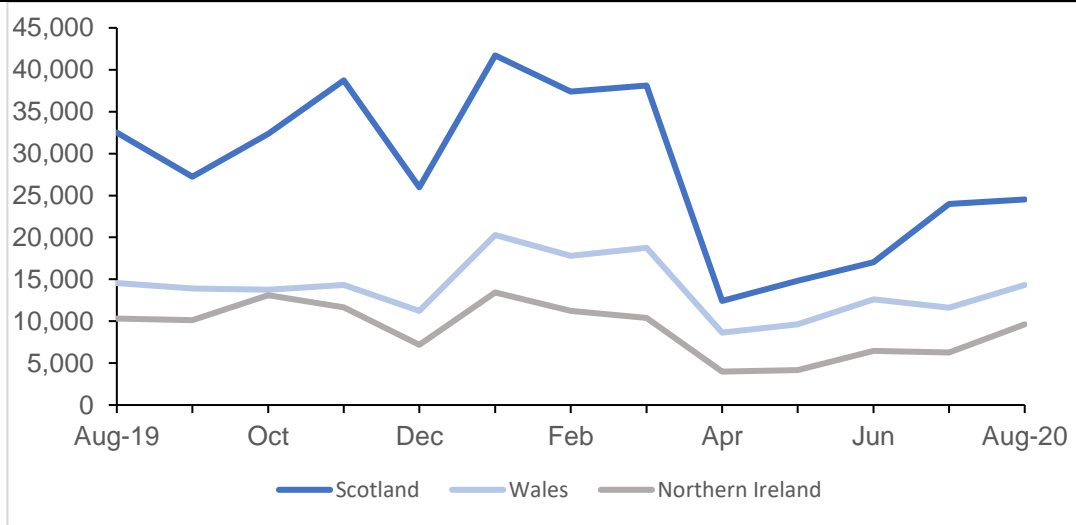
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<sup>94</sup> Burning Glass, 2019-20 <https://labourinsight.burning-glass.com/>

UK and England only. Across all the devolved nations there is a clear dip in vacancies posted in December, before seeing an increase in vacancies posted in January.

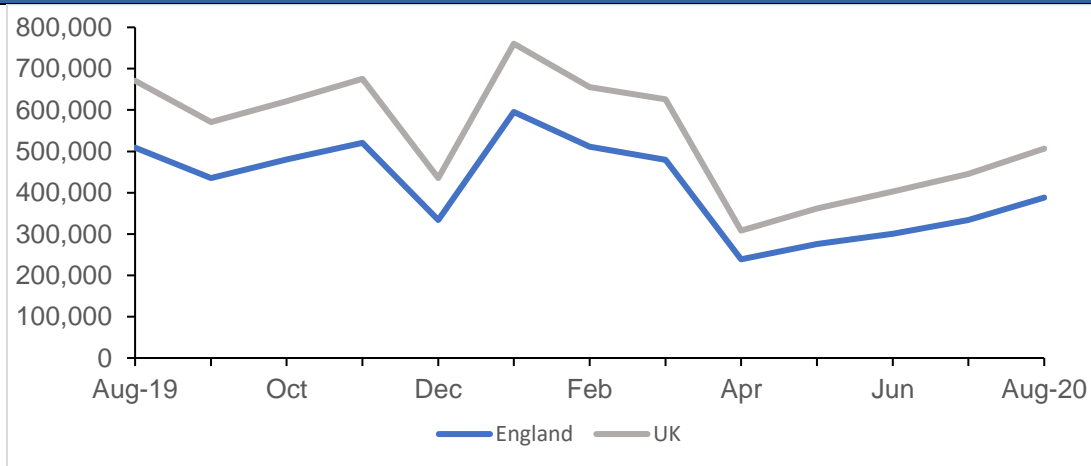
4.23 From March there is another drop in the number of vacancies posted in all the devolved nations due to the COVID-19 pandemic and the national lockdown that was implemented as a result. From March to August 2020, Scotland had the largest percentage decrease in number of vacancies at 36 per cent, followed by Wales at 24 per cent, England at 19 per cent and then lastly Northern Ireland at seven per cent<sup>95</sup>.

**Figure 4.1: Scotland, Northern Ireland and Wales job postings**



Source: Burning Glass

**Figure 4.2: England and UK-wide job postings**



Source: Burning Glass

<sup>95</sup> <https://labourinsight.burning-glass.com/>

- 4.24 Table 4.2 shows labour market statistics disaggregated by nation of the UK. For the period April-June 2020, Scotland had the highest unemployment rate<sup>96</sup> at 4.6 per cent, whilst Northern Ireland had the lowest at 2.9 per cent. England had the highest employment rate<sup>97</sup> of 77.0 per cent, whilst Northern Ireland had the lowest employment rate of 71.5 per cent. Northern Ireland had the highest rate of economic inactivity (26.3 per cent), which accounts for the low unemployment and low employment rates.
- 4.25 Employment rates had increased in England compared to the previous year (0.5 percentage points), fallen in Scotland (-0.6 percentage points) and Northern Ireland (-0.5 percentage points), and stayed the same in Wales. Unemployment compared to the previous year had increased the most in Scotland (0.7 percentage points) and decreased the most in Wales (-0.7 percentage points). Unemployment had increased slightly in England over the same period (0.3 percentage points) and stayed the same in Northern Ireland.

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<sup>96</sup> Defined as the number of unemployed people divided by the economically active population (those in employment plus those who are unemployed).

<sup>97</sup> Defined as the number of people in work aged 16-64 divided by the total population of people aged 16-64.



Table 4.2: Labour market statistics by nation, (April to June 2020)						
		United Kingdom	England	Northern Ireland	Scotland	Wales
<b>Economically active</b>	Rate (%)	<b>79.8</b>	80.4	73.7	78.0	77.1
	Change on Quarter (ppts)	<b>0.3</b>	0.3	0.4	0.1	0.4
	Change on year (ppts)	<b>0.6</b>	0.8	-0.4	-0.1	-0.6
<b>Employment</b>	Rate (%)	<b>76.5</b>	77.0	71.5	74.3	74.7
	Change on Quarter (ppts)	<b>0.1</b>	0.2	-0.1	0.1	0.3
	Change on year (ppts)	<b>0.4</b>	0.5	-0.5	-0.6	0.0
<b>Unemployment</b>	Rate (%)	<b>4.1</b>	4.1	2.9	4.6	3.1
	Change on Quarter (ppts)	<b>0.2</b>	0.2	0.6	0.1	0.1
	Change on year (ppts)	<b>0.3</b>	0.3	0.0	0.7	-0.7
<b>Economically inactive</b>	Rate (%)	<b>20.2</b>	19.6	26.3	22.0	22.9
	Change on Quarter (ppts)	<b>-0.3</b>	-0.3	-0.4	-0.1	-0.4
	Change on year (ppts)	<b>-0.6</b>	-0.8	0.4	0.1	0.6

Source: ONS

## Stakeholder Evidence

4.26 The stakeholder evidence outlined below begins with setting out some of the overarching themes emerging from the evidence, as it relates to the overall employment situation in each nation. It moves on to discuss specific issues identified in relation to individual employment sectors.

### Scotland

4.27 The stakeholder evidence for Scotland came from a broad spread of employers and sectoral/trade representative bodies, along with evidence from the Scottish Government (including the Expert Committee on Migration) and local government.

## Demographic change and depopulation

- 4.28 The Scottish Government, Scotland's Enterprise Agencies and the Convention of Scottish Local Authorities (COSLA) were among those who emphasised Scotland's long-standing demographic challenges, including a lower birth rate than the rest of the UK, and an ageing population leading to a decline in the working age population.
- 4.29 In addition to its major cities, and the more densely-populated Central Belt, Scotland has several areas of low population density, meaning that small rural, island and coastal communities are common. Within these communities, both labour supply and demand issues can be exacerbated, with individual employers, governmental and representative organisations all indicating that recruitment could often be very challenging in rural areas, given both the lower overall population and the smaller population of working age.

*“Scotland also faces a distinct demographic challenge. Its birth rate is lower than the rest of the UK and this, in combination with an ageing population and potential changes to the pattern of inward migration due to Brexit, creates a significant strategic driver. Relating to this challenge, there will be a need to replace the large number of workers who are expected to retire, move away, or change jobs in the coming months and years. This is brought into sharper focus when Scotland's rural and island communities and their economies are considered.”*

Scotland's Enterprise and Skills Agencies; Response to MAC consultation

- 4.30 The demographic challenges are also not experienced evenly across Scotland, with several stakeholders pointing to the additional challenges this represented. For example, evidence received from Scotland's Enterprise and Skills Agencies indicates that while the working age population in Scotland is projected to decline by four per cent by 2041, in the South of Scotland this is projected to be 15 per cent. The Scottish Government pointed out that large cities have so far experienced much more inward migration than rural areas. Despite this (and the concentration of both shortages and vacancies in urban areas), given the very low population in some rural communities, stakeholders felt that migration could still provide an important means of offsetting longer term demographic changes and rural depopulation, and maintaining the viability of rural communities.

*“In Scotland, while inward migration to rural areas has been less significant than to large cities, such mobility has helped to stabilise and even rejuvenate the local population age structure in many areas. It is important to note that this rural depopulation is a result of a legacy of outward migration. Even a minor reduction in inward migration to those areas will thus have a significant negative impact.”*

Scottish Government; Response to MAC consultation

*“The social capital brought by these individuals to what are exclusively rural and largely remote areas is easily demonstrable. For example, rural school closures are a continuous pressure on rural and remote communities and in many cases having just one or two children on the school roll can be the difference between that school being kept open or closing. Many non-UK nationals who are working in a permanent capacity on Scottish farms will have families who make a genuine positive contribution to the social fabric of that area. ... [We believe] this is strongly fitting with the ‘sensible’ criteria of the MAC’s analysis.”*

Representative body; Agriculture, Forestry and Fishing; Scotland

- 4.31 The Scottish Government and other stakeholders emphasised that Scotland has so far received less inward migration than many other areas of the UK and indicated that it would like to attract more migrants in order to address some of the demographic and workforce availability challenges previously outlined.

*“We need people to settle in Scotland, to make their homes here, to bring their families and to contribute to our long term future prosperity. The demographic pressures in the rest of the UK are less pronounced, and many communities, particularly in England, have larger migrant populations than are typically found in Scotland, or have experienced more rapid growth in migrant populations than typically experienced in Scotland. That has led to different requirements for, and perspectives towards, migration across the UK.”*

Scottish Government; response to MAC consultation

*“NFUS urges the MAC to also consider the social capital of non-UK nationals who come to Scotland to fill permanent roles within agri-food in rural and remote areas. NFUS sees a key opportunity for the SOL to be used in a manner which addresses the demographic and population challenges facing Scotland as a nation, and which are having an impact on rural economies in particular. Within the most rural and peripheral parts of Scotland (Argyll and Bute, Western Isles, Ayrshire, Orkney and Shetland, Lanarkshire, Highland) working age population is projected to decrease over the next 30 years. It is estimated that net migration of 100,000 a year is required in Scotland in order to keep dependency levels stable, and therefore reducing inward migration into Scotland would exacerbate demographic problems in the most exposed areas.”*

Representative body; Agriculture, Forestry and Fishing; Scotland

## **Presence of competitor industries**

- 4.32 Related to the issues outlined above, in some areas, roles were reported to be particularly difficult to fill because there are high employment rates. Jobs with a shorter training requirement, or roles with less attractive working conditions, can be

particularly difficult to fill in these circumstances – issues that are discussed further in Chapter 5, which focuses on occupations below RQF3, and presents evidence from stakeholders from around the UK making similar points.

- 4.33 In Scotland, however, this was an issue that was also cited in relation to jobs with medium and longer training requirements, for example in engineering, where the presence of the oil and gas industry made it difficult for lower-paying sectors to recruit in the North East of Scotland. In these circumstances, employers appeared even more inclined to rely on EEA migration to fill the gap.

*“We constantly struggle to recruit this post, specifically a problem in Aberdeen (or areas with strong engineering industries e.g. oil and gas).”*

Individual organisation; Food Production Sector; Scotland

### Impact of forthcoming changes to the immigration system

- 4.34 Concerns were expressed across the board about the potential impact of changes to the immigration system, particularly the ending of free movement from the European Union.

- 4.35 The reduction in the salary threshold from £30,000 to £25,600 was received positively. The Expert Advisory Group on Migration and Population indicated that this would be especially beneficial in areas where pay was lower, making a comparatively higher proportion of jobs eligible for Tier 2 (General).

*“At the other end of the scale, local authorities where pay is typically lower have a much higher proportion of jobs for which migrants would be ineligible. These include, for example, Inverclyde, Clackmannanshire, Dumfries and Galloway and Na h-Eileanan Siar. The change in the threshold is more beneficial to these authorities because a larger proportion of jobs would now be available to migrants. Thus, for example, the reduction in the threshold makes an additional 15.5% of jobs available in Na h-Eileanan Siar and 12.4% of jobs available in Dumfries and Galloway.”*

Expert Advisory Group on Migration and Population

- 4.36 Despite this, there were still concerns about the need for EEA workers to meet both skill and salary thresholds in the new immigration system, with stakeholders expressing both a continued need for recruitment to jobs below RQF3 and concerns about the ability of employers, particularly in lower-paying sectors and in rural areas, to meet the salaries required.

- 4.37 Given the issues that had been raised affecting rural, coastal and island communities in particular, stakeholders felt that the impacts of a reduction in EEA migration may be felt more strongly in these communities both in terms of the effects of population loss, and the loss of workers, particularly given that many of the sectors employing

higher proportions of EEA workers (for example agriculture, fishing, food processing and travel and tourism) are located in these areas.

*“Following COVID-19 and Brexit many of the crew have left the industry looking for other work (when the boats stopped fishing) and some have returned to EU or non EEA country due to uncertainty of settlement/visa status. We need a productive workforce to maintain the infrastructure of not only our fishing industry, but also of our towns and villages. We ask that regional factors are considered carefully.”*

Individual organisation; Agriculture, Forestry and Fishing; Scotland

*“Restricted routes for EU migration alone will be particularly disruptive for rural and remote areas of Scotland where the age structure means that inward migration is the only means of countering depopulation. The economic conditions in rural and remote areas suggest that a salary threshold, even at the reduced level of £25,600 will make it very difficult to recruit workers through existing migration routes.”*

Scottish Government; response to MAC consultation

- 4.38 At an individual employer and sectoral level, stakeholders highlighted that they had few options for alternative recruitment in the absence of being able to recruit EEA workers and outlined potential impacts in terms of both continued business viability and ability to continue to provide services.

*“Our direct experience is, however, that it is very difficult to recruit suitable staff within our "travel to work " area to meet the demands of the job at the best of times. If we are unable to replace the flow of young Europeans who come to work for us every year/two years, then we will be faced with having to reduce the number of residents in our care.”*

Individual organisation; Care Sector; Scotland

- 4.39 As with demographic change, the picture regarding EEA employment, and the consequent distribution of the expected impacts, varied by area. For example, figures from the Federation of Small Businesses cited by the Scottish Government indicated that although 26 per cent of small businesses across Scotland currently employ EEA migrants, this rises to 41 per cent in the Highlands.

- 4.40 The Expert Advisory Group on Migration and Population indicated that among workers who would now be affected by skills and salary thresholds, the impact would be disproportionately felt by women in comparison to men, given the salary differential, although they also noted that the lowering of the salary threshold mitigated this to some extent.

*“Our analysis shows that 63.3% of jobs currently employing females would not be available to migrants. This is much larger than the corresponding percentage for*

*males and is due to the lower wages typically earned by females – the gender pay gap. Although migrants would therefore be excluded from most jobs currently occupied by females, the reduction in the threshold would increase the range of such jobs available to migrants by 9%.”*

Expert Advisory Group on Migration and Population

## Role of immigration in growth

- 4.41 The Scottish Government emphasised the importance of continuing to recruit internationally in order to deliver new workers to Scotland’s growth industries (for example creative and digital industries and fintech) and meet sectoral growth targets, as well as to meet the country’s existing needs (for example social care, construction and agriculture). This was echoed by individual employers and representative bodies.

*“Productivity is key to the future success of the Scottish agri-food industry which is a key growth sector of the Scottish economy. The Scottish food and drink sector and Scottish Government have a growth strategy in place to double the turnover of the sector to £30bn by 2030. This target will not be reached if the sector cannot employ workers throughout the food chain.”*

Representative body; Agriculture, Forestry and Fishing; Scotland

## Sectoral evidence in Scotland

- 4.42 The following sections outline specific sectoral evidence as it relates to Scotland. These sections focus on outlining factors that are restricted to, or more pronounced in Scotland, and hence they should be read alongside the relevant occupational chapters, which discuss factors applying to the UK.

### Sectoral evidence in Scotland: caring occupations

- 4.43 As with the rest of the UK, social care is a sector of concern in Scotland, and Scottish employers made similar points to employers in the rest of the UK relating to social care being a role that requires important skills – issues that are discussed further in Chapter 5 on social care and occupations below RQF3.
- 4.44 The Scottish Government said that a high proportion of EEA migrants currently works in the sector (9.1 per cent of the workforce were born outside the UK, with 38.5 per cent of these coming from the EEA, with social care roles making up 7.7 per cent of Scotland’s workforce), and that this was an issue of pressing concern across Scotland given the difficulty of securing alternative staff.

*“All of the responses we received from councils emphasised their concerns about shortages in the social care sector.”*

COSLA; Response to MAC consultation

4.45 Despite this, Scottish stakeholders indicated that social care is an area where there are even greater challenges in some areas: evidence submitted by COSLA indicates that Highland and Na h-Eileanan Siar are areas where increasing demand and difficulty filling posts are reported, driven by a growth in people reaching retirement age, and in the case of Na h-Eileanan Siar an overall decline in population and skills shortages in the local area. Demographic change also influences these factors: Scottish Care indicates that changing population needs in Scotland are increasing the complexity of care roles undertaken with, for example, an increased demand for dementia care.

4.46 Stakeholders highlighted that from October 2020 most care workers in Scotland will be required to be skilled at RQF3 or working toward such a skill-level during a registration period. This issue is discussed further in Chapter 5 looking at the skills classification of care workers in Scotland. Stakeholders reported that most care workers would not meet the salary threshold: figures from the Scottish Social Services Council (SSSC) cited by the Scottish Government in their submission estimated that most care workers (SOC 6145) will earn even less than the minimum threshold for visa eligibility as currently set at £20,480. Stakeholder evidence further indicated that it was these frontline roles which social care employers have experienced the greatest difficulty in recruiting and retaining: data from the Scottish Social Services Council indicated that 38 per cent of social services had vacancies, and that 47 per cent of services with vacancies had problems in filling these across care homes, at-home care, residential special schools, housing support and nursing agencies.

*“Our residents are people with learning difficulties and special needs. Some have complex needs. Their care can be demanding and requires a high degree of understanding and interpersonal skills as well as nursing skills for which we provide training.”*

Individual organisation; Care Sector; Scotland

4.47 As in the rest of the UK, COVID-19 has had a huge impact on the sector, and stakeholders said that this has widened existing fault lines and exacerbated the recruitment issues that were already in existence. Individual employers, sectoral representation and local and national government were, therefore, clear in their view that there was a continued need to recruit migrants to fill roles in social care.

*“Even long before the pandemic, Scottish Care had raised concerns regarding the continued fragility of care services due to significant workforce recruitment, retention and skills challenges. These have all been exacerbated significantly by Coronavirus,*

*with the future of the sector extremely uncertain if a multitude of practical solutions are not implemented with some urgency.”*

Representative organisation; Care Sector; Scotland

- 4.48 Childcare occupations in Scotland were reported to be affected by the rapid expansion of the Early Learning and Childcare (ELC) sector. The provision of funded ELC is increasing: Scottish local authorities are legally obliged to provide 1,140 hours of funded childcare per year for each child<sup>98</sup> by August 2020 (previously this was 600 hours), and there are concerns about meeting the staffing implications.
- 4.49 Evidence on the number of additional workers that would be required as a result varied, with Scottish Government estimating around 4,200 and figures cited by COSLA (from *A Blueprint for 2020: The expansion of early learning and childcare in Scotland*) estimating a range from 8,000 to 20,000. COSLA stated that this is a concern to most councils, with large increases in the number of workers being required at individual council level: for example, the predominantly rural council of Argyll and Bute forecasts a need for an additional 253 FTE posts across all early learning and childcare delivery roles by 2022 and an expansion of 18 FTE in central management, support and co-ordination.
- 4.50 Around seven per cent of the current workforce are non-UK EU nationals, according to evidence received from the Scottish Government. Childcarers at support worker and practitioner level are required to be skilled at RQF3-4 and hence these workers would meet the Skilled Worker route threshold. The Scottish Government argued for a lower salary threshold and/or regional variation for this occupation, in order to better reflect the salaries paid in the sector and enable demand to be met across Scotland.

*“We support the change in approach of this commission to consider roles from RQF3 and above, which thus includes the ELC workforce. However, there is a large variation in the salaries paid across the public, private and third sectors in ELC. Again, with many employers paying minimum/living wage, setting the salary threshold at this level would be preferable and allow every part of the sector a further route to recruiting additional staff.*

*Should salary thresholds remain, the ELC sector would benefit from a wide range of flexibility around these. Regional variation might allow thresholds to be set which would benefit, for example, rural and remote areas across Scotland.”*

Scottish Government; Response to MAC consultation

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<sup>98</sup> For three-year-olds, four-year-olds and eligible two-year-olds



## **Sectoral evidence in Scotland: education**

- 4.51 Although these roles are not the central focus of the current review, several Scottish councils are actively recruiting primary and secondary teachers (in a variety of subjects) from overseas to fill vacancies. Teaching of Gaelic and teaching of subjects in both English and Gaelic continue to be required.
- 4.52 As in other parts of the UK, the evidence indicated that technicians are needed to support vital research programmes in universities. The Scottish Government asked that all technicians such as; laboratory technicians, electrical and electronics technicians and science, engineering and production technicians be considered for the SOL from level RQF3 and above, and said that the proportion of university staff being paid less than £25,000 in Scotland (26 per cent) is a slightly higher share than in the UK as a whole (20 per cent).

## **Sectoral evidence in Scotland: travel, tourism and hospitality**

- 4.53 Given that around a fifth of workers in the sector are employed in rural areas, according to evidence received from the Scottish Government, the sector is reliant on EEA workers given their willingness to relocate, and other issues such as shortages of accommodation: Scottish Government indicated in their evidence that the sector will experience difficulties without continued access to the EEA workforce.
- 4.54 The Scottish Government highlighted several roles in shortage, based on sectoral evidence: specialist chefs (5434) (in which shortages have continued despite the occupation already being on the SOL); waiting staff/sommeliers (9273); assistant chefs (9272); receptionists (4216); reservations (7219); porters and other hotel workers (9279). Many of these roles are not RQF3+ and will, therefore, not be eligible for the Skilled Worker route.

## **Sectoral evidence in Scotland: construction**

- 4.55 Evidence received from the Scottish Government indicated that the Polish workers who had previously supplied much of the labour in this sector were now not filling these roles, owing to the weakening pound, improving economic conditions in Poland and the result of the Brexit referendum (these issues are discussed further in Chapter 5 on occupations below RQF3), and that the sector in Scotland now relied heavily on Romanian nationals. The Scottish Government highlighted bricklayers (5312), joiners (5315) (below RQF3) and electricians (5241) as particularly hard to fill, based on sectoral evidence they had received.

## **Sectoral evidence in Scotland: agriculture, forestry and fishing**

- 4.56 Evidence received from stakeholders' states that horticulture, dairy farming, fisheries and meat processing are particularly reliant on EEA labour. It may be difficult for

workplaces in rural areas, such as farms, to attract younger local workers without their own transport. Recruiting the necessary labour from the local area is therefore challenging, with industry citing both a lack of suitably skilled local labour, particularly in butchery, and the working conditions within which many roles are performed perceived as undesirable by potential workers. There is often also low unemployment in rural areas. These UK-wide issues are discussed further in Chapter 5.

- 4.57 Stakeholders indicated that these problems had persisted in agriculture despite the recent Pick for Britain campaign, which had only enabled farmers to fill a limited number of vacancies (and only those held by growers).

*“In the experience of [our] members who used the service, shared by other growers groups, growers were overwhelmed with initial interest in available vacancies. However, when following up with potential candidates, growers either did not receive a response, or, after outlining the terms of employment to the potential candidate, candidates dropped out. The reasons given were various: concern about shift patterns, early starts, the nature of the work, and accessibility to farms that are not serviced by public transport. Whilst these efforts very much remain underway as the season reaches its peak, [our] initial estimation is that domestic labour-matching schemes have had an average 10% success rate for growers.”*

Representative body; Agriculture, Forestry and Fishing; Scotland

- 4.58 Although the use of casual and seasonal employment is common across the sector, this appeared to depend on the type of work: a representative body indicated that those employed year-round are primarily in dairy and livestock farming, which are therefore less suitable for the Seasonal Agricultural Workers Scheme (SAWS). Meanwhile, stakeholders said that seasonal work was common in occupations requiring work around harvesting (which may take place at different types of year – for example soft fruit and Christmas tree harvests). Although these workers are eligible for the SAWS, the sector did not believe the numbers catered for by the scheme, which are set at a UK-wide level, to be enough.

*“It is estimated that up to 22,000 non-UK seasonal workers are employed on Scottish farms every year, the majority of whom come from other EU countries. 6,700 seasonal workers are needed annually in Scotland’s soft fruit sector alone. ... In consideration of these numbers, even in 2017, the 2,500 visas for the whole of the UK of the proposed Seasonal Agricultural Workers Scheme (SAWS) pilot are shown to be woefully inadequate. In 2017, there were between 2,000 and 2,500 vacancies in Scotland alone.”*

Scottish Government; Response to MAC consultation

- 4.59 The importance of clerical and food processing staff (especially in marketing and butchery) to enable the sector to function was also stressed, along with occupations

in machinery and haulage. The key nature of the sector in maintaining food supply, as elsewhere in the UK, was highlighted.

- 4.60 The following roles were suggested for potential inclusion on the SOL: managers and proprietors in agriculture and horticulture (1211) (RQF4); farmer, crofter, herd manager, dairy operatives (5111) (RQF3); veterinary nurses (6131) (RQF3), and 9119 (field worker, field husbandry: these roles are below RQF3-5, but the similar SOC code 5119 covers many of the same areas of employment), and the related importance of securing workers under occupation 5431 (butchers, relief butchers, processing/abattoir work) and 5223 (engineers) was also underlined. Stakeholders said that many of these workers would not meet the necessary salary threshold (and would potentially fail to do so even at the discounted rate).
- 4.61 Tree planters and tree nursery labour (5112 and 9112) were identified by stakeholders as key roles in forestry, given that these are important seasonal jobs in Scotland (for example, to meet the need for Christmas trees). As with other agricultural businesses, stakeholders said that there are difficulties in recruiting domestic labour of sufficient quality, and such labour often has a high turnover. Both the Scottish and UK Government have ambitious planting targets for new woodlands, and stakeholder evidence expressed the view that without the labour to raise and plant the trees these targets would not be achievable.
- 4.62 Evidence from the sea fisheries industry indicated that this sector has a high proportion of overseas labour. A 2015 survey carried out by Scottish Sea Fisheries indicated that within the Scottish fleet, eight per cent of crew came from EEA countries (including Rol, and also Latvia, Lithuania, Poland, Romania and Spain) and 19 per cent from non-EEA countries (principally the Philippines, Ghana, Sri Lanka and Belarus<sup>99</sup>).
- 4.63 A great deal of evidence was submitted directly from employers and representatives. A decline in available workforce caused by depopulation, deskilling and UK workers taking up employment in other industries was reported to have resulted in the need for migrants, both to crew existing boats and also to teach domestic workers how to fish (see Chapter 5 on jobs below RQF3 for fuller discussion of this issue, although jobs under SOC code 5119 agricultural and fishing trades n.e.c. are at RQF3-5 and therefore fall within scope). Thus, without migrants, stakeholders said the sector will be less sustainable and this will impact on the economy in coastal communities.

*“Fishing is the most dangerous peacetime occupation in UK, pay is performance related and at best erratic and just does not attract locals. We have an absolute minimum safe number of crew we can legally sail with, if one man decides not to show up the rest of us that have cannot go to sea, this happened repeatedly when I’d local crew last. Without access to highly motivated and skilled Latvian crew I*

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<sup>99</sup> Scottish Government (2016) Scottish Sea Fisheries Employment 2015, Marine Scotland Science, Marine Analytical Unit, available at <http://www.gov.scot/Resource/0050/00507777.pdf>

*simply won't have a business, one by one I've watched the fleet in my small town slowly disappear solely due to lack of crew. ... My current crew are by far the best I've ever had, all are happy and want to stay."*

Individual organisation; Agriculture, Forestry and Fishing; Scotland

4.64 Employers within the sector indicated that it could be difficult for share fishermen to show they met the salary threshold owing to the variability of wages, even if their wages were above the level required.

*"Most fishermen are paid on a share basis currently (some have a set wage) so the wage [is] just an indicator. The wages vary from region to region and are dependent on the fishing type etc. In share fishing the better the catch the more the pay, so wages will vary greatly, they could be well in excess of £30k, or less depending on factors related to fishing."*

Individual organisation; Agriculture, Forestry and Fishing; Scotland

## Strategies suggested to work alongside the SOL

4.65 Within the body of evidence received was several suggestions on strategies that Scottish stakeholders felt could work alongside the SOL in enabling Scottish employers to address shortages. These included:

- A greater, and more formalised, role for the Scottish Government in determining which occupations are in shortage in Scotland;
- Schemes specifically encouraging migration to Scotland, and aiming to facilitate this, for example through the allocation of additional points for taking up employment in specific areas (whether specifically Scotland or areas such as rural/remote areas which are more prevalent there than in the UK as a whole);
- As an alternative to regional visa schemes, the adoption of schemes such as those used in Spain and Sweden, which are primarily aimed at addressing sectoral shortages but in doing so can also alleviate regional shortages;
- Extension of the SAWS to include additional roles with a seasonal component (e.g. forestry related roles);
- Extension of the NHS visa scheme to include social care;
- The inclusion of elements other than academic qualifications within the PBS, such as social value and/or key worker status, and manual/technical skills; and
- The inclusion of roles on the SOL which do not meet the skills requirement, but for which there is difficulty recruiting and which act as a skills pipeline by training

workers to fill roles that do meet the skills requirement.

## Northern Ireland

### Overview

4.66 As with the evidence from stakeholders in Scotland, those representing Northern Ireland came from a range of employers and sectoral/trade representative bodies, as well as the Northern Ireland Executive.

### The impact of Brexit in Northern Ireland

4.67 Although the impacts of the UK's departure from the European Union were raised by stakeholders across the UK, stakeholder evidence relating to Northern Ireland highlighted several factors that they said meant the impacts would be felt particularly strongly in Northern Ireland. These included:

- The sectoral mix of the economy and extent to which these sectors employ migrants;
- Lower wages in Northern Ireland; and
- Issues relating to the border with the Republic of Ireland (RoI).

### Sectoral mix of the economy in Northern Ireland

4.68 The sectoral mix of the economy, which includes several of the industries which employ more EEA migrants, was thought to make it likely that the impacts of Brexit would be felt more strongly in Northern Ireland. Given the departure of many EEA workers, stakeholders felt that these industries were therefore more likely to experience staffing problems. Analysis by Oxford Economics further indicated that districts located on the border between Northern Ireland and the Republic of Ireland were particularly likely to derive a large share of their employment from such sectors.

*“The sectoral mix of the NI economy leaves it particularly vulnerable to shortages in typically labour-intensive sectors. The employment base is comparatively dominated by manufacturing and agriculture, forestry & fishing sectors, alongside typically public-sector activities including human health & social work and public administration. ... Border districts on average tend to draw a larger share of employment from comparatively labour-intensive sectors, such as agriculture and manufacturing, and thus may be vulnerable to shocks to the labour supply.”*

Oxford Economics, The Impact of Changes to Migration Policy on the Northern Ireland Economy

4.69 A high proportion of EEA labour did not necessarily imply that there had been previous displacement of the local workforce: evidence submitted by a representative

association notes that the number of UK and Irish workers employed was similar in 2017 to the number employed in 2001, yet the overall number of employees had risen over the same period, with the additional workers overwhelmingly being from the EEA. Nor did a high proportion of EEA labour necessarily imply that this was unskilled labour – NI Chamber of Commerce underlined that roles at all skill levels were affected.

*“Northern Ireland has lost many EU workers post Brexit. We also know from our quarterly ‘Brexit Watch’ that this has had consequences for members in trying to fill the gaps that these workers leave. This is not just about the lower tier NQF type roles, it affects all levels of skills that are a critical support to businesses and employers in the Northern Ireland economy. In fact, 60% of our members believe that Brexit is negatively impacting on the ability to attract skilled workers to Northern Ireland.”*

NI Chamber of Commerce; Response to MAC consultation

## Impact of the loss of EEA workers

- 4.70 Evidence received from the NI Minister for the Economy stated that there has been a 24 per cent decrease in the number of EU26 people employed in Northern Ireland from Q1 2016 to Q1 2020. It was reported that at a sectoral level the largest adverse impact is expected to be felt by some of the sectors with higher proportions of EEA workers: most notably the food manufacturing sector, followed by the wholesale and retail trade, and accommodation and food services sector. These sectors were predicted to experience 4.6 per cent, 3.5 per cent and 1.7 per cent declines respectively in GVA, relative to the expected baseline scenario in 2030, in analysis carried out by Oxford Economics on behalf of the NI Minister for the Economy. Food products, beverages and tobacco, the wholesale and retail trade, administrative and support occupations and the accommodation and food services sector are predicted to experience the most severe reductions in employment.
- 4.71 Analysis by Oxford Economics indicated that NI will be unable to replace its departing EEA workforce, resulting in a smaller workforce and consequently lower income tax and receipts from employee and employer NICs (estimated at a loss of £706 million cumulatively over the 2020s). The report further suggests that negative supply chain and consumer spending impacts may also be observed as a result of the forthcoming changes to the immigration system, a fear echoed by other stakeholders submitting evidence to the consultation.

*“The challenge is, what happens if the supply of migrant labour is restricted and the obvious implications [for] the sector. There would be implications for the viability of factories running below capacity with knock-on impacts for the jobs of indigenous skilled and unskilled workers within the sector, as well as for broader supply chain interests including farmers and consumers.”*

Representative Organisation; Food Production Sector; Northern Ireland

## Lower salaries, and inability to raise these

- 4.72 Several stakeholders raised the lower salaries paid in Northern Ireland in comparison to the UK, which mean workers within Northern Ireland will, on average, be less likely to meet salary thresholds. Evidence from the NI Minister for the Economy states that the overall UK salary thresholds do not reflect the NI labour market, especially in the private sector. This may make inclusion on the SOL particularly valuable to NI employers, as it means it is more likely to reflect average salaries in NI.

*“You will be aware that officials have previously raised the wage differential between Northern Ireland and other regions within the UK. Employers here make the point that they are disadvantaged by wage thresholds which form part of the UK Immigration system but are not set at levels which reflect the NI labour market. This differential is particularly stark in the private sector where the most recent Annual Survey of Hours and Earnings (ASHE) shows that private sector salaries in Northern Ireland are the lowest of all UK regions and almost 20% below the UK private sector median salary. In the context of the points-based immigration system the real value of inclusion on the SOL now arises from the potential for a reduced salary threshold from £25,600 to £20,480.”*

NI Minister for the Economy; response to MAC consultation

- 4.73 Although salaries are overall lower than in the UK as a whole, this is particularly marked in the industries most likely to employ EEA migrants: analysis by Oxford Economics refers to data from Department of Agriculture, Environment and Rural Affairs (DAERA) and the Labour Force Survey (LFS) showing that EEA migrants account for 40 per cent of employees in food manufacturing, 16 per cent in manufacturing overall and eight per cent in distribution, hotels and restaurants, all of which sectors are both major employers, and pay lower than average wages.

*“Of course the SOL must recognise that we are at a different salary starting point than other parts of the UK and the unique opportunities and challenges for Northern Ireland of EU Exit need to be taken into account.”*

NI Minister for the Economy; response to MAC consultation

4.74 Analysis by Oxford Economics indicates that the capacity of employers in Northern Ireland to respond by raising wages, or by increased use of automation, was limited, given the tight profit margins and small business sizes of many businesses in affected sectors. Stakeholder evidence further suggested that raising wages did not necessarily translate to more UK labour becoming available.

*“In response to tighter labour supplies, members have increased rates of pay in the last year, in line with market expectations, and have invested heavily in training, recruitment (campaigns and apprenticeship schemes) and broader industry skills initiatives. Despite these efforts serious ongoing difficulties with labour shortages remain and dependence on migrant workers is ongoing. Rising wages have been a feature of the market over the last year, but this has not led to any increased labour supply, but greater turnover, with firms taking staff from each other.”*

Representative Organisation; Food Production Sector; Northern Ireland

### Land border with the *Republic of Ireland*

4.75 The land border with the RoI, combined with the need to maintain an all-island economy, was said to create specific and severe difficulties for Northern Irish employers. Stakeholders pointed to the difficulties of maintaining competitiveness with rival firms in the RoI, given that firms in the RoI would continue to be able to access workers from the EEA under freedom of movement rules.

*“Our stakeholders have already made the point that, if Northern Ireland employers find themselves in a scenario where they had access to skills and labour on a more constrained basis than their Republic of Ireland counterparts, their competitive position would be adversely affected. That could have consequent impacts on Northern Ireland’s ability to attract and retain business investment. I understand this is a point that has been accepted by the MAC and by UKG. I would urge you to consider it carefully as you take forward this particular review and look at occupations that would sit on a Northern Ireland specific SOL. If the UKG wishes to fulfil its aspiration of an immigration system that works for all parts of the UK, it must recognise this and allow Northern Ireland firms proportionate and fair access to labour in a manner that helps them prosper.”*

NI Minister for the Economy; response to MAC consultation

4.76 Analysis by Oxford Economics outlined a range of potential impacts arising from this issue, ranging from displacement of labour, the displacement of production or wholesale relocation of firms to RoI, or even an increase in commuting inflows to Northern Ireland. The FSB stated that the uncertainty around the operational details of the NI border had the potential to impact small businesses.



*“While the Northern Ireland Protocol is agreed in principle, in operational terms much of the detail is yet to be fully determined. There is a very high likelihood of added trading ‘friction’ and costs for small businesses in NI.”*

FSB Northern Ireland; Response to MAC consultation

4.77 In relation to these potential impacts, evidence from stakeholders provided early indicators that some of these issues – such as labour and firms relocating – had begun to impact on their businesses and sectors.

*“The Republic of Ireland also remains a member of the EU, and whilst a harmonious neighbour, a competitor nonetheless. Along with other organisations, we previously highlighted the risks of businesses relocating jobs to the Republic of Ireland. We now understand there are businesses who have chosen to do so, as noted recently in the UK Parliament.”*

FSB Northern Ireland; Response to MAC consultation

*“This has been exacerbated by the proximity of an alternative labour market on the island of Ireland; the perceived chill factor and uncertainty around immigration policy are major push factors for EEA workers to leave NI and make the short journey south. There have been ongoing reports of Republic of Ireland recruitment agents working actively in Northern Ireland to recruit EEA workers.”*

Representative Organisation; Food Production Sector; Northern Ireland

4.78 Stakeholders were keen to stress the importance of securing a ‘level playing field’ in terms of access to labour for Northern Irish businesses, particularly given the lack of restriction on the free movement of manufactured goods back into Northern Ireland. They urged ongoing analysis to examine the nature and extent of any comparative disadvantages being experienced by employers in Northern Ireland in comparison to RoI and ensure the immigration system takes these into account.

*“NI Chamber believes that the specific challenges faced by Northern Ireland in terms of its geographical proximity to the Republic of Ireland and the potential to find itself negatively impacted when competing for jobs means that there should be an additional resource put in place to understand and address any potential comparative disadvantage with the Republic of Ireland and what this might mean for skills, migrant workers and the Northern Ireland labour market.”*

NI Chamber of Commerce; Response to MAC consultation

4.79 In summary, as a result of the planned changes to the immigration system (including changes to salary thresholds, the end of freedom of movement and the introduction of restrictions on EEA workers), analysis by Oxford Economics indicated that the issue of where EEA migrants are concentrated, the sectors on which NI’s economy depends

and the skill/salary levels prevalent in these sectors are likely to impact NI heavily, with the result that employment, sectoral productivity and GVA will all be reduced. Oxford Economics modelling indicated that this impact could be lowered under a lower salary threshold, and that a £20,000 threshold would result in 3,300 fewer jobs lost. The fall in GVA, predicted under the current scenario to be 1.4 per cent, would be predicted to reduce to 1.2 per cent. Although the report acknowledged that the safeguarding of public sector occupations, and rules around new entrants currently under the age of 26, would have some mitigating effect, it assessed this to be limited in nature (offsetting the fall by 1,700 jobs).

## Role of migration in growth

4.80 As with the Scottish Government, the NI Executive underlined the importance of the overall UK migration agenda enabling and facilitating growth strategies in Northern Ireland. Evidence received from the NI Minister for the Economy stressed the need for recruitment in several sectors. A number of these were not covered by the SOL in its current form: analysis carried out by the NI Skills Barometer (produced by Ulster University Economic Policy Centre) and quoted by the NI Minister for the Economy in her submission to the MAC indicates that *“around 67% of Northern Ireland’s future annual demand is not included in the UK-wide recommended SOL.”*

*“The demand for new workers with RQF level 3-5 qualifications will be highest for other elementary services occupations<sup>100</sup> (approx. 500 per annum), secretarial and related occupations (approx. 400 per annum), caring personal services (approx. 400 per annum), construction and building trades (approx. 300 per annum) and teaching and educational professionals (approx. 300 per annum). The only occupation here included on the current UK SOL is teaching and educational professionals. Yet, in terms of supporting the NI economy, many of the skills needed to support our world leading sectors including the Advanced Manufacturing, Materials and Engineering sector, are absent from the list.”*

NI Minister for the Economy; response to MAC consultation

4.81 The point was also made that in order to increase NI salaries across the board, there would need to be economic growth, which will itself be difficult without inward migration to secure a continued flow of skilled labour. Life and health sciences, advanced manufacturing, clean energy and digital sectors have been identified as priorities for Northern Ireland in this respect.

*“I will continue to devote my strengths to raising salaries and prosperity in this region. However, in order to achieve that our industry needs to be globally competitive and facilitated to grow. Access to skills is an important dimension of that and we must*

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<sup>100</sup> Includes hospital porters, kitchen and catering assistants, waiters and waitresses, bar staff, leisure and theme park attendants - <https://onsdigital.github.io/dp-classification-tools/standard-occupationalclassification/data/SingleClass.html?soc=927>

*be enabled to complement our extensive upskilling agenda with access to skills from beyond these shores.”*

NI Minister for the Economy; response to MAC consultation

## Skills shortages in Northern Ireland

- 4.82 Skill shortages are an issue in NI. Of those businesses that reported having vacancies, 21 per cent stated that the vacancies were difficult to fill because of skill shortages.
- 4.83 Analysis of the NI ESS, received from the NI Minister for the Economy on hard-to-fill vacancies in NI (in response to the MAC consultation), shows that six out of the top ten hard-to-fill occupations were below RQF3. Of these, welding trades, chefs, metal working production and maintenance fitters, vehicle technicians, mechanics and electricians, and plumbers and heating/ventilating engineers also represented the highest number of skills shortage vacancies (SSVs) within Northern Ireland. Fifteen of the 21 occupations where all hard-to-fill vacancies were SSVs were RQF3-4 occupations.
- 4.84 A number of stakeholders emphasised the continuing reliance of many Northern Irish sectors on workers performing roles below RQF3, as well as RQF3+, and advocated for a means to continue recruiting labour from outside the UK to these roles.

## Sectoral and occupational evidence in Northern Ireland

- 4.85 The following sections outline specific sectoral and occupational evidence as it relates to Northern Ireland. These sections outline factors that were restricted to, or more pronounced in, Northern Ireland, and hence they should be read alongside the relevant occupational chapters, which discuss factors applying to the UK.

### Sectoral and occupational evidence in Northern Ireland: agri-food

- 4.86 Stakeholder evidence emphasised EEA workers as a key source of labour supply in the agri-food sector in Northern Ireland, both as a direct source of labour that is already skilled to the level required, and as a source of unskilled labour that can then be trained and upskilled to the required level, providing the required pipeline to produce the necessary skilled labour in future. Stakeholders indicated that it was difficult to recruit into these jobs among UK workers, an issue discussed in more detail in Chapter 5 on occupations below RQF3.

*“[Employers] need an ongoing supply of skilled and unskilled labour. It is important to recognise that the key source of skilled labour in the red meat sector, is through the training and development of unskilled migrant workers.”*

Representative Organisation; Food Production Sector; Northern Ireland

- 4.87 Stakeholder evidence in the agri-food sector pointed out that, by their nature, agri-food businesses are typically concentrated in mainly rural areas across Northern Ireland. These areas were said to be more likely to be economically disadvantaged and to have a lack of other employment opportunities.

*“Taken together with our colleagues in the eating ecosystem, our members support over 100,000 jobs. This is approximately 20% of the entire NI private sector employment. Those jobs are non-urban with... members in all counties.”*

Representative Organisation; Food Production Sector; Northern Ireland

- 4.88 Although many of the predicted shortages are not in RQF3-5 roles, nevertheless there were calls for the new immigration system to come up with a way of filling these roles, as has been seen elsewhere in the UK.
- 4.89 Within the food processing occupations that are skilled at RQF3-5, the NI Minister for the Economy stated in her submission to the MAC that 22 per cent of skilled food and drink processing operatives are currently from the EU and, moreover, the salary differential between NI and the rest of the UK for skilled food preparatory trades is close to the 20 per cent salary reduction that being on the SOL would confer. The NI Minister for the Economy requested six RQF3-5 roles in agri-food to go onto the NI SOL: 2463 (environmental health professionals), 3111 (laboratory technicians), 5112 (horticultural trades), 5431 (butchers), 5432 (bakers and flour confectioners) and 5433 (fishmongers and poultry dressers). Stakeholder evidence included within the overall evidence supplied by the NI Minister for the Economy further indicated that there was heavy reliance on EU26 workers in the meat processing, bakery, snack and convenience, and fish processing sectors, and that NI agri-food employers also face difficulties in recruiting laboratory technicians and quality testing/verification staff for their operations.

### **Sectoral and occupational evidence in Northern Ireland: digital**

- 4.90 Stakeholder evidence provided to the NI Minister for the Economy, and included in her response to the MAC, indicates that employment in Northern Ireland’s ICT sector has grown by 50 per cent since 2010, and that it is difficulties to fill vacancies because the demand for labour (particularly experienced hires and technical leads) outstrips supply. The extent to which COVID-19 will impact on this situation is currently unknown.

### **Sectoral and occupational evidence in Northern Ireland: tourism, hospitality and leisure**

- 4.91 Stakeholder evidence provided to the NI Minister for the Economy, and included in her response to the MAC, indicates that the tourism and hospitality sector is an important one for the NI economy, and that EEA workers are required by the sector but as roles

are often at a minimum wage level, the sector is unlikely to be able to meet the salary thresholds required.

### **Sectoral and occupational evidence in Northern Ireland: manufacturing**

- 4.92 Within the manufacturing sector, stakeholder evidence reported by the NI Minister for the Economy suggests that maintenance engineers are needed to increase productivity

### **Sectoral and occupational evidence in Northern Ireland: textiles**

- 4.93 Stakeholder evidence reported by the NI Minister for the Economy suggests that stitchers are in short supply among UK workers in Northern Ireland, with a consequent reliance on EEA workers, but that these roles are unlikely to meet the salary threshold.

### **Sectoral and occupational evidence in Northern Ireland: health and social care**

- 4.94 Evidence received from the NI Minister for the Economy states that the proportion of EU nationals working in social care in Northern Ireland is around seven per cent, and that the vast majority of these roles, apart from senior roles, with in health and social care in Northern Ireland would not reach the minimum salary level for the SOL, even at the discounted rate of £20,480.

*“While there are roles that would merit being including in the SOL, nursing support and social care workers in particular both of which have a significant vacancy rates. They are not going to meet all of the Tier 2 criteria. Vital services will be relying on smaller local only applicant pool and without a stable and well-resourced support service, the health and social care system in Northern Ireland would be seriously compromised.”*

NI Minister for the Economy; Response to MAC consultation

### **Sectoral and occupational evidence in Northern Ireland: higher education**

- 4.95 Several technician roles (3111, 3112, 3113, 3119, 3131: laboratory, electrical/electronics, engineering, science/engineering/production n.e.c., and IT operations) were raised as being in shortage by employers in the university sector. Universities and manufacturing within other parts of the UK have also raised these shortages.

## **Sectoral and occupational evidence in Northern Ireland: heritage and craft occupations**

- 4.96 Evidence provided by the NI Minister for the Economy states that the Northern Irish Department for Communities has raised concerns that there are shortages of supply in heritage craft skills in NI, and that in recent work at National Trust and other sites, they have relied on labour from elsewhere. Specifically skills thought to be in shortage were: blacksmiths – smiths and forge workers (SOC 5211); cabinet makers – Furniture and other craft workers (5442); drystone wallers – bricklayers and masons (5312); thatcher – roofers, roof tilers and slaters (5313); carpenter (5315); general crafts (5442); glazier (5316); plasterers both lime and fibrous (5321); plumbers (5314); and stone Fixer (5312).

## **Sectoral and occupational evidence in Northern Ireland: recycling**

- 4.97 Evidence given by a representative organisation referred to recycling operatives having been highlighted by the Northern Ireland Environment Agency as experiencing a shortage in workforce (9235, recycling operatives), that there was an overall shortage of labour which would be exacerbated by departure from the EU, and that the technology was not available to overcome this issue. Further stakeholder evidence underlined the sector's high dependency on foreign national workers: one waste company estimated that 63 per cent of its workforce were not from the UK.
- 4.98 Stakeholders emphasised the high importance of the waste and recycling sector in both the response to COVID-19 and ongoing development of sustainability and Green Growth. However, stakeholder evidence indicated that many of the roles within the sector were below RQF3, and therefore would not be eligible for the Skilled Worker route.
- 4.99 Stakeholders cited 3112 electrical technician, 3115 quality assurance technician roles, and 5231 vehicle technicians as being difficult to recruit.

## **Strategies suggested to work alongside the SOL**

- 4.100 Within the body of evidence received were several suggestions on strategies that Northern Irish stakeholders felt could work alongside the SOL in enabling Northern Irish employers to address shortages:
- As in Scotland, the NI Minister for the Economy indicated a desire for a closer and more formal role in conveying Northern Ireland's needs to the MAC. An NI Skills Barometer is being developed, and the MAC is invited to help shape the development of this;
  - Employers in various sectors indicated that there was a need for a route for migrants to fill jobs that do not require RQF3 or above qualifications; for example,

in agri-food, hospitality and road haulage.

- A temporary route for unskilled labour of a few years' duration was suggested, with the aim that such labour would then be able to switch into a skilled work route without a cooling off period. This would address, for example, the needs of parts of the agri-food sector.

## Wales

4.101 The stakeholder evidence from Wales was limited in terms of the number of respondents, but fairly in depth regarding the content of the few submissions we received. We received evidence from the Welsh NHS confederation, and the Welsh Government regarding shortages specific to Wales and information pertinent to the Wales only SOL, as well as two responses to our online questionnaire regarding shortages in Wales.

4.102 Both stakeholders' submissions were primarily focused on social care and, to a lesser extent, healthcare occupations; but the Welsh Government's response also provided information regarding several other industries. The evidence discussed here should be viewed alongside the recommendations we make in Chapter 9: the purpose of this sub-chapter is to discuss the evidence we received from stakeholders specifically regarding Wales.

### Sectoral evidence in Wales: Social Care

4.103 Both the Welsh NHS Confederation and the Welsh Government emphasised the recruitment difficulties that the social care sector is currently facing. They reported that, like the rest of the UK, the social care sector in Wales is fragile with long standing recruitment issues, and that local authorities and social care providers are therefore experiencing severe shortages in these roles.

*“Recent research has shown that 58% of registered social care providers reported difficulties recruiting to vacancies, with 28% indicating that it had become ‘very difficult’.”*

Welsh Government; Response to MAC consultation

*“The majority (78%) of vacancies across commissioned services in Wales were amongst the staff group categorised as care workers, care officers or care assistants.”*

Welsh Government; Response to MAC consultation

4.104 Stakeholders made clear what they considered to be the main causes of these shortages. Wales is reported to have an ageing population and high rates of chronic illness, which increases the strain on social care services.

*“Due to the ageing population in Wales the need for care will only increase and this will result in an increased demand for caring roles, particularly in terms of domiciliary care, which is the growing at the expense of residential care.”*

Welsh Government; Response to MAC consultation

- 4.105 In addition to increasing demand for these services, there also several supply side issues which respondents said had an impact on the social care sector. One such issue was reported to be the high turnover of staff within these occupations. It is estimated that approximately 32 per cent of domiciliary care staff in commissioned care providers left during 2018. High rates of turnover were said to be particularly detrimental to social care employers due to the high costs associated with training and recruitment. As a result, many social care providers in Wales report difficulties in retaining staff.

*“Recent research has shown that 26% of registered social care providers reported difficulties retaining staff, which was particularly evident within domiciliary care services where 37% of respondents described difficulties.”*

Welsh Government; Response to MAC consultation

- 4.106 Nursing shortages within the social care sector pose a concern according to stakeholders, who suggested it is becoming increasingly difficult to recruit and retain Nurses in social care and expressed concerns that Britain’s departure from the EU will exacerbate these issues further, due to the high proportion of non-UK EEA nationals currently working in these roles.

*“Recent research indicates that Nursing and Midwifery Council (NMC) registered nurses are the staff group with the highest proportion of non-UK EU nationals working in social care in Wales at 17.7%; a figure which is much higher than the sector average of 6.4% across all staff groups.”*

Welsh Government; Response to MAC consultation

- 4.107 Stakeholders were keen to express how COVID-19 has exacerbated the existing challenges faced by the sector. The social care sector struggles to recruit UK-wide due to relatively low pay and the challenging nature of the work, especially compared to alternative jobs. The COVID-19 pandemic is said to have made existing issues worse and has raised concerns that existing care workers may leave the sector as a result.



*“Stakeholder evidence suggests that potential new recruits are less likely to join the sector now due to their concerns about the risks of contracting COVID-19, and there is concern that existing care workers could leave the sector for jobs with less responsibility and risk.”*

Welsh Government; Response to MAC consultation

- 4.108 Stakeholders expressed concern regarding both the scope of the current SOL review and the impact of future immigration policies. Many vacancies in the social care sector fall into the group of occupations below RQF3 and are hence not eligible for the Skilled Worker route (Chapter 5 discusses these occupations in more detail). Under the scope of this review, only one of the occupations in the social care sector raised by stakeholders is eligible to qualify for SOL inclusion (SOC 6146 - senior care workers). Stakeholders did not believe that the RQF level, or a ‘lower skilled’ characterisation was appropriate, or reflective of the challenging nature of the work.

*“Both the skills and salary threshold will exclude many social care roles from inclusion. Our members have expressed their concerns that future immigration policies will negatively impact social care in Wales and any impact felt within social care in Wales will have knock-on consequences for the NHS workforce due to the integrated nature of the system.”*

Welsh NHS Confederation; Response to MAC consultation

- 4.109 Stakeholders said that the salary threshold was particularly concerning as most social care services in Wales operate within a monopsony: the only buyer is the local authority. This limits flexibility in terms of the rates workers are paid and means there is limited scope to raise these.

- 4.110 The Welsh NHS Confederation also highlighted the difference in the legislative landscape for social care between Wales and England: the Welsh Government has been increasing the number of social care roles that require registration in Wales, and requested that the MAC take this into consideration when developing the Welsh SOL.

*“By 2022 all domiciliary and residential workers, in both children and adults, must be registered with Social Care Wales, and thus meet specific levels of competence and conduct. This changes the market for these roles fundamentally in Wales: the approach to the SOL must be able to accommodate this difference.”*

Welsh NHS Confederation; Response to MAC consultation

## **Sectoral evidence in Wales: Healthcare**

- 4.111 The Welsh NHS Confederation suggested that Wales was experiencing recruitment difficulties in several healthcare occupations, including nurses working in social care,

which are covered above. They indicated that there was a considerable reliance on non-UK nationals in healthcare occupations in Wales: whilst only five per cent of the Welsh NHS workforce is made up of non-UK nationals, the proportion of non-UK nationals varies considerably depending on the occupation.

*“According to our most recent statistics (March 2020), on average 5% of the Welsh NHS workforce is made up of non-UK nationals. While these might seem small, dependence on an international workforce varies greatly depending on the profession; for example, at least 27% of doctors, 10% of dentists and 5% of healthcare scientists are from outside of the UK.”*

Welsh NHS Confederation; Response to MAC consultation

4.112 There are concerns that RQF3-5 healthcare occupations (such as support to nursing, midwifery etc.) will be particularly affected by both Brexit and forthcoming immigration changes. Members of the Welsh NHS Confederation do not have an international recruitment programme for this sector of the workforce – unlike the programmes in existence for doctors or nurses – and therefore the end of free movement will cut off a major source of labour supply for these occupations.

4.113 The Welsh NHS Confederation is taking steps to alleviate shortages in healthcare: the Train Work Live initiative has been implemented to recruit general practitioners, nurses, midwives and pharmacists across Wales: healthcare occupations that they said had been particularly difficult to recruit into.

*“Train Work Live is a national and international campaign that complements work already being undertaken by Health Boards and NHS Trusts to recruit staff. It supports GPs who express an interest in working in Wales, including relocating with their families, while providing helpful information on what they can expect when coming to the country.”*

Welsh NHS Confederation; Response to MAC consultation

4.114 The Welsh NHS confederation also made clear that they believed that the impact of COVID-19 would negatively impact recruitment and training in healthcare occupations, as well as increase demand for their services, thus exacerbating shortages further.

## **Sectoral evidence in Wales: Manufacturing**

4.115 The Welsh Government provided evidence in their response regarding shortages within the manufacturing industry in Wales. Their response stated that the manufacturing sector in Wales makes up 16.9 per cent of gross value added for all industries, compared to 10 per cent for the UK. Their research suggested that manufacturing would be particularly affected by changes to the immigration system across a range of skill levels.

*“Manufacturing would be particularly affected by changes to the immigration system and that changes would not just impact on ‘low-skilled’ workers and their employers; but those with intermediate skills, would also be affected.”*

Welsh Government; Response to MAC consultation

## **Sectoral evidence in Wales: Digital Trade/ Creative**

- 4.116 The Welsh Government highlighted the importance of this sector, due to its rapid growth in recent years and the low likelihood of it being affected by automation. Creative workers were cited as important, and the Welsh Government said that it was important to ensure that these workers were free to move across Europe to deliver short-term services.

## **Sectoral evidence in Wales: Food and Drink**

- 4.117 The Welsh Government emphasised the important role of this sector during the COVID-19 pandemic. They said that EEA migrant workers played a pivotal role within complex supply chains and that EEA workers comprise a significant proportion of the workforce employed in this sector. They also said that EEA migrants are both an affordable and flexible source of labour for employers, allowing them to scale production up and down to meet demand.

*“Since EU citizens comprise 26% of the labour force employed in the Welsh Food and Drink manufacturing sector, as a country we could be disproportionately affected by the loss of ready access to migrant labour from EU countries, when compared to the rest of the UK.”*

Welsh Government; Response to MAC consultation

- 4.118 Stakeholders felt that the end of freedom of movement and the associated forthcoming changes to immigration policies were likely to increase the cost burden of recruitment for employers in this sector, and that this would result in either increased costs for consumers, or the closure of businesses in this sector, which will cause further impacts within the Welsh economy.
- 4.119 Although stakeholders said that some automation measures have been implemented in this sector, they stressed that there was still a strong reliance on human input to ensure maximum productivity, and therefore said that a source of readily available, flexible labour for this sector is vital.

## **Sectoral evidence in Wales: Construction**

- 4.120 Stakeholder evidence stated that there is ongoing work in the construction sector to train the domestic workforce in order to reduce reliance on migrant workers in Wales,

but that the sector may need temporary inclusion to bridge the gap whilst these efforts take place.

## **Sectoral evidence in Wales: Hospitality**

- 4.121 The Welsh Government said that it had previously received evidence that this sector was struggling to cope with staff shortages, skill gaps and limited recruitment due to low unemployment and considerable competition from other similar sectors, such as retail. Representative groups, such as UK Hospitality Cymru were said to have led on initiatives to alleviate shortages in this sector by increasing outreach and changing perceptions of the hospitality sector.
- 4.122 Employers in this sector, both in Wales and the UK, have previously contacted the MAC to ask for consideration of measures to help alleviate these skill shortages, such as by allowing a continuation of the Brexit transition period for imported labour and reducing the previous £30,000 per annum salary requirement.
- 4.123 Stakeholder evidence indicated that the effect of the ongoing COVID-19 pandemic has been a dramatic impact on staff resourcing in this sector, due to the substantial reduction in demand for hospitality services as a result of the lockdown. The eventual impact on the sector in Wales is, currently, unknown: stakeholders said that it was unclear if, or when, demand for hospitality services will return to its previous level, which has implications for the number of suitable workers the sector will need. It was also acknowledged that there is likely to be more availability of domestic workers, which may help fill some of these gaps. Stakeholder evidence reports that employers say many of their EEA workers have returned to their home countries during the pandemic, and it is unknown if, or when, they will return to their previous roles in Wales.

## **Strategies suggested to work alongside the SOL**

- 4.124 The Welsh Government made some additional points about the SOL and the immigration system in general, which are outlined below:
- The Welsh Government felt that changes to the immigration system should be paused to allow the COVID-19 pandemic to run its course;
  - The Welsh Government also expressed its need for workers below RQF3, emphasising that these workers had valuable skills; and
  - The intention to review the SOL again shortly was received positively.

## **Recommendations**

- 4.125 Recommendations have been made for the Scotland-only, Northern Ireland-only and Wales-only SOLs. A full list of the recommendations made for devolved-nation-only SOLs can be found in Chapter 9.

- 4.126 The MAC remains committed to engaging with the devolved nations, and will be taking this forward between now and the next review of the SOL.
- 4.127 The next chapter explores some of the issues relating to social care, and occupations below RQF3.

## Chapter 5: Occupations below RQF3 including social care

### Introduction

- 5.1 For employers in some sectors of the economy, the Call for Evidence (CfE) presented an opportunity to voice concerns about occupations ineligible for the SOL because they do not meet the Skilled Worker route requirement of having RQF3+ qualifications. 185 organisations cited SOC codes below RQF3 in their response to the online questionnaire, with 48 unique SOC codes being specified. In addition to this, several individual and representative organisations submitted additional evidence relating to roles below RQF3 within their organisations and sectors.

### Social care

- 5.2 Social care was a critical sector where respondents to the CfE outlined a picture of serious current and future labour shortages. The specific case of senior care workers, and other occupations at RQF3+ that are eligible to be considered for the SOL, will be discussed in chapter 6F.
- 5.3 In this chapter we will focus on some of the concerns raised for caring occupations that are currently below RQF3, where stakeholders fear the impact of the end of free movement (amongst other things) in an already precarious recruitment context. Having reviewed the evidence, which will be outlined later in this section, the MAC reinforces the need for the Government to address fundamental issues with the job design, pay and conditions of workers in the social care sector. This is something we have stated on multiple occasions before. In 2018, in its *EEA migration in the UK: Final Report*, p. 125, the MAC commented that:

*“We are concerned about social care which struggles to recruit and retain workers. The fundamental problem is that these jobs are not attractive to enough UK residents at current terms and conditions, leading to reliance on migrant workers (mostly from outside the EEA). Many care workers are paid the minimum wage and it is not surprising that the sector then struggles to recruit resident workers as other minimum wage jobs are more attractive. Care workers’ pay is low because social care is mostly publicly-funded and budgets are tight.”*

- 5.4 The MAC has argued for some years now that funding social care to a level enabling higher wages to be paid, and consequently making jobs more attractive to the resident workforce, is crucial to long term sustainability of labour provision.

*“Our preferred solution would be that the financing of social care is changed to allow higher wages to be paid to workers alleviating recruitment and retention problems.”*

*In the absence of such a change it is likely the sector will continue to struggle to recruit resident workers and there will be demands to be allowed to hire migrant workers to plug gaps.”*

MAC; *EEA migration in the UK: Final report, 2018*, p. 125

- 5.5 Migration is often a sensible response to a labour shortage that cannot rapidly be met by hiring domestic workers. This is often because it takes time to generate a new supply of domestic workers with the right skills and experience, and migration can help fill the gap. However, we believe that migration alone cannot solve the care crisis in the UK more substantially, not because we underestimate the difficulties faced in the sector, but because migration will not solve underlying problems with pay and incentives that are fundamental to placing the social care sector on a sustainable footing. The fact that there is such high turnover in the sector highlights these problems.
- 5.6 While migration could in theory be used to create a ‘captive’ workforce of low-paid workers tied to the job by their visa conditions (at least in the short run), doing this has significant drawbacks, including exacerbating the risks of exploitation of low-paid workers with limited ability to move between employers.
- 5.7 Whilst there is a potential rise in labour supply to the care sector as a result of job losses in other sectors (for example the retail or hospitality sectors) due to the impact of COVID-19, this cannot be predicted with any certainty. It therefore remains crucial that the Government implements a more sustainable and generous funding model. The risks of this not happening in a timely manner are stark. If that does not occur, or occurs with substantial delay, we would expect the end of freedom of movement to increase the pressure on the social care sector, something that would be particularly difficult to understand at a time when so many care occupations are central to the COVID-19 pandemic frontline response. The CfE illustrated that employers in the social care sector feel strongly that the worth of their staff is not recognised. Improving pay and conditions is the way in which their worth should be recognised.
- 5.8 In the rest of this section we explore the evidence submitted by employers as part of the CfE, illustrating the issues already faced by employers of social care workers below RQF3, and their concerns about what may happen in the future. It paints a picture of some of the issues that may occur if the Government does not act urgently on the question of care sector funding. It also identifies concerns about strategic training and development within the sector, which has been exacerbated by the COVID-19 pandemic.

### **Concerns about social care raised in the CfE**

- 5.9 Employers in the social care sector emphasised the perceived lack of value attached to the key qualities required to be a successful care worker, implying that a lack of

formal qualifications resulted in perceptions that the sector was less important or valuable than others.

*“The qualifications that do exist are less well recognised and rewarded and ... the other key qualities and values intrinsic to providing excellent care have no visibility in the immigration system.”*

Representative organisation; Care Sector; UK-wide

- 5.10 There were concerns raised that the lack of worth attached to social care could have negative impacts on the ability to find recruits to fill roles.

*“The characterization of these roles as ‘low skilled’ is not only wholly inaccurate but damaging for existing and prospective workers both nationally and internationally who are so desperately needed in the sector.”*

Representative organisation; Care Sector; Scotland

- 5.11 It was not only the perception of the skills required that respondents to the CfE saw as being an issue, they stated that pay and conditions were also key obstacles to recruitment.

*“There is simply a shortage of **able, willing and compassionate** care staff. A career in social care is not recognised as being skilled or professional due to the historic poor pay rates which have been dependent on the inadequate funding received from local authorities.”*

Representative organisation; Care Sector; UK-wide

- 5.12 In addition, problems with workforce planning and training in the sector were identified as challenges that needed addressing.

*“The fragmentation of responsibility for workforce issues at a national level; inadequate workforce planning; funding cuts for training places and continuing professional development; restrictive immigration policies exacerbated by Brexit; geographical attractiveness, and high attrition rates.”*

Representative organisation; Care Sector; UK-wide

- 5.13 The COVID-19 pandemic was identified as a key issue that has disrupted normal training and development processes.



*“It is also important to recognise the disruption the pandemic is having on domestic training and recruitment plans and it is unlikely that employers will be able to pursue all the domestic training aspirations or any expansion of training because of the disruption to training and associated placement capacity.”*

Representative Organisation; Care Sector; UK-wide

- 5.14 It is also increasing the demand for care, according to research from the Institute of Public Policy Research, quoted in the CfE, which may see even more acute consequences emerging as a result of the staff shortages after the pandemic.

*“IPPR research suggests that following the COVID-19 pandemic there will be a substantial increase in staff leaving the sector. Reduced access to overseas recruitment could impede the delivery of safe care to residents owing to reduced staff numbers.”*

Representative Organisation; Health and Social Care Sector; UK-wide

*“The demand for live-in care and in the rest of social care will increase due to COVID-19 and people frightened of their relatives going into care homes.”*

Employer; Care Sector; UK-wide

- 5.15 Turning to the issue of who should fill vacancies in the social care sector, CfE respondents were clear that it was important for workers in the sector to have a range of key qualities, meaning that not everyone is suited to working in the sector. Given the vulnerability of customers in the sector, the implications of having staff that are unsuitable for their roles was particularly concerning to respondents.

*“It is essential that people recruited to job roles across health and adult social care are the right people, with the right values. Evidence shows that people recruited for their values impacts upon retention, productivity, absence, and service user satisfaction. We know that the adult social care sector suffers from a higher than average turnover rate (30.8 per cent), particularly within the first 12 months (41.7 per cent drop out rate equating to 440,000 losses in last reporting year) and this is partly due to the fact that the wrong people are recruited in the first place, and the job role not being what they thought it would be.”*

Representative Organisation; Care Sector; UK-wide

*“Not all applicants are suitable to care work... regardless of the terms and conditions. ... empathy, sensitivity and emotional intelligence are key skills”.*

Representative Organisation; Care Sector; UK-wide

5.16 The specific recruitment challenges faced by social care focused on the difficulties of finding local individuals willing to do what is potentially more difficult and emotionally draining work compared to other occupations requiring a similar level of qualifications or training. Organisations were clear that their first focus for filling vacancies was to recruit from the local population, but that recruits were not always forthcoming to fill the roles given the pay and conditions offered, and so migration had become their fallback position.

*“It is essential to note that all providers we represent advertise for domestic staff in the first instance and are driven to filling vacancies from abroad only because they are unable to do so from the UK.”*

Representative Organisation; Care Sector; UK-wide

5.17 Looking at the Annual Population Survey (APS) for occupation code 6145 (care workers and home carers), the 2017-2019 average figure for the proportion of employment by country of birth records that 78 per cent of workers in this occupation were born in the UK or RoI, whilst six per cent were born within the EEA and 16 per cent from outside the EEA. This compares with an all-occupation average of 83 per cent from the UK and RoI, seven per cent from the EEA and 10 per cent from outside the EEA.<sup>101</sup> Respondents to the CfE were clear on concerns about how the end of free movement would impact the sector, citing that the distribution of EEA-born and EEA nationals is not even.

*“Certain sections of the care system are also more highly dependent on non-British workers: 26% of the workforce in CQC registered homes with nursing is non-British, for example.<sup>102</sup> There is also significant regional variation in dependence on non-British workers; in London, as many as 38% of all care sector jobs are filled by non-British workers.<sup>103</sup>”*

Representative Organisation; Care Sector; quoting Skills for Care Survey 2019

5.18 There were concerns that the end of free movement would exacerbate the already high vacancies in the care sector. Various statistics were quoted to illustrate the level of vacancies currently being absorbed within the system.

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<sup>101</sup> Source: Annual Population Survey *country of birth share of jobs (main and second) by 4-digit occupation, 16+ population, 2017-19 average*

<sup>102</sup> Skills for Care, ASC Workforce Statistical Appendix 2019: <https://www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/publications/Topics/Workforce-nationality.aspx>

<sup>103</sup> Skills for Care Regional Report, London, <https://www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/publications/regional-information/London/London.aspx>

*“Adult social care is currently experiencing shortages of over 100,000 (as of June 2020). Every vacancy carried causes pressure on existing staff.”*

Representative Organisation; Care Sector; quoting Skills for Care Regional Report, 2019

*“It is estimated that 7.8% of the roles in adult social care are vacant, equal to approximately 122,000 vacancies at any time.”*

Representative Organisation; Care Sector; UK-wide

- 5.19 However, as a representative organisation emphasised in its response, the current shortage of care workers in the UK is not isolated, and in fact there is a global shortage of health care staff, including those in social care.

*“There is a domestic and global shortage of healthcare workers. The World Health Organisation estimates there will be a healthcare workforce gap of around 14.5 million by 2030.”*

Representative Organisation; Care Sector; UK-wide quoting WHO<sup>104</sup>

- 5.20 Stakeholders felt that addressing more fundamental issues, such as sector funding, and workforce pay and conditions, as well as strategic workforce planning and training, was required to make the care system sustainable and to reflect the public value of the service it provides. As one trade union outlined in its response to the CfE, these reforms are required to ensure the value of the sector is recognised, alongside an awareness of how migrant social care workers are treated.

*“Social care needs a fundamental overhaul of its funding, staffing, wages and training. This needs to go hand in hand with a cultural change around how we view social care and the value we place on the staff who deliver it. This includes the way the immigration system treats migrant social care workers.”*

Trade Union Body; UK-wide

- 5.21 The MAC plans to conduct research with the care sector to look in more detail at the trade-offs involved in making choices about filling vacancies, including how workforce planning, training and development fits with recruitment strategies.

- 5.22 In the rest of this chapter we now turn to look more broadly at the other occupations at below RQF3 referred to in responses to the CfE, outlining the key concerns they raised as a result of not being eligible for the SOL, and using APS data to examine the share of EEA workers.

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<sup>104</sup> <https://commonslibrary.parliament.uk/the-health-and-social-care-workforce-gap/>

## Issues raised by other occupations below RQF3 in the CfE

5.23 In this section, we start by giving the EEA and non-EEA workforce breakdown for the ten occupations below RQF3 with the largest proportion of non-British employment (employees and self-employed) cited within the CfE. This section then turns to consider the availability of EEA and British workers, and other issues raised by CfE responses in relation to occupations below RQF3, including:

- Political and macro-economic factors, including the result and impacts of the EU referendum;
- Increases or changes in demand for labour, and lack of ability to automate;
- The availability, skills and willingness of the UK workforce, compared to their EEA counterparts; and concludes by discussing;
- The availability of training.

5.24 The evidence given by organisations below is given thematically, but this should not imply that the themes were discrete. Rather, the factors described interacted with each other, with the ending of free movement forming (depending on the industry and location) the context against which the other themes could be viewed. Many of the issues identified were similar to those described for social care, in the section above.

## Occupations below RQF3 most dependent on non-British labour

5.25 Table 5.1 below shows the occupations below RQF3 cited in the CfE, ranked according to the proportion of non-British employees and self-employed (based on country of birth) within them<sup>105</sup>. These occupations may not be those across the entire economy below RQF3 with the highest rate of EEA nationals in the workforce, as not all occupations at this level responded to the CfE. Social care workers are not included in the top ten here as they were ranked 12<sup>th</sup> amongst those that responded to the CfE by proportion of EEA employment.

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<sup>105</sup> Source: Annual Population Survey *country of birth share of jobs (main and second) by 4-digit occupation, 16+ population, 2017-19 average*

**Table 5.1: Country of Birth profile for occupations below RQF3 cited in CFE with lowest proportion of British employment (employees and self-employed)**

		UK/RoI %*	EEA %*	Non-EEA %*
9134	Packers, bottlers, canners and fillers	40	43	17
8111	Food, drink and tobacco process operatives	48	38	14
8137	Sewing machinists	66	13	22
8222	Fork-lift truck drivers	67	25	7
9260	Elementary storage occupations	68	23	9
8139	Assemblers and routine operatives n.e.c.	71	20	9
6231	Housekeepers and related occupations	73	13	14
8133	Routine inspectors and testers	74	19	6
8113	Textile process operatives	74	10**	15**
9139	Elementary process plant occupations n.e.c.	74	17	9
<b>All occupations</b>		<b>83</b>	<b>7</b>	<b>10</b>

Source: Annual Population Survey, country of birth share of jobs (main and second) by 4-digit occupation, 16+ population, 2017-19 average.

\*Figures may not sum to 100 due to rounding.

\*\* Estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

## Political and macro-economic factors

5.26 The result and impacts of the EU referendum were specifically cited as a major cause in the reduction of the availability of EEA labour by respondents across various sectors. Employers said that, following the result and the impending end of freedom of movement to the UK, their supply of EEA labour had reduced for the following reasons:

- EEA migrants not entering the UK to work because they believed they would not be able to stay for long, and therefore those who would have replaced the existing EEA workforce no longer doing so;
- An increase in the number of EEA migrants returning home (whether because they felt unwelcome or because they were completing their stay in the UK);
- A fall in the value of the pound, leading EEA migrants to find work elsewhere in Europe, in Euro-using economies that were also often closer to their home countries.

5.27 In many submissions mentioning the EU referendum, all these factors were included, and in some industries the impact of these issues was said to be exacerbated by the competition for labour across Europe.

*“The immediate impact of the Leave vote was felt by the fall in value of the Pound, making the UK less attractive than other countries that use the Euro. There is in fact a shortage of meat industry workers across the whole of Europe, so competition for these workers is high, and the fall in the Pound value coupled with uncertainty over Brexit makes the UK less attractive in comparison. Despite many companies trying hard to reassure workers of their residency status, and value as a team member, the unwelcome sentiment ... has been felt by many EU workers since June 2016. Workers have frequently cited this as a reason to leave the UK upon exit interviews with member companies.”*

Representative organisation; Food Production Sector; UK-wide

5.28 As discussed in Chapter 4, Northern Irish respondents had specific reasons for citing the EU referendum as a factor in their ongoing recruitment difficulties, related to businesses within the Republic of Ireland continuing to be able to access EEA labour through continued freedom of movement. These respondents said that this threatened their businesses’ ability to compete with businesses in the RoI, and some were considering relocation as a result.

*“The industry needs... a level playing field on the all-island labour market. The agreed Ireland/Northern Ireland protocol allows for free movement of goods on the island of Ireland without free movement of labour. A shortage of labour threatens the viability of food manufacturing in NI and will incentivise businesses to relocate to places like RoI, where there is greater supply of labour, particularly when there are no implications with respect to free movement of manufactured goods back into NI.”*

Representative organisation; Food Production Sector; Northern Ireland

5.29 In addition to uncertainty surrounding the UK’s departure from the EU, the improving economic situation and reduction in unemployment rate (at least pre-COVID-19) in a number of key EEA source countries was mentioned, leading to a reduction in the numbers of people seeking work in the UK and elsewhere, and increasing competition between employers across Europe.

### **Ability to meet growing demand**

5.30 Respondents mentioned both overall growth in demand and growth in the composition of specific skills required within their industries as factors leading them to rely on EEA labour in occupations below RQF3. Some employers and

representatives considered that there was a limited extent to which their roles could be automated.

## Growth in demand

5.31 Growth in demand for labour overall created demand for EEA workers because of:

- Overall growth in the sector creating demand for workers with the correct skills and experience;
- New and emerging occupations within the sector creating demand for specific or niche skills; and
- A change in the demand for specific products or services within the sector leading to a more intensive demand for skilled work or specific skills.

*“Our sector has grown significantly, beyond the UK labour availability in the areas we operate (where the unemployment rate remains very low). 60% of our workforce... are EU nationals who are going above and beyond to keep this country fed.”*

Representative organisation; Food Production Sector; UK-wide

5.32 As well as the international competition between employers described earlier, a number of respondents mentioned high or increasing rivalry between employers for migrants with specific skills. Where this was the case, employers offering higher wages (often larger employers), easier accessibility and more comfortable working conditions were said to be at an advantage, particularly (but not exclusively) in relation to recruiting the resident UK workforce. This is discussed in more detail below.

*“Due to the low number of applicants there is some competition between employers for a candidate and often it is the larger organisations who recruit the candidate as they can offer a more competitive remuneration package compared to the smaller businesses within the industry.”*

Representative Organisation; Construction Sector; UK-wide

## Ability to automate

5.33 The issue of automation was raised in the responses, with respondents keen to stress that, although it was possible to automate some roles, the potential for automation to provide a large-scale solution to labour supply issues was limited in some cases because:

- Human input was needed – in some roles a degree of experience and judgement was required, which a machine would not be able to provide; and

- It was suggested that the size of the UK limited the potential for automation compared to larger markets and required a greater investment than smaller UK employers can afford.

*“The slaughter line is also difficult to automate because the machines are not dextrous enough to adapt quickly and efficiently to the different shapes and sizes of animals, particularly in lamb and cattle but also pigs. For example, a trained human eye can understand immediately where to start and stop the cut to eviscerate a cow according to the animal’s physique. ... Some functions can be performed by machinery and implemented where possible. This has particularly been the case for unskilled tasks. However, the UK is a small country with comparatively small abattoirs and boning halls. If one compares the UK’s (even largest) plants with those in the US or Australia, the cost of designing, manufacturing and installing such equipment is not economically viable. Members have reported that technology companies have been unwilling to engage in discussions once they are aware that the plants are based in the UK, for this reason.”*

Representative organisation; Food Production Sector; Great Britain

## Availability and skills of the UK workforce

- 5.34 The availability of the UK workforce, their skills, and their willingness to undertake specific kinds of work (whether at all, or in preference to the other types of work available) were an important issue discussed by respondents in their explanations of why they relied heavily on non-UK (and particularly EEA) labour. This was especially the case where training was less available or possible.
- 5.35 These issues are discussed separately in this section, but naturally in practice they interacted.

## Availability of the UK workforce

- 5.36 Particularly in rural areas, and in areas with high employment, there was a lack of potential workers for employers to access. This was because of:
- Lack of population density;
  - Depopulation;
  - An aging population reducing the proportion of the population of working age; and
  - The availability of alternative employment (especially at higher salaries or in better conditions)

*“Depopulation and aging population and remoteness of location in a number of fragile coastal areas has led to a low availability of domestic workforce to go to sea,*



*yet these communities rely on the sticky income fishing brings to the whole local socio-economy. In such circumstances it's essential to recruit from the EU and non-EEA countries."*

Representative Organisation; Agriculture, Forestry and Fishing; Scotland

- 5.37 Although this issue was raised with particular intensity in Scotland (owing both to depopulation and the presence of the oil and gas industries providing alternative employment), it was by no means unique to the Scottish economy. Other rural employers, employers competing with large alternative employers in the same area, employers in areas of low unemployment and areas near to London, where work paying increased salaries or London weighting could be accessed, also experienced problems with accessing workers, which they addressed by using EEA workers.

*"Localised areas of low unemployment occurring nationwide: Members frequently highlight that national labour market statistics do not tell the whole story, particularly in rural areas. Areas highlighted as particularly challenging include Cambridgeshire, Suffolk, Northamptonshire, and Cumbria. ... Larger members have suggested moving production overseas if they have insufficient labour in the UK market going forward."*

Representative Organisation; Food Production Sector; UK-wide

- 5.38 Pay was certainly a factor that stakeholders said influenced the likelihood of workers (and in particular the resident UK working population) choosing specific types of work, and employers said it formed part of their strategies to address recruitment difficulties where it was possible for them to do this. However, several employers and representative organisations were also at pains to stress that they were not recruiting migrant labour as a cheaper alternative or a cost-cutting exercise, but as an expedient means of filling labour shortages that would otherwise not be addressed.

*"It is important to note that, contrary to popular belief, migrant labour is neither cheap, nor cheaper than UK nationals. For the same jobs, migrant employees are paid the same wages as UK workers. In one member's example, where comparable, all workers in both job roles (butcher and slaughterman) were paid the same for the job performed, and slaughter hall operatives had the same median salary for both non-UK and UK workers."*

Representative organisation; Food Production Sector; UK-wide

## **Skills available within the UK workforce, and willingness to work**

- 5.39 Within certain industries, respondents indicated that non-British workers possessed specific skills within the industry that were not easy to find among UK workers. Although these respondents were not necessarily arguing for a change in the RQF

level, they did make the case that several occupations ostensibly below RQF3 required significant skills. Respondents ascribed the lack of availability of relevant skills within the British workforce to a few reasons, including:

- The skills taught in British schools;
- The urbanisation of the UK (versus the extent to which this had happened in other countries) leading to a change in the available skills profile of the workforce; and
- The general ‘work readiness’ and work ethic of British workers: in some areas with particularly high employment employers said that many of those people who did not already have a job, did not want one, and only applied for positions to appear as though they were looking for work.

5.40 Specific skills the UK workforce were said to lack were:

- Skills relating to agriculture and fishing;
- Skills related to food (in particular meat, poultry and fish) processing;
- Skills relating to textiles, textile machine operation and stitching;
- Language skills, particularly related to EU languages;
- Mental arithmetic skills; and
- The ability to undertake arduous physical work.

5.41 The decline in skills in specific areas was thought to have an impact on UK workers’ likelihood of considering certain industries as a viable career choice – an issue raised by the fishing, agriculture and construction sectors in particular. This was something a number of employers and representative organisations were attempting to address through promotional work in schools and colleges.

*“Currently up to 70% of croupiers in the UK are from overseas. In order to remain competitive our casinos need the best croupiers with great arithmetic agility.”*

Representative Organisation; Arts, Entertainment and Recreation; UK-wide

*“Also, in years gone by navigation was taught at schools and a more visible marine industry was present [and] word of mouth at the harbour could be enough to secure a job, this has changed now and unfortunately fishing did not really catch up with integration to the curriculum, attendance at recruitment fairs etc. We are doing this now as Denmark did, but it will take time. We now need fishermen to teach new domestic and non-domestic new starts how to fish.”*

Representative Organisation; Agriculture, Forestry and Fishing; Scotland

5.42 The issues of both availability of alternative employment and the familiarity/desirability of specific jobs, interacted to make some types of employment much less likely to be taken up by British workers. This was particularly said to be the case for non-British workers who had had difficulty in finding work in their home countries, or who were

otherwise invested in being in the UK (and therefore facilitated in this by finding employment).

*“Farming is not seen as a desirable career choice, often incorrectly classed as poorly paid, low skilled work which lacks career prospects. The enlargement of the EU has opened up a pool of labour outside of the UK, especially from Central and Eastern EU countries. Many people living in these countries have grown up with or are connected to agriculture, don’t have an issue with the type of work, and are keen to come and work here where opportunities at home have been lacking. As a result of these factors, accessible, skilled and motivated workers from Europe have been much more likely to apply than UK based workers.”*

Representative Organisation; Agriculture, Forestry and Fishing; UK-wide

5.43 EEA and non-EEA workers were, for this reason, said to be more willing than British workers to:

- Be mobile or relocate for work, especially to rural areas;
- Undertake hard and physical work;
- Work in unattractive conditions (for example cold, wet, noisy, repetitive, requiring PPE or unsociable hours);
- Take up work that is insecure, seasonal or temporary in nature (for example driven by occasions such as Christmas, or product availability such as harvests). Employers within the food manufacturing sector stressed the need for a hugely expanded workforce at seasonal peaks, similar to that known to exist in agriculture.

*“It can be more sensible for mobile migrant labour to move to [rural] areas than for those rooted elsewhere in the UK to relocate. Members report struggling to recruit from local rural populations despite paying above NLW and providing free bus services.”*

Representative organisation; Food Production Sector; UK-wide

*“The work is undertaken in chilled conditions and is hard. UK citizens apply and then either don't show up for interview, or apply and then don't show up for work, or turn up to work for a day or so before leaving. EU and non-EU staff on the other hand come to work, do a good day’s work and then return the next day and so on. They are more reliable and, in our opinion, have 'invested' in being in the UK and value having a job more than the domestic population.”*

Representative organisation; Food Production Sector; UK-wide

## Availability of training

5.44 Some employers and sectors discussed the limited availability of training for roles. The reasons training might be limited included:

- Limited capacity: training being a longer-term issue (which might need to start with the work being done within schools and colleges as described earlier);
- Lack of enthusiasm from British workers meaning on-the-job training was less effective;
- The location of training providers in relation to employers, particularly in rural areas, meaning that employers had to either develop their own training programme or look for workers who were already skilled; and
- The cost and duration of training.

5.45 The point was also made that if the UK workforce did not want to carry out the work, the availability of training was unlikely to change the nationality profile to a great extent.

*“As mentioned, the low uptake by students on butchery college courses is in part due to the locations of colleges/sites, and lack of concentrated demand. This has led many large organisations to develop their own in-house training programme or hybrid college-industry partnerships. Whilst they have been successful, in fact many of those they train are often non-UK workers.”*

Representative organisation; Food Production Sector; UK-wide

5.46 This chapter has outlined some of the concerns raised in the CfE by occupations below RQF3. Next, we consider specific evidence that we received regarding the skill level classification of certain occupations currently classed below RQF3.

## Skill level classifications

5.47 As set out in the Introduction chapter, the Office for National Statistics (ONS) is responsible for determining the structure and roles within SOC codes. The mapping of occupation codes (4-digit SOC codes) to RQF skill levels has been determined in previous MAC reports (see Introduction pages 57-58 for more detail). As part of the introduction of the future immigration system, the skills threshold for eligibility for the Skilled Worker route is changing from RQF6+ to RQF3+. Given these changes, the boundary between below RQF3 and RQF3+ has become more important as it determines the eligibility for the Skilled Worker route in the future immigration system.

5.48 In our report on the Points-Based System published earlier this year, we noted *“the current skill definitions are dated and have not been constructed with the current*

*situation in mind*<sup>106</sup>. For this reason and with the renewed importance of the RQF3 boundary, we made recommendations to add and remove some occupations from the list of RQF3+ occupations within that report. These recommendations have been accepted by the Government<sup>107</sup>. The Home Office has published a list of SOC codes which are eligible for the Skilled Worker route in the future immigration system<sup>108</sup>.

- 5.49 Given the renewed importance of the RQF3 boundary, around 40 stakeholders provided input to the CfE on the skill level of occupations below RQF3. This section examines the stakeholder evidence along with relevant data to determine whether there is now a case to recommend any changes to the skill classifications of occupations or job titles that would make them eligible for the skilled route worker if accepted by the Home Office.
- 5.50 The current SOC definitions are based on SOC 2010. The ONS has recently released the SOC 2020 definitions and structure<sup>109</sup>. This is updated every 10 years to account for changes in the nature of job roles and new roles which have emerged over that time. For this review, we have continued to use SOC 2010 as most data are only available using SOC 2010 at this time. Data using SOC 2020 are starting to become available this year. Therefore, next year we plan to review how SOC 2020 codes map to RQF levels.
- 5.51 As we stated in our Point-Based System review, *“the underlying principle is that skill is related to the length of time taken to acquire the skills necessary to do a job: it is not, as sometimes alleged, a statement about the value of a job.”*<sup>110</sup> This continues to be our view.

## Stakeholder Evidence

- 5.52 In response to the CfE, some stakeholders provided detailed evidence on the skills required in particular occupations, whilst others stated that an occupation should be reviewed without providing detailed evidence on the skills required. This included calls for specific job titles to be defined as RQF3+ and calls for entire SOC codes to be redefined. The evidence from stakeholders relating to skill levels and training requirements is summarised below.

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<sup>106</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/873155/PBS\\_and\\_Salary\\_Thresholds\\_Report\\_MAC\\_word\\_FINAL.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/873155/PBS_and_Salary_Thresholds_Report_MAC_word_FINAL.pdf)

<sup>107</sup> <https://www.gov.uk/government/collections/uk-points-based-immigration-system-further-details>

<sup>108</sup> <https://www.gov.uk/government/collections/uk-points-based-immigration-system-further-details>

<sup>109</sup><https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassification/soc/soc2020>

<sup>110</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/873155/PBS\\_and\\_Salary\\_Thresholds\\_Report\\_MAC\\_word\\_FINAL.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/873155/PBS_and_Salary_Thresholds_Report_MAC_word_FINAL.pdf)

## Care workers (6145)

5.53 We received evidence from 13 stakeholders regarding skill levels for care workers (SOC code 6145). More generally, we received extensive evidence on social care which is discussed in depth in Chapter 5.

5.54 Multiple stakeholders reported that this role was a skilled and demanding job. They highlighted the need for interpersonal skills (e.g. empathy and emotional intelligence) in addition to nursing and technical skills. One stakeholder stated:

*“Homecare workers need to have the right values, ethics and disposition in order to provide highly intimate care for people with complex health and social care needs such as dementia; those with a complex medication regime; or require management of a tracheostomy, stoma or catheter.”*

Representative organisation; Care Sector; UK-wide

5.55 Stakeholders also highlighted that many roles do not require formal qualifications and that training is done on the job. One stakeholder outlined the lack of formal career pathways based on agreed qualifications and a regulated, registered workforce. Similarly, another stakeholder reported that:

*“The Care Certificate only covers a basic induction into care, rather than more specialised training, and it is not a mandatory requirement for employers. Not all parts of the UK have professional registration for care workers.”*

Representative Organisation; Care Sector; UK-wide

5.56 We received multiple responses from stakeholders in Scotland noting that this occupation has a qualification requirement in Scotland which is currently being phased in. Stakeholders said that this would be completed for most care workers in Scotland from 2020, where there is a requirement for qualification at least to Scottish Credit and Qualifications Framework (SCQF) level 6, which is the equivalent of RQF3<sup>111</sup>.

## Call and contact centre occupations (7211) and customer service occupations n.e.c. (7219)

5.57 We received evidence from one stakeholder regarding skill levels for customer service roles which required multiple languages. These related to call and contact centre occupations (SOC code 7211) and customer service occupations n.e.c. (SOC code 7219). They said that around 1,000 hours of training would be required over six

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<sup>111</sup> <https://www.sqa.org.uk/sqa/64561.html>

months to become proficient in these roles, and that they required customer service workers to be fluent in international languages.

### **Plant and machine operatives n.e.c. (8129)**

- 5.58 We received evidence from one stakeholder calling for the skill level for machine operatives to be reviewed, given that the National Skills Academy for Food and Drink offers a Level 3 Apprenticeship as a Food & Drink Advanced Process Operator.

### **Sewing machinists (8137)**

- 5.59 We received evidence from two stakeholders regarding skill levels for sewing machinists (SOC code 8137). One stated that the occupation required “*months to years of training*” and the other said that training can take several years. No further detail was provided about what the training involved.

### **Large goods vehicle drivers (8211)**

- 5.60 We received evidence from four stakeholders regarding skill levels for large goods vehicle drivers (SOC code 8211). One stated “*it is anomalous for HGV Instructors to be classified as skilled but drivers not to be.*” Another called for the skills classification to be reviewed, but did not provide any detail about the skills required for this role.
- 5.61 One stakeholder provided more information on the licences required for large goods vehicle drivers. They noted the requirement to have a minimum of a Category C license and that the additional E licence was required for larger vehicles. They said that the time taken to pass these licences can vary, but that most will complete within twelve weeks of an apprenticeship with the remainder of the nine-month apprenticeship period learning how to carry out other aspects of the job.
- 5.62 Stakeholders highlighted that, although the licence is one part of the training, drivers needed to understand many regulations to operate successfully. In total, one stakeholder assessed that the end to end process, from starting with no experience to a fully skilled driver able to operate safely in all parts of the UK, was around twelve months.

### **Agricultural machinery driver (8223)**

- 5.63 We received evidence from one stakeholder regarding skill levels for agricultural machinery driver (SOC code 8223). The stakeholder expressed their view that this classification should be reviewed and stated that most applicants were required to have some form of work-based qualification.

## **Farm worker (9111)**

- 5.64 We received evidence from four stakeholders regarding skill levels for farm workers (SOC code 9111). One stakeholder said that most applicants were required to have some form of work-based qualification. Two of the responses related to dairy farming, with stakeholders stating that on-the-job training takes significant time and technical understanding. They said that this is done through practical experience, with the only qualifications generally accepted within the industry being either experience or a willingness to work and relocate to live in on-site accommodation.
- 5.65 One stakeholder highlighted that some of the migrant workers in this occupation held degree level qualifications and that many had experience as farm workers in other countries. However, as we noted earlier the skill requirement is based on the occupation and not the worker doing it.

## **Forester (9112) – job title ‘forest machine operator’**

- 5.66 We received evidence from two stakeholders regarding the skill level for forest machine operators in this SOC code. One stakeholder noted that experienced operators can have high earnings and that many are self-employed. As we have highlighted in other parts of the report, the benefits of the SOL are applied to the Skilled Worker visa, in which a worker must have employer sponsorship. Therefore, the use of the route may be more limited for occupations where there is a high proportion of self-employed workers.
- 5.67 The other stakeholder described the role, saying that workers physically operate the machines used for harvesting, including undertaking minor repairs, and ensuring logs were cut to market specification.

## **Fishing and other elementary agricultural occupations n.e.c. (9119) – job title ‘mushroom harvester’**

- 5.68 We received evidence from three stakeholders regarding the skill level of mushroom harvesters in this SOC code. All three responses said that the time to train for these roles is a minimum of 12 weeks with no formal qualifications required. One stakeholder reported that there was salary progression over time if pickers developed their skillset (£22,000 after six months and £27,000 after 12 months).
- 5.69 One stakeholder mentioned the potential for career progression into supervisory and leadership programmes in preparation for management roles.



## Fishing and other elementary agricultural occupations n.e.c. (9119) – job title ‘vent chick sexer’

- 5.70 We received evidence from three stakeholders regarding the skill level of ‘vent chick sexers’ in this SOC code. These stakeholders referred to previous MAC reports on this job title. This included the 2015 Partial Review of the SOL, where it was reported that for vent chick sexers “*the salary is an average of £38,500 per annum across the industry.*”<sup>112</sup> In that report, the MAC also suggested that the Government should ask us to consider this role in more detail in the next SOL review.
- 5.71 In response to the CfE, one stakeholder suggested that this role typically pays £60,000-£70,000. They referred to the work permit scheme which was the predecessor of Tier 2 (General). At that point, vent chick sexers were eligible if the individual had NVQ3+ and had at least three years of full-time experience using these skills<sup>113</sup>. Stakeholders also noted that Lantra<sup>114</sup> had historically confirmed that a fully-trained vent sexer would be skilled at NVQ3+.

## Fishing and other elementary agricultural occupations n.e.c. (9119) – job title ‘deckhand on larger fishing vessels (above 9 metres in length)’

- 5.72 We received extensive evidence on the training and skills required for ‘deckhands’ in this SOC code. This is based on the response from one stakeholder who commissioned a report looking into the skill requirements. This study noted that deckhand roles were classified within two SOC codes: agricultural and fishing trades n.e.c. (SOC code 5119) and fishing and other elementary agriculture occupations n.e.c. (SOC code 9119). Based on the ONS SOC 2010 coding index, ‘deckhand’ in the fishing industry is classified under SOC 9119 and other job roles including ‘captain’, ‘skipper’ and ‘fisherman’ are classified under SOC 5119<sup>115</sup>. The report argues that the classification under 9119 is “*a misleading and arguably erroneous classification.*” SOC code 5119 is classified as eligible for the Skilled Worker route in the future immigration system. Therefore, we only discuss the evidence in relation to 9119 here<sup>116</sup>.
- 5.73 The report says that whilst there are no formal requirements for entry to the role of a deckhand, the role is highly skilled and has changed over the last 10-15 years, due

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<sup>112</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/406775/Partial\\_review\\_of\\_the\\_SOL\\_for\\_UK\\_and\\_Scotland\\_Report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/406775/Partial_review_of_the_SOL_for_UK_and_Scotland_Report.pdf)

<sup>113</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/438846/chicksexer.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/438846/chicksexer.pdf)

<sup>114</sup> Lantra is an awarding body which develops courses and national qualifications for land based industries in the UK

<sup>115</sup><https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassification/soc/soc2010/soc2010volume2thestructureandcodingindex>

<sup>116</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/899755/UK\\_Points-Based\\_System\\_Further\\_Details\\_Web\\_Accessible.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/899755/UK_Points-Based_System_Further_Details_Web_Accessible.pdf)

to technological changes and changes to the makeup of the crew on a fishing vessel (driven by economic factors). They note that this now requires deckhands “*to have good knowledge and skill across all aspects of the job but also to have in-depth competence in at least one area such as engineering, net repair, fish handling, catch presentation and the sea.*” The report states that the role requires a higher level of responsibility given the dangerous conditions in which deckhands are operating.

5.74 They argue that for deckhands on larger fishing vessels (9 metres and above in length), it takes 2-3 years to attain the required skills. This includes skills in “*complex hand-eye skills...for net-mending and rope splicing*”, “*extent of minute-to-minute responsibility and autonomy*” and “*a wide range of technical, legal and regulatory knowledge*”. The technical training was reported to include first aid, health and safety, firefighting and prevention, and survival at sea. They also report that the job role is determined to be RQF3 in other European countries. In addition, it was noted that much of the training is done on the job.

5.75 As part of the study, they undertook engagement with employers and found that “*all of the employers and stakeholders with whom we spoke provided evidence in support of their view that it takes two to three years to develop a deckhand to ‘skilled’ status and five years to develop a person to what might be called ‘Deck Boss’ or ‘Chargehand Deckhand’.*”

### **Elementary construction occupations (9120)**

5.76 We received evidence from one stakeholder regarding skill levels for elementary construction occupations (SOC code 9120). The stakeholder noted that the occupation had a “*low entry level*” at NVQ1 but required further training on health and safety to be able to work on site.

### **Refuse and salvage occupations (9235) – job title ‘recycling operative’**

5.77 We received evidence from one stakeholder regarding the skill level for recycling operatives in this SOC code. They noted that these workers “*may not have formal qualifications but nonetheless have experience and the right qualities to succeed within the recycling industry.*” A manual process was said to be essential to ensure procedures and regulations are followed.

### **Other**

5.78 We also received requests for a variety of other SOC codes to be added to the SOL, such as forklift truck drivers (SOC code 8222) and kitchen porters (SOC code 9272). Many of these requests did not include any further evidence on the training required or an argument for a change in skill level. There will be a full review of how SOC 2020 codes map to RQF skill levels next year, in which we will consider all SOC codes.

5.79 There were also some requests for SOC codes to be reclassified that we had already recommended for reclassification in our Points-Based System review<sup>117</sup>, such as construction and building trades supervisors (SOC code 8330). The Government has now accepted these recommendations.

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<sup>117</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/873155/PBS\\_and\\_Salary\\_Thresholds\\_Report\\_MAC\\_word\\_FINAL.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/873155/PBS_and_Salary_Thresholds_Report_MAC_word_FINAL.pdf)

## Salary data

**Table 5.1 – Pay in selected occupations**

SOC	Occupation	25th Percentile of Full-Time Employee Pay	Median of Full-Time Employee Pay	Theoretical salary threshold if eligible	Binding full-time percentile (5-year average)	Theoretical salary threshold if on SOL	Binding with SOL full-time percentile (5-year average)
6145	Care workers and home carers	£15,600	£19,100	£25,600	86	£20,480	64
7211	Call and contact centre occupations	£16,600	£19,000	£25,600	88	£20,480	65
7219	Customer service occupations n.e.c.	£18,400	£21,600	£25,600	75	£20,480	44
8129	Plant and machine operatives n.e.c.	£19,700	£25,000	£25,600	51	£20,480	28
8137	Sewing machinists	£16,100	£18,200	£25,600	93	£20,480	73
8211	Large goods vehicle drivers	£25,500	£30,500	£25,600	28	£20,480	10
8223	Agricultural machinery drivers	£21,200	£25,400	£25,600	43	£20,480	16
9111	Farm workers	£18,400	£22,600	£25,600	67	£20,480	38
9112	Forestry workers	£19,400	£24,700	£25,600	69	£20,480	28
9119	Fishing and other elementary agriculture occupations n.e.c.	£17,100	£20,200	£25,600	90	£20,480	60
9120	Elementary construction occupations	£19,500	£22,800	£25,600	64	£20,480	36
9235	Refuse and salvage occupations	£18,400	£20,400	£25,600	83	£20,480	46

Source: ONS, Annual Survey of Hours and Earnings 2015-19

Note: For occupations where the 25<sup>th</sup> percentile is unavailable due to disclosure issues, we have included estimates based on our own methodology<sup>118</sup>.

**5.80** For the SOC codes where some information was provided on skill level or training requirements making a case for reclassification, we have additionally considered the salary levels. However, this information is for context and is not used when making decisions about the skill classifications in this report. All but one of these occupations has median pay below the general salary threshold. We have considered what the salary threshold would be if any of these occupations were eligible for the Skilled Worker route and if they were on the SOL.

<sup>118</sup> <https://www.gov.uk/government/publications/calculating-salary-thresholds-technical-note>

- 5.81 As the 25<sup>th</sup> percentile of the full-time wage distribution in each occupation is below the general threshold (£25,600), the general threshold would bind i.e. that would be the salary threshold that would theoretically have to be paid. For almost all these occupations, the binding salary threshold sits at a high percentile within that occupations' wage distribution. For example, if care workers (SOC code 6145) were eligible for the route, the salary threshold is at the 86<sup>th</sup> percentile of full-time earnings in this occupation, meaning that 86 per cent of full-time employees in the UK earn less than the salary threshold.
- 5.82 Across most of these occupations, unless employers are willing and able to pay migrants coming through this route at the very top end of the pay distribution and substantially more than the median paid to resident workers to meet the salary requirements, this route would be of little use. We have also considered the theoretical salary threshold if these occupations were both eligible for the route and on the SOL. This has similar conclusions.

## Assessment

- 5.83 We have carefully considered the stakeholder evidence that we received. In many cases, the evidence we received highlighted that the occupations had a reasonably short job training requirement. This is consistent with the occupation being classified as below RQF3. Whilst some stakeholders emphasised that it could take several years to reach the top level of performance within a job, we think this is true for almost all jobs. The key distinction that is used for the immigration system is the length of time it takes for a new hire to acquire the skills and experience needed to become competent in the job. We would urge stakeholders to focus explicitly on this aspect in future reviews.
- 5.84 On balance, we believe there is a case for reclassifying two job titles within SOC code 9119 – fishing and other elementary agricultural occupations not elsewhere classified. This SOC code contains a diverse range of job titles, most of which are not defined as RQF3+.
- 5.85 Based on the evidence, **we recommend classifying 'vent chick sexers' as RQF3 and therefore to be eligible for the Skilled Worker route.** For this job title, we recommend the same criteria should apply as under the historical Work Permit route<sup>119</sup>, including a requirement for the applicant to have at least three years full time experience in using their skills. We recognise that the salary threshold that would apply to this job title is much lower than the salary levels which stakeholders have reported vent chick sexers are paid. This is because it sits within a SOC code with a wide range of job titles. If our recommendation to classify this job title as RQF3 is implemented, we will monitor the salary levels of migrants doing this role on the

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<sup>119</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/438846/chicksexer.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/438846/chicksexer.pdf)

Skilled Worker visa to ensure there is not undercutting of wages of resident workers and make further recommendations if we do find evidence of undercutting.

- 5.86 We have also considered whether this occupation should be put on the SOL. Given the specificity of the job title within the wider occupation code, shortage indicators are not useful for this assessment as the data will be primarily driven by other job roles within the occupation code. Two stakeholders reported that they had been unable to fill vacancies in these roles over the last 6-12 months and that they had used migrants to fill vacancies historically. Limited information was provided on what actions employers had taken to address the vacancies, aside from hiring migrants. Based on the sensible criteria and our concerns of potential undercutting of wages under the relevant salary threshold, **we do not recommend adding vent chick sexers to the SOL.**
- 5.87 **We also recommend classifying ‘deckhands on large fishing vessels (9 metres and above)’ as RQF3 and therefore to be eligible for the Skilled Worker route.** For this job title, we recommend including a requirement for the applicant to have at least three years full time experience using their skills. We recognise that there may be operational challenges given the rules on operating inside compared to outside territorial waters, which the Home Office will want to consider.
- 5.88 We have considered whether deckhands should be placed on the SOL, and have not used the shortage indicators in this assessment as the data will be driven by other job roles within the SOC code. We received evidence from eight stakeholders who said they considered this job role to be in shortage. Many of the responses highlighted the shortages in Scotland and Northern Ireland, and that this occupation was essential for coastal communities. One respondent had undertaken a survey of over 60 employers in the sector. Stakeholders reported that there were “*not enough locals willing to do the job*” and a lack of people with the right skills and lack of motivation to do this type of role. Several different approaches were taken to advertise and recruit new workers with limited success. **We recommend adding deckhands on large fishing vessels (9 metres and above) to the SOL.**
- 5.89 We note that stakeholders have highlighted some care workers in Scotland will be required to have a qualification equivalent to RQF3 and this is currently being phased in. We followed up to understand more on the detail of the registration and qualification requirements for social care workers who are defined under SOC code 6145. In Scotland, registration is determined by what service is being provided but is expected to cover the vast majority of workers under SOC code 6145. Workers must be registered with specific regulatory bodies by the end of September 2020 and new staff have up to six months to apply for registration once they have started in

employment<sup>120</sup>. Once registered, workers have up to five years to get the equivalent of an RQF3 level qualification, though most would complete this much earlier.

5.90 In Wales, there is a similar approach where registration is mandatory for some care occupations and voluntary for others. For adult care home workers, it is currently voluntary to register but there is a move towards making the registration mandatory. For these workers, they must have RQF2-3 level qualifications within three years of registration or must go through a process to evidence their competence in the job and have three years of experience. Rules vary depending on what type of services are being provided<sup>121</sup>. In Northern Ireland, registration is mandatory, but qualifications are not required. In England, there is not a requirement for registration or qualifications<sup>122</sup>.

5.91 We are supportive of the proactive approach to the social care workforce taken in Scotland and Wales. We welcome the move towards increasing the formal training requirements, the focus on staff development and improving career paths for those in social care. In considering the case for changing the skills classification, we consider whether the skills and experience are needed before starting and being competent in a job. Given it is possible to start the role before achieving the RQF3 equivalent qualification in Scotland and that this is a requirement after a certain time period, we do not currently recommend reclassifying this occupation. One option would be to consider reclassifying this occupation in administrations with qualification requirements for RQF3 with an additional requirement of having at least three years full-time experience using these skills. This would be a significant divergence in policy, as the current skill levels for occupations apply UK-wide. As the registration requirements in Scotland have only recently become mandatory, this is an area which warrants further consideration. Other stakeholder feedback on wider issues in social care is covered earlier in this chapter.

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<sup>120</sup> <https://www.sssc.uk.com/registration/who-can-register/>

<sup>121</sup> <https://socialcare.wales/qualification-framework>

<sup>122</sup> <https://www.nuffieldtrust.org.uk/news-item/what-does-the-social-care-workforce-look-like-across-the-four-countries>

## Chapter 6: RQF3-5 occupations

### 6A: Introduction

- 6A.1 There are 151 4-digit RQF3-5 occupations that meet the skills requirements of the future Skilled Worker route. We have grouped these occupations into the broad categories below and use these headings to structure the rest of this chapter.
- b) Administrative and secretarial occupations
  - c) Agricultural occupations
  - d) Business associate professionals
  - e) Culture, media and sports occupations
  - f) Health and social care occupations
  - g) Other energy and environment
  - h) Other hospitality and leisure
  - i) Other miscellaneous
  - j) Other retail and wholesale
  - k) Other transport
  - l) Other caring occupations
  - m) Public service associate professionals
  - n) Science, engineering and technology associate professionals
  - o) Skilled construction and building trades
  - p) Skilled metal, welding, fitting and instrument making trades
  - q) Skilled vehicle, electrical and electronic trades
  - r) Textiles, printing and other skilled trades
- 6A.2 Each group will form a subsection in this chapter, within which we discuss the evidence of shortage for each of its 4-digit occupations.
- 6A.3 This chapter combines the quantitative shortage methodology, detailed in Chapter 2, with the responses received from stakeholders in the Call for Evidence (CfE), explained in Chapter 3. We also include a number of indicators for each occupation in the SOC box that provide context (see page 75 for definitions of these).
- 6A.4 Each occupation is reviewed on a case by case basis, using all available information to inform the recommendation. As such, the level of detail will vary across occupations depending on the volume and detail of the evidence available.
- 6A.5 A summary of recommendations can be found in Chapter 9.



## 6B: Administrative and Secretarial Occupations

### Introduction

6B.1 We have identified seven occupations at RQF3-5 that sit within the broad description of administrative and secretarial occupations. These occupations are not associated with any one sector of the economy, but instead involve a range of administrative and clerical duties across public and private sector organisations.

6B.2 The seven occupations considered are:

- i. National government administrative occupations (4112)
- ii. Officers of non-governmental organisations (4114)
- iii. Transport and distribution clerks and assistants (4134)
- iv. Sales administrators (4151)
- v. Office managers (4161)
- vi. Company secretaries (4214)
- vii. Personal assistants and other secretaries (4215)

6B.3 We received limited evidence on these occupations in our Call for Evidence (CfE).

### Sector overview

6B.4 The occupations cover a range of sectors which are analysed in detail within other sections of this report. Instead, here we look at some of the characteristics of employment in the specific occupations. This group of occupations includes around 749,000 employees within the UK, which represents two per cent of total UK employment.

6B.5 Table 6B.1 shows that the country of birth varies by occupation. Unsurprisingly, self-employment rates are low in these occupations.

**Table 6B.1: Employment in selected occupations**

Occupation	Total employment	% who are self employed	% born in EEA (ex. UK)	% born outside EEA	% born in UK
Total UK Economy	33,603,100	16%	7%	10%	83%
National government administrative occupations	150,400	0.6%	2%	6%	92%
Officers of non-governmental organisations	45,700	4%	2%	7%	91%
Transport and distribution clerks and assistants	64,600	3%	10%	10%	80%
Sales administrators	77,200	4%	6%	7%	88%
Office managers	183,200	6%	5%	5%	90%
Company secretaries	37,400	10%	3%	5%	92%
Personal assistants and other secretaries	190,200	8%	6%	6%	88%

Source: APS (2017-19)

All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes

- 6B.6** Table 6B.2 shows that the median pay for most of these occupations is above the general salary threshold of £25,600 for the skilled occupation route.
- 6B.7** Pay growth has been varied. Whilst some occupations have seen increases in pay, others have seen a fall, most notably a 15 per cent drop (inflation adjusted) for company secretaries.

**Table 6B.2: Pay in selected occupations**

<b>Occupation</b>	<b>Median gross annual pay for full-time employees 2019</b>	<b>25<sup>th</sup> percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
National government administrative occupations	£26,000	£22,400	+6%
Officers of non-governmental organisations	£28,200	£22,900	+7%
Transport and distribution clerks and assistants	£25,400	£20,600	-2%
Sales administrators	£21,600	£18,700	-1%
Office managers	£32,200	£25,000	+0.6%
Company secretaries	£27,100	£19,500	-15%
Personal assistants and other secretaries	£27,600	£22,000	+1%

Source: ASHE (2019)

Non-reported estimates are due to insufficient sample sizes

## COVID-19 impact

**6B.8** We would expect that many of these roles could largely be carried out at home, subject to technology and security considerations, as highlighted by the exposure to COVID-19 indicators reported in the SOC boxes. Therefore, these occupations are likely to be less impacted than other occupations and sectors considered in this review.

## SOC 4112: National government administrative occupations

Summary table: SOC 4112 National government administrative occupations																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.5%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	2%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£26,000																		
25th percentile full-time annual wage (ASHE, 2019)	£22,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.05</td> </tr> <tr> <td>2013/14</td> <td>0.10</td> </tr> <tr> <td>2014/15</td> <td>0.10</td> </tr> <tr> <td>2015/16</td> <td>0.10</td> </tr> <tr> <td>2016/17</td> <td>0.10</td> </tr> <tr> <td>2017/18</td> <td>0.12</td> </tr> <tr> <td>2018/19</td> <td>0.18</td> </tr> <tr> <td>2019/20</td> <td>0.15</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.05	2013/14	0.10	2014/15	0.10	2015/16	0.10	2016/17	0.10	2017/18	0.12	2018/19	0.18	2019/20	0.15
Year	Ratio																		
2012/13	0.05																		
2013/14	0.10																		
2014/15	0.10																		
2015/16	0.10																		
2016/17	0.10																		
2017/18	0.12																		
2018/19	0.18																		
2019/20	0.15																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	105																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6B.9 We received no stakeholder evidence regarding SOC 4112.

## Recommendation

6B.10 **We do not recommend adding SOC code 4112 (national government administrative occupations) to the SOL.** It ranks in the bottom third of the RQF3-5 shortage indicators (105<sup>th</sup>) and the online job posts to employee ratio has been substantially below the median of eligible occupations since 2012. We did not receive any stakeholder evidence to indicate shortage for this occupation.

## SOC 4114: Officers of non-governmental organisations

Summary table: SOC 4114 Officers of non-governmental organisations																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	2%																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£28,200																		
25th percentile full-time annual wage (ASHE, 2019)	£22,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
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<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.1</td> </tr> <tr> <td>2013/14</td> <td>0.05</td> </tr> <tr> <td>2014/15</td> <td>0.1</td> </tr> <tr> <td>2015/16</td> <td>0.1</td> </tr> <tr> <td>2016/17</td> <td>0.1</td> </tr> <tr> <td>2017/18</td> <td>0.1</td> </tr> <tr> <td>2018/19</td> <td>0.1</td> </tr> <tr> <td>2019/20</td> <td>0.1</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.1	2013/14	0.05	2014/15	0.1	2015/16	0.1	2016/17	0.1	2017/18	0.1	2018/19	0.1	2019/20	0.1
Year	Ratio																		
2012/13	0.1																		
2013/14	0.05																		
2014/15	0.1																		
2015/16	0.1																		
2016/17	0.1																		
2017/18	0.1																		
2018/19	0.1																		
2019/20	0.1																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	124																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6B.11 We received no stakeholder evidence regarding SOC code 4114.

## Recommendation

6B.12 **We do not recommend adding SOC code 4114 (officers of non-governmental organisations) to the SOL.** It ranks low in the RQF3-5 shortage indicators (125<sup>th</sup>) and the online job posts to employee ratio has consistently been below the median of eligible occupations since 2012. We did not receive any stakeholder evidence to indicate shortage in this occupation.

## SOC 4134: Transport and distribution clerks and assistants

Summary table: SOC 4134 Transport and distribution clerks and assistants																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	10%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£25,400																		
25th percentile full-time annual wage (ASHE, 2019)	£20,600																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	34%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-22.8%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>2.0</td> </tr> <tr> <td>2013/14</td> <td>2.2</td> </tr> <tr> <td>2014/15</td> <td>1.9</td> </tr> <tr> <td>2015/16</td> <td>2.1</td> </tr> <tr> <td>2016/17</td> <td>2.1</td> </tr> <tr> <td>2017/18</td> <td>2.4</td> </tr> <tr> <td>2018/19</td> <td>2.4</td> </tr> <tr> <td>2019/20</td> <td>2.4</td> </tr> </tbody> </table>		Year	Ratio	2012/13	2.0	2013/14	2.2	2014/15	1.9	2015/16	2.1	2016/17	2.1	2017/18	2.4	2018/19	2.4	2019/20	2.4
Year	Ratio																		
2012/13	2.0																		
2013/14	2.2																		
2014/15	1.9																		
2015/16	2.1																		
2016/17	2.1																		
2017/18	2.4																		
2018/19	2.4																		
2019/20	2.4																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	96																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

- 6B.13 We received three responses to our CfE stating that this occupation was in shortage.
- 6B.14 A farming organisation said that this was due to most employees being aged in their 40s and 50s, training requirements and that the occupation was not taken up by younger applicants. However, these issues were not sufficiently evidenced or explained.
- 6B.15 Organisations stated that they had tried to increase salaries and training. However, this is not supported by data for the occupation as a whole and no further detail on specific actions was provided, so it was unclear whether further measures to attract talent and investment in training could help.

## Recommendation

- 6B.16 **We do not recommend adding SOC code 4134 (transport and distribution clerks and assistants) to the SOL.** The online job posts to employee ratio is above the median, however the occupation ranks low by RQF3-5 shortage indicator rank and pay growth has been negative (2016-2019, see table 6B.2). Although some stakeholder evidence highlighting difficulties was received, on balance there was not enough evidence to indicate a UK-wide shortage.

## SOC 4151: Sales administrators

Summary table: SOC 4151 Sales administrators																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.3%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	6%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	24%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£21,600																		
25th percentile full-time annual wage (ASHE, 2019)	£18,700																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	39%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-49.3%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.7</td> </tr> <tr> <td>2013/14</td> <td>0.65</td> </tr> <tr> <td>2014/15</td> <td>0.6</td> </tr> <tr> <td>2015/16</td> <td>0.65</td> </tr> <tr> <td>2016/17</td> <td>1.1</td> </tr> <tr> <td>2017/18</td> <td>0.8</td> </tr> <tr> <td>2018/19</td> <td>0.78</td> </tr> <tr> <td>2019/20</td> <td>0.6</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.7	2013/14	0.65	2014/15	0.6	2015/16	0.65	2016/17	1.1	2017/18	0.8	2018/19	0.78	2019/20	0.6
Year	Ratio																		
2012/13	0.7																		
2013/14	0.65																		
2014/15	0.6																		
2015/16	0.65																		
2016/17	1.1																		
2017/18	0.8																		
2018/19	0.78																		
2019/20	0.6																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	73																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6B.17 We received no stakeholder evidence regarding SOC 4151.

## Recommendation

6B.18 **We do not recommend adding SOC code 4151 (sales administrators) to the SOL.** It is middle ranking in the RQF3-5 shortage indicators (73<sup>rd</sup>) and the online job posts to employee ratio has been below the median of eligible occupations, apart from in 2016/17. We did not receive any stakeholder evidence to indicate shortage in the occupation.

## SOC 4161: Office managers

Summary table: SOC 4161 Office managers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.6%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	5%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£32,200																		
25th percentile full-time annual wage (ASHE, 2019)	£25,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	16%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-32.9%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.08</td> </tr> <tr> <td>2013/14</td> <td>1.05</td> </tr> <tr> <td>2014/15</td> <td>1.02</td> </tr> <tr> <td>2015/16</td> <td>1.22</td> </tr> <tr> <td>2016/17</td> <td>1.15</td> </tr> <tr> <td>2017/18</td> <td>1.45</td> </tr> <tr> <td>2018/19</td> <td>1.15</td> </tr> <tr> <td>2019/20</td> <td>1.10</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.08	2013/14	1.05	2014/15	1.02	2015/16	1.22	2016/17	1.15	2017/18	1.45	2018/19	1.15	2019/20	1.10
Year	Ratio																		
2012/13	1.08																		
2013/14	1.05																		
2014/15	1.02																		
2015/16	1.22																		
2016/17	1.15																		
2017/18	1.45																		
2018/19	1.15																		
2019/20	1.10																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	45																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6B.19 We received only one response stating that this occupation was in shortage. However, the corresponding explanation indicated that the respondent had misclassified care managers as office managers and so the evidence has been considered as part of the recommendation for SOC 1242, residential, day and domiciliary care managers and proprietors.

## Recommendation

- 6B.20 **We do not recommend adding SOC code 4161 (office managers) to the SOL.** Although the occupation ranks in the top third of RQF3-5 shortage indicators (45<sup>th</sup>), the vacancy to employee ratio is only slightly higher than the median and the occupation has a below average proportion of employees born in the EEA (five per cent compared to seven per cent for the workforce as a whole). We did not receive any evidence from stakeholders to indicate shortage.

## SOC 4214: Company secretaries

Summary table: SOC 4214 Company secretaries																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	4%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	5%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£27,100																		
25th percentile full-time annual wage (ASHE, 2019)	£19,500																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	15%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-38.6%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	3.8																		
2013/14	3.5																		
2014/15	3.9																		
2015/16	5.0																		
2016/17	4.3																		
2017/18	4.1																		
2018/19	4.1																		
2019/20	4.5																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	22																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6B.21 We received one response from a recycling organisation stating that this occupation was in shortage. They did not provide further evidence on the reasons or extent of the shortage.

## Recommendation

- 6B.22 **We do not recommend adding SOC code 4214 (company secretaries) to the SOL.** The occupation has a relatively high ratio of online job postings to employees and ranks high in the RQF3-5 shortage indicators (22<sup>nd</sup>). We received limited evidence from one stakeholder.

## SOC 4215: Personal assistants and other secretaries

Summary table: SOC 4215 Personal assistants and other secretaries																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.6%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	14%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£27,600																		
25th percentile full-time annual wage (ASHE, 2019)	£22,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	14%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-51.9%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.62</td> </tr> <tr> <td>2013/14</td> <td>0.62</td> </tr> <tr> <td>2014/15</td> <td>0.68</td> </tr> <tr> <td>2015/16</td> <td>0.78</td> </tr> <tr> <td>2016/17</td> <td>0.92</td> </tr> <tr> <td>2017/18</td> <td>0.92</td> </tr> <tr> <td>2018/19</td> <td>0.92</td> </tr> <tr> <td>2019/20</td> <td>0.94</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.62	2013/14	0.62	2014/15	0.68	2015/16	0.78	2016/17	0.92	2017/18	0.92	2018/19	0.92	2019/20	0.94
Year	Ratio																		
2012/13	0.62																		
2013/14	0.62																		
2014/15	0.68																		
2015/16	0.78																		
2016/17	0.92																		
2017/18	0.92																		
2018/19	0.92																		
2019/20	0.94																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	118																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

- 6B.23 Limited evidence was received for this occupation. A consultancy firm stated that they found it difficult to find individuals with the combination of technical knowledge and experience in the local market. Although they stated that they had tried to increase salaries and recruitment spend, they did not provide further detailed evidence on the impact of this.
- 6B.24 Another respondent stated that they struggled to fill vacancies for office-based work on Scottish farms, due to peripherality and accessibility challenges. However, there was not enough evidence to ascertain whether this was a widespread issue in this occupation across Scotland. Further evidence would be required at the next SOL review.

## Recommendation

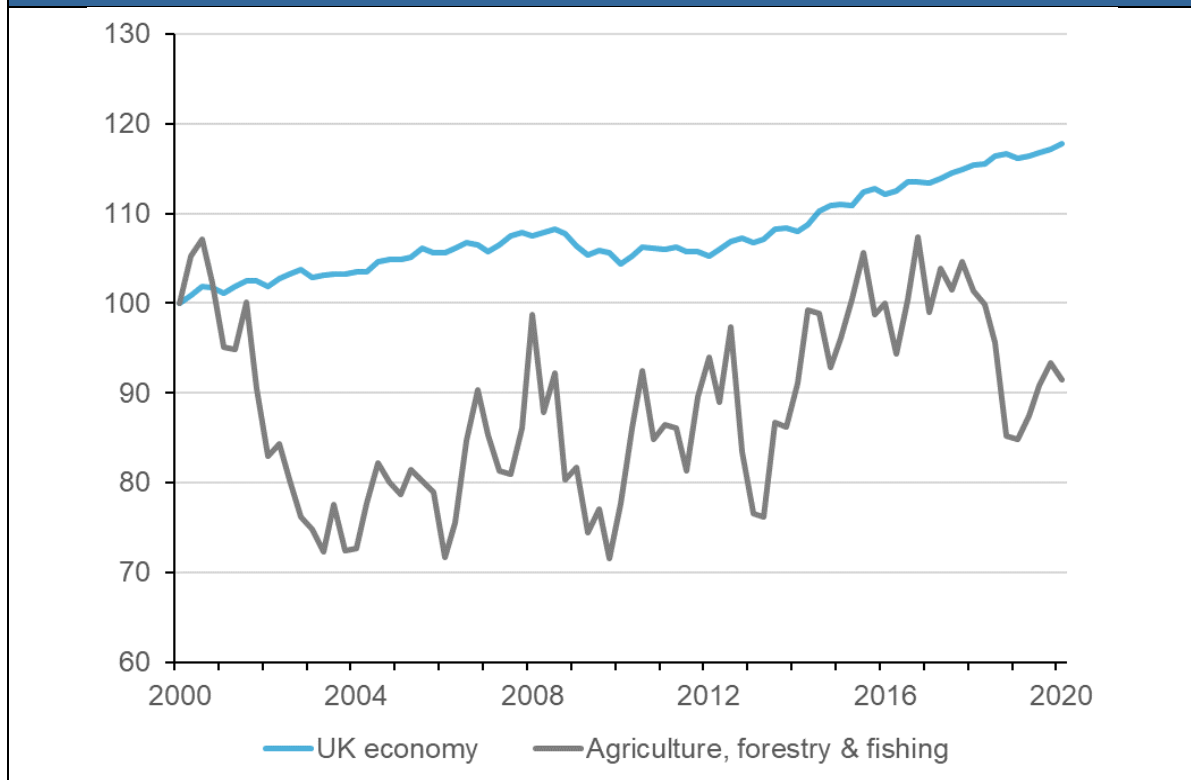
- 6B.25 **We do not recommend adding SOC code 4215 (personal assistants and other secretaries) to the SOL.** It ranks low in the RQF3-5 shortage indicators (118<sup>th</sup>) and the online job posts to employee ratio has been below the median since 2012/13, all be it the gap has closed in later years. The stakeholder evidence was limited and did not provide enough information to demonstrate either UK-wide or Scotland only shortage.

## 6C: Agricultural Occupations

### Sector Overview

- 6C.1 In the section we cover agricultural-related occupations, presenting analysis by SOC code.
- i. Farmers (5111)
  - ii. Horticultural trades (5112)
  - iii. Gardeners and landscape gardeners (5113)
  - iv. Groundsmen and greenkeepers (5114)
  - v. Agricultural and fishing trades n.e.c. (5119)
  - vi. Managers and proprietors in agriculture and horticulture (1211)
  - vii. Managers and proprietors in forestry, fishing and related services (1213)
- 6C.2 There are seven agricultural occupations at RQF3-5 that are considered. There are several other occupations in this group which are below RQF3 and so not eligible for the Skilled Worker route. It should also be noted that the data included in this chapter will not generally include seasonal workers due to the skill level of such workers being most commonly below RQF3. Also, datasets such as the Labour Force Survey (LFS) do not capture seasonal workers fully.
- 6C.3 The agriculture, forestry and fishing sector accounts for less than one per cent of total employment in the UK. Figure 6C.1 shows the number of employees in these industries compared with the whole UK economy indexed to 2000. Whilst employment in the UK has risen by around 20 per cent, employment in the agriculture, fishing and forestry industries has been more volatile, falling around 10 per cent this time, with seasonal fluctuations.

**Figure 6C.1: Indexed number of employees in sector (Jan-Mar 2000=100)**



Source: ONS - EMP14 Employees and self-employed by industry

- 6C.4 A chart plotting vacancy rates is unavailable due to the exclusion of the agriculture, forestry and fishing sector in the ONS' VACS02 Vacancies by Industry data set.
- 6C.5 Approximately 449,000 people work in the agricultural occupation group in the UK according to the three-year average Annual Population Survey (APS) from 2017-19. This occupation group has a lower proportion of overseas born workers compared to the economy. Table 6C.1 shows employment in the agricultural occupations by country of birth compared to employment across all occupations in the UK. Of those in the agricultural occupations, approximately 95 per cent were born in the UK and RoI, with two per cent born in the EEA and the same proportion born in Non-EEA countries.

Table 6C.1: Employment in selected occupations					
Occupation	Total employment	% who are self employed	% born in EEA (ex. UK)	% born outside EEA	% born in UK
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Farmers	147,300	81%	0.3%	0.9%	99%
Horticultural trades	18,500	25%	6%	-	93%
Gardeners and landscape gardeners	177,700	66%	4%	3%	93%
Groundsmen and greenkeepers	30,500	6%	-	3%	97%
Agricultural and fishing trades n.e.c.	35,500	53%	1%	3%	95%
Managers and proprietors in agriculture and horticulture	26,900	52%	3%	3%	94%
Managers and proprietors in forestry, fishing and related services	12,300	55%	3%	12%	85%

Source: APS (2017-19)

All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes

**6C.6** There is a high proportion of self-employed workers in the agricultural occupations group, at around 63 per cent of total employment. This is important to note as the advantages of the SOL only apply to the Skilled Worker route where migrants must be sponsored by an employer and do not apply to self-employed migrants.

## Wages

**6C.7** In this occupation group, the manager and proprietors SOC codes (SOC 1211 and SOC 1213) have the highest median full-time earnings at around £32,400 and £29,300 respectively.

**6C.8** Table 6C.2 shows the going rates (25th percentile earnings). All occupations in this group have a going rate lower than the current general threshold. Therefore, a migrant employed through the Skilled Worker route would have to earn £25,600. If these occupations were to be put on the SOL, the migrant would have a salary threshold of £20,480; the impact of this is to reduce, in some cases substantially, the binding

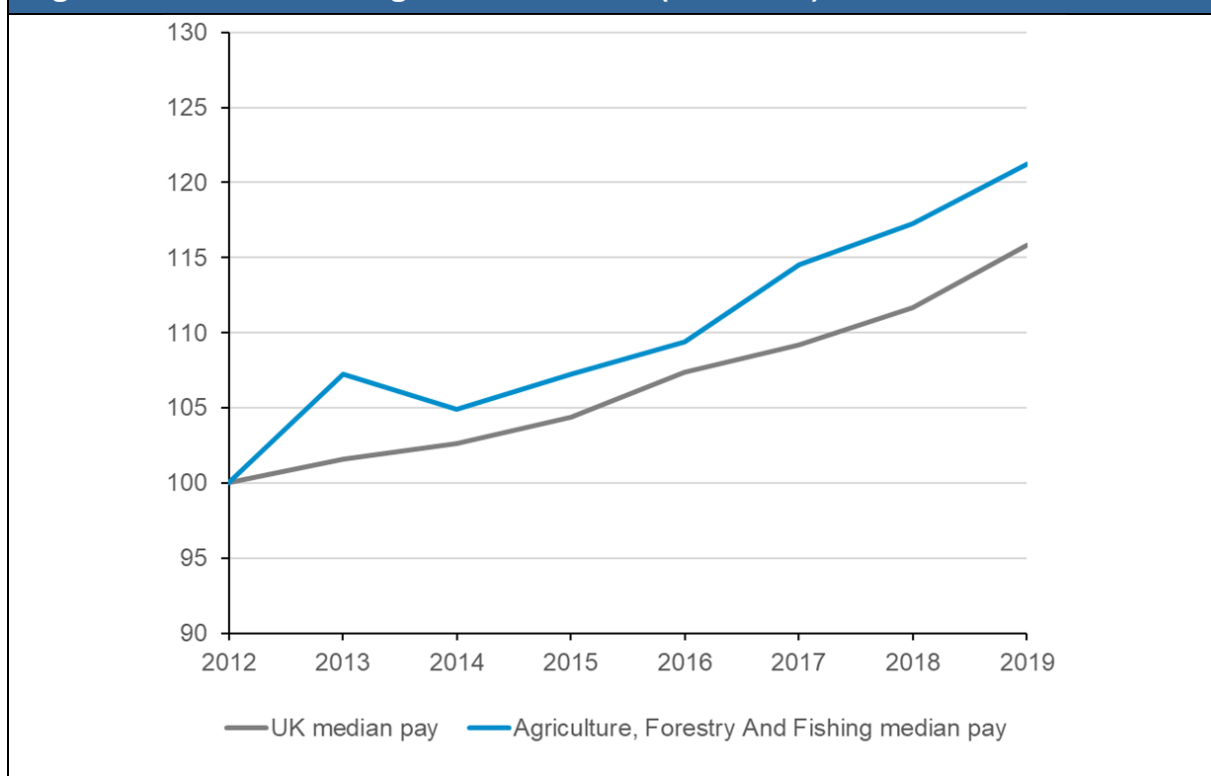
percentile of the distribution. Pay growth data for these occupations is limited but of those available the trend is that wages have stayed the same or fallen.

<b>Table 6C.2: Pay in selected occupations</b>			
<b>Occupation</b>	<b>Median gross annual pay for full-time employees 2019</b>	<b>25<sup>th</sup> percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
Farmers	£26,200	£20,100	-5%
Horticultural trades	£19,700	£17,000	-
Gardeners and landscape gardeners	£20,500	£18,600	-2%
Groundsmen and greenkeepers	£19,900	£17,700	-2%
Agricultural and fishing trades n.e.c.	-	£18,800	-
Managers and proprietors in agriculture and horticulture	£32,400	£25,200	+0.4%
Managers and proprietors in forestry, fishing and related services	£29,300	£21,200	-

Source: ASHE (2019)

Non-reported estimates are due to insufficient sample sizes

**Figure 6C.2: Indexed wage level in sector (2012=100)**



Source: ASHE (2012-19)

- 6C.9 Figure 6C.2 shows that wage growth in the sector has been slightly above UK median pay since 2012.

## Shortage

- 6C.10 Stakeholder responses to the Call for Evidence (CfE) stated that the main reasons for shortage in their businesses was a lack of suitable applicants applying for roles, unsocial working hours and the remote rural location of the workplace.
- 6C.11 A Scottish representative organisation for the farming industry stated that in an industry survey, 65 per cent of their members said they considered down-scaling business operations should difficulties filling vacancies persevere, with 41 per cent saying that they have considered switching to other agricultural activities and 31 per cent saying that they have considered switching to non-agricultural activities.

## Steps taken to alleviate shortage

- 6C.12 Many firms in the industry have been increasing overtime to existing staff, increasing labour retention when they have difficulty in recruiting, as well as improving their labour planning. In the response to the CfE, the Association of Labour Providers stated that 80 per cent of firms experiencing labour and skills shortages were focusing on improving their workplace.

6C.13 In the same report, 39 per cent of growers and manufacturers stated that in the coming year they will automate to reduce reliance on labour.

*“Over the past three years the sector has been working to encourage the development of automation to replace the current levels of dependency on labour over the past 3 years and its spiralling costs. However, the technology to do many of the tasks involved simply does not exist. Although research is advancing, viable solutions will not be available for some years. Furthermore, the industry does not generate adequate returns to fund the large-scale capital investments that automation requires.”*

Representative Organisation; Agriculture, Forestry and Fishing; UK-wide

6C.14 Other stakeholders echoed that automation is not a short-term solution to shortages of skills in the industry and that the technology to do many tasks required currently does not exist. Though this technology is advancing, it will not be viable for years to come.

### **COVID-19 impact**

6C.15 The COVID-19 pandemic has highlighted the agricultural sector and its vital role as part of the nation’s critical infrastructure and in ensuring food security.

6C.16 Campaigns such as Pick for Britain have been launched due to the COVID-19 lockdown in order to match growers in need of workers with members of the general population who were available for work. Stakeholders have stated that some growers were overwhelmed with the initial interest. However, upon following up with potential candidates, employers either did not receive a response or, after outlining the terms of employment, candidates dropped out.

## SOC 1211: Managers and proprietors in agriculture and horticulture

Summary table: SOC 1211 Managers and proprietors in agriculture and horticulture																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	6%																		
Share of employees born outside the EEA (APS, 2017-19)	3%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	7%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£32,400																		
25th percentile full-time annual wage (ASHE, 2019)	£25,200																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.18</td> </tr> <tr> <td>2013/14</td> <td>0.15</td> </tr> <tr> <td>2014/15</td> <td>0.20</td> </tr> <tr> <td>2015/16</td> <td>0.20</td> </tr> <tr> <td>2016/17</td> <td>0.25</td> </tr> <tr> <td>2017/18</td> <td>0.22</td> </tr> <tr> <td>2018/19</td> <td>0.30</td> </tr> <tr> <td>2019/20</td> <td>0.25</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.18	2013/14	0.15	2014/15	0.20	2015/16	0.20	2016/17	0.25	2017/18	0.22	2018/19	0.30	2019/20	0.25
Year	Ratio																		
2012/13	0.18																		
2013/14	0.15																		
2014/15	0.20																		
2015/16	0.20																		
2016/17	0.25																		
2017/18	0.22																		
2018/19	0.30																		
2019/20	0.25																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	81																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder engagement

- 6C.17 We received evidence from three stakeholders regarding this occupation. Stakeholders stated that they had difficulty finding suitable candidates to fill roles. It was stated that there was a lack of candidates with appropriate operational and technical experience, as well as a misguided public perception of pay and conditions and a lack of provision of relevant full-time training programmes.
- 6C.18 The Scottish Government's response also stated that prior farming experience is usually needed for a managerial role in the sector. However, the response went further to suggest that EEA migrants in agriculture play an important role in managing the diverse seasonal workforce, and that in recent years workers from EEA countries have been unwilling to return to Scotland for work.

## Recommendation

- 6C.19 **We do not recommend adding SOC code 1211 (managers and proprietors in agriculture and horticulture) to the SOL.** This occupation is relatively low ranked in the RQF3-5 shortage indicators and the vacancy to employee ratio is substantially lower than the median for eligible occupations. There is not a large share of EEA and non-EEA workers employed in this occupation. Given the 25<sup>th</sup> percentile earnings, the general salary threshold will bind at the 28<sup>th</sup> percentile of this occupation. There is insufficient evidence of a UK-wide shortage

## SOC 1213: Managers and proprietors in forestry, fishing and related services

Summary table: SOC 1213 Managers and proprietors in forestry, fishing and related services																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	7%																		
Share of employees born outside the EEA (APS, 2017-19)	15%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	7%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£29,300																		
25th percentile full-time annual wage (ASHE, 2019)	£21,200																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.15</td> </tr> <tr> <td>2013/14</td> <td>0.15</td> </tr> <tr> <td>2014/15</td> <td>0.15</td> </tr> <tr> <td>2015/16</td> <td>0.15</td> </tr> <tr> <td>2016/17</td> <td>0.08</td> </tr> <tr> <td>2017/18</td> <td>0.10</td> </tr> <tr> <td>2018/19</td> <td>0.22</td> </tr> <tr> <td>2019/20</td> <td>0.30</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.15	2013/14	0.15	2014/15	0.15	2015/16	0.15	2016/17	0.08	2017/18	0.10	2018/19	0.22	2019/20	0.30
Year	Ratio																		
2012/13	0.15																		
2013/14	0.15																		
2014/15	0.15																		
2015/16	0.15																		
2016/17	0.08																		
2017/18	0.10																		
2018/19	0.22																		
2019/20	0.30																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	.																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder engagement

- 6C.20 We received limited evidence from stakeholders regarding this occupation.
- 6C.21 The Forestry Commission stated that forest managers, which fall under this SOC code, provide a vital service for the UK forestry industry. The organisation expressed the view that a sizeable proportion of the current workforce was made up of non-UK citizens, and that the industry would suffer if it could not access these workers.

## Recommendation

- 6C.22 **We do not recommend adding SOC code 1213 (managers and proprietors in forestry, fishing and related services) to the SOL.** There is insufficient evidence to show a shortage in this occupation.

## SOC 5111: Farmers

Summary table: SOC 5111 Farmers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	3%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	4%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£26,200																		
25th percentile full-time annual wage (ASHE, 2019)	£20,100																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.1																		
2013/14	0.15																		
2014/15	0.15																		
2015/16	0.15																		
2016/17	0.1																		
2017/18	0.1																		
2018/19	0.2																		
2019/20	0.25																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	129																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder engagement

- 6C.23 We received evidence from five stakeholders regarding this occupation. Stakeholders stated that roles in this occupation were becoming increasingly hard to fill due a decline in formal education in farm skills and the fact that agriculture tends not to be advertised as a viable career prospect in schools.
- 6C.24 One representative organisation stated that EU enlargement had enabled UK employers to access a pool of workers who were familiar with, and willing to do, the types of work required in agricultural roles, and who were willing to relocate to the UK in order to do so.
- 6C.25 In an industry survey, 54 per cent of respondents agreed that there were profound difficulties in recruiting staff, with 55 per cent indicating that accessing EU staff was the only way in which this could be overcome.
- 6C.26 A representative of the poultry industry stated that the industry has grown considerably, and beyond UK labour availability as unemployment rates are very low. They estimated that 60 per cent of the workforce in the industry are EEA-born and that annual turnover of staff is 30 per cent, meaning that 7,000 vacancies a year need to be filled with non-UK workers.
- 6C.27 A representative of the dairy industry stated that roles in the industry under this occupation require significant time and learning on the job to become proficient. They state that qualifications in the industry tend to take second place to experience or a willingness to work and relocate. The representative said that the industry struggles to recruit UK workers due to the long hours required to perform two to three milkings per day, 365 days a year. They stated:

*“Without adequate farm managers, livestock welfare and milk hygiene standards may not be maintained, and staff training and organisation can't be targeted in the right area.”*

Representative Organisation; Agriculture, Forestry and Fishing; UK-wide

- 6C.28 The Scottish Government's response to the CfE stated that the attractiveness of entry level jobs in the sector has declined, possibly due to pay, working patterns and perceived lack of job progress. Research in March 2018 showed that 9,255 international seasonal workers were employed on Scottish farms in 2017, with a further 15 per cent of vacancies unfilled.
- 6C.29 The response also noted that for most of the roles in this sector, academic qualifications are not a requirement. Therefore, proposals for points based on academic qualifications would not meet the needs of the sector. The response also claimed that EU citizens are much more willing to work in rural areas of which there are many in Scotland.

## Recommendation

6C.30 **We do not recommend adding SOC code 5111 (farmers) to the SOL.** Although they are low ranked (129<sup>th</sup>) on the RQF3-5 shortage indicators and the vacancy to employee ratio is lower than the median for eligible occupations there is stakeholder evidence to suggest a shortage. Stakeholders have suggested that staff turnover and the share of non-EEA workers is higher than the data might show. It appears that much of the evidence submitted was related to the more general sector than to this specific occupation code. It is also worth noting that around 80 per cent of those in this occupation are self-employed and so the benefits to the occupation of being on the SOL are limited.

## SOC 5112: Horticultural trades

Summary table: SOC 5112 Horticultural trades																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	7%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	13%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£19,700																		
25th percentile full-time annual wage (ASHE, 2019)	£17,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.38																		
2013/14	0.25																		
2014/15	0.38																		
2015/16	0.28																		
2016/17	0.18																		
2017/18	0.22																		
2018/19	0.35																		
2019/20	0.32																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	104																		
<b>Recommendation</b>																			
Recommend adding entire occupation to Northern Ireland-only SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder engagement

- 6C.31 We received evidence from eight stakeholders regarding this occupation. Stakeholders stated that there is a lack of sufficiently skilled UK workers to fill vacancies in this occupation and a stakeholder commented that the Horticulture industry is not considered to be a serious or attractive career choice in the UK.
- 6C.32 One stakeholder noted that STEM careers are the focus of a lot of career advice and that the number of applicants for further education in the sector has dropped leading to the closure of several establishments. This has led to a decrease in the number of applications for work experience and summer placements.
- 6C.33 Another stakeholder responded that *“The roles at RQF L3-5 identified for this Call for Evidence often have a specialist field of expertise related to specific research areas and thus require specific skills and experience.”* Citing that they face high competition for candidates and often cannot compete with industry salaries being offered.
- 6C.34 Evidence from Northern Ireland stated issues with recruitment in rural areas and the importance of this occupation for the agri-food sector. They highlighted significant salary differentials between NI and the UK represent a unique challenge to Northern Ireland employers that could competitively disadvantage them within the new immigration system.
- 6C.35 Firms looking to recruit in this occupation tend to choose from those who have developed their career within the industry. Given the size of the UK industry, firms look to those with experience overseas to widen the pool of candidates.
- 6C.36 The Scottish Government’s response to the CfE highlighted the Scottish and UK Governments’ tree planting targets and stated that without further labour the targets would be hard to meet. They state that businesses reported that they try to employ domestic labour, but applicants are of low quality. This coincides with the stakeholder evidence that suggests a lack of skilled UK workers to fill vacancies. The response also notes that the occupation is seasonal, with a lot of labour coming from the EU (and beyond) each year which the sector relies on.

## Recommendation

- 6C.37 **We do not recommend adding SOC code 5112 (horticultural trades) to the UK SOL but do recommend adding it to the NI-only SOL.**
- 6C.38 The NI Government highlighted the importance of this occupation for the agri-food sector in Northern Ireland. We have heard at several stakeholder events that the sector faces challenges as a result of the land border with the Republic of Ireland and so competing with local businesses that will retain access to EEA workers on an unrestricted basis. Stakeholders have suggested that this has reduced investment in



the sector recently. Mindful of these challenges that NI businesses face, we recommend that this occupation be added to the NI-only SOL. We will closely monitor the use of this as the new system comes into operation.

**6C.39** With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 54th percentile of full-time earnings in this occupation, meaning that 54 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

**6C.40** For the UK-wide SOL, this occupation is ranked low on the RQF3-5 shortage indicators and the vacancies to employment ratio is lower than the median for eligible occupations. We welcome evidence in future reviews of the SOL, especially once freedom of movement ends.

## SOC 5113: Gardeners and landscape gardeners

Summary table: SOC 5113 Gardeners and landscape gardeners																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	2%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	12%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£20,500																		
25th percentile full-time annual wage (ASHE, 2019)	£18,600																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	28%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-17.9%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.75																		
2013/14	0.58																		
2014/15	0.75																		
2015/16	0.65																		
2016/17	0.55																		
2017/18	0.68																		
2018/19	0.68																		
2019/20	0.70																		
<b>Shortage indicator rank</b> (only including SOCs for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	93																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder engagement

- 6C.41 We received evidence from two stakeholders regarding this occupation. Stakeholders stated that there is a lack of sufficiently skilled people to fill roles.
- 6C.42 In the heritage sector it was stated that there is an on-going lack of funding for apprenticeships and training, and that the COVID-19 pandemic had led to staff being laid off in small businesses and a lack of training for new staff.
- 6C.43 A cross-industry survey reported difficulties in recruiting people with the right skills and/or attitudes as the top reason for skill gaps, alongside firms having difficulties in releasing staff for training. Landscaping businesses find the cost of external training is challenging, and that the training available is not always relevant or of sufficient quality.
- 6C.44 The Scottish Government's response to the CfE does not refer to SOC code 5113 specifically but does provide some evidence for the horticulture sector. The response claims that the sector is seasonal and relies on non-UK workers. The response also discusses uneven population change and rural depopulation in Scotland. It states that if there was a reduction of inward migration to rural areas then it will have a negative impact. This theme is further picked up in Chapter 4 where we discuss responses from the Devolved Administrations in more detail.

## Recommendation

- 6C.45 **We do not recommend adding the SOC code 5113 (gardeners and landscape gardeners) to the SOL.** This occupation is ranked in the bottom half of the RQF3-5 shortage indications. Although the vacancy to employee ratio is the highest of all the occupations in this agricultural occupational group, it is below the median for eligible occupations.

## SOC 5114: Groundsmen and greenkeepers

Summary table: SOC 5114 Groundsmen and greenkeepers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	3%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	12%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£19,900																		
25th percentile full-time annual wage (ASHE, 2019)	£17,700																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	13%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>0.08</td></tr> <tr><td>2013/14</td><td>0.10</td></tr> <tr><td>2014/15</td><td>0.11</td></tr> <tr><td>2015/16</td><td>0.10</td></tr> <tr><td>2016/17</td><td>0.11</td></tr> <tr><td>2017/18</td><td>0.10</td></tr> <tr><td>2018/19</td><td>0.12</td></tr> <tr><td>2019/20</td><td>0.12</td></tr> </tbody> </table>		Year	Ratio	2012/13	0.08	2013/14	0.10	2014/15	0.11	2015/16	0.10	2016/17	0.11	2017/18	0.10	2018/19	0.12	2019/20	0.12
Year	Ratio																		
2012/13	0.08																		
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2017/18	0.10																		
2018/19	0.12																		
2019/20	0.12																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	57																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder engagement

6C.46 We received no evidence from stakeholders regarding this occupation.

## Recommendation

6C.47 **We do not recommend adding the SOC code 5114 (groundsmen and greenkeepers) to the SOL.** This occupation is mid-rank on the RQF3-5 shortage indicators, the vacancies to employee ratio is well below the median for eligible occupations and we did not receive any evidence from stakeholders.

## SOC 5119: Agricultural and fishing trades n.e.c.

Summary table: SOC 5119 Agricultural and fishing trades n.e.c.																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	2%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	£18,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.28																		
2013/14	0.45																		
2014/15	0.42																		
2015/16	0.35																		
2016/17	0.25																		
2017/18	0.28																		
2018/19	0.32																		
2019/20	0.18																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	125																		
<b>Recommendation</b>																			
Recommend partially adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder engagement

- 6C.49 We received evidence from six stakeholders regarding this occupation, most of which came from the fishing industry. Stakeholders highlighted that low employment, particularly in rural areas where stakeholders in this occupation operate, competition from other sectors and a lack of UK candidates for roles as the main reasons for difficulties recruiting to this occupation.
- 6C.50 A representative organisation in the fishing industry had performed a cross-industry survey. They recorded that over half of respondents had difficulty recruiting and that they look outside the UK to find workers with sufficient skills, qualifications and experience. The same survey also found that 63 per cent of respondents said they could pay a deckhand a salary of £25,600, stating that the lack of financial rewards does not discourage UK workers from the industry so much as a perception of the role being “*dirty, dangerous and dull*”. They state that most workers in the industry currently work over 50 hours per week, which is more than other occupations. The modernisation of vessels is possible but requires investment which depends on certainty of labour.
- 6C.51 Another representative of the fishing industry highlighted that a lack of new entrants to the industry and poor retention rates due to the more challenging aspects of the job, as well as competition from other sectors, was causing recruitment difficulties. In a cross-industry survey in 2017, 23 per cent of job roles on board fishing vessels were filled by non-UK nationals (this figure was 53 per cent in Northern Ireland).

*“The inability to recruit enough skilled, reliable skippers means that business owners are often forced to cancel or postpone trips resulting in the loss of days at sea and potential fishing income”.*

Fishing Organisation

- 6C.52 We received evidence from the Scottish Government in the CfE relating to the agricultural sector, which SOC code 5119 falls under. They noted that the attractiveness of entry level jobs in the sector has declined, possibly due to pay, working patterns and perceived lack of job progress. The response also pointed out that for most of the roles in this sector, academic qualifications are not a requirement. Therefore, proposals for points based on academic qualifications would not meet the needs of the sector.
- 6C.53 The response claims that sea fishing businesses face challenges in recruiting UK nationals to work on the sector, stating a reliance on non-UK workers. The end of free movement for EEA nationals may lead to a further reliance on non-EEA workers.

## Recommendation

- 6C.54 **We recommend partially adding SOC code 5119 (agricultural and fishing trades n.e.c.) to the SOL only for those in the fishing industry.** This occupation is ranked low on the RQF3-5 shortage indicators and the vacancy to employee ratio is well below the median for eligible occupations. However, stakeholders in the fishing industry have stated their concerns and there is evidence to suggest a UK-wide shortage in this part of the occupation.
- 6C.55 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 32<sup>nd</sup> percentile of full-time earnings in this occupation, meaning that 32 per cent of full-time employees in this occupation.



## 6D: Business associate professionals

### Introduction

6D.1 We have identified 11 eligible occupations skilled below RQF6 that sit within the broad description of business associate professionals.

- i. Legal associate professionals (3520)
- ii. Estimators, valuers and assessors (3531)
- iii. Insurance underwriters (3533)
- iv. Importers and exporters (3536)
- v. Financial and accounting technicians (3537)
- vi. Business and related associate professionals n.e.c. (3539)
- vii. Buyers and procurement officers (3541)
- viii. Business sales executives (3542)
- ix. Marketing associate professionals (3543)
- x. Estate agents and auctioneers (3544)
- xi. Conference and exhibition managers and organisers (3546)

6D.2 These occupations do not come from a single sector of the economy. The occupations sit across a variety of industries, including retail, financial, legal and professional services. One job title within SOC 3541 was previously on the SOL (manufacturing engineer (purchasing) in the aerospace industry), before being removed in the 2019 review.

### Sector overview

6D.3 Table 6D.1 provides some employment statistics for occupations within the Business associate professionals grouping, and for the wider labour market. From these statistics we can see that, in general, these occupations are less reliant on employees from outside of UK & RoI. However, there is considerable variation between the occupations within this. Cumulatively, the 11 occupations account for over 900,000 jobs (including self-employed and others).

Table 6D.1: Employment in selected occupations					
Occupation	Total employment	% who are self employed	% born in EEA (ex. UK)	% born outside EEA	% born in UK
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Legal associate professionals	74,500	8%	2%	9%	89%
Estimators, valuers and assessors	63,900	13%	3%	4%	93%
Insurance underwriters	29,700	2%	3%	3%	93%
Importers and exporters	7,100	33%	18%	17%	65%
Financial and accounting technicians	23,600	7%	6%	10%	84%
Business and related associate professionals n.e.c.	182,000	10%	6%	9%	86%
Buyers and procurement officers	58,600	5%	5%	6%	89%
Business sales executives	125,600	12%	4%	6%	90%
Marketing associate professionals	209,100	13%	6%	8%	85%
Estate agents and auctioneers	51,300	19%	3%	4%	93%
Conference and exhibition managers and organisers	76,300	19%	9%	6%	85%

Source: APS (2017-19)

All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes

6D.4 Table 6D.2 contains details of pay for business associate professional occupations. For the 10 occupations in this group with median salary data available<sup>123</sup>, all were above the general £25,600 salary threshold, with four also having a 25th percentile wage higher than this. Median wages ranged from just over £26,300 (SOC 3546 - Conference and exhibition managers and organisers) to around £45,500 (SOC 3537 - Financial and accounting technicians).

<sup>123</sup> Median salary data was not available for SOC3544 - Estate agents and auctioneers due to small sample sizes.

<b>Table 6D.2: Pay in selected occupations</b>			
<b>Occupation</b>	<b>Median gross annual pay for full-time employees 2019</b>	<b>25<sup>th</sup> percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
Legal associate professionals	£29,700	£21,900	+3%
Estimators, valuers and assessors	£31,300	£25,800	+0.7%
Insurance underwriters	£34,000	£27,100	-4%
Importers and exporters	£32,800	£22,300	+23%
Financial and accounting technicians	£45,500	£32,500	-
Business and related associate professionals n.e.c.	£29,500	£23,300	+2%
Buyers and procurement officers	£30,900	£25,500	-6%
Business sales executives	£34,900	£25,800	+5%
Marketing associate professionals	£28,500	£24,400	-3%
Estate agents and auctioneers	-	£20,700	-
Conference and exhibition managers and organisers	£26,300	£22,900	-9%

Source: ASHE (2019)

Non-reported estimates are due to insufficient sample sizes

**6D.5** Several of the occupations rank highly within the shortage indicator score. Of the 136 occupations ranked by our shortage indicator, four of the top 10 were in this group. Whilst this tends to indicate a degree of shortage across these occupations, each occupation must be examined individually, along with other data sources and stakeholder evidence. In addition, shortage alone is not enough for an occupation to be added to the SOL, we must also consider whether it is sensible to use migrant labour to alleviate these shortages.

### **Steps being taken to alleviate shortages**

**6D.6** 12 organisations used the online Call for Evidence (CfE) to provide information on occupations within this group and how they have taken steps to alleviate shortages.

**6D.7** This should not be taken as a representative sample, but the evidence provided tends to match the strategies found more broadly within the CfE, and within the 2017 ESS.

These typically include utilising new recruitment methods or channels and increasing advertising / recruitment spend<sup>124</sup>.

- 6D.8 Other approaches noted in the CfE included reemploying retired staff on an ad hoc basis, offering longer contracts to junior staff to aid retention, secondments, and providing incentives such as free bus travel.

## COVID-19 impact

- 6D.9 Whilst COVID-19 was not raised with specific regard to any occupations within this group in the CfE responses, there will undoubtedly be an impact on all occupations. All 11 of the occupations are ranked as 'low' for exposure to diseases within the ONS classification but the majority are rated as 'medium' risk for proximity to others. Conference and exhibition managers and organisers (SOC 3546) are rated as high risk for proximity to others.
- 6D.10 Whilst these occupations span several industries, it is likely that some of the occupations within this group will be impacted by COVID-19 more than others. Several of these occupations are less able to move to an exclusively digital way of working; for example, estate agents (SOC 3544), or the previously referenced conference and exhibition managers.
- 6D.11 However, each occupation needs to be understood by its own circumstance. In the case of the two occupations highlighted, whilst the housing market has begun (at the time of drafting) to reopen, this is not the case for conferencing and exhibitions.
- 6D.12 The longer-term impacts of this for conferencing and exhibition managers are unclear. In July 2020 the Events Industry Alliance wrote to the Government expressing concern that they were unable to hold events and the implications for not having clear timescales of when this will change. They highlighted the economic impacts through the supply chain and local economies, as well as to the exhibition sector itself<sup>125</sup>. Conversely the estate agency representative body NAEA Propertymark, reported that buyer demand in June 2020 was around 1.5 times higher than the same period in 2019<sup>126</sup>.
- 6D.13 Another occupation likely to be particularly impacted by COVID-19 is 'Importers and exporters' (SOC 3536). In May 2020 the ONS published an analysis of the impact of COVID-19 on exporting and importing by UK businesses, based on their survey series the 'Business Impact of Coronavirus'<sup>127</sup>. This indicated that of UK businesses who were continuing to trade and whose financial performance was outside normal

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<sup>124</sup> ESS 2017 Data table, Table 71

<sup>125</sup> <https://www.aev.org.uk/media/covid-19/EIA-MIA-Letter-to-Prime-Minister,-13th-July-2020.pdf>

<sup>126</sup> <https://www.naea.co.uk/news/july-2020/pandemic-has-not-deterred-the-uk-from-making-the-next-move/>

<sup>127</sup> <https://www.ons.gov.uk/businessindustryandtrade/internationaltrade/articles/theimpactofcoronaviruscovid19onexportingandimportingbyukbusinesses/20aprilto3may2020>

expectations, 72 per cent of exporting businesses were exporting less than normal, and 59 per cent of importing businesses were importing less than normal. Only 20 per cent of these businesses reported that exporting had not been affected by COVID-19, and 29 per cent that importing had not been affected by COVID-19.

## SOC 3520: Legal associate professionals

Summary table: SOC 3520 Legal associate professionals																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	2%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	18%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£29,700																		
25th percentile full-time annual wage (ASHE, 2019)	£21,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-35.2%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.8</td> </tr> <tr> <td>2013/14</td> <td>2.0</td> </tr> <tr> <td>2014/15</td> <td>2.5</td> </tr> <tr> <td>2015/16</td> <td>2.3</td> </tr> <tr> <td>2016/17</td> <td>2.4</td> </tr> <tr> <td>2017/18</td> <td>2.2</td> </tr> <tr> <td>2018/19</td> <td>2.8</td> </tr> <tr> <td>2019/20</td> <td>1.8</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.8	2013/14	2.0	2014/15	2.5	2015/16	2.3	2016/17	2.4	2017/18	2.2	2018/19	2.8	2019/20	1.8
Year	Ratio																		
2012/13	1.8																		
2013/14	2.0																		
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2015/16	2.3																		
2016/17	2.4																		
2017/18	2.2																		
2018/19	2.8																		
2019/20	1.8																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	8																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6D.14 We received limited evidence for this occupation. We did not receive any responses through our online CfE questionnaire that mentioned this occupation. However, one representative organisation made explicit mention of this occupation through a separate written response.
- 6D.15 The recruitment-based organisation highlighted that there is consistently high demand for more staffing in this role, and this has continued even during the first half of 2020. It was unclear however what steps had been taken by employers to try and alleviate shortage for this specific profession, or what barriers exist to recruiting through the domestic labour market.

## Recommendation

- 6D.16 **We do not recommend adding SOC code 3520 (legal associate professionals) to the SOL.** This occupation ranks highly RQF3-5 shortage rankings, potentially suggesting a tighter market than for most other occupations. This is demonstrated by the vacancy ratio being consistency above the median, though with no noticeable trend over time.
- 6D.17 Whilst this does suggest some level of shortage, we must also consider whether it is sensible to fill shortages with migrant workers. The occupation is not overly reliant on migrant labour, with the proportions of EEA and non-EEA employees lower than average. We therefore do not expect that shortages will be significantly exacerbated following the end of free movement. Although the general salary threshold is above the 25<sup>th</sup> percentile, it is around £4,100 below median full-time earnings in the occupation. Given these factors, and the relative lack of stakeholder representations for this occupation we do not recommend this occupation for the SOL.

## SOC 3531: Estimators, valuers and assessors

Summary table: SOC 3531 Estimators, valuers and assessors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	2%																		
Share of employees born outside the EEA (APS, 2017-19)	4%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	11%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£31,300																		
25th percentile full-time annual wage (ASHE, 2019)	£25,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,800																		
Minimum salary required with SOL points	£20,640																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	22%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-22.1%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>2.4</td> </tr> <tr> <td>2013/14</td> <td>2.3</td> </tr> <tr> <td>2014/15</td> <td>2.7</td> </tr> <tr> <td>2015/16</td> <td>2.8</td> </tr> <tr> <td>2016/17</td> <td>3.3</td> </tr> <tr> <td>2017/18</td> <td>2.9</td> </tr> <tr> <td>2018/19</td> <td>2.6</td> </tr> <tr> <td>2019/20</td> <td>2.5</td> </tr> </tbody> </table>		Year	Ratio	2012/13	2.4	2013/14	2.3	2014/15	2.7	2015/16	2.8	2016/17	3.3	2017/18	2.9	2018/19	2.6	2019/20	2.5
Year	Ratio																		
2012/13	2.4																		
2013/14	2.3																		
2014/15	2.7																		
2015/16	2.8																		
2016/17	3.3																		
2017/18	2.9																		
2018/19	2.6																		
2019/20	2.5																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	66																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

- 6D.18 We received two pieces of stakeholder evidence relating to this SOC, one through the online CfE questionnaire and one through a separate written response. Whilst both argued that shortage is an ongoing issue for this occupation, they did not provide evidence about the barriers to hiring from the domestic labour market for this specific role, or the steps that had been taken to alleviate shortage.

## Recommendation

- 6D.19 **We do not recommend adding SOC code 3531 (estimators, valuers and assessors) to the SOL.** Though the vacancy ratio is consistently above the median, the occupation ranks towards the middle of the RQF3-5 shortage rankings. The occupation is not currently particularly reliant on non-UK employees. The proportion of non-EEA employees by country of birth is lower than average (four per cent compared to 10 per cent), whilst the EEA figure is notably lower (two per cent compared to seven per cent). Median wages are comfortably above the general salary threshold, with employers able to recruit at the occupations 25<sup>th</sup> wage percentile without requiring additional points. Given this, and the relative lack of stakeholder evidence, we do not recommend this occupation for the SOL.

## SOC 3533: Insurance underwriters

Summary table: SOC 3533 Insurance underwriters																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & Rol) (APS, 2017-19)	4%																		
Share of employees born outside the EEA (APS, 2017-19)	3%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	7%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£34,000																		
25th percentile full-time annual wage (ASHE, 2019)	£27,100																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£27,100																		
Minimum salary required with SOL points	£21,680																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-37.3%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
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Shortage indicator overall rank (/136 eligible occupations below RQF6)	44																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6D.20 We did not receive any stakeholder evidence relating to this SOC.

## Recommendation

6D.21 **We do not recommend adding SOC code 3533 (insurance underwriters) to the SOL.** The occupation shows some elements of shortage. The RQF3-5 shortage indicator ranking is moderately high (44<sup>th</sup> out of 136) and the vacancy to employee ratio is marginally above the median. However, the occupation has below average rates of migrant employees, and 25<sup>th</sup> percentile salaries are higher than the general threshold. Given this, the lack of stakeholder representations for this occupation and only moderate evidence of shortage to be found in the data alone, we do not recommend this occupation for the SOL.

## SOC 3536: Importers and exporters

Summary table: SOC 3536 Importers and exporters																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & Rol) (APS, 2017-19)	9%																		
Share of employees born outside the EEA (APS, 2017-19)	11%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	7%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£32,800																		
25th percentile full-time annual wage (ASHE, 2019)	£22,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.1</td> </tr> <tr> <td>2013/14</td> <td>0.25</td> </tr> <tr> <td>2014/15</td> <td>0.15</td> </tr> <tr> <td>2015/16</td> <td>0.3</td> </tr> <tr> <td>2016/17</td> <td>0.25</td> </tr> <tr> <td>2017/18</td> <td>0.25</td> </tr> <tr> <td>2018/19</td> <td>0.35</td> </tr> <tr> <td>2019/20</td> <td>0.4</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.1	2013/14	0.25	2014/15	0.15	2015/16	0.3	2016/17	0.25	2017/18	0.25	2018/19	0.35	2019/20	0.4
Year	Ratio																		
2012/13	0.1																		
2013/14	0.25																		
2014/15	0.15																		
2015/16	0.3																		
2016/17	0.25																		
2017/18	0.25																		
2018/19	0.35																		
2019/20	0.4																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	108																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6D.22 We did not receive any stakeholder evidence relating to this SOC.

6D.23 As discussed in the overview, the occupation has been adversely impacted by the COVID-19 crisis. However, industry bodies, such as the British International Freight Association (BIFA) have also been calling on the Government to provide greater transparency and clarity around the future trading relationship with the EU<sup>128</sup>, and highlighting HMRC figures suggesting UK supply chains could face an additional £15 billion per annum cost burden in a 'no-deal' situation<sup>129</sup>. Whilst it is currently unclear what the future relationship with Europe will look like, the ultimate outcome will clearly have a large impact on importers and exporters.

## Recommendation

6D.24 **We do not recommend adding SOC code 3536 (importers and exporters) to the SOL.** The occupation is more reliant on migrant labour than others, with above average proportions of EEA and non-EEA employees. However, its RQF3-5 shortage indicator rank was relatively low (108<sup>th</sup>) and the vacancy to employee ratio has been consistently below the median. In terms of employment it is a relatively small occupation, with likely fewer than 10,000 people working within it which makes it hard to produce reliable estimates of the nature of the occupation using the survey data available to us. The occupation also has a relatively high proportion of self-employed workers (33 per cent) who would not be able to use the Skilled Worker route. These factors, combined with a lack of stakeholder information means that we do not have sufficient evidence to recommend this occupation for the SOL. We note however, that the occupation may be particularly impacted by COVID-19 and EU exit and would welcome further submissions from the sector in future reviews.

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<sup>128</sup> <https://www.bifa.org/news/articles/2020/jan/freight-forwarders-call-for-greater-transparency-and-clarity-in-the-development-of-a-post-brexit-trading-relationship>

<sup>129</sup> <https://www.bifa.org/news/articles/2019/oct/uk-supply-chains-face-15bn-annual-freight-admin-cost-rise-from-no-deal-brexit>

## SOC 3537: Financial and accounting technicians

Summary table: SOC 3537 Financial and accounting technicians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & Rol) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	10%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	13%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£45,500																		
25th percentile full-time annual wage (ASHE, 2019)	£32,500																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£32,500																		
Minimum salary required with SOL points	£26,000																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>0.1</td></tr> <tr><td>2013/14</td><td>0.15</td></tr> <tr><td>2014/15</td><td>0.2</td></tr> <tr><td>2015/16</td><td>0.15</td></tr> <tr><td>2016/17</td><td>0.2</td></tr> <tr><td>2017/18</td><td>0.25</td></tr> <tr><td>2018/19</td><td>0.3</td></tr> <tr><td>2019/20</td><td>0.25</td></tr> </tbody> </table>		Year	Ratio	2012/13	0.1	2013/14	0.15	2014/15	0.2	2015/16	0.15	2016/17	0.2	2017/18	0.25	2018/19	0.3	2019/20	0.25
Year	Ratio																		
2012/13	0.1																		
2013/14	0.15																		
2014/15	0.2																		
2015/16	0.15																		
2016/17	0.2																		
2017/18	0.25																		
2018/19	0.3																		
2019/20	0.25																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	3																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6D.25 We received relatively limited evidence for this occupation, with one stakeholder submitting it through our online CfE. The UK-based University argued that it is difficult to find appropriately qualified UK national candidates, and that the previous financial crisis exacerbated problems in training for this occupation. However, they also noted that as an academic organisation, they could only offer wages within their nationally set salary framework. Figures from the Financial Reporting Council also indicate that membership of the Association of Accounting Technicians (AAT) grew by six per cent between 2014 and 2018, and 30 per cent for students in the same period<sup>130</sup>.

## Recommendation

6D.26 **We do not recommend adding SOC code 3537 (financial and accounting technicians) to the SOL.** Financial and accounting technicians ranked highly within the RQF3-5 shortage indicator ranking (3<sup>rd</sup>). The high ranking was driven by relatively robust wage growth and new hires. This is reflected in this occupation having the highest median wage within the business associate professionals grouping, and the 25<sup>th</sup> percentile wage raising the minimum salary required without additional points by around £6,900.

6D.27 However, this occupation is not overly reliant on migrant employees, and is a little below the economy-wide average. The vacancy to employee ratio is also consistently below the median, and the salary threshold employers will face is around £13,000 below median full-time earnings in the occupation. Given these factors, and the limited stakeholder representations for this occupation, we do not recommend this occupation for the SOL.

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<sup>130</sup> <https://www.frc.org.uk/getattachment/109373d4-abc2-424f-84d0-b80c2cec861a/Key-Facts-and-Trends-2019.pdf>

## SOC 3539: Business and related associate professionals n.e.c.

Summary table: SOC 3539 Business and related associate professionals n.e.c.																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.6%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	6%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	14%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£29,500																		
25th percentile full-time annual wage (ASHE, 2019)	£23,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	7%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-32.0%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.88</td> </tr> <tr> <td>2013/14</td> <td>0.90</td> </tr> <tr> <td>2014/15</td> <td>0.92</td> </tr> <tr> <td>2015/16</td> <td>0.95</td> </tr> <tr> <td>2016/17</td> <td>0.85</td> </tr> <tr> <td>2017/18</td> <td>0.80</td> </tr> <tr> <td>2018/19</td> <td>0.85</td> </tr> <tr> <td>2019/20</td> <td>0.78</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.88	2013/14	0.90	2014/15	0.92	2015/16	0.95	2016/17	0.85	2017/18	0.80	2018/19	0.85	2019/20	0.78
Year	Ratio																		
2012/13	0.88																		
2013/14	0.90																		
2014/15	0.92																		
2015/16	0.95																		
2016/17	0.85																		
2017/18	0.80																		
2018/19	0.85																		
2019/20	0.78																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	7																		
<b>Recommendation</b>																			
Recommend partially adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

6D.28 We received strong evidence on this occupation. Seven organisations requested this to be added to the SOL through our online CfE, as well as one separate written response. These organisations spanned a variety of sectors; for example, construction, retail, and professional, scientific and technical activities. However, whilst these organisations covered different sectors, they specified similar job titles – data analyst and business analyst. The job titles are particularly notable as this occupation includes jobs that are ‘n.e.c.’ (not elsewhere classified). Therefore, the range of roles included in this title are quite diverse. For example, the ONS occupation coding tool includes the following titles for SOC3539;

- Business systems analyst
- Data analyst
- Marine consultant
- Planning assistant
- Project administrator
- Project coordinator

6D.29 It should be noted however that this will be somewhat clearer in the upcoming SOC 2020 classification, where data analysts will be given a unique occupation code (SOC 3544)<sup>131</sup>.

6D.30 Respondents requesting the inclusion of these titles in the SOL spoke of difficulties in finding candidates with the required skills in the UK market, and the impact on their business of delays in filling vacancies. One respondent described how unfulfilled posts meant they were unable to deliver new technology. It was also apparent that these organisations had taken steps to try and alleviate the shortage, for example respondents referenced increasing pay in data roles, and hiring contractors to fill gaps. No evidence was provided that this was a regional, rather than a UK-wide, issue.

## Recommendation

6D.31 **We recommend adding some roles within SOC code 3539 (business and related associate professionals n.e.c.) to the SOL.** Although the occupation has a marginally below median vacancy to employee ratio, and relatively low levels of migrant employees by country of birth, there is evidence of shortage within this occupation. The occupation scores highly on our RQF3-5 shortage indicator rank (7<sup>th</sup>), supporting the clear and consistent stakeholder evidence from a variety of sectors.

6D.32 The stakeholder evidence indicated shortage in two job titles – data analyst and business system analyst. Given the diversity of roles within this occupation, and the different skills they require, we recommend only including these two job titles on the SOL. Given the changes to this occupation as part of the SOC 2020 categorisation we

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<sup>131</sup> ONS - SOC 2020 Volume 2: the coding index and coding rules and conventions

would expect it to be fully reviewed again when we switch to SOC 2020 definitions. In addition, we are somewhat sceptical that a reduced salary threshold will alleviate shortages in these jobs. Therefore, we will be closely monitoring the visa applications in these job titles to see what salaries are being offered to migrants.

**6D.33** With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 15<sup>th</sup> percentile of full-time earnings in this occupation, meaning that 15 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

## SOC 3541: Buyers and procurement officers

Summary table: SOC 3541 Buyers and procurement officers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & Rol) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	14%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£30,900																		
25th percentile full-time annual wage (ASHE, 2019)	£25,500																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	22%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-27.6%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>3.6</td> </tr> <tr> <td>2013/14</td> <td>3.1</td> </tr> <tr> <td>2014/15</td> <td>2.4</td> </tr> <tr> <td>2015/16</td> <td>2.8</td> </tr> <tr> <td>2016/17</td> <td>3.9</td> </tr> <tr> <td>2017/18</td> <td>4.0</td> </tr> <tr> <td>2018/19</td> <td>4.0</td> </tr> <tr> <td>2019/20</td> <td>3.0</td> </tr> </tbody> </table>		Year	Ratio	2012/13	3.6	2013/14	3.1	2014/15	2.4	2015/16	2.8	2016/17	3.9	2017/18	4.0	2018/19	4.0	2019/20	3.0
Year	Ratio																		
2012/13	3.6																		
2013/14	3.1																		
2014/15	2.4																		
2015/16	2.8																		
2016/17	3.9																		
2017/18	4.0																		
2018/19	4.0																		
2019/20	3.0																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	21																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6D.34 We received limited evidence on this occupation. Two stakeholders requested it to be added to the SOL through our online CfE, as well as one separate written response. Whilst the respondents to the CfE requested that this role was added to the SOL, they did not provide specific evidence as to why. The recruitment-based organisation stated that there had continued to be shortage for this occupation in the first half of 2020 despite the COVID-19 crisis.

## Use of the SOL

6D.35 One job title within SOC 3541 was previously on the SOL (manufacturing engineer (purchasing) in the aerospace industry). This was the only job title within the occupation that was classified as RQF6+. This job title was removed from the SOL in the 2019 review.

6D.36 Despite an above average vacancy rate and a high shortage rank at the time, this was little used whilst on the SOL. Just nine RCoS were issued for this occupation in the five calendar years between 2014 and 2018. No stakeholder evidence was received to keep it on the SOL at the time.

## Recommendation

6D.37 **We do not recommend adding SOC code 3541 (buyers and procurement officers) to the SOL.** This occupation ranks relatively highly in the RQF3-5 shortage indicator rank, and the vacancy to employee ratio is consistently above average. However, the stakeholder evidence did not provide specific detail as to the steps that had been taken to alleviate shortage, and why this occupation should be on the SOL. In addition, the 25<sup>th</sup> percentile of wages is broadly equivalent to the general salary threshold, and RCoS usage was consistently low when a job title within this occupation was previously included on the SOL.

## SOC 3542: Business sales executives

Summary table: SOC 3542 Business sales executives																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.4%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	4%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	21%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£34,900																		
25th percentile full-time annual wage (ASHE, 2019)	£25,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,800																		
Minimum salary required with SOL points	£20,640																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	30%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-47.3%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>2.7</td> </tr> <tr> <td>2013/14</td> <td>2.4</td> </tr> <tr> <td>2014/15</td> <td>2.0</td> </tr> <tr> <td>2015/16</td> <td>2.4</td> </tr> <tr> <td>2016/17</td> <td>3.0</td> </tr> <tr> <td>2017/18</td> <td>2.5</td> </tr> <tr> <td>2018/19</td> <td>2.3</td> </tr> <tr> <td>2019/20</td> <td>1.9</td> </tr> </tbody> </table>		Year	Ratio	2012/13	2.7	2013/14	2.4	2014/15	2.0	2015/16	2.4	2016/17	3.0	2017/18	2.5	2018/19	2.3	2019/20	1.9
Year	Ratio																		
2012/13	2.7																		
2013/14	2.4																		
2014/15	2.0																		
2015/16	2.4																		
2016/17	3.0																		
2017/18	2.5																		
2018/19	2.3																		
2019/20	1.9																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	1																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6D.38 We received relatively limited stakeholder evidence for this occupation. One stakeholder requested this to be included on the SOL through our online CfE, as well as well as one separate written response.
- 6D.39 One organisation, who organises group tours across Europe, highlighted the difficulties they have recruiting tour operators and the SOC categorisation of this role. Typically, this would be included in SOC 6212 travel agents (which is not currently eligible for the SOL), but 'group travel designer' is part of SOC 3542 and is more aligned with the skillset and qualifications of this occupation. They have struggled to recruit to this role, noting the lack of UK applicants, the limited language skills amongst UK candidates, and their reliance on non-UK staff.

## Recommendation

- 6D.40 **We do not recommend adding SOC code 3542 (business sales executives) to the SOL.** Whilst this was the highest ranked occupation of the 136 in our shortage indicator rank, none of the nine indicators that make up the overall rank were individually ranked at number one. The average rank of these nine indicators was 23. The high ranking was particularly driven by the high number of vacancies and a small stock of available candidates which were both in the top 10 by rank. Other indicators were ranked far lower. Furthermore, whilst in isolation the high shortage rank tends to indicate shortage in the occupation, we must also examine other metrics, and consider whether it is sensible to add this occupation to the SOL.
- 6D.41 Though the vacancy to employee ratio is above the median, it has consistently fallen year on year since 2016/17. The occupation is not especially reliant on migrant labour, with fewer EEA employees by country of birth than average (four per cent compared to seven per cent), and low levels of non-EEA employees (six per cent compared to 10 cent). This suggests that the occupation will not be especially susceptible to shortages following the UK's exit from the EU if supply is restricted. Wages are also relatively high, and the threshold that employers will face is significantly below median full-time earnings in the occupation. Any job being filled at or above the 25<sup>th</sup> percentile of full-time earnings will be eligible for the work route.
- 6D.42 Overall, given the relative lack of stakeholder response for this occupation, the comparatively high wages, and low levels of migrant labour, we do not recommend this occupation for the SOL. However, given the high shortage ranking of this indicator, we will continue to monitor this occupation in future reviews, and welcome further evidence from stakeholders at that time.

## SOC 3543: Marketing associate professionals

Summary table: SOC 3543 Marketing associate professionals																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.6%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	6%																		
Share of employees born outside the EEA (APS, 2017-19)	8%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	25%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£28,500																		
25th percentile full-time annual wage (ASHE, 2019)	£24,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Low																		
Share of employees furloughed (LFS, 2020)	26%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-47.7%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	3.3																		
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2018/19	2.5																		
2019/20	2.5																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	39																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6D.43 We received relatively limited stakeholder evidence for this occupation. Two stakeholders requested this occupation to be included on the SOL through our online CfE, both from representatives for higher education, as well as one further separate written response. These submissions stated there was a shortage of applicants within the UK labour market but did not provide further evidence as to the barriers to hiring from the domestic labour market for this specific role or the steps that had been taken to alleviate shortage.

## Recommendation

6D.44 **We do not recommend adding SOC code 3543 (marketing associate professionals) to the SOL.** Marketing associate professionals are just outside the top quartile in our RQF3-5 shortage indicator rank, and the vacancy to employee ratio is consistently above the median. Median wages are around £3,000 above the general salary threshold, with 25<sup>th</sup> percentile wages marginally below.

6D.45 Whilst we received a small number of requests to include this occupation on the SOL, we do not have enough information to know what, if any, barriers exist to hiring from the domestic labour market for this occupation. Country of birth data suggests this role is less reliant on EEA and non-EEA employees than the average for the UK. Overall, we do not feel there is enough evidence to recommend the inclusion of Marketing associate professionals on the SOL.



## SOC 3544: Estate agents and auctioneers

Summary table: SOC 3544 Estate agents and auctioneers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	4%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	23%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	£20,700																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	56%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	+1.7%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	2.4																		
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2018/19	2.3																		
2019/20	2.2																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	62																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6D.46 We did not receive any stakeholder evidence relating to this SOC.

## Recommendation

6D.47 **We do not recommend adding SOC code 3544 (estate agents and auctioneers) to the SOL.** Estate agents and auctioneers ranked towards the middle of our RQF3-5 shortage indicator rank (62<sup>nd</sup>) and the vacancy to employee ratio is relatively high. However, the occupation is not overly reliant on employees born overseas, with both EEA and non-EEA proportions comfortably below the economy-wide average. As no stakeholder evidence was provided on this occupation, we do not have enough evidence to recommend this occupation for the SOL.

## SOC 3546: Conference and exhibition managers and organisers

Summary table: SOC 3546 Conference and exhibition managers and organisers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & Rol) (APS, 2017-19)	10%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	23%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£26,300																		
25th percentile full-time annual wage (ASHE, 2019)	£22,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	32%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-74.8%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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2018/19	1.4																		
2019/20	1.35																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	97																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6D.48 We did not receive any stakeholder evidence relating to this SOC.

## Recommendation

6D.49 **We do not recommend adding SOC code 3546 (conference and exhibition managers and organisers) to the SOL.** This occupation scored relatively low on our RQF3-5 shortage indicator rank (97th). The general salary threshold is around £700 higher than the median salary for this role. Although there is a relatively high proportion of employees born in the EEA (10 per cent compared to an economy-wide average of seven per cent), this is not the case when considering nationality. By nationality, the proportion of EEA employees is slightly below average (six per cent compared to seven per cent).

6D.50 Given the lack of stakeholder representations for this occupation, no overwhelming evidence of shortage to be found in the data alone and an expectation that recruitment will be subdued for some time as a result of COVID-19, we do not recommend this occupation for the SOL.

## 6E: Culture, media and sports occupations

### Introduction

- 6E.1 This chapter covers the occupations in the culture, media and sports occupation group (sub-major group 34).
- 6E.2 There are eight occupations skilled at RQF3-5 in this group that are potentially eligible for inclusion on the SOL:
- i. Artists (3411)
  - ii. Authors, writers and translators (3412)
  - iii. Actors, entertainers and presenters (3413)
  - iv. Dancers and choreographers (3414)
  - v. Photographers, audio-visual & broadcasting equipment operators (3417)
  - vi. Graphic Designers (3421)
  - vii. Product, Clothing & Related Designers (3422)
  - viii. Fitness Instructors (3443)
- 6E.3 We received 46 responses to the Call for Evidence (CfE) that included information relating to seven of these occupations.
- 6E.4 Of these RQF3-5 occupations, all except 3417 (photographers, audio-visual and broadcasting equipment operators) and 3443 (fitness instructors) were reviewed in full in the last review of the SOL in 2019, because these occupations were then eligible for the SOL owing to the difficulty of assessing skill level in creative occupations using RQF. Following all RQF3-5 occupations becoming eligible for the Skilled Worker route, in this report we will therefore reconsider the decisions taken in 2019 only in light of any new and compelling evidence, whether submitted by stakeholders or obtained through our own research.

### Sector overview

- 6E.5 The broader sector within which these eight occupations sit is defined slightly differently by different data sources. The eight occupations of interest largely (except for fitness instructors) fall under the Department for Culture, Media and Sport (DCMS) categories defined as the creative industries. The ONS Standard Industry Classification sector 'Arts, Entertainment and Recreation'<sup>132</sup> contains similar

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<sup>132</sup> This wider group contains many occupations other than the occupations being considered [https://onsdigital.github.io/dp-classification-tools/standard-industrial-classification/ONS\\_SIC\\_hierarchy\\_view.html](https://onsdigital.github.io/dp-classification-tools/standard-industrial-classification/ONS_SIC_hierarchy_view.html) (Creative, arts and entertainment activities; libraries, archives, museums and other cultural activities; gambling and betting activities; sports activities and amusement and recreation activities).

industries, although some entertainment occupations relating to film and video production and distribution are counted elsewhere under other sectors.

## Occupations

- 6E.6 The occupations encompassed by the culture, media and sports sector are varied in nature, including performing arts, literature, visual media and broadcasting, product design and health and fitness, and consequently requiring a wide variety of specialised skills. Under the current Tier 2 (General) criteria, these industries (other than photographers, audio-visual and broadcasting equipment operators and fitness instructors) were the only SOC codes below RQF6 that were able to use this route. This is because of the difficulty of classifying such roles, and the difficulty of translating artistic and creative skills into the RQF framework.
- 6E.7 Overall, these eight occupations accounted for just under 635,000 jobs, with most workers across all but two of the industries being self-employed (Table 6E.1). Self-employment is particularly common in the performing arts. The Skilled Worker route, and hence any benefit from the shortage occupation list, would therefore not be open to a large proportion of this sector, as it applies to employees only.
- 6E.8 Those working within these occupations do so within a wide variety of working patterns. Freelance and part-time working is common in the sector, and many undertake 'portfolio' careers, combining part-time work for a number of different employers and/or self-employment at once. For example, musicians may work part time as paid performers and/or music teachers while devoting time to their own practice and/or composition work as well, and fitness instructors may combine working at a gym or leisure centre on a part-time or per class basis with their own personal training work.
- 6E.9 The share of workforce by country of birth, as shown in Table 6E.1, indicates that, for most of the occupations (with the notable exception of authors, writers and translators), the share of UK/RoI employees was in line with or above that for all occupations. This in turn indicates that these occupations either did not have a greater need than normal to fill their vacancies through migration, or that they were not able to do so.

Table 6E.1: Employment in selected occupations					
Occupation	Total employment	% who are self employed	% born in EEA (ex. UK)	% born outside EEA	% born in UK
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Artists	66,700	77%	8%	8%	85%
Authors, writers and translators	100,700	66%	11%	18%	71%
Actors, entertainers and presenters	69,900	80%	5%	6%	88%
Dancers and choreographers	23,900	76%	7%	3%	89%
Photographers, audio-visual and broadcasting equipment operators	90,200	67%	7%	12%	82%
Graphic designers	100,400	41%	6%	9%	85%
Product, clothing and related designers	90,300	45%	5%	10%	85%
Fitness instructors	92,600	63%	8%	9%	83%

Source: APS (2017-19)

All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes

**6E.10** Pay for most of the occupations under consideration was close to the median for all occupations as shown in Table 6E.2. Not all occupations in this group had sufficient sample sizes to enable analysis of pay growth. However, where this was possible the picture was mixed: authors, writers and translators, graphic designers and fitness instructors had seen their pay grow over the period 2016-19 after adjusting for inflation (by 2 per cent for each occupation), whereas pay for photographers, audio-visual and broadcasting equipment operators saw pay fall by 5 per cent and product, clothing and related designers by 3 per cent over the same period.

**Table 6E.2: Pay in selected occupations**

Occupation	Median gross annual pay for full-time employees 2019	25 <sup>th</sup> percentile of gross annual pay for full-time employees 2019	Pay growth 2016-2019 adjusted for inflation
Artists	-	£21,000	-
Authors, writers and translators	£30,500	£25,600	+2%
Actors, entertainers and presenters	-	£32,200	-
Dancers and choreographers	-	£29,800	-
Photographers, audio-visual and broadcasting equipment operators	£26,000	£21,100	-5%
Graphic designers	£27,500	£23,500	+2%
Product, clothing and related designers	£30,200	£25,400	-3%
Fitness instructors	£19,200	£15,600	+2%

Source: ASHE (2019)

Non-reported estimates are due to insufficient sample sizes

## Drivers of shortage

- 6E.11** Statistical and stakeholder evidence suggests that the drivers of shortage for these occupations are mixed, and include dynamic, supply and structural factors.
- 6E.12** Firstly, employment has grown in the sector: DCMS figures indicate that growth in the number of filled jobs over the period 2011-2019 was 35 per cent in the Creative Industries (compared to an overall UK employment growth rate of 11 per cent). Stakeholder evidence across most of the occupations highlighted the increased demand for labour, primarily skilled labour. Secondly, respondents raised the issue of falling labour supply, related to the departure of EEA workers and predicted difficulty in replacing these. One stakeholder also cited low unemployment levels as a driver of shortage.
- 6E.13** There may also be a mismatch in terms of training and job requirements. The stakeholder evidence identified in some cases (within video games, animation and fashion in particular) a plentiful supply of UK graduates, but these were said often to lack the right skills for the job. In some cases, these courses were very prestigious. In



part this is likely to be a reflection of the nature of the sector, in which employers often look for talent as well as qualifications, but industry reports and stakeholder evidence also suggested skill gaps were a result of the education system failing to predict future demand adequately.

## Steps being taken to alleviate shortages

6E.14 The stakeholder evidence relating to the individual occupations of interest is presented separately in each section below. However, there are several measures that have been used both to alleviate and pre-empt skills shortages, and to support the arts and creative industries more generally in order to access and maximise the economic and wellbeing benefits. As many creative businesses are SMEs, micro-businesses and individuals, sectoral and governmental support is important to support innovation at a strategic or sectoral level. Governments are also keen to support the creative industries as contributors to economic growth.

6E.15 Industry evidence suggests that there is likely to be a pool of potential labour across the sector that is currently untapped. The CIC *Create Together* strategy<sup>133</sup> showed that 92 per cent of creative industry jobs are occupied by more advantaged groups, and that there are challenges to entry for: women; black, Asian, and minority ethnic (BAME) people; those with disabilities; and people from disadvantaged backgrounds. Barriers to accessing these jobs include:

- Financial barriers;
- Lack of networks;
- Knowledge and information barriers
- Geographic barriers and
- Attitudinal barriers.

6E.16 Again, addressing this in a meaningful and co-ordinated way is dependent on sectoral, industry and governmental leadership, given the size of the businesses in question. A *Culture Strategy for Scotland*, for example<sup>134</sup>, emphasises increasing diversity in the sector, through industry initiatives, and through educational work such as Museums Galleries Scotland's *Skills for Success* programme with schools, encouraging people into the arts and creative industries.

6E.17 Industry sources also pointed to the importance of the educational system readying pupils for a career in the creative industries, in terms of both access to creative subjects, and learning the skills required. Several sources said that less time is now devoted to arts and culture in schools, particularly within England, because of an increasing focus on science, technology, engineering and mathematics (STEM) subjects. In England the National Society for Education in Art and Design (NSEAD)

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<sup>133</sup> <https://thecreativeindustries.co.uk/resources/strategy>

<sup>134</sup> <https://www.gov.scot/publications/culture-strategy-scotland/>

has developed a parallel National Curriculum to address this with respect to art and design<sup>135</sup>. The Scottish Government also referred to the importance of education in *A Culture Strategy for Scotland*, Welsh Government in *Strive to Excel*, and the NI Executive also emphasised the importance of working with the Education Authority on arts education.<sup>136</sup>

6E.18 Industry initiatives such as Creative Skillset and Pact, have developed accreditation models, to help both consistency and job-readiness among new graduates, and encourage confidence among prospective employers.

6E.19 Other work is being carried out at an industry or sectoral level. For example, the BFI<sup>137</sup>, have developed their own education and skills strategy to champion film education and skills, and encourage people into the industry. The games production industry has several industry initiatives, supported by government, such as the UK Games Fund's Tranzfuser programme, which nurtures high-potential graduates and enables them to gain development experience, and the InGame Cluster<sup>138</sup> – Innovation for Games and Media Enterprise, led by three Scottish universities and local and international industry partners.

6E.20 The evidence on how well apprenticeships work in the sector is mixed. The Bazalgette *Independent report on the Creative Industries* said that apprenticeships might be too burdensome to work optimally in the sector, although it recognised the potential for them to bring in new talent. On the other hand, apprenticeships are working well in Scotland, according to the *Culture Strategy for Scotland*.

6E.21 Industry reports from across the UK also referred to the value of 'place based' strategies in encouraging the creative industries. The Bazalgette *Independent Review of the Creative Industries* referred to several solutions managed by the Department for Education (DfE) in England, which used place-based outcomes as the measures of success, including multi-academy trusts, the Strategic School Improvement Fund, and the anticipated Skills Advisory Panels<sup>139</sup>. It also referred to creative clusters involving local employers, Higher Education institutions, schools and cultural institutions at the municipal, local, and regional levels. A Creative Industries Policy and Evidence Centre report<sup>140</sup> into the distribution of creative clusters, however, noted that place-based strategies, although important, can also be riskier in terms of leading to uneven outcomes. The Scottish Government is also using place-based strategies, for

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<sup>135</sup> <https://www.nsead.org/static/index.html>

<sup>136</sup> <http://www.artscouncil-ni.org/images/uploads/publications-documents/ACNI-Draft-5-year-Strategic-Framework-for-Developing-the-Arts-2019-2024.pdf>

<sup>137</sup> <https://www.bfi.org.uk/2022/>

<sup>138</sup> <https://www.innovationforgames.com/>

<sup>139</sup> <https://www.gov.uk/government/publications/skills-advisory-panels-saps-role-and-governance>

<sup>140</sup> <https://www.pec.ac.uk/assets/publications/PEC-report-The-Changing-Spatial-Distribution-of-Employment-in-Creative-Industry-Clusters-in-England-1991-2018.pdf>

example a partnership in the South of Scotland, funded through the South of Scotland Economic Partnership, to develop textiles skills.

## COVID-19 impact

- 6E.22 The immediate impact of the COVID-19 pandemic on culture, media and sport occupations has been severe, both in terms of lost income and employment, and impact on potential growth.
- 6E.23 An Oxford Economics report<sup>141</sup> on the impact of COVID-19 on the creative industries estimated a 122,000 drop in employment among employees (despite the Coronavirus Job Retention Scheme) in 2020, and a further 287,000 job losses among self-employed workers, compared to 2019 levels<sup>142</sup>. The impact is expected to be felt sooner by self-employed workers than employees, as these workers experienced a drop in income from March, whereas employers are expected to make redundancies starting from Q2<sup>143</sup>
- 6E.24 A report on COVID-19 in Northern Ireland<sup>144</sup>, based on a survey of Northern Irish artists and arts organisations, found that organisations responding anticipated an average income loss of £36,700 between March and May 2020, with the report indicating that organisations dependent on earned sources such as box-office income were particularly vulnerable to financial losses. When asked to quantify anticipated financial impact on a scale between 1 (not severe) and 5 (very severe), the average response from arts organisations was 4.15 and artists 4.33.
- 6E.25 The longer-term impacts on these occupations – and on the sector as a whole – are not yet known. Stakeholder evidence during the MAC stakeholder meetings held over the lockdown period indicated that many workers in the performing arts had moved into alternative work, and it remains to be seen what the long-term impact of the pandemic is on live performance in particular: at the time of writing many theatres and dance venues remain closed, and others have only been able to open at greatly reduced capacity. Further stakeholder evidence indicated that film, TV and drama production was paused for a period from February 2020, and that this was likely to impact on visual effects (VFX) jobs from late 2020 onwards.
- 6E.26 Oxford Economics suggested that without the impact of COVID-19, the creative industries would have continued to grow, both in terms of employment and GVA<sup>145</sup>. For the most part, however, the data available do not allow us to consider the impact

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<sup>141</sup> <https://www.oxfordeconomics.com/recent-releases/The-Projected-Economic-Impact-of-COVID-19-on-the-UK-Creative-Industries>

<sup>142</sup> Ibid.

<sup>143</sup> Ibid.

<sup>144</sup> <http://www.artscouncil-ni.org/images/uploads/publications-documents/ACNI-Coronavirus-Survey-Findings-Summary.pdf>

<sup>145</sup> <https://www.oxfordeconomics.com/recent-releases/The-Projected-Economic-Impact-of-COVID-19-on-the-UK-Creative-Industries>

of COVID-19 to date. We will review the SOL again in 2021, by which time the impact should be clearer.

## SOC 3417: Photographers, audio-visual and broadcasting equipment operators

Summary table: SOC 3417 Photographers, audio-visual and broadcasting equipment operators																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	6%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	12%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£26,000																		
25th percentile full-time annual wage (ASHE, 2019)	£21,100																		
<b>Salary Threshold</b>																			
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Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	31%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-66.3%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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2019/20	1.0																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	85																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6E.27 The stakeholder evidence was limited in nature: four organisations submitted responses to the online questionnaire in which this SOC code was cited, although these were representative organisations representing a large number of individual employers within the sector. In addition, three stakeholder attachments were received in which this occupation was discussed. However, there was a comparative lack of stakeholder information on this specific role in response to this commission.

6E.28 Stakeholders indicated that they preferred to wait for someone with most of the required skills when recruiting, rather than fill a position quickly. A wide variety of recruitment sources were used, including the traditional (e.g. newspaper advertisements and filling positions internally), more modern (e.g. social media) and industry specific (e.g. Arts Council graduate skills showcases). Nevertheless, they reported finding a shortage of people in the UK with the skills and/or experience required. This was ascribed to several factors:

- The demanding nature of roles
- The comparatively high wages offered overseas
- Preference for some areas of the industry over others
- A shortage of the right technical skills, experience and qualifications – and of the pipeline necessary to supply this
- Unwillingness to relocate (reported by a stakeholder organisation relating to some organisations in Wales).

6E.29 In particular, the following roles were cited falling within SOC code 3417:

- Sound designer
- Sound technician
- Photographers, audio-visual and broadcasting equipment operators, especially focus pullers, grips, riggers, sound recorders and projectionists
- VFX editor (a stakeholder submission received in relation to this role indicated that they believed the role of VFX editor was RQF6).

6E.30 Stakeholder evidence submitted in relation to VFX and animation roles indicates that the industry has several schemes to address this, but which will take time to bear fruit: a stakeholder organisation indicated that they might expect this to take around 10 years.

## Recommendation

6E.31 **We do not recommend adding 3417 (photographers, audio-visual and broadcasting equipment operators) to the SOL.** It is of middle ranking (85<sup>th</sup>) in terms of the RQF3-5 shortage indicators. For most of the period 2012-2020, the vacancy to employee ratio as identified by job posting data was around the median for

all occupations (although there was evidence of a period where the vacancy ratio was higher than the median).

6E.32 It does appear from industry evidence, and limited specific evidence given by stakeholders, that there may be some difficulty in recruiting for this role. However, given that the industry evidence also indicates that insufficient use is being made of the potential labour supply within the UK, and in light of the lack of further detailed stakeholder evidence relating to this specific role, we are not convinced that filling vacancies through migration is the answer to the problem. The severe and prolonged impact of COVID-19 on the creative industries is also likely to reduce the demand for labour, and the impact of any shortage. Therefore, on balance we do not recommend adding this occupation to the SOL at present.

## SOC 3443: Fitness instructors

Summary table: SOC 3443 Fitness instructors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	9%																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£19,200																		
25th percentile full-time annual wage (ASHE, 2019)	£15,600																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	63%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-55.5%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.6</td> </tr> <tr> <td>2013/14</td> <td>2.2</td> </tr> <tr> <td>2014/15</td> <td>2.1</td> </tr> <tr> <td>2015/16</td> <td>3.8</td> </tr> <tr> <td>2016/17</td> <td>4.0</td> </tr> <tr> <td>2017/18</td> <td>2.5</td> </tr> <tr> <td>2018/19</td> <td>2.4</td> </tr> <tr> <td>2019/20</td> <td>3.6</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.6	2013/14	2.2	2014/15	2.1	2015/16	3.8	2016/17	4.0	2017/18	2.5	2018/19	2.4	2019/20	3.6
Year	Ratio																		
2012/13	1.6																		
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2016/17	4.0																		
2017/18	2.5																		
2018/19	2.4																		
2019/20	3.6																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	121																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

6E.33 Limited stakeholder evidence was received in relation to this occupation.

## Recommendation

6E.34 **We do not recommend adding SOC code 3443 (fitness instructors) to the SOL.** The occupation ranked low in terms of the RQF3-5 shortage indicators (121<sup>st</sup>). Although the vacancy ratio was above the median for all occupations, indicating that it may be comparatively difficult to recruit this occupation compared to all occupations, given the low ranking in terms of shortage indicators and the overall lack of stakeholder evidence indicating that the occupation is in shortage, we do not recommend adding it to the SOL.

## SOC 3411: Artists

Summary table: SOC 3411 Artists																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	7%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	9%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	£21,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Low																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-33.9%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>5.0</td></tr> <tr><td>2013/14</td><td>8.0</td></tr> <tr><td>2014/15</td><td>8.8</td></tr> <tr><td>2015/16</td><td>7.8</td></tr> <tr><td>2016/17</td><td>4.5</td></tr> <tr><td>2017/18</td><td>4.5</td></tr> <tr><td>2018/19</td><td>3.0</td></tr> <tr><td>2019/20</td><td>4.0</td></tr> </tbody> </table>		Year	Ratio	2012/13	5.0	2013/14	8.0	2014/15	8.8	2015/16	7.8	2016/17	4.5	2017/18	4.5	2018/19	3.0	2019/20	4.0
Year	Ratio																		
2012/13	5.0																		
2013/14	8.0																		
2014/15	8.8																		
2015/16	7.8																		
2016/17	4.5																		
2017/18	4.5																		
2018/19	3.0																		
2019/20	4.0																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	112																		
<b>Recommendation</b>																			
Recommend no change to existing SOL eligibility																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6E.35 The stakeholder evidence in relation to this occupation was limited. As with the last review of the SOL, stakeholders said there were shortages within the film, television and video games industries, and as with the last review, the requests to be put on the SOL were for roles within animation, visual effects (VFX), special effects (SFX) and the computer gaming industry. Within the video gaming industry, this role is closely related to occupation 3421 (graphic designer) and similar evidence was received for both occupations.
- 6E.36 The list of job titles requested to be put on the SOL or to remain on the SOL was:
- Technical artist
  - UI artist
  - VFX artist
  - Character artist
  - Junior animator (animator was cited in the previous SOL review; some similar roles have been reclassified into other categories)
  - Lighting artist
  - Storyboard artist
  - Concept artist
  - Layout artist
  - Previsualisation artist
  - VFX production coordinator
- 6E.37 Many of these roles had been cited in the previous SOL review in 2019, apart from junior animator (animator was cited in the 2019 review), and storyboard, previsualisation and lighting artists. A response to the CfE received in respect of the junior animator role suggested that the minimum qualification necessary to do this job was a degree, which raises the possibility that this role may be RQF6+.
- 6E.38 Stakeholders had tried most strategies listed in the CfE to increase recruitment (e.g. increasing wages, training) apart from automation and job redefinition, which – as previously discussed – are not necessarily appropriate for the creative industries. One of the strategies tried by stakeholders to fill vacancies was to re-recruit former employees, adding weight to the theory that there is a comparatively small pool of people on which employers are able to draw.
- 6E.39 Stakeholders said that they needed to look outside the UK to access people with the skills, and work experience (though not necessarily the qualifications) they needed. Although they had engaged with schools and universities in the UK, this strategy had met with limited success for the time being, and employers said they still had to look overseas while they waited for the situation to improve following these efforts, in order to maintain competitiveness. Brexit was also said to have reduced the number of experienced EEA candidates applying for roles, exacerbating existing shortages.

6E.40 Perhaps unsurprisingly, given the nature of the role, technical, advanced IT, and complex problem-solving skills were all sought. Stakeholders made the point that, as a fast-moving sector, new skills were also emerging. Without access to these skills, stakeholders said that they had to increase hours, contract work out or send it overseas. The point was also made that international recruitment was desirable in and of itself – with the cross-cultural experience thus gained helping companies to produce products with global appeal.

6E.41 Stakeholder evidence indicates that the salary threshold may not be affordable for some companies, especially given that many are based outside London. There is, however, a lack of evidence on pay to assess this claim, given small sample sizes.

### Recommendation

6E.42 **We recommend retaining SOC code 3411 (artists) on the SOL.** Although the SOC code is ranked low in the list of RQF3-5 shortage rankings (112<sup>th</sup>), which raises the possibility that it may only be specific roles (i.e. the subset of artist roles cited in this and previous reviews of the SOL) that are in shortage, the job posting to employee ratio is higher than the median.

6E.43 Evidence received in relation to this occupation came from organisations in the VFX, animation and computer games industry. Although we recommend retaining the whole occupation on the SOL for the time being, unless we receive evidence concerning artists in roles that are not in the VFX, film, animation or computer games industries, we may suggest confining the use of the SOL to these more technologically-orientated occupations in a future review.

6E.44 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 20th percentile of full-time earnings in this occupation, meaning that 20 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

## SOC 3412: Authors, writers and translators

Summary table: SOC 3412 Authors, writers and translators																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	10%																		
Share of employees born outside the EEA (APS, 2017-19)	17%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	12%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£30,500																		
25th percentile full-time annual wage (ASHE, 2019)	£25,600																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-40.6%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>2.8</td></tr> <tr><td>2013/14</td><td>3.5</td></tr> <tr><td>2014/15</td><td>4.5</td></tr> <tr><td>2015/16</td><td>5.8</td></tr> <tr><td>2016/17</td><td>4.0</td></tr> <tr><td>2017/18</td><td>2.7</td></tr> <tr><td>2018/19</td><td>3.0</td></tr> <tr><td>2019/20</td><td>2.9</td></tr> </tbody> </table>		Year	Ratio	2012/13	2.8	2013/14	3.5	2014/15	4.5	2015/16	5.8	2016/17	4.0	2017/18	2.7	2018/19	3.0	2019/20	2.9
Year	Ratio																		
2012/13	2.8																		
2013/14	3.5																		
2014/15	4.5																		
2015/16	5.8																		
2016/17	4.0																		
2017/18	2.7																		
2018/19	3.0																		
2019/20	2.9																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	13																		
<b>Recommendation</b>																			
Recommend partially adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6E.45** The stakeholder evidence received in relation to this occupation was very strong in relation to interpreters, but less strong/limited in relation to other roles within the occupation. As with the last review, much of the evidence relating to SOC code 3412 related to the scarcity of foreign language skills. This was said to have a severe impact on public services in particular: the All Party Parliamentary Group (APPG) on Modern Foreign Languages (MFL) drew on evidence in its submission to the MAC that the number of National Register of Public Service Interpreters (NRPSI) registrants fell by 29 per cent between 2012 and 2020, and noted that at the same time the use of interpreters in the courts is rising by seven per cent per year. The APPG further noted that the most common complaint in court cases requiring an interpreter in 2019 was 'no interpreter available' and pointed to incidences of miscarriages of justice, medical errors, and cancelled court cases and operations having been caused by either lack of interpretation/translation, and/or use of unqualified/underqualified individuals. The need for staff with foreign language skills was also cited by other stakeholders including the computer games and fashion industries.
- 6E.46** Respondents during stakeholder meetings and in written evidence underlined the specific importance of first-language foreign language skills, to allow for both the need for complete accuracy, to provide cultural context, and to provide coverage of all the languages required. Stakeholders said that this meant, by definition, that it was not possible to fill positions from the UK labour market.
- 6E.47** Stakeholder evidence also described how, apart from the need for first-language foreign language skills, there was little prospect of gaps in the workforce being filled by British workers currently being educated or trained. The APPG described the situation in respect of foreign language learning at schools and universities and foresaw no alternative but to fill these gaps through recruiting from abroad.
- 6E.48** The APPG on MFL expected this shortage to be exacerbated by the ending of free movement, indicating that 32 per cent of registrants on the National Register of Public Service Interpreters (NRPSI) are EU nationals, and that five of the top ten languages registered with the NRPSI are EU languages. Moreover, the APPG underlined the need for interpreters on the NRPSI to have 400+ hours of UK interpreting experience, which could only be gained once the individual was in the UK.
- 6E.49** This was borne out by a survey carried out by an organisation representing translation companies in 2019, and quoted in the stakeholder evidence: the results indicated that language service companies highlighted the low number of applicants with the required language skills, low numbers of applicants with qualifications that are required for the job, and a low number of applicants generally as the main reasons for recruitment difficulties for the roles of translator and interpreter. In the same survey, respondents (in line with the APPG) expected the UK's departure from the European

Union to increase recruitment difficulties for their business: stakeholders said they believed shortages would become more acute as migrant workers left.

6E.50 Stakeholders also cited a lack of understanding about the roles offered by the industry, and how to access them, and a lack of uptake by the younger workforce. In previous evidence presented to the MAC, stakeholders also cited several roles relating to foreign language skills, such as interpreters, translators, and localisation testers in a variety of languages, as being in short supply, but the occupation was not included.

6E.51 The stakeholder evidence requested inclusion on the SOL to provide them with the maximum flexibility to recruit the workers they required from outside the UK. The APPG's evidence suggested that this was only one of the barriers to recruiting interpreters (with low pay being common, and many public service interpreters in particular being self-employed), but nevertheless stakeholders said that this would help the recruitment situation.

## Recommendation

6E.52 **We recommend that SOC code 3412 (authors, writers and translators) is partially added to the SOL: we recommend that interpreters only are added.** The occupation ranks highly (13<sup>th</sup>) in the RQF3-5 shortage rankings and the job vacancy to employee ratio has been above the median of all eligible occupations.

6E.53 Given this and the nature of the stakeholder evidence, which persistently mentioned the shortage of foreign language skills, the change in circumstances occasioned by the ending of free movement, the lack of ability to meet these skills from the domestic labour market, and the fact that the APPG has indicated that inclusion on the SOL would help to remove one of the recruitment barriers, we recommend inclusion on the SOL for interpreters. However, we would need further evidence that translation and writing roles requiring foreign language skills need to be carried out in the UK and would also need further evidence that non-foreign-language writing roles are in shortage. Therefore, we do not recommend at present that these roles are included.

6E.54 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 9th percentile of full-time earnings in this occupation, meaning that nine per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

## SOC 3413: Actors, entertainers and presenters

Summary table: SOC 3413 Actors, entertainers and presenters																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	15%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	8%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	£32,200																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£32,200																		
Minimum salary required with SOL points	£25,760																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	76%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-24.2%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>9.0</td> </tr> <tr> <td>2013/14</td> <td>11.0</td> </tr> <tr> <td>2014/15</td> <td>8.5</td> </tr> <tr> <td>2015/16</td> <td>10.0</td> </tr> <tr> <td>2016/17</td> <td>4.0</td> </tr> <tr> <td>2017/18</td> <td>8.0</td> </tr> <tr> <td>2018/19</td> <td>6.0</td> </tr> <tr> <td>2019/20</td> <td>4.0</td> </tr> </tbody> </table>		Year	Ratio	2012/13	9.0	2013/14	11.0	2014/15	8.5	2015/16	10.0	2016/17	4.0	2017/18	8.0	2018/19	6.0	2019/20	4.0
Year	Ratio																		
2012/13	9.0																		
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2018/19	6.0																		
2019/20	4.0																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	.																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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## Stakeholder evidence

- 6E.56 The stakeholder evidence received in relation to this role was limited in nature. We received two responses to the online questionnaire relating to this role, which presented evidence relating only to fashion models. The evidence received did not indicate how inclusion on the SOL would be expected to help the issues raised (the UK population being too short to generate sufficient models, and the perceived non-availability of BAME models).

## Recommendation

- 6E.57 **We do not recommend adding SOC code 3413 (actors, entertainers and presenters) to the SOL.** Although the vacancy ratio of job postings to employees is high compared to the median for all occupations, it is not possible to access either shortage indicator rank or wage data, because of small sample sizes. Combined with the lack of stakeholder evidence, there is insufficient evidence to recommend adding this occupation to the SOL.

## SOC 3414: Dancers and choreographers

Summary table: SOC 3414 Dancers and choreographers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	19%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	£29,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£29,800																		
Minimum salary required with SOL points	£23,840																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>2.9</td> </tr> <tr> <td>2013/14</td> <td>3.6</td> </tr> <tr> <td>2014/15</td> <td>1.9</td> </tr> <tr> <td>2015/16</td> <td>1.4</td> </tr> <tr> <td>2016/17</td> <td>1.3</td> </tr> <tr> <td>2017/18</td> <td>1.0</td> </tr> <tr> <td>2018/19</td> <td>1.3</td> </tr> <tr> <td>2019/20</td> <td>0.7</td> </tr> </tbody> </table>		Year	Ratio	2012/13	2.9	2013/14	3.6	2014/15	1.9	2015/16	1.4	2016/17	1.3	2017/18	1.0	2018/19	1.3	2019/20	0.7
Year	Ratio																		
2012/13	2.9																		
2013/14	3.6																		
2014/15	1.9																		
2015/16	1.4																		
2016/17	1.3																		
2017/18	1.0																		
2018/19	1.3																		
2019/20	0.7																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	.																		
<b>Recommendation</b>																			
Recommend no change to existing SOL eligibility																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6E.58 The stakeholder evidence relating to this occupation was limited in nature. We received one written stakeholder submission specifically in relation to this occupation, which was from an individual (in addition, this occupation was listed in the response from the Scottish Government among the other occupations currently on the SOL, and which they thought should remain on). The submission from the individual argued for the removal of ballet dancers from the SOL, owing to the ending of freedom of movement and the difficulty thereby created for British ballet dancers to work in the EU (where many have been employed to date). This individual argued that the inclusion of ballet dancers on the SOL made it easier for British dance companies to recruit dancers from across the world, which meant that British dancers had a smaller chance of finding work in the UK. The individual contrasted this situation to that in other countries such as the US, Italy and France, where, it was claimed, companies recruit primarily from their national ballet schools. The individual argued that classical ballet dancers should be removed from the SOL, at least at *corps de ballet* (entry) level, in order to allow highly-skilled British dancers more chance to find work in the UK now that jobs in the rest of the world are less available than they have been.
- 6E.59 The dance industry has previously presented the case for continued recruitment from the EU after the UK's departure from the European Union. In the report *Movement Beyond Borders*<sup>146</sup>, the representative organisation One Dance UK indicated concern that existing dancers working within the UK's dance companies would leave and argued the need for people working in dance to continue to be able to move freely in Europe, to aid both recruitment and international co-operation and exchange of ideas.
- 6E.60 Two responses to the online questionnaire cited dancers – one concerning dancers in musical theatre, and one concerning Indian Kathak dancers. Both alluded to the importance and difficulty of obtaining suitable staff but without providing specific evidence relating to the occupation.

## Recommendation

- 6E.61 **We recommend that SOC code 3414 (dancers and choreographers), which is already partially on the SOL, retains its existing eligibility criteria.** The rules allowing ballet dancers on the SOL are very specific – “*only the following jobs in this occupation code: Skilled classical ballet dancers who meet the standard required by internationally recognised United Kingdom ballet companies (e.g. Birmingham Royal Ballet, English National Ballet, Northern Ballet Theatre, the Royal Ballet and Scottish Ballet). The Company must either: have performed at or been invited to perform at venues of the calibre of the Royal Opera House, Sadler's Wells or Barbican, either in the United Kingdom or overseas; or attract dancers and/or choreographers and other*

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<sup>146</sup> <https://www.onedanceuk.org/wp-content/uploads/2018/08/Movement-Beyond-Borders-Brexit-report-Aug18-180820.pdf>

*artists from other countries; or be endorsed as being internationally recognised by a United Kingdom industry body such as the Arts Councils (of England, Scotland and/or Wales)."* Skilled contemporary dancers have similar rules.

6E.62 We do not have ASHE salary data or a shortage indicator rank for this occupation, because of sample sizes. The vacancy rate has previously been above the median for all occupations but is now below the median. Given the points raised about EU departure, we considered whether the Tier 5 (Creative) route might be a more suitable way to provide dancers with the means of performing in the UK. However, the overall lack of stakeholder evidence leads us to recommend that there should be no change to the occupation's existing SOL eligibility at present.

6E.63 With the discount applied for SOL occupations, the salary threshold for this occupation would be £23,840. This salary threshold is at the 34<sup>th</sup> percentile of full-time earnings in this occupation, meaning that 34 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

## SOC 3421: Graphic designers

Summary table: SOC 3421 Graphic designers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	6%																		
Share of employees born outside the EEA (APS, 2017-19)	8%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£27,500																		
25th percentile full-time annual wage (ASHE, 2019)	£23,500																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	24%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-56.1%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>1.9</td></tr> <tr><td>2013/14</td><td>2.0</td></tr> <tr><td>2014/15</td><td>2.0</td></tr> <tr><td>2015/16</td><td>2.1</td></tr> <tr><td>2016/17</td><td>1.7</td></tr> <tr><td>2017/18</td><td>2.0</td></tr> <tr><td>2018/19</td><td>1.5</td></tr> <tr><td>2019/20</td><td>1.45</td></tr> </tbody> </table>		Year	Ratio	2012/13	1.9	2013/14	2.0	2014/15	2.0	2015/16	2.1	2016/17	1.7	2017/18	2.0	2018/19	1.5	2019/20	1.45
Year	Ratio																		
2012/13	1.9																		
2013/14	2.0																		
2014/15	2.0																		
2015/16	2.1																		
2016/17	1.7																		
2017/18	2.0																		
2018/19	1.5																		
2019/20	1.45																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	77																		
<b>Recommendation</b>																			
Recommend no change to existing SOL eligibility																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6E.64 The stakeholder evidence received in relation to this occupation was fairly limited in nature. As with the previous review of the SOL, and occupation 3411 in the current review, evidence received for this occupation was primarily related to the video games industry. The roles were closely linked, being related to the design, appearance and effects appearing in video games, and therefore the organisations responding were similar. The roles cited were similar to those named in the 2019 SOL review, albeit at a more junior (mid/junior/entry) level to fit with the reduced skill and salary thresholds.

6E.65 Requests were made in relation to the following roles:

- Technical artist
- Audio designer
- Graphic designers (including 2D and 3D animators, technical and environmental artists, FX artists, FX tech directors, digital matte painters and Houdini generalists)
- Junior VFX compositor
- Junior modeller
- Junior animation rigger
- Environment artist
- Technical artist

6E.66 As with the evidence received in relation to occupation 3411 (Artists), stakeholders said that they had tried many strategies to increase recruitment. Stakeholders also said that they needed to look outside the UK to access people with the skills and work they needed, as there were insufficient UK graduates of high enough quality. Although they had engaged with schools and universities in the UK, and developed apprenticeships for entry level roles, employers said they still had to look overseas to access workers of high enough quality.

## Recommendation

6E.67 **We recommend that SOC code 3421 (graphic designers) should remain on the SOL.** The occupation ranks towards the middle (77<sup>th</sup>) of the RQF3-5 shortage rankings, and the vacancy ratio of job postings to employees is above the median for all occupations. The stakeholder evidence was similar to that submitted to our 2019 review of the SOL, and we therefore do not recommend a change to the occupation's SOL eligibility at present.

6E.68 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 13th percentile of full-time earnings in this occupation, meaning that 13 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

## SOC 3422: Product, clothing and related designers

Summary table: SOC 3422 Product, clothing and related designers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	10%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£30,200																		
25th percentile full-time annual wage (ASHE, 2019)	£25,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	40%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-41.1%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.65</td> </tr> <tr> <td>2013/14</td> <td>1.45</td> </tr> <tr> <td>2014/15</td> <td>1.20</td> </tr> <tr> <td>2015/16</td> <td>1.30</td> </tr> <tr> <td>2016/17</td> <td>1.25</td> </tr> <tr> <td>2017/18</td> <td>1.20</td> </tr> <tr> <td>2018/19</td> <td>0.80</td> </tr> <tr> <td>2019/20</td> <td>0.80</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.65	2013/14	1.45	2014/15	1.20	2015/16	1.30	2016/17	1.25	2017/18	1.20	2018/19	0.80	2019/20	0.80
Year	Ratio																		
2012/13	1.65																		
2013/14	1.45																		
2014/15	1.20																		
2015/16	1.30																		
2016/17	1.25																		
2017/18	1.20																		
2018/19	0.80																		
2019/20	0.80																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	31																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6E.69 The stakeholder evidence received in relation to this occupation was limited in nature. We received evidence relating to three roles within this occupation. All the submissions we received related to the fashion industry rather than product, interior, kitchen or furniture design, and therefore it may be worth reading this section alongside the evidence and recommendations set out in 6R: Textiles, printing and other skilled trades. For this occupation, we received evidence relating to:
- The general term ‘designer’ or ‘product, clothing and related designers’
  - Fashion designers
  - Footwear designers
- 6E.70 Although the median wage for the whole occupation presented in the table above (£30,200) is well above the salary threshold, data received from a representative organisation as part of a stakeholder submission indicates that pay levels within the fashion industry may be somewhat below this. The organisation carried out a very small-scale membership survey which indicated that the salary received by a new entrant would be around £21,600, and that that received by an experienced worker was usually more than £25,700. Evidence received in our online CfE indicated that low levels of pay could be contributing to recruitment difficulties, where potential workers were able to access other opportunities:
- 6E.71 Written stakeholder evidence mentioned the world-famous fashion design courses available in the UK. A previous industry report<sup>147</sup> from the British Fashion Council also indicated that at least one of these courses emphasises technical skills. However, despite these, this and other respondents to the CfE indicated that it was hard to find people with the required skills: respondents indicated that they had to look outside the UK to find workers with the right skills (particularly technical/job-specific skills and manual dexterity) and work experience, but did not report the same issues in relation to finding workers with the right qualifications. In particular, the point was made that recruiting workers with experience at large European fashion houses means that employers may have to look outside the UK workforce.
- 6E.72 Employers responding to the survey said that they kept vacancies open until finding a worker with the required set of skills, although some would employ a worker not having the required set of skills, which is in line with what respondents to the online CfE said about this occupation. Without access to the required workforce, respondents said that they lost business, had difficulty meeting quality standards, or had to outsource work.
- 6E.73 A representative organisation felt that this demonstrated the existent limitations for development and scaling-up of most businesses in the fashion sector (with many

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<sup>147</sup> [https://www.britishfashioncouncil.co.uk/uploads/files/1/BFC\\_Future\\_of\\_Fashion\\_v9\\_lo\\_res.pdf](https://www.britishfashioncouncil.co.uk/uploads/files/1/BFC_Future_of_Fashion_v9_lo_res.pdf)



businesses being small or microbusinesses, to which the constraints to access workers in the new points-based immigration system would add additional challenges).

- 6E.74 There was mixed evidence on stakeholders' recruitment efforts in the online CfE, with some respondents having tried most/all methods cited in the CfE, and others having tried very few. This is likely to relate to the size and resources of organisations.

### Recommendation

- 6E.75 **We do not recommend adding SOC code 3422 (product, clothing and related designers) to the SOL.** While the occupation ranks relatively highly in the RQF3-5 shortage rankings (31<sup>st</sup>), the ratio of job vacancies to employees has been somewhat above the median for all occupations but more recently has fallen below. There is also insufficient stakeholder evidence to suggest that the entire occupation should be added to the list. However, we considered the case for adding fashion designers (which encompasses fashion/footwear/accessories designers) to the SOL carefully.
- 6E.76 We accept that the global nature of the industry, and the prestige of European fashion designers, means that it is desirable for employers to continue to be able to recruit designers easily from Europe and elsewhere, and that the ending of freedom of movement will make it more difficult to do this. Nevertheless, we consider that there is not enough new evidence at present to demonstrate that employers cannot meet recruitment needs by raising wages, recruiting graduates from British fashion design courses, or expanding their recruitment efforts, and we therefore do not recommend adding this occupation to the SOL.

## 6F: Health and Social Care

### Introduction

- 6F.1 We have identified ten eligible occupations skilled between RQF3-5 in the health and social care sector.
- i. Healthcare practice managers (1241)
  - ii. Residential, day and domiciliary care managers and proprietors (1242)
  - iii. Dispensing opticians (3216)
  - iv. Pharmaceutical technicians (3217)
  - v. Medical and dental technicians (3218)
  - vi. Health associate professionals (3219)
  - vii. Nursery nurses and assistants (6121)
  - viii. Nursing auxiliaries and assistants (6141)
  - ix. Dental nurses (6143)
  - x. Senior care workers (6146)
- 6F.2 The stakeholder evidence we received was uneven; there were many submissions for the social care occupations and few – in some cases none – for several of the healthcare ones.
- 6F.3 This chapter offers an overview of the sector, identifies the common causes of shortages behind some of the occupations and how employers are dealing with them, before discussing the impact of COVID-19 on the sector and what might be expected going forward. It concludes by providing an occupation by occupation view using our data analysis and stakeholder evidence.

### Sector overview

- 6F.4 Table 6F.1 shows the relative sizes of the RQF3-5 occupations in health and social care that will be considered in this review. We can see that the two nursing occupations: nursery nurses and assistants (6121) and nursing auxiliaries and assistants (6141) are two substantial occupation groups, with the latter including numerous roles and titles. However, it should be noted that many health and social care employees and occupations do not fall within the remit of this review of RQF3-5 occupations. Notably, there are many RQF6+ professions that require a medical degree as well as roles below RQF3, such as care workers (6145).
- 6F.5 Nursing auxiliaries and assistants have the highest proportion of employees born outside the EEA (17 per cent) whilst health associate professionals n.e.c. have the highest proportion of self-employed workers at 66 per cent. It is important to note that there is limited benefit in including occupations with high proportions of self-employed workers on the SOL. This is because self-employed workers are not eligible for the skilled worker visa route as employer sponsorship is required.

<b>Table 6F.1: Employment in selected occupations</b>					
<b>Occupation</b>	<b>Total employment</b>	<b>% who are self employed</b>	<b>% born in EEA (ex. UK)</b>	<b>% born outside EEA</b>	<b>% born in UK</b>
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Dispensing opticians	8,800	11%	5%	-	91%
Pharmaceutical technicians	34,100	-	4%	9%	86%
Medical and dental technicians	46,700	20%	6%	9%	85%
Health associate professionals n.e.c.	71,900	66%	5%	11%	84%
Health care practice managers	26,000	11%	5%	7%	88%
Nursery nurses and assistants	220,100	0.9%	4%	7%	89%
Nursing auxiliaries and assistants	344,000	1%	5%	17%	78%
Dental nurses	53,500	-	7%	4%	88%
Senior care workers	75,900	0.2%	5%	14%	81%
Residential, day and domiciliary care managers and proprietors	59,300	8%	5%	11%	84%

Source: APS (2017-19)

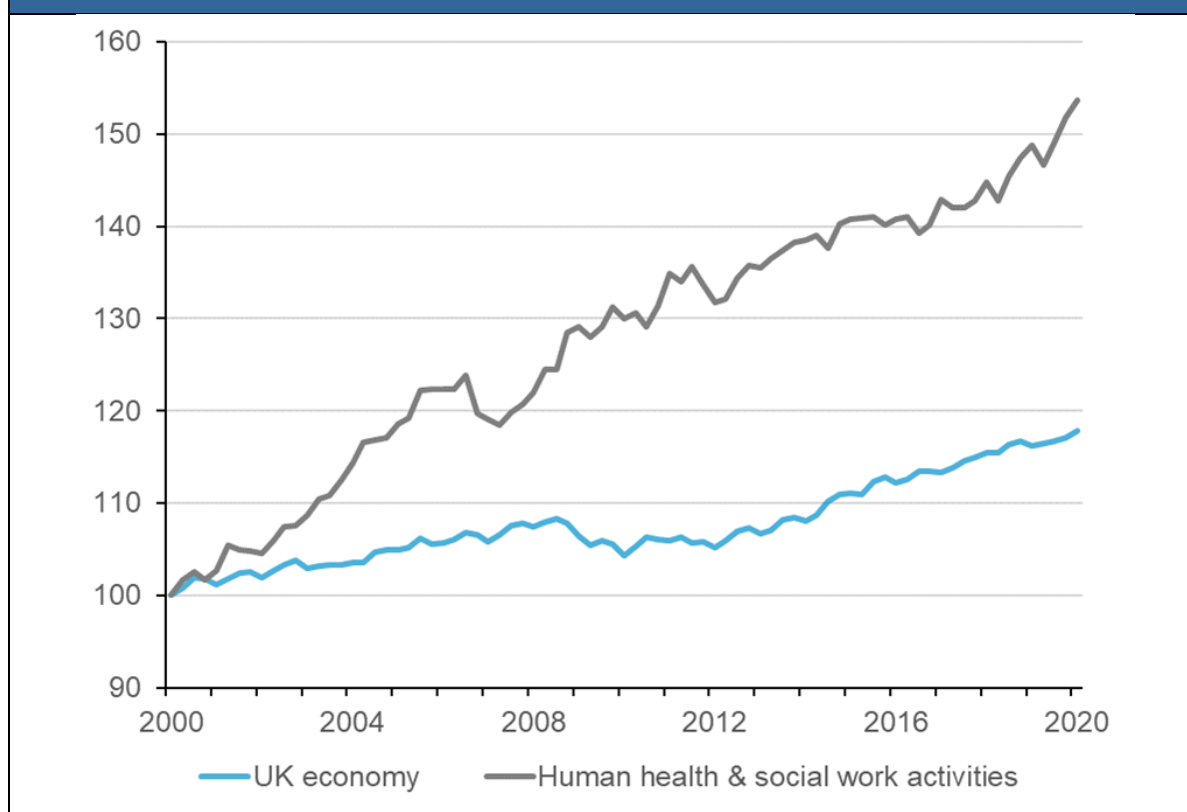
All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes

**6F.6** Figure 6F.1 shows how the number of employees in the human health and social care sector has grown at a faster rate compared to employee growth across all occupations. Employment in the sector has grown by almost 60 per cent since 2000 in comparison to growth of just under 20 per cent for the economy.

**Figure 6F.1: Indexed number of employees in sector (Jan-Mar 2000=100)**



Source: ONS - EMP14 Employees and self-employed by industry

**6F.7** Table 6F.2 shows the pay distribution of the occupations in this group. We can see that almost all the occupations, except residential, day and domiciliary care managers and proprietors, have 'going rates' (the 25<sup>th</sup> percentile of that occupation's earning distribution) below that of the minimum salary threshold for the PBS Skilled Worker route of £25,600. Some occupations are in fact considerably below this threshold; senior care workers and nursery nurses and assistants fall beneath the SOL's minimum salary threshold meaning that the practical benefit of these occupations being placed on the SOL may be more limited. Similarly, four of the ten occupations (medical and dental technicians, dental nurses, nursing auxiliaries and assistants, health associate professionals n.e.c.) are subject to national pay scales as their salary threshold and are exempt from the general threshold of £25,600. For these occupations, being placed on the SOL would not alter the salary threshold they face (see Chapter 1, page 55).

**Table 6F.2: Pay in selected occupations**

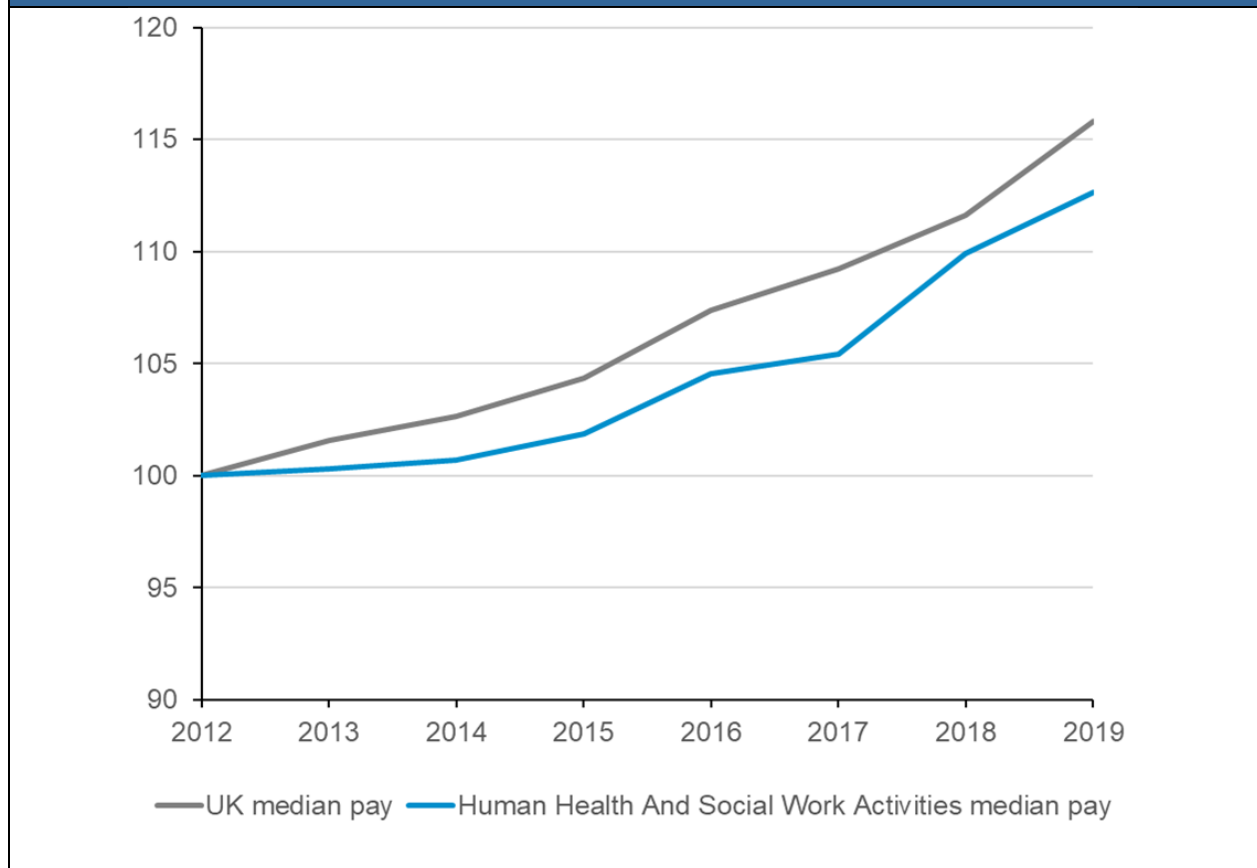
<b>Occupation</b>	<b>Median gross annual pay for full-time employees 2019</b>	<b>25<sup>th</sup> percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
Dispensing opticians	£24,700	£18,900	-1%
Pharmaceutical technicians	-	£20,300	-
Medical and dental technicians	£27,400	£23,400	-9%
Health associate professionals n.e.c.	£20,500	£17,100	-9%
Health care practice managers	£33,100	£25,500	-5%
Nursery nurses and assistants	£17,000	£14,700	+5%
Nursing auxiliaries and assistants	£21,200	£18,100	+3%
Dental nurses	£18,300	£16,000	-0.2%
Senior care workers	£20,300	£16,900	+7%
Residential, day and domiciliary care managers and proprietors	£33,700	£26,700	-0.1%

Source: ASHE (2019)

Non reported estimates are due to insufficient sample sizes

**6F.8** In Figure 6F.2 we can see that between 2012-2019, wage growth in this sector had been about 12 per cent compared to the 16 per cent seen on average across all occupations.

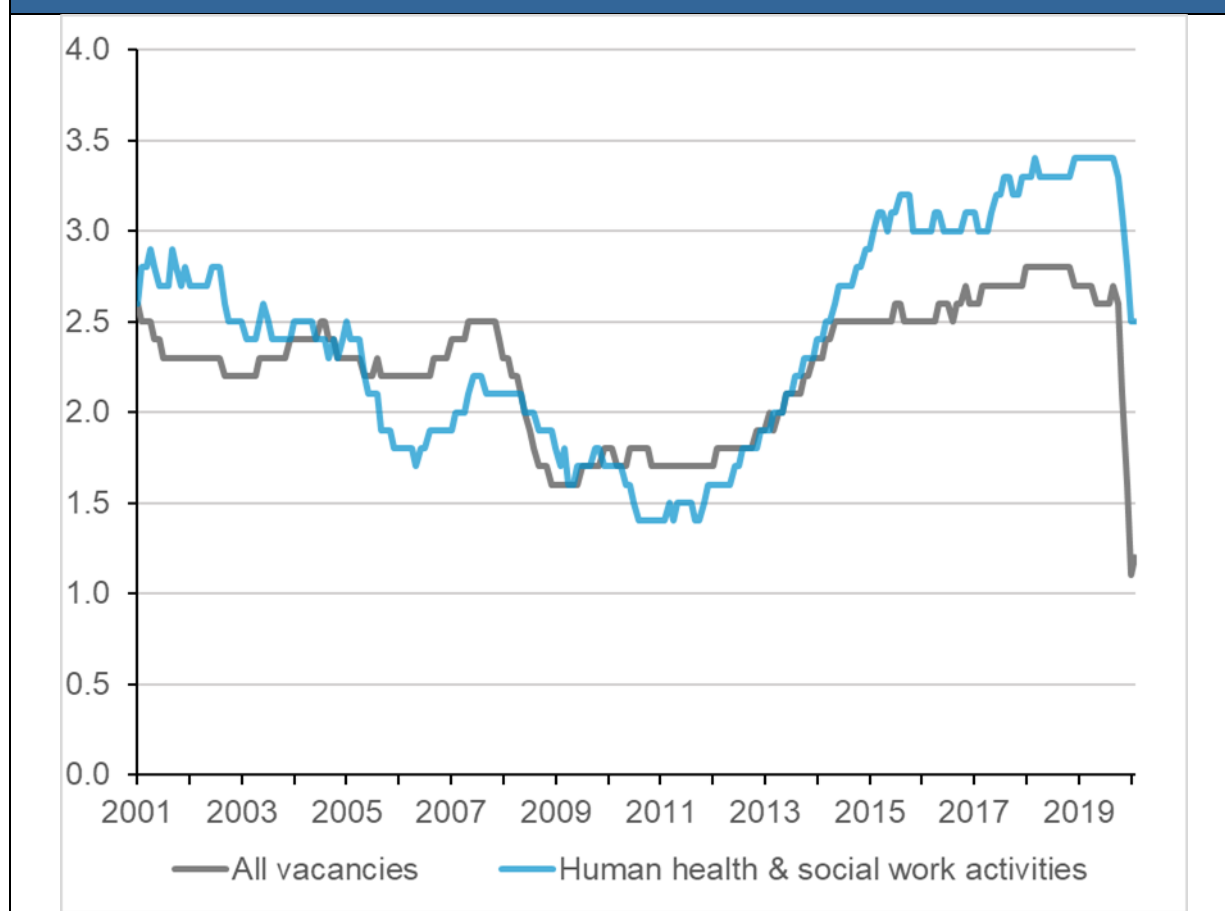
Figure 6F.2: Indexed wage level in sector (2012=100)



Source: ASHE (2012-2019)

6F.9 Figure 6F.4 shows the vacancy ratio for the health and social care sector in comparison to the vacancy ratio across the overall economy (excluding agriculture, forestry and fishing) since 2001. Whilst there have been periods in which health and social care have had a higher vacancy ratio than across the whole economy and vice versa, what is most noticeable is the gradual increase in the vacancy ratio for the health and care sector since 2011 to nearly 3.5 vacancies per 100 employees in 2019, resulting in a sustained gap between the vacancy ratio of the sector and that of vacancies across all sectors in the last five years.

Figure 6F.4: Industry vacancy ratio (vacancies per 100 employee jobs)



Source: ONS – VACS02 Vacancies by industry

6F.10 The effect of COVID can be seen in the latest data points. The vacancy ratio both for vacancies across all sectors and the health and social care sector fell significantly.

6F.11 Several stakeholders highlighted that the current vacancy level in the NHS is approximately 100,000<sup>148</sup> vacancies, with the social care figure being 122,000 (with around eight per cent of roles in care vacant). The social care sector is primarily made up of independently-run, small and medium-sized businesses.

## Shortages

6F.12 A range of longstanding, structural issues, as well as developments in the last few years relating to supply and demand for care, were reported as causes of the shortages in the sector. This sub-section largely relates to the sector pre-COVID-19; a later sub-section will serve to address the impact COVID-19 has had on the sector.

6F.13 A representative organisation in the health and social care sector stressed that increasing service demand continues to outstrip supply, resulting in shortages across

<sup>148</sup> House of Commons Committee of Public Accounts, NHS financial stability: progress review

the sector. For instance, NHS Employers reported that there are 1.4 million people believed to be going without the social care support they need<sup>149</sup>. The representative body highlighted that government measures to improve education, training and routes into professions, as well as making these roles more attractive, have not resulted in enough skilled or experienced UK-born staff. They suggest that inadequate workforce planning and a lack of responsibility taken for such issues at a national level have also served to limit supply.

6F.14 A representative body in the healthcare sector also pointed to growing demand being a major cause of shortage in the sector across the UK:

*“In the NHS in England, in 2018/19 almost 1/5 people attending A&E waited over four hours, compared to just 1/25 in 2010/2011<sup>150</sup>. In Northern Ireland, 35% of patients waited longer than a year for a hospital appointment in September 2019<sup>151</sup> whilst in Scotland the percentage of patients meeting the 12-week outpatient referral standard dropped from 90% in 2015 to 75% in 2019<sup>152</sup>. In the NHS in Wales, 6.2% of patients spent longer than 12 hours in urgent care departments in October 2019, which is the highest proportion since records began<sup>153</sup>”*

Representative Organisation; Healthcare Sector; UK-wide

6F.15 Low unemployment prior to the pandemic meant there were fewer job seekers, which could have had knock-on effects on the vacancy rate, particularly in social care. However, even as unemployment rates rise due to the pandemic, organisations expressed concern that they will struggle to recruit going forward as job seekers are fearful of exposure to the virus. Additionally, uncertainty around EU Exit and the future immigration system has led to both an increased outflow and lower inflow of EEA workers. A greater desire for flexibility and part-time working in health and social care was also cited by stakeholders as a growing issue.

6F.16 A fall in central funding for healthcare education and training from five per cent of health spending in 2006/7 to three per cent in 2018/19<sup>154</sup> was raised by a representative organisation in the health and social care sector. Stakeholders reported that teaching grants are also being cut from 2020/21, which amount to a six to seven per cent cut per capita for nursing, midwifery, physiotherapy and other allied health profession courses<sup>155</sup>.

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<sup>149</sup>Age UK, Briefing: Health and Care of Older People in England 2019

<sup>150</sup> NHS Digital, NHS Workforce Statistics

<sup>151</sup> Northern Ireland Department of Health, Northern Ireland Hospital Statistics

<sup>152</sup> Scottish Government, NHS performance against LDP standards

<sup>153</sup> NHS Wales, NHS Wales Data Dictionary

<sup>154</sup> Health.org.uk, The health care workforce in England

<sup>155</sup> Office for Students, Consultation on implementing savings in academic years 2019-20 and 2020-21



- 6F.17 High staff turnover remains a problem in the sector, with the Royal College of Nursing reporting in their 2019 employment survey that 39 per cent of all respondents were seeking new jobs, with the majority of these being people in jobs equivalent to NHS pay bands 2-5, where pay ranges from £8-15 an hour. Several reasons were suggested for such turnover rates; high levels of stress and pressure, coupled with a lack of support and feeling undervalued were all highlighted.
- 6F.18 In social care, Skills for Care estimates a staff turnover rate of 31 per cent, with their report equating this to approximately 440,000 workers leaving their roles in the previous 12 months. However, 66 per cent of recruitment is from within the social care sector, suggesting that many leavers find new roles within social care such that the sector retains skills and experience<sup>156</sup>.
- 6F.19 Low pay across the health and social care sector, but especially in social care, was highlighted by many respondents as a cause of not only high vacancy rates, but also the high staff turnover rates, as workers move jobs within the sector for small pay rises. The movement of workers in social care to the generally higher paying healthcare sector (due in part to NHS pay bands) was also often cited.
- 6F.20 Such low pay is inextricably linked to the funding pressures, which have been worsened by an aging population, complex care needs and reductions in government funding to local authorities according to a stakeholder in the health and social care sector. Another stakeholder added to this, noting that as a result, eligibility criteria for qualifying for care are becoming more stringent, leaving more people without the care they require, which puts added strain on community health services. In a snap poll run by NHS Employers in November 2019, 97 per cent of healthcare leaders said that the social care crisis was having a damaging effect on NHS patient care.
- 6F.21 Stakeholders also highlighted the antisocial hours required and competition from the retail and hospitality sectors - pay is similar for less challenging jobs with reduced responsibility - for the persistently high vacancy rates. There are also geographical factors affecting the provision of care, with rural locations being inherently harder to recruit for, whilst affluent areas also struggle to recruit local workers.

### **Steps being taken to alleviate shortages**

- 6F.22 In response to these issues, organisations in the health and care sector are taking a range of measures to combat such shortages.
- 6F.23 The NHS has been running the '*We are the NHS*' recruitment campaign since 2018, which has seen, for the second year running, an increase in nurse applications. Through raising the profile of health and social care careers, it has also helped bring

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<sup>156</sup> Skills for Care, The state of the adult social care sector and workforce in England: September 2019

about around a five per cent increase in university applications for health education courses.

- 6F.24 The NHS also published a national workforce strategy – the Interim NHS People Plan<sup>157</sup> – in June 2019, which details the steps the NHS will take to improve recruitment, retention, and collaborative approaches to workforce planning.
- 6F.25 NHS organisations have been emphasising local community engagement in line with their recruitment campaigns and workforce strategies through work experience programmes, pre-employment programmes, traineeships, internships and apprenticeships.
- 6F.26 As of September 2020, there will also be a new grant for nursing, midwifery and allied health professional students of between £5,000 and £8,000.
- 6F.27 Additionally, the NHS has sought to improve wages; the minimum pay rate in the NHS increased to £17,652 on April 1, 2019 (an hourly rate of £9.03, marginally above the Living Wage Foundation’s rate at the time). Negotiations will also begin soon on a new Agenda for Change pay deal.
- 6F.28 In partnership with Skills for Care, the Department of Health and Social Care (DHSC) has launched the national recruitment campaign ‘*Care for others; Make a difference*’ on television, radio and social media in a bid to promote careers in care. The campaign aims to highlight the crucial role social care has had during COVID-19.
- 6F.29 In addition, DHSC have launched ‘*Join Social Care*’ a new online platform for fast-track recruitment which also provides free training via Skills for Care and should aid in streamlining the recruitment process. More broadly, Skills for Care have been commissioned by the DHSC to provide digital training for all staff through 12 of their Endorsed Training Providers. Furthermore, the DHSC will provide councils an additional £1.5bn for social care funding in 2020/21.
- 6F.30 The social care sector has also been working with the Department for Work and Pensions concentrating on pre-employment schemes to highlight the opportunities in the sector for jobseekers, whilst also running distance recruitment programmes and partnering with local authorities.
- 6F.31 The Scottish Government also ran a recruitment campaign – ‘*There’s More to Care than Caring*’ – for eight weeks in early 2020, and has invested about £50 million through the NDPB, the Scottish Social Services Council, to support development of the social care workforce.

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<sup>157</sup> <https://improvement.nhs.uk/resources/interim-nhs-people-plan/>

## COVID-19

6F.32 COVID-19 has resulted in an unprecedented period for health and social care in the UK and whilst (at the time of writing) cases have been declining in recent months, the virus looks set to continue to be a key issue for the sector going forwards. Numerous stakeholders highlighted that the pandemic has exacerbated existing challenges that the sector was facing. Prior to COVID-19, the NHS already had a vacancy level of around 100,000<sup>158</sup> in the UK, with vacancies in social care standing at around 122,000<sup>159</sup>. Furthermore, stakeholders said that these challenges had been worsened by the impending withdrawal of the UK from the EU.

6F.33 Stakeholders highlighted that, despite the various measures taken by the NHS to alleviate shortages, these responses do not provide a short-term supply solution, especially given COVID-19 and the setbacks to training that have resulted because of it. They state that the pandemic has disrupted placements and apprenticeships as well as the planned expansion of training to cater for the shortages that existed pre COVID-19 due to a lack of supervision and mentoring capacity. Insufficient clinical placement capacity was also said to have been a longstanding issue which will be made worse with post-pandemic service pressures.

*“Some students, for example on Operating Department Practitioner or Podiatry courses, could not be placed at all during the emergency situation and there will be an increased pressure on placements in the academic year 2020/21 to enable existing students to catch up on practice placements, which will impact on the availability of placements for new students.... The risk of a second wave of the pandemic exacerbates this uncertainty.”*

Representative Organisation; Health and Social Care Sector; UK-wide

6F.34 Furthermore, once normal service provision resumes, stakeholders said that the NHS would face a backlog of planned care cases because the pandemic has increased waiting lists. One report estimated that by October 2020 there would be a 64 per cent increase in NHS hospital waiting lists compared to the point at which the NHS had been asked to stop non-urgent activity in March 2020. Another report estimated that waiting lists for routine hospital appointments would more than double – from 4.4 million to 10 million – by the end of 2020.

6F.35 The British Medical Association also highlighted that many COVID-19 patients will require ongoing care and support from mental health, primary and community health services.

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<sup>158</sup> House of Commons Committee of Public Accounts, NHS financial stability: progress review

<sup>159</sup> Skills for Care, The state of the adult social care sector and workforce in England: September 2019

6F.36 Additionally, whilst many recent positions have been filled during the pandemic, it is suggested that this is a temporary fix as people have returned from retirement to work in the sector and are unlikely to stay in the long-term.

*“The NMC’s temporary register attracted more than 13,000 former or overseas nurses and midwives to assist during the COVID-19 outbreak, although while NHS organisations are exploring retention opportunities for some of these staff as appropriate, this alone is not a long term or sustainable solution to the ongoing workforce crisis”*

NHS Employers; Response to MAC Consultation

6F.37 A survey by the Institute of Public Policy Research found that 22 per cent of workers in health and social care are more likely to leave their jobs after the pandemic<sup>160</sup>.

6F.38 Several stakeholders also pointed to the mental and physical health effects such a stressful period has had on health and social care staff raising the concern that many will leave the sector due to stress and exhaustion. One stakeholder in the health and social care sector said that there had been a 170 per cent rise in sickness days between February and April 2020. Similarly, NHS Employers reported in their submission:

*“Before COVID-19 around 3 per cent of working days in social adult social care were lost to sickness. Since the pandemic, this figure has increased to 8 per cent. Applying these statistics to the whole workforce equates to around 3.4 million extra days lost to sickness throughout March, April, and May than usually expected.”*

NHS Employers; Response to MAC Consultation

6F.39 Many stakeholders raised the concern that COVID-19 has deterred potential new recruits from entering the care sector due to the risk of contracting the virus, whilst employers are also at risk of losing existing staff to jobs with less associated risk and responsibility.

6F.40 The Scottish Government raised social care staff salaries by 3.3 per cent in April 2020 followed a month later by the announcement that social care workers would also receive enhanced sick pay if they contract COVID-19.

## Going forward

6F.41 Looking towards the future points-based immigration system and the end of freedom of movement, several stakeholders raised the issue that they would be unable to fill positions due to the salary thresholds and the required skill level. In the case of social

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<sup>160</sup> IPPR, Care fit for carers: Ensuring the safety and welfare of NHS and social care workers during and after COVID-19

care, this is still a large concern even if positions are placed on the SOL with its resultant lower threshold. For example, the most cited was the SOC care workers and home carers (6145) which is an occupation below RQF3. According to ASHE 2019 (although stakeholders reported lower figures), this occupation has a going rate (25<sup>th</sup> percentile of full-time earnings distribution) of £15,600 and a median full-time salary of £19,100 – both of which lie below the minimum SOL salary threshold of £20,480. We discuss SOC 6145 care workers, which are not eligible for the Skilled Worker route, in further detail in Chapter 5.

- 6F.42 In addition, whilst the Scottish Government and NHS Scotland welcomed the removal of the Immigration Health Surcharge for health and care staff (under the ‘Skilled Worker: Health and Care Visa’), they raised concerns that the Immigration Skills Charge - £1,000 per year – and additional visa costs were a burden on organisations looking to employ migrants in medium-skilled occupations typically below the £25,600 salary threshold.
- 6F.43 Many stakeholders were concerned that current shortages would be worsened in the future citing demographic projections for the UK, which forecast a growing elderly population putting strain on both health and social care.
- 6F.44 One stakeholder in the health and social care sector estimated that the population aged 65 and over will increase from 10.2 million (as of 2018) to 14.1 million by 2035. Given this, Skills for Care suggests that if the social care workforce grows proportionally, a further 580,000 jobs would need to be added in the next fifteen years. The DHSC adds that the population aged 75 and over is set to grow at a faster rate than those aged 65-74 and, were the workforce to increase proportionally to this demographic (by 50 per cent), then a further 800,000 jobs would be required<sup>161</sup>.
- 6F.45 Similarly, Health Education England has attempted to estimate future demand and predicts that by 2027 the NHS in England will need 118,000 more workers in addition to the forecasted supply of 72,000<sup>162</sup>.
- 6F.46 Skills Development Scotland anticipated that 3,400 health professionals and 3,800 workers in caring personal service occupations will be required by 2028 if demand is to be met. A Welsh representative organisation in the care sector reported that Wales needs around 20,000 more people to work in care by 2030.
- 6F.47 Given the uncertainties surrounding COVID-19, stakeholders stressed that a future immigration system must be agile enough for employers to be able to respond to labour shortages.

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<sup>161</sup> Skills for Care, The state of the adult social care sector and workforce in England: September 2019

<sup>162</sup> Health Education England, Facing the Facts, Shaping the Future: A draft health and care workforce strategy for England to 2027

## SOC 1241: Healthcare practice managers

Summary table: SOC 1241 Health care practice managers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	5%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£33,100																		
25th percentile full-time annual wage (ASHE, 2019)	£25,500																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.5</td> </tr> <tr> <td>2013/14</td> <td>1.4</td> </tr> <tr> <td>2014/15</td> <td>1.05</td> </tr> <tr> <td>2015/16</td> <td>0.95</td> </tr> <tr> <td>2016/17</td> <td>0.95</td> </tr> <tr> <td>2017/18</td> <td>1.5</td> </tr> <tr> <td>2018/19</td> <td>0.75</td> </tr> <tr> <td>2019/20</td> <td>0.9</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.5	2013/14	1.4	2014/15	1.05	2015/16	0.95	2016/17	0.95	2017/18	1.5	2018/19	0.75	2019/20	0.9
Year	Ratio																		
2012/13	1.5																		
2013/14	1.4																		
2014/15	1.05																		
2015/16	0.95																		
2016/17	0.95																		
2017/18	1.5																		
2018/19	0.75																		
2019/20	0.9																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	55																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6F.48 We received a recommendation from the Welsh Government to consider this occupation for the Wales-only SOL. They noted their recommendation was based on their stakeholder engagement and analysis using the shortage indicators to a 3-digit SOC level. However, we have not received detailed evidence on the drivers of shortage and any actions taken to mitigate shortage for this occupation from stakeholders at this time.

## Recommendation

6F.49 **We do not recommend adding SOC code 1241 (healthcare practice managers) to the SOL.** The occupation is around the middle (55<sup>th</sup>) of the RQF3-5 shortage indicator rank and has a job postings per employee ratio similar to the median of eligible occupations. There is also limited stakeholder evidence and the occupation has a higher than average percentage of workers born in the UK, so is less reliant on migrant workers.

## SOC 1242: Residential, day and domiciliary care managers and proprietors

Summary table: SOC 1242 Residential, day and domiciliary care managers and proprietors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	11%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	11%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£33,700																		
25th percentile full-time annual wage (ASHE, 2019)	£26,700																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£26,700																		
Minimum salary required with SOL points	£21,360																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	+29.7%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>2.9</td> </tr> <tr> <td>2013/14</td> <td>2.0</td> </tr> <tr> <td>2014/15</td> <td>1.7</td> </tr> <tr> <td>2015/16</td> <td>1.9</td> </tr> <tr> <td>2016/17</td> <td>1.8</td> </tr> <tr> <td>2017/18</td> <td>1.8</td> </tr> <tr> <td>2018/19</td> <td>1.5</td> </tr> <tr> <td>2019/20</td> <td>1.0</td> </tr> </tbody> </table>		Year	Ratio	2012/13	2.9	2013/14	2.0	2014/15	1.7	2015/16	1.9	2016/17	1.8	2017/18	1.8	2018/19	1.5	2019/20	1.0
Year	Ratio																		
2012/13	2.9																		
2013/14	2.0																		
2014/15	1.7																		
2015/16	1.9																		
2016/17	1.8																		
2017/18	1.8																		
2018/19	1.5																		
2019/20	1.0																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	51																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

- 6F.50 We received 12 Call for Evidence (CfE) submissions for this occupation.
- 6F.51 According to Skills for Care, there were 22,800 registered managers in the social care sector prior to the pandemic with 2,900 (12.7 per cent) vacancies, which was double the average of other managerial roles (5.3 per cent). Turnover rose to 22 per cent in 2018/19, up four percentage points on 2012/13.
- 6F.52 One stakeholder reported that vacancies are high as “*positions are left open for an extended period due to a national shortage.*” They further cited the wage constraints of the care sector as an issue and one that would not be solved in the foreseeable future.
- 6F.53 Skills for Care also estimated the average salary of the 800 registered managers employed by local authorities to be £38,900 whilst it is £30,600 for those in the independent sector.
- 6F.54 Another stakeholder highlighted that registered managers are fundamental to delivering homecare services as there are legal responsibilities with the role and these roles require individuals with a wide range of skills, experience (at least five years in the sector) and qualities. They cite the vacancies and staff turnover statistics as evidence that this mix of attributes is in short supply. Evidence from other stakeholders supported this and added that at present 33 per cent of their registered managers have EU and non-UK nationality.

## Recommendation

- 6F.55 **We recommend adding SOC code 1242 (residential, day and domiciliary care managers and proprietors) to the SOL.** This occupation ranks towards the middle of our RQF3-5 shortage rankings (51<sup>st</sup>). It appears no more reliant on migrants than the average UK occupation. The occupation has a higher salary relative to the minimum salary threshold as the going rate lies above it, with this also being supported by the Skills for Care estimates. There is stakeholder evidence which suggests that there are significant shortages in this occupation. We believe that due to this occupation meeting the sensible criterion of public value, especially given COVID-19, that it should be added to the SOL.
- 6F.56 With the discount applied for SOL occupations, the salary threshold for this occupation would be £21,360. This salary threshold is at the 8th percentile of full-time earnings in this occupation, meaning that eight per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

## SOC 3216: Dispensing Opticians

Summary table: SOC 3216 Dispensing opticians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£24,700																		
25th percentile full-time annual wage (ASHE, 2019)	£18,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	80%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-31.3%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	2.6																		
2013/14	4.0																		
2014/15	3.1																		
2015/16	1.7																		
2016/17	1.7																		
2017/18	2.2																		
2018/19	2.9																		
2019/20	3.3																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	89																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6F.57 We received a recommendation from the Welsh Government to consider this occupation for the Wales-only SOL. They noted their recommendation was based on their stakeholder engagement and analysis using the shortage indicators to a 3-digit SOC level. However, we have not received detailed evidence on the drivers of shortage and any actions taken to mitigate shortage for this occupation from stakeholders at this time.

## Recommendation

6F.58 **We do not recommend adding SOC code 3216 (dispensing opticians) to the SOL.** The RQF3-5 shortage rank is nearly in the bottom third (89<sup>th</sup>). The occupation has had a relatively high job postings to employee ratio compared to the median of eligible occupations, exceeding it in every one of the last seven years.

6F.59 The occupation has a below average proportion of employees born in the EEA (five per cent compared to seven per cent for the workforce as a whole) suggesting that employers are less reliant on migrants, and we received limited stakeholder evidence.

## SOC 3217: Pharmaceutical technicians

Summary table: SOC 3217 Pharmaceutical technicians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	4%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	8%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	£20,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	High																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-5.3%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.55																		
2013/14	0.95																		
2014/15	1.00																		
2015/16	0.95																		
2016/17	0.80																		
2017/18	0.85																		
2018/19	0.95																		
2019/20	1.15																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	101																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6F.60 We received three stakeholder submissions requesting this occupation be placed on the SOL.
- 6F.61 We received a recommendation from the Welsh Government to consider this occupation for the Wales-only SOL. They noted their recommendation was based on their stakeholder engagement and analysis using the shortage indicators to a 3-digit SOC level. However, we have not received detailed evidence on the drivers of shortage and any actions taken to mitigate shortage for this occupation from stakeholders at this time.
- 6F.62 We received two other stakeholder submissions requesting this occupation be placed on the SOL, but no supporting arguments were advanced.

## Recommendation

- 6F.63 **We do not recommend adding SOC code 3217 (pharmaceutical technicians) to the SOL.** The occupation ranks low on RQF3-5 shortage indicators (101<sup>st</sup>) and job postings to employee ratio roughly mirrors that of all the median of all eligible occupations. There was limited stakeholder evidence and the occupation is also less reliant on people born outside the UK than average.

## SOC 3218: Medical and dental technicians

Summary table: SOC 3218 Medical and dental technicians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	7%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£27,400																		
25th percentile full-time annual wage (ASHE, 2019)	£23,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	Pay scales apply																		
Minimum salary required with SOL points	Pay scales apply																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	High																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-24.5%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.8</td> </tr> <tr> <td>2013/14</td> <td>2.2</td> </tr> <tr> <td>2014/15</td> <td>2.7</td> </tr> <tr> <td>2015/16</td> <td>3.1</td> </tr> <tr> <td>2016/17</td> <td>2.3</td> </tr> <tr> <td>2017/18</td> <td>3.1</td> </tr> <tr> <td>2018/19</td> <td>2.4</td> </tr> <tr> <td>2019/20</td> <td>2.6</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.8	2013/14	2.2	2014/15	2.7	2015/16	3.1	2016/17	2.3	2017/18	3.1	2018/19	2.4	2019/20	2.6
Year	Ratio																		
2012/13	1.8																		
2013/14	2.2																		
2014/15	2.7																		
2015/16	3.1																		
2016/17	2.3																		
2017/18	3.1																		
2018/19	2.4																		
2019/20	2.6																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	64																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6F.64 We received three stakeholder submissions in our CfE.
- 6F.65 A stakeholder in the health and social care sector reported that the Association for Respiratory Technology and Physiology (ARTP) of NHS Jobs (2020) found that over 50 per cent of all vacancies are not successfully recruited to, and that at Band 5 level (£24,907 in the UK except Scotland where £25,100), over 75 per cent of advertised roles resulted in no suitable applicant being identified.
- 6F.66 One stakeholder highlighted that they struggled to find suitable candidates at the appropriate level and that without EU staff they will receive lower quality candidates. However, given that the occupation's salary threshold is subject to mandatory pay scales, they would not be able to recruit EU candidates (or any other migrants) on a lower salary through the SOL than through the Skilled Worker route anyway.
- 6F.67 We received a recommendation from the Welsh Government to consider this occupation for the Wales-only SOL. They noted their recommendation was based on their stakeholder engagement and analysis using the shortage indicators to a 3-digit SOC level.

## Recommendation

- 6F.68 **We do not recommend adding SOC code 3218 (medical and dental technicians) to the SOL.** This occupation ranks towards the middle of the RQF3-5 rankings (64<sup>th</sup>). Whilst the vacancy concerns noted in the submissions are supported by the relatively high ratio of job postings to employees, the shortage indicators are roughly average, as are the share of workers who are born outside the UK.

## SOC 3219: Health associate professionals

Summary table: SOC 3219 Health associate professionals n.e.c.																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	2%																		
Share of employees born outside the EEA (APS, 2017-19)	11%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	12%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£20,500																		
25th percentile full-time annual wage (ASHE, 2019)	£17,100																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	Pay scales apply																		
Minimum salary required with SOL points	Pay scales apply																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	-																		
Proximity to others	-																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-7.9%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>3.0</td> </tr> <tr> <td>2013/14</td> <td>3.3</td> </tr> <tr> <td>2014/15</td> <td>5.1</td> </tr> <tr> <td>2015/16</td> <td>5.2</td> </tr> <tr> <td>2016/17</td> <td>5.0</td> </tr> <tr> <td>2017/18</td> <td>4.5</td> </tr> <tr> <td>2018/19</td> <td>4.6</td> </tr> <tr> <td>2019/20</td> <td>6.2</td> </tr> </tbody> </table>		Year	Ratio	2012/13	3.0	2013/14	3.3	2014/15	5.1	2015/16	5.2	2016/17	5.0	2017/18	4.5	2018/19	4.6	2019/20	6.2
Year	Ratio																		
2012/13	3.0																		
2013/14	3.3																		
2014/15	5.1																		
2015/16	5.2																		
2016/17	5.0																		
2017/18	4.5																		
2018/19	4.6																		
2019/20	6.2																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	116																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

6F.69 We received a recommendation from the Welsh Government to consider this occupation for the Wales-only SOL. They noted their recommendation was based on their stakeholder engagement and analysis using the shortage indicators to a 3-digit SOC level. However, we have not received detailed evidence on the drivers of shortage and any actions taken to mitigate shortage for this occupation from stakeholders at this time.

## Recommendation

6F.70 **We do not recommend adding SOC code 3219 (health associate professionals) to the SOL.** The occupation has seen a persistently high ratio job postings per employee. However, the occupation has a below average share of employees born outside the UK and has a low RQF3-5 shortage ranking (116<sup>th</sup>). There is also limited stakeholder evidence.

## SOC 6121: Nursery nurses and assistants

Summary table: SOC 6121 Nursery nurses and assistants																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.8%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	4%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	21%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£17,000																		
25th percentile full-time annual wage (ASHE, 2019)	£14,700																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	41%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-17.8%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.9</td> </tr> <tr> <td>2013/14</td> <td>0.95</td> </tr> <tr> <td>2014/15</td> <td>1.0</td> </tr> <tr> <td>2015/16</td> <td>0.95</td> </tr> <tr> <td>2016/17</td> <td>0.9</td> </tr> <tr> <td>2017/18</td> <td>0.85</td> </tr> <tr> <td>2018/19</td> <td>0.75</td> </tr> <tr> <td>2019/20</td> <td>0.75</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.9	2013/14	0.95	2014/15	1.0	2015/16	0.95	2016/17	0.9	2017/18	0.85	2018/19	0.75	2019/20	0.75
Year	Ratio																		
2012/13	0.9																		
2013/14	0.95																		
2014/15	1.0																		
2015/16	0.95																		
2016/17	0.9																		
2017/18	0.85																		
2018/19	0.75																		
2019/20	0.75																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	47																		
<b>Recommendation</b>																			
Recommend adding entire occupation to Scotland-only SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6F.71 We received evidence from the Scottish Government's response to the CfE relating to the early learning and childcare sector. The Scottish Government have committed to increase the provision of funded Early Learning and Childcare from 600 to 1,140 hours per annum for all three and four-year olds, and eligible two-year olds by 2020. One stakeholder reported that this will require an extra 4,200 workers, and another that it would require between 8,000 and 11,000 additional workers<sup>163</sup>.

## Recommendation

6F.72 **We recommend adding SOC code 6121 (nursery nurses and assistants) to the Scotland-only SOL.** Stakeholders have provided evidence that the commitment to provide early learning and childcare has increased the demand for workers in this occupation. Whilst the commitment is temporarily paused due to COVID-19, stakeholders noted it was to be reintroduced in the future.

6F.73 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 80th percentile of full-time earnings in this occupation, meaning that 80 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

6F.74 **We do not recommend adding SOC code 6121 (nursery nurses and assistants) to the UK-wide SOL.** Whilst the RQF3-5 shortage indicator rank is relatively high (47<sup>th</sup>), there is an absence of any stakeholder evidence of shortage in other areas of the UK and low ratio of job postings to employees for this occupation.

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<sup>163</sup> <https://www.gov.scot/binaries/content/documents/govscot/publications/independent-report/2020/03/implications-national-local-labour-markets-social-care-workforce-report-scottish-government-cosla/documents/early-learning-childcare-workforce-final-report-scottish-government-cosla/early-learning-childcare-workforce-final-report-scottish-government-cosla/govscot%3Adocument/early-learning-childcare-workforce-final-report-scottish-government-cosla.pdf>

## SOC 6141: Nursing auxiliaries and assistants

Summary table: SOC 6141 Nursing auxiliaries and assistants																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	6%																		
Share of employees born outside the EEA (APS, 2017-19)	17%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	16%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£21,200																		
25th percentile full-time annual wage (ASHE, 2019)	£18,100																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	Pay scales apply																		
Minimum salary required with SOL points	Pay scales apply																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	High																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	4%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	+6.4%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.5</td> </tr> <tr> <td>2013/14</td> <td>0.6</td> </tr> <tr> <td>2014/15</td> <td>0.7</td> </tr> <tr> <td>2015/16</td> <td>0.75</td> </tr> <tr> <td>2016/17</td> <td>0.8</td> </tr> <tr> <td>2017/18</td> <td>0.8</td> </tr> <tr> <td>2018/19</td> <td>0.75</td> </tr> <tr> <td>2019/20</td> <td>0.75</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.5	2013/14	0.6	2014/15	0.7	2015/16	0.75	2016/17	0.8	2017/18	0.8	2018/19	0.75	2019/20	0.75
Year	Ratio																		
2012/13	0.5																		
2013/14	0.6																		
2014/15	0.7																		
2015/16	0.75																		
2016/17	0.8																		
2017/18	0.8																		
2018/19	0.75																		
2019/20	0.75																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	24																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6F.75 We received seven CfE submissions for this occupation.
- 6F.76 A representative organisation in the health and social care sector asked for the following roles to be placed on the SOL under this SOC code: Healthcare/Clinical support worker, Nursing support worker and Physiotherapy support worker. A representative body in the healthcare sector also highlighted the range of health and care settings, job titles and consequent differing levels of responsibility and qualification requirements within these roles. This can also be seen in the above summary table which shows that this SOC code makes up 1.2 per cent of total UK employees.
- 6F.77 A representative organisation in the healthcare sector detailed the current situation for 6141 roles; in Northern Ireland there were 545 vacancies for nursing and midwifery support roles in December 2019, which represents a vacancy rate of almost 10 per cent, and an increase of 2 per centage points since 2018<sup>164</sup>. Similarly, in NHS Scotland, vacancy rates for healthcare support workers employed in Bands 3-4 were 4.6 per cent, which represents the highest level of vacancy rates within this staff group in the last five years; vacancy rates were 1.6 per cent in March 2015<sup>165</sup>.
- 6F.78 NHS Wales reported that health care support workers make up 41 per cent of their workforce and with over half of them working in roles supporting nurses and Allied Health Professionals.
- 6F.79 A health and social care stakeholder reported that the number of physiotherapy support workers needs to increase to 35 per cent of registered practitioners – requiring a trebling of the current 6,000 - to ensure workforce proportions in nursing are met and to achieve planned service developments. Given COVID-19 limiting training, this goal is in jeopardy as physiotherapy education requires a minimum of 1,000 hours practice-based learning which is currently not possible. The resultant backlog of placements means students will graduate later, whilst this will also impact the number of new students higher education institutions can take in future years.
- 6F.80 It is also worth noting that we received some submissions which reiterated the need for nurses to remain on the SOL as developments in nursing were expected to have knock on effects for this occupation. For instance, one stakeholder reported that they were looking to replace nurses with Health Care Assistants (6141) because they needed to reduce their budget. It was cited that there are still difficulties recruiting enough nurses and the occupation relies heavily on migrants. A representative body in the healthcare sector stated that registered nurses are the staff group with the

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<sup>164</sup> Northern Ireland Department of Health, Northern Ireland NHS workforce

<sup>165</sup> ISD Scotland, Scotland NHS Workforce

highest proportion of non-UK EU nationals working in social care in Wales at nearly 18 per cent; a figure which is much higher than the sector average of 6.4 per cent.

6F.81 The Welsh Government referred to concerns expressed by employers in the sector, saying that *“59 per cent of employers were finding it increasingly difficult to recruit nurses, and 39 per cent reported more difficulties in retaining these qualified professionals”*<sup>166</sup>. The submission went to mention that their stakeholders also expected NHS nursing shortages in the social care sector in Wales post-Brexit and cited this occupation as a key area for consideration.

## Recommendation

6F.82 **We recommend adding SOC code 6141 (nursing auxiliaries and assistants) to the SOL.** The occupation is highly ranked in the RQF3-5 shortage indicator rankings (24th). The vacancy numbers cited by stakeholders and the critical role that many roles which fall under this SOC code are playing in tackling COVID-19 also support putting this occupation on the SOL. This occupation is subject to national pay scales and therefore will not have a salary threshold reduction as a result of being on the SOL.

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<sup>166</sup> <https://gov.wales/implications-brexit-social-care-and-childcare-workforce>

## SOC 6143: Dental nurses

Summary table: SOC 6143 Dental nurses																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	7%																		
Share of employees born outside the EEA (APS, 2017-19)	4%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	14%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£18,300																		
25th percentile full-time annual wage (ASHE, 2019)	£16,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	Pay scales apply																		
Minimum salary required with SOL points	Pay scales apply																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	High																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	37%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-9.0%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.35</td> </tr> <tr> <td>2013/14</td> <td>1.00</td> </tr> <tr> <td>2014/15</td> <td>0.80</td> </tr> <tr> <td>2015/16</td> <td>0.85</td> </tr> <tr> <td>2016/17</td> <td>0.80</td> </tr> <tr> <td>2017/18</td> <td>0.70</td> </tr> <tr> <td>2018/19</td> <td>0.95</td> </tr> <tr> <td>2019/20</td> <td>1.00</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.35	2013/14	1.00	2014/15	0.80	2015/16	0.85	2016/17	0.80	2017/18	0.70	2018/19	0.95	2019/20	1.00
Year	Ratio																		
2012/13	1.35																		
2013/14	1.00																		
2014/15	0.80																		
2015/16	0.85																		
2016/17	0.80																		
2017/18	0.70																		
2018/19	0.95																		
2019/20	1.00																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	66																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6F.84 We received two CfE submissions.
- 6F.85 A representative body in the health and social care sector reported that recruiting and retaining dental nurses is difficult due to regulatory requirements. General Dental Council registration and the cost of staying on the register were cited, as were the educational and continuing professional development requirements. They suggested that the low salary might also result in workers to leaving the profession.
- 6F.86 We received a recommendation from the Welsh Government to consider this occupation for the Wales-only SOL. They noted their recommendation was based on their stakeholder engagement and analysis using the shortage indicators to a 3-digit SOC level. However, we have not received detailed evidence on the drivers of shortage and any actions taken to mitigate shortage for this occupation from stakeholders at this time.

## Recommendation

- 6F.87 **We do not recommend adding SOC code 6143 (dental nurses) to the SOL.** This is given the limited stakeholder evidence, low share of workers born outside of the UK, its middling position in the RQF3-5 shortage rank (66<sup>th</sup>). The salary threshold for this occupation is based on pay scales and therefore there is more limited benefits of this occupation being placed on the SOL.



## SOC 6146: Senior care workers

Summary table: SOC 6146 Senior care workers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.3%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	14%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	11%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£20,300																		
25th percentile full-time annual wage (ASHE, 2019)	£16,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	2%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	+21.4%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.45</td> </tr> <tr> <td>2013/14</td> <td>0.40</td> </tr> <tr> <td>2014/15</td> <td>0.50</td> </tr> <tr> <td>2015/16</td> <td>0.45</td> </tr> <tr> <td>2016/17</td> <td>0.45</td> </tr> <tr> <td>2017/18</td> <td>0.55</td> </tr> <tr> <td>2018/19</td> <td>0.45</td> </tr> <tr> <td>2019/20</td> <td>0.50</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.45	2013/14	0.40	2014/15	0.50	2015/16	0.45	2016/17	0.45	2017/18	0.55	2018/19	0.45	2019/20	0.50
Year	Ratio																		
2012/13	0.45																		
2013/14	0.40																		
2014/15	0.50																		
2015/16	0.45																		
2016/17	0.45																		
2017/18	0.55																		
2018/19	0.45																		
2019/20	0.50																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	88																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6F.88 We received 15 CfE submissions on this SOC code.
- 6F.89 According to Skills for Care estimates, staff turnover rose by 8.4 percentage points to 22 per cent from 2012/13 to 2018/19. Skills for Care calculated the mean salary to be £23,700 for the 2,600 workers in this occupation employed by a local authority and £17,600 for the 85,000 employed by the independent sector. So, even with placement on the SOL which would reduce the salary threshold to £20,480, it would only be plausible for local authorities to employ migrants in senior care worker roles with current pay.
- 6F.90 A representative body in the care sector highlighted that for care employers to pay the minimum salary threshold they would need to pay approximately £13.60 per hour, which they said was far higher than the sector could afford to pay for a senior carer, based on the funding received.
- 6F.91 Another such organisation acknowledged that although pay, reward and recognition all needed to be addressed, the need for a continued supply of international staff to meet the need for skilled and trained staff in the social care sector in the context of rising demand was paramount.
- 6F.92 The Welsh Government highlighted that there were an excessive number of vacancies across the social care sector. They referred to evidence received from employers, saying that 58 per cent of registered social care providers had reported difficulties in recruiting to vacancies, with 28 per cent indicating it had become very difficult.<sup>167</sup> The Welsh Government discussed the aging population in Wales driving an increase in the need for care, and evidence from their stakeholders indicating that potential new recruits were less likely to join the sector because of concerns about the risks of contracting COVID-19 and that existing care workers could leave the sector for jobs with less responsibility and risk. The Welsh Government also highlighted the 'We Care Wales' campaign as an example of efforts to attract suitably skilled people with the "*right values*" to work in caring roles.

## Recommendation

- 6F.93 **We recommend that SOC code 6146 (senior care workers) be added to the SOL.** The data provided in the summary table above does not suggest that the occupation is particularly in shortage; the job postings per employee have been roughly half that of the average for the economy and the shortage indicator rank falls in the bottom 40 per cent.

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<sup>167</sup> <https://gov.wales/implications-brexit-social-care-and-childcare-workforce>

6F.94 However, the numerous stakeholder submissions and the vacancy and staff turnover estimates provided in these, COVID-19's effects on social care (highlighted by the many submissions related to care workers) and the state of social care outlined in the sector overview suggest that employers are struggling to employ sufficient senior care workers. We are also mindful of the high public value of such roles.

6F.95 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 54th percentile of full-time earnings in this occupation, meaning that 54 per cent of full-time employees in this occupation in the UK earn less than the salary threshold. So, at the margin, reducing the salary threshold to £20,480 from £25,600 will allow some limited employment of migrants to these roles and ease the shortages. However, this will not radically alter the difficulties in recruitment for this occupation given that the SOL salary threshold is very close to the median salary.

## 6G: Other energy and environmental service

### occupations

#### Introduction

- 6G.1 This section covers three RQF3-5 occupations which can be broadly defined as energy and environmental service occupations, these are:
- i. Waste disposal and environmental service managers (1255)
  - ii. Energy plant operatives (8124)
  - iii. Water and sewerage plant operatives (8126)
- 6G.2 This section examines the characteristics of the occupations under review, and is followed by an assessment of shortages for the three occupations and recommendations about whether the occupations should be included on the SOL.
- 6G.3 This group of occupations operate across multiple sectors. Employment is concentrated in the Electricity, gas, steam & air conditioning supply (SIC 35) sector, Water supply, sewerage, waste & remediation activities (SIC 36-39) sector, Wholesale and retail sector (SIC 45-47) and Other manufacturing (SIC 12-33).

#### Sector overview

- 6G.4 This section examines pay and employment characteristics of the energy and environmental service occupations under consideration: SOC 1255 waste disposal and environmental service managers, SOC 8124 energy plant operatives and SOC 8126 water and sewerage plant operatives.
- 6G.5 The occupations in this group cover around 28,400 jobs in the UK in total. There is a higher proportion of self-employment in waste disposal and environmental service manager (29 per cent) jobs than the average for all occupations (16 per cent) in the economy. All occupations under review have a higher than average share of UK- born workers (Table 6G.1).

**Table 6G.1: Employment in selected occupations**

Occupation	Total employment	% who are self employed	% born in EEA (ex. UK)	% born outside EEA	% born in UK
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Waste disposal and environmental services managers	12,600	29%	6%	-	93%
Water and sewerage plant operatives	10,900	-	-	5%	93%
Energy plant operatives	5,000	15%	-	-	96%

Source: Annual Population Survey (APS), 2017-19

All estimates include all employment, including those who are self-employed.

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution.

Non-reported estimates are due to insufficient sample sizes.

**6G.6** The energy and environmental service occupations pay higher than the median gross annual pay for full-time employees for all RQF skill levels (£30,400)<sup>168</sup>, with waste disposal and environmental services managers paying the highest of all occupations under review in this group. Water and sewerage plant operatives saw a growth in pay of 4% from 2016-2019, adjusting for inflation (Table 6G.2).

**Table 6G.2: Pay in selected occupations**

Occupation	Median gross annual pay for full-time employees 2019	25 <sup>th</sup> percentile of gross annual pay for full-time employees 2019	Pay growth 2016-2019 adjusted for inflation
Waste disposal and environmental services managers	£42,500	£32,900	-
Water and sewerage plant operatives	£30,800	£25,000	+4%
Energy plant operatives	£33,700	£23,900	0%

Source: ASHE (2019)

Non-reported estimates are due to insufficient sample sizes

<sup>168</sup>Annual survey of hours and earnings (ASHE), 2019.

## Drivers of Shortages

- 6G.7 This section examines issues that may drive shortages of workers in the energy and environmental service occupations.
- 6G.8 Most of the responses that we received from the Call for Evidence (CfE) were from organisations that were part of or represented the waste and recycling industries. Stakeholders widely reported shortages of SOC 9235 – refuse and salvage occupations, however this occupation is not in scope for review because it is skilled below RQF3-5 level, for a further discussion see Chapter 5.
- 6G.9 A mismatch between skills needed by employers and availability within the labour market may lead to shortages. Stakeholders responding to the CfE said there were shortages of engineering, technical/specialist and managerial skills. A report by the Department for Education (DfE) into apprenticeships in England said that most sectors had fewer apprenticeship starts in 2018/19 compared to 2016/17 before the apprenticeship levy was introduced<sup>169</sup>.

*“For the organisation’s environmental technician roles which require specialist skills and experience, there is a lack of applicants with skills and experience relating to landfill, hazardous waste, waste management, industrial energy, CHP, decommissioning...”*

Representative Organisation; Waste and Recycling Sector; Northern Ireland

- 6G.10 Government environmental policies such as the net zero target of reducing greenhouse gas emissions by 2050 and increased investment into infrastructure may lead to a growth in jobs<sup>170</sup>. The Northern Ireland Executive said skilled workers may be needed in the sector(s) to support growth for clean energy jobs.
- 6G.11 Other factors that are, or may be, leading to shortages of workers may be the perceived attractiveness of industries such as waste and recycling. Stakeholders reported difficulties in attracting local workers because of unclean work environments, unsociable hours and image problems. Representative organisations for the sector also cited image problems as being an issue for attracting relevant skilled workers<sup>171</sup>.

*“Stigma around sector: there is a stigma around working in the waste and environmental services sector, which has known lower salaries and is less attractive than competitor sectors.”*

Representative Organisation; Waste and Recycling Sector; Northern Ireland

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<sup>169</sup>

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/871769/Apprenticeships\\_in\\_England\\_by\\_industry\\_characteristics\\_2018to2019\\_final.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/871769/Apprenticeships_in_England_by_industry_characteristics_2018to2019_final.pdf)

<sup>170</sup> <https://www.gov.uk/government/news/business-secretary-leads-economic-recovery-roundtables>

<sup>171</sup> <https://www.euskills.co.uk/about/energy-utilities-skills-partnership/skills-strategy-2020/>

## COVID- 19 Impacts

- 6G.12 The impacts of COVID-19 on the energy and environmental service occupations are unclear as limited evidence was received from responses to the CfE. Stakeholders responding to the CfE reported difficulties with operating/delivering services at materials recovery facilities (MRF's) because of early lockdown restrictions. The lockdown restrictions also impacted the availability of EEA workers, which stakeholders said represented a large share of workers within this sector.
- 6G.13 Water and sewerage plant operatives are largely concentrated in the utilities sectors (SIC 35-39)<sup>172</sup>. The ONS reported that of the businesses surveyed in the water supply sector, 98 per cent had been trading for more than the last two weeks or had started trading again within the last two weeks after a pause in trading (10 to 23 August 2020). This was slightly higher than the average for all sectors (96 per cent)<sup>173</sup>.
- 6G.14 All occupations under review ranked low for exposure to diseases, but these occupations were ranked at medium risk for proximity to others according to the ONS classification<sup>174</sup>.

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<sup>172</sup> Around three quarters of water and sewerage plant operatives and around half of waste disposal and environmental service managers are employed in the utilities sectors.

<sup>173</sup><https://www.ons.gov.uk/businessindustryandtrade/business/businessservices/bulletins/coronavirusandtheeconomicimpactsontheuk/10september2020>

<sup>174</sup><https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/whichoccupationshavethehighestpotentialexposuretothecoronaviruscovid19/2020-05-11>

## SOC 1255: Waste disposal and environmental services managers

Summary table: SOC 1255 Waste disposal and environmental services managers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	4%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£42,500																		
25th percentile full-time annual wage (ASHE, 2019)	£32,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£32,900																		
Minimum salary required with SOL points	£26,320																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.28</td> </tr> <tr> <td>2013/14</td> <td>0.42</td> </tr> <tr> <td>2014/15</td> <td>0.25</td> </tr> <tr> <td>2015/16</td> <td>0.40</td> </tr> <tr> <td>2016/17</td> <td>0.43</td> </tr> <tr> <td>2017/18</td> <td>0.38</td> </tr> <tr> <td>2018/19</td> <td>0.25</td> </tr> <tr> <td>2019/20</td> <td>0.32</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.28	2013/14	0.42	2014/15	0.25	2015/16	0.40	2016/17	0.43	2017/18	0.38	2018/19	0.25	2019/20	0.32
Year	Ratio																		
2012/13	0.28																		
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2015/16	0.40																		
2016/17	0.43																		
2017/18	0.38																		
2018/19	0.25																		
2019/20	0.32																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	84																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

- 6G.15 We received three responses from representative organisations and one from an individual organisation to the CfE. All organisations were from waste and recycling industries and no specific information was given for SOC 1255 - waste disposal and environmental services managers. Stakeholders reported on issues within the waste and recycling industry such as difficulties in attracting local workers, difficulties in retaining workers, inability to fully automate roles within the materials recovery facilities (MRF's), and skills shortages.
- 6G.16 Stakeholders widely reported difficulties in filling SOC 9235 - refuse and salvage occupations or the manual sorting of waste and recycling. Stakeholders reported a reliance on EEA workers to fill these roles, however this occupation is ineligible for review as it skilled below RQF3-5 level. The Northern Ireland Government reported possible skills needs to support growth in green jobs more generally.

## Recommendation

- 6G.17 **We do not recommend adding SOC code 1255 (waste disposal and environmental service managers) to the SOL.** It ranks amongst the middle of the RQF3-5 shortage indicators (84<sup>th</sup>) and the online job posts to employee ratio is been below the median of eligible occupations. We received limited stakeholder evidence that this occupation is in shortage.

## SOC 8124: Energy plant operatives

Summary table: SOC 8124 Energy plant operatives																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£33,700																		
25th percentile full-time annual wage (ASHE, 2019)	£23,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.65</td> </tr> <tr> <td>2013/14</td> <td>0.75</td> </tr> <tr> <td>2014/15</td> <td>1.00</td> </tr> <tr> <td>2015/16</td> <td>0.75</td> </tr> <tr> <td>2016/17</td> <td>1.00</td> </tr> <tr> <td>2017/18</td> <td>1.30</td> </tr> <tr> <td>2018/19</td> <td>1.40</td> </tr> <tr> <td>2019/20</td> <td>1.20</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.65	2013/14	0.75	2014/15	1.00	2015/16	0.75	2016/17	1.00	2017/18	1.30	2018/19	1.40	2019/20	1.20
Year	Ratio																		
2012/13	0.65																		
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2015/16	0.75																		
2016/17	1.00																		
2017/18	1.30																		
2018/19	1.40																		
2019/20	1.20																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	2																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6G.18 One individual organisation cited SOC 8124 Energy plant operatives as being in shortage, but no detailed information was given about why this occupation is or may be in shortage, or about actions that had been taken to try to alleviate any such shortages.

## Recommendation

- 6G.19 **We do not recommend adding SOC code 8124 (energy plant operatives) to the SOL.** It ranks high amongst the RQF3-5 shortage indicators (2<sup>nd</sup>), and the online job posts to employee ratio is higher than the median of eligible occupations from 2017/18. However, we do not recommend adding this occupation to the SOL because we received limited stakeholder evidence that this occupation is in shortage.

## SOC 8126: Water and sewerage plant operatives

Summary table: SOC 8126 Water and sewerage plant operatives																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	5%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	17%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£30,800																		
25th percentile full-time annual wage (ASHE, 2019)	£25,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
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Year	Ratio																		
2012/13	0.35																		
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2016/17	0.55																		
2017/18	0.33																		
2018/19	0.48																		
2019/20	0.50																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	26																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Summary of evidence

- 6G.20 Stakeholders responding to the CfE said that SOC 8126 – water and sewerage plant operatives were in shortage, but no further detailed information was given to explain why there were likely to be shortages and what actions had been taken to try to alleviate such shortages.

## Recommendation

- 6G.21 **We do not recommend adding SOC code 8126 (water and sewerage plant operatives) to the SOL.** It ranks high amongst the RQF3-5 shortage indicators (26th), and the online job posts to employee ratio has been below the median of eligible occupations. We received limited stakeholder evidence that this occupation is in shortage.

## 6H: Hospitality & leisure

### Introduction

6H.1 We have identified seven eligible occupations skilled below RQF6 that sit within the broad description of hospitality and leisure.

- i. Hotel and accommodation managers and proprietors (1221)
- ii. Restaurant and catering establishment managers and proprietors (1223)
- iii. Publicans and managers of licensed premises (1224)
- iv. Leisure and sports managers (1225)
- v. Travel agency managers and proprietors (1226)
- vi. Chefs (5434)
- vii. Catering and bar mangers (5436)

6H.2 Most of the employment across these seven occupations sits within the accommodation and food service activities sector (SICs 55 and 56). The two exceptions being leisure and sports managers and travel agency managers and proprietors. Overall, the seven occupations covered by this section account for around one quarter of all employment in the accommodation and food service activities sector<sup>175</sup> which we refer to as the hospitality sector.

### Sector overview

6H.3 Tables 6H.1 presents a comparison between some selected labour market statistics for the seven identified occupations, and for the wider labour market.

6H.4 The hospitality sector can be characterised as being a lower-paying sector, with higher turnover, a younger workforce, greater part-time working, a greater reliance on workers from EEA countries and with employment concentrated in occupations with lower training and qualification requirements when compared to the wider economy.

6H.5 Table 6H.2 below presents a pay comparison between selected occupations within this occupation group; from these statistics we can see real pay growth for most occupations between 2016 and 2019.

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<sup>175</sup> 3-year Annual Population Survey 2017-19

**Table 6H.1: Employment in selected occupations**

Occupation	Total employment	% who are self employed	% born in EEA (ex. UK)	% born outside EEA	% born in UK
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Hotel and accommodation managers and proprietors	69,500	60%	5%	8%	88%
Restaurant and catering establishment managers and proprietors	145,900	34%	13%	23%	64%
Chefs	252,800	7%	15%	27%	58%
Catering and bar managers	71,000	20%	10%	12%	78%
Publicans and managers of licensed premises	42,700	25%	7%	2%	91%
Leisure and sports managers	65,900	13%	5%	5%	90%
Travel agency managers and proprietors	8,800	20%	-	22%	78%

Source: APS (2017-19)

All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes

<b>Table 6H.2: Pay in selected occupations</b>			
<b>Occupation</b>	<b>Median gross annual pay for full-time employees 2019</b>	<b>25<sup>th</sup> percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
Hotel and accommodation managers and proprietors	£31,200	£21,800	+12%
Restaurant and catering establishment managers and proprietors	£25,400	£21,000	+2%
Chefs	£22,900	£18,900	+9%
Catering and bar managers	£22,000	£18,400	+3%
Publicans and managers of licensed premises	£28,000	£20,700	-3%
Leisure and sports managers	£31,500	£24,200	+1%
Travel agency managers and proprietors	-	£24,800	-

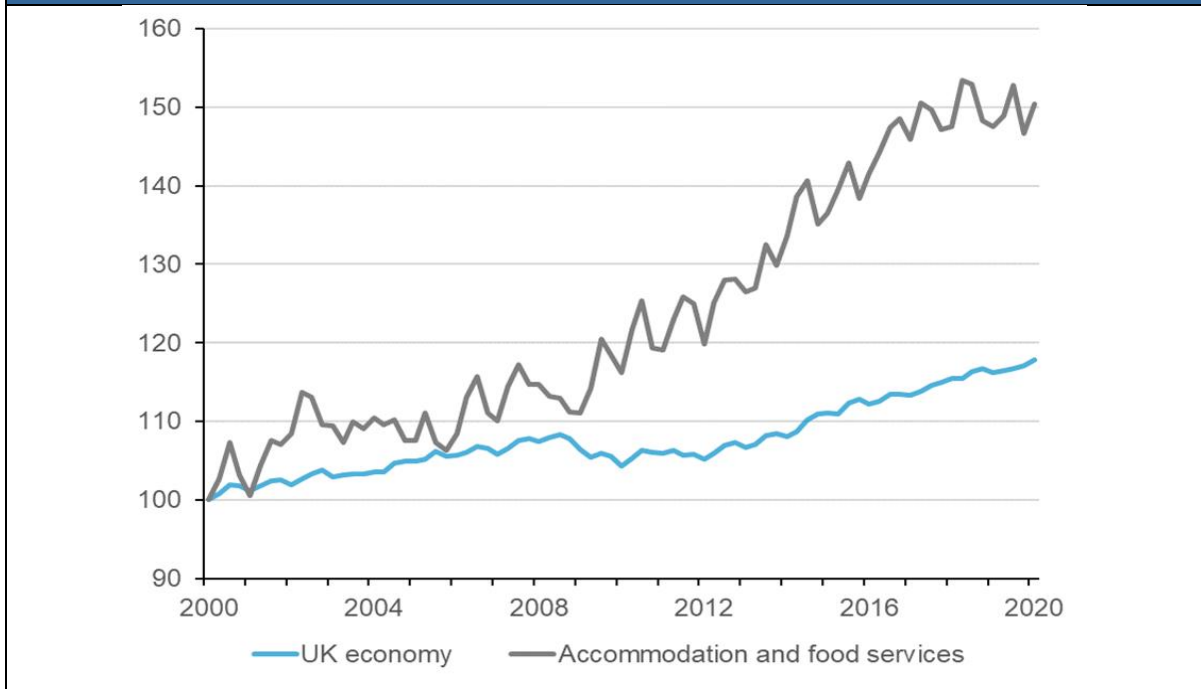
Source: ASHE (2019)

Non-reported estimates are due to insufficient sample sizes

**6H.6** Figure 6H.1 shows indexed wage growth in the accommodation and food services sector: this has been faster than for the economy.



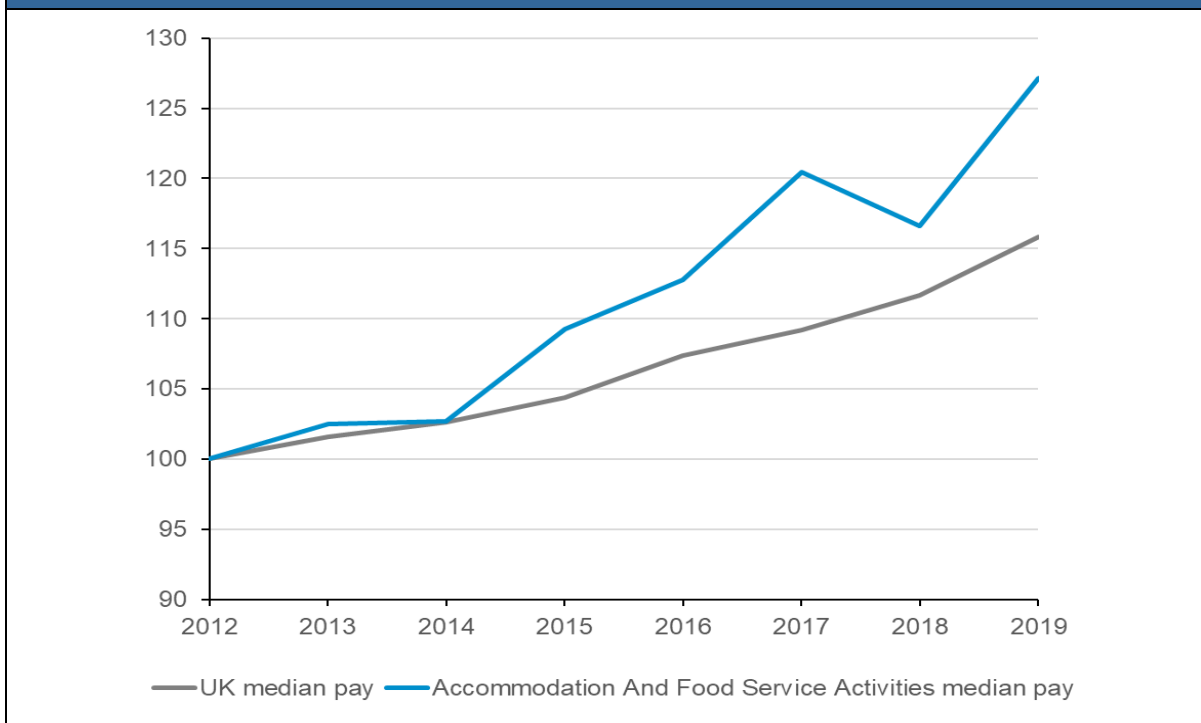
**Figure 6H.1: Indexed number of employees in sector (Jan-Mar 2000=100)**



Source: ONS - EMP14 Employees and self-employed by industry

6H.7 Figure 6H.2 below shows the employee growth within the accommodation and food services sector. This shows that employee growth has been faster in this sector than the overall economy.

**Figure 6H.2: Indexed wage level in sector (2012=100)**



Source: ASHE (2012-19)

## Shortages

- 6H.8 Figure 6H.3 below shows the number of vacancies per 100 employee jobs in the accommodation and food services sector and for all sectors (excluding agriculture, forestry and fishing). It highlights that vacancies have consistently run at a higher rate within the hospitality sector than for the economy as a whole; although the sector appears to have broadly tracked the overall tightening and slackening in the labour market over time.
- 6H.9 Additionally, the most recent Employer Skills Survey (ESS) from 2017<sup>176</sup> found that Hospitality was the sector with the highest vacancy rate, with vacancies as a proportion of employment being 5.7 per cent compared to 3.5 per cent in the UK overall<sup>177</sup>. Despite a higher overall vacancy rate, the share of those vacancies that were hard-to-fill was the same as the proportion for the labour market at 33 per cent<sup>178</sup>. Additionally, the share of vacancies related to applicants lacking skills, qualifications or experience (so called skill-shortage vacancies) was lower in hospitality than in the labour market as a whole – at 17 per cent compared to 23 per cent<sup>179</sup>.
- 6H.10 The hospitality sector was the sector that reported the highest share of its workforce as not being fully proficient in their jobs, at 6.7 per cent compared to 4.4 per cent overall<sup>180</sup>. The highest proportion of non-proficient staff in the hospitality sector was among elementary staff, at 8.4 per cent<sup>181</sup>. The main reason given for workers not being fully proficient was that they were new to their role, which is in line with the responses given by other sectors<sup>182</sup>. Hospitality employers were more likely to attribute skill-shortage vacancies to a lack of management and leadership skills, sales and customer skills, self-management skills and operational skills and less likely to cite digital skills when compared to employers overall<sup>183</sup>.

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<sup>176</sup> <https://www.gov.uk/government/publications/employer-skills-survey-2017-uk-report>

<sup>177</sup> ESS 2017 Table A.3.1 p.158

<sup>178</sup> ESS 2017 Table A.3.12 p.171

<sup>179</sup> ESS 2017 Table A.3.3 p.160

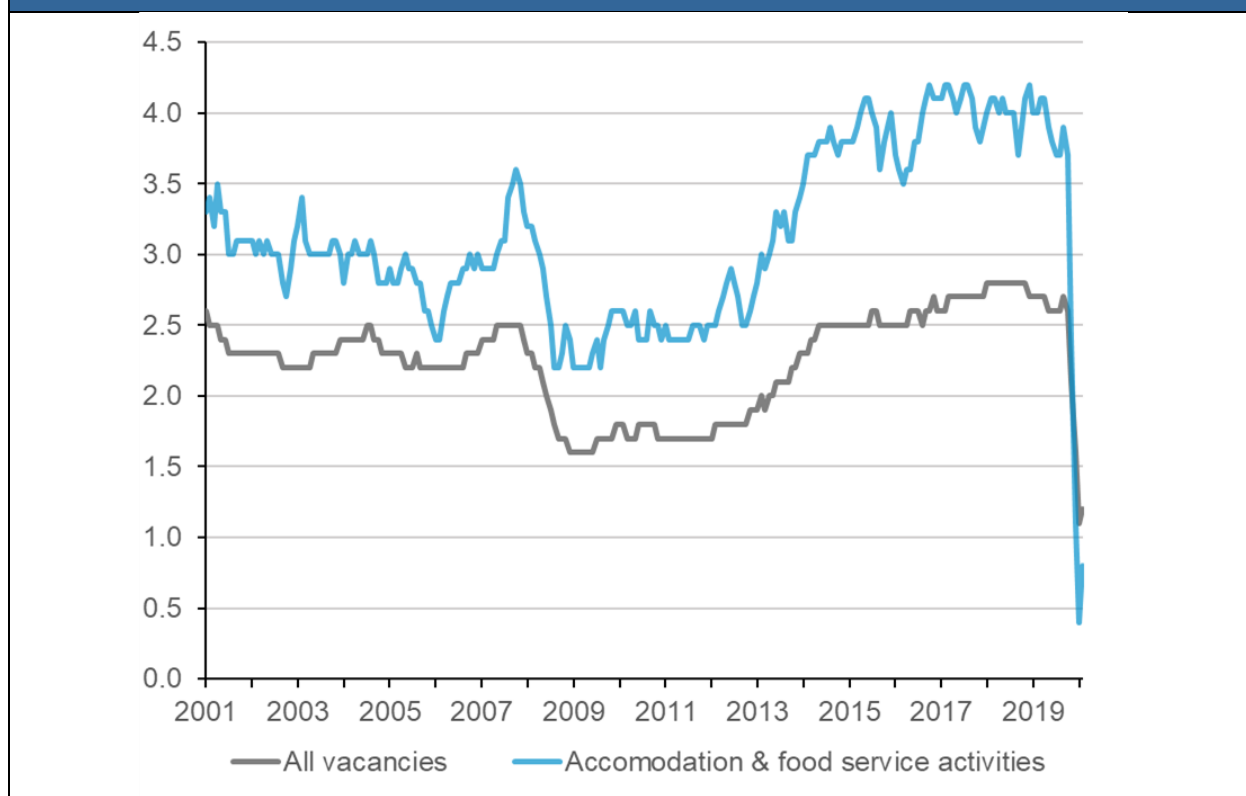
<sup>180</sup> ESS 2017 Figure 4.3 p.68

<sup>181</sup> ESS 2017 Figure 4.1 p.71

<sup>182</sup> ESS 2017 Table A.4.5 p.179

<sup>183</sup> ESS 2017 Data table, Table 47 and Table 51

**Figure 6H.3: Vacancy ratio for the Accommodation & Food Service Activities industry (vacancies per 100 employee jobs)**



Source: ONS - VACS02 Vacancies by industry

**6H.11** In summary even though the hospitality sector has had a higher vacancy rate than other sectors in recent years, those vacancies do not appear to be driven primarily by a lack of skills and, where that is not the case, the skills missing tend to be softer skills rather than technical ones. Given this and given the long-run nature of elevated vacancies in the sector seen in Figure 6H.3, shortages in hospitality are likely to be related to the nature of employment in the sector, such as a high turnover of staff, and therefore represent a structural rather than temporary phenomenon.

**6H.12** While this may be a reasonable characterisation of shortages in the sector, the nature of shortages in the seven occupations we are focused on may differ. As employment in the hospitality sector is strongly concentrated among occupations below RQF3 (see Table 6H.1), it is likely these types of roles will be key drivers of overall shortages in this sector.

**Table 6H.1 - Selected labour market statistics for the hospitality sector**

	<b>Accommodation and Food Service Activities (SIC 55 &amp; 56)</b>	<b>All sectors</b>
<b>Share of workforce by skill level of occupation<sup>2</sup></b>		
RQF6+	3%	32%
RQF3-5	46%	31%
RQF1-2	51%	38%
<b>Share of workforce by working pattern<sup>3</sup></b>		
Part-time	46%	26%
<b>Share of workforce by working arrangement<sup>4</sup></b>		
Zero Hour Contract	14%	3%
<b>Share of workforce by age<sup>2</sup></b>		
16-29 years old	47%	23%
<b>Share of workforce by length continuously employed<sup>3</sup></b>		
12 months or less	31%	16%

1. Annual Survey of Hours and Earnings 2019 Tables 4.5a and 4.7a.

2. Annual Population Survey 2019, main and second job, occupation RQF levels as given in Appendix J of the immigration rules, may not sum to 100% due to rounding.

3. Annual Population Survey 2019, main job only.

4. Labour Force Survey October-December 2019.

## Steps being taken to alleviate shortages

**6H.13** Again the 2017 ESS provides some evidence of the steps employers in the hospitality sector have taken in response to the high levels of vacancies they face. Amongst hospitality sector establishments which reported they had hard-to-fill vacancies, 46 per cent reported increasing advertising or recruitment spend in response, while 32 per cent said they made use of new recruitment methods<sup>184</sup>. By and large the response of hospitality employers to vacancies was in line with all employers.

**6H.14** Responses to the ESS also show that the hospitality sector was the sector most likely to try and fill vacancies by recruiting EU nationals, with 53 per cent of hospitality employers with hard-to-fill vacancies reporting doing so compared to 34 per cent of employers overall<sup>185</sup>. With the ending of free movement, the sectors reliance on EEA workers may represent a vulnerability and necessitate some difficult adjustments.

<sup>184</sup> ESS 2017 Data table, Table 71

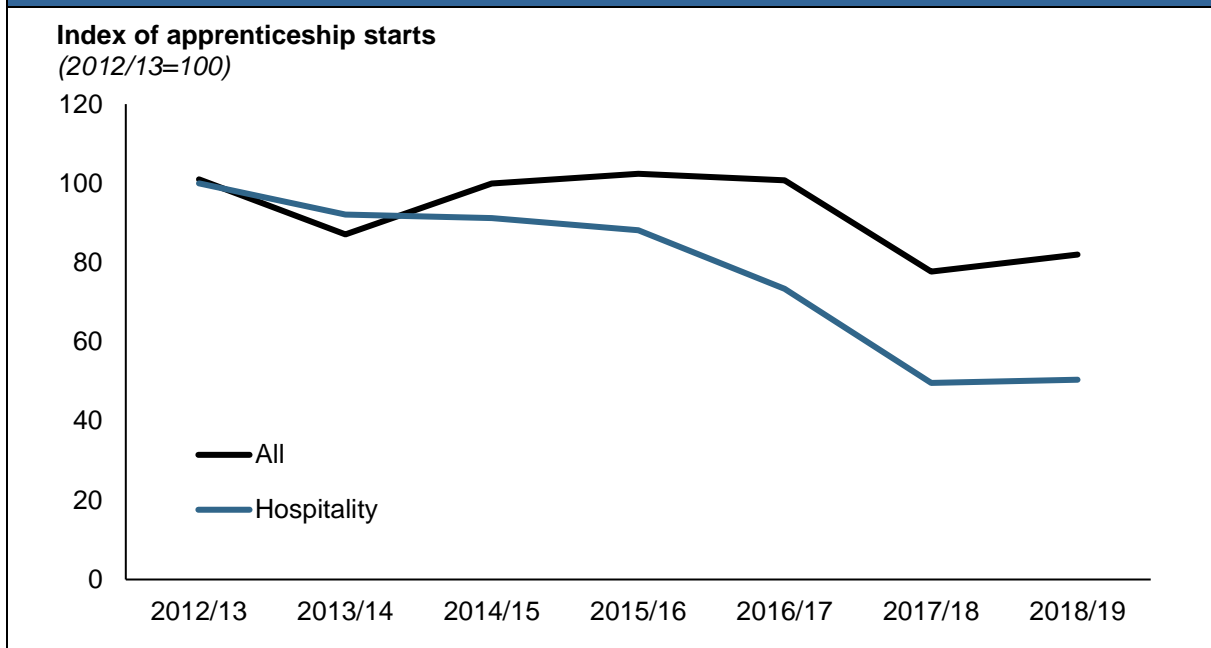
<sup>185</sup> ESS 2017 Figure 3.12, p.59

- 6H.15 A report by KPMG in 2017 presented the results of a survey of 136 British Hospitality Association members (now called UKHospitality)<sup>186</sup>. It found that the number one response when asked about the reasons behind the high levels of EEA national recruitment was that there is a “*lack of interest in work from local UK labour*”. The reports writers concluded that the reasons for the reported low UK-worker interest in hospitality roles included careers not being seen as viable in the long term, a perception that roles were low-paid and high-effort, a lack of desire to work seasonal jobs or in shift patterns and a lack of knowledge about opportunities in the industry.
- 6H.16 The same report goes on to consider what alternative pools of labour the hospitality sector might be able to recruit from if access to EEA workers diminishes. It concludes that; given low levels of unemployment, the characteristics and circumstances of those who are inactive, and the poor perception of the sector amongst UK workers; it will be difficult for the sector to attract workers either from those not currently employed or from those employed in other sectors. It also suggests that the potential for automation and productivity improvements in the sector were not significant enough to meet workforce demands on their own given the manual nature of many of the roles in hospitality.
- 6H.17 Given these difficulties the report points to improvements in conditions, such as higher pay and greater use of permanent contracts, increased use of employment programs, such as apprenticeships, and increased availability of training in technical skills (such as for chefs) as the actions hospitality employers could take to meet their workforce demands in the face of reduced access to EEA labour.
- 6H.18 We are not aware of any overwhelming evidence that the sector as a whole has made significant progress along these dimensions in improving their offer to UK workers. For example, Figure 6H.4 shows that the number of apprenticeship starts has fallen within the hospitality sector to a greater extent than they have overall – with starts falling even prior to the introduction of the apprenticeship levy. No doubt individual employers will have been taking steps to improve their offer, but more work will likely be needed before the sector can expect to meet its demand for labour, particularly once freedom of movement no longer applies.

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<sup>186</sup> <https://www.bha.org.uk/wordpress/wp-content/uploads/2017/05/BHA-EU-migration-final-report-170518-public-vSTC.pdf>

**Figure 6H.4: Number of apprenticeship starts index (2012/13=100)**



Source: Apprenticeships in England by industry characteristics, Department for Education

## COVID-19 impact

- 6H.19** As can be seen in Figure 6H.3 the three-month period between March and May 2020 saw the vacancy rate for the hospitality sector falling much more dramatically than for the economy as whole with a rate being recorded below that of the overall economy for the first time in the series.
- 6H.20** This recent sharp fall in vacancies reflects the impact of COVID-19 lockdown restrictions. We know that the hospitality sector has been especially negatively impacted by the crisis. A representative organisation told us that more than 75 per cent of their sectors workforce were on furloughed leave. A survey commissioned by the Resolution Foundation and Health Foundation carried out in early May found that the Hospitality sector was the worst hit in terms of employees being furloughed, losing their jobs and facing reduced hours<sup>187</sup>. HMRC statistics show that by the 31<sup>st</sup> May 2020 the accommodation and food services sector had made the second largest volume and value of claims against the coronavirus job retention scheme (CJRS)<sup>188</sup>.
- 6H.21** Furthermore, results from the ONS Business Impact of Coronavirus Survey show that the accommodation and food service sector has had one the highest shares of respondents reporting that they had temporarily closed or paused trading. This has however improved over time as restrictions have eased with 81 per cent of

<sup>187</sup> "The Full Monty", figure 13, page 26

<https://www.resolutionfoundation.org/app/uploads/2020/06/The-Full-Monty.pdf>

<sup>188</sup> <https://www.gov.uk/government/statistics/coronavirus-job-retention-scheme-statistics-june-2020>

respondents in the sector reporting they had paused trading in wave two of the survey (23 March to 5 April 2020) falling to 53 per cent in wave seven (1 June to 14 June).

**6H.22** Clearly the sector is currently facing very substantial difficulties and the timing of when business will be able to return to normal and when consumers will return to previous patterns of behaviour are inherently uncertain. In the short-term, labour supply is unlikely to present a constraint on the sector as it tries to return to pre-crisis levels of output. However, the longer activity remains depressed, the greater the risk that the existing supply of labour becomes disassociated from the sector. This has the potential to sustain recruitment difficulties as social distancing measures eventually end. Ultimately the longer-run impact of the COVID-19 crisis on the hospitality sector is uncertain and will depend on factors such as epidemiological conditions, government policy and consumer behaviour.

**6H.23** For the purposes of this review, and given the available data, we are largely restricted to considering the picture of labour supply and demand amongst occupations as they presented prior to COVID-19. As mentioned elsewhere we intend to review the SOL again next year, by which point we hope to have a much better understanding of the extent to which current circumstances translate into longer-run changes for the sector as well as for individual occupations.

## SOC 1221: Hotel and accommodation managers and proprietors

Summary table: SOC 1221 Hotel and accommodation managers and proprietors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	11%																		
Share of employees born outside the EEA (APS, 2017-19)	15%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£31,200																		
25th percentile full-time annual wage (ASHE, 2019)	£21,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	53%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.1</td> </tr> <tr> <td>2013/14</td> <td>1.0</td> </tr> <tr> <td>2014/15</td> <td>1.15</td> </tr> <tr> <td>2015/16</td> <td>1.4</td> </tr> <tr> <td>2016/17</td> <td>1.2</td> </tr> <tr> <td>2017/18</td> <td>1.5</td> </tr> <tr> <td>2018/19</td> <td>1.05</td> </tr> <tr> <td>2019/20</td> <td>0.95</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.1	2013/14	1.0	2014/15	1.15	2015/16	1.4	2016/17	1.2	2017/18	1.5	2018/19	1.05	2019/20	0.95
Year	Ratio																		
2012/13	1.1																		
2013/14	1.0																		
2014/15	1.15																		
2015/16	1.4																		
2016/17	1.2																		
2017/18	1.5																		
2018/19	1.05																		
2019/20	0.95																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	59																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

6H.24 We did not receive any responses through our Call for Evidence (CfE) online questionnaire that mentioned this occupation. Nor did we receive stakeholder evidence through other means that made explicit mention of this occupation.

## Recommendation

6H.25 **We do not recommend adding SOC code 1221 (hotel and accommodation managers and proprietors) to the SOL.** There was no overwhelming evidence of shortage to be found in the data alone and there was a lack of stakeholder representations for this occupation. The occupation ranks towards the middle of the RQF3-5 shortage rankings (59<sup>th</sup>). The ratio of online job posts to employment is in line with the median occupation. It is more reliant on EEA nationals than average with 11 per cent of the workforce being born in the EEA compared to seven per cent overall. However, it is also the case that around 60 per cent of those working in this occupation are self-employed<sup>189</sup> and that the salary threshold employers will face is significantly below median full-time earnings in the occupation.

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<sup>189</sup> Annual Population Survey 2017-19

## SOC 1223: Restaurant and catering establishment managers and proprietors

Summary table: SOC 1223 Restaurant and catering establishment managers and proprietors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.3%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	14%																		
Share of employees born outside the EEA (APS, 2017-19)	16%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	16%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£25,400																		
25th percentile full-time annual wage (ASHE, 2019)	£21,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	50%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-44.2%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>2.1</td> </tr> <tr> <td>2013/14</td> <td>1.3</td> </tr> <tr> <td>2014/15</td> <td>1.4</td> </tr> <tr> <td>2015/16</td> <td>1.5</td> </tr> <tr> <td>2016/17</td> <td>1.7</td> </tr> <tr> <td>2017/18</td> <td>1.2</td> </tr> <tr> <td>2018/19</td> <td>0.9</td> </tr> <tr> <td>2019/20</td> <td>0.6</td> </tr> </tbody> </table>		Year	Ratio	2012/13	2.1	2013/14	1.3	2014/15	1.4	2015/16	1.5	2016/17	1.7	2017/18	1.2	2018/19	0.9	2019/20	0.6
Year	Ratio																		
2012/13	2.1																		
2013/14	1.3																		
2014/15	1.4																		
2015/16	1.5																		
2016/17	1.7																		
2017/18	1.2																		
2018/19	0.9																		
2019/20	0.6																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	33																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			
Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution																			
Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%																			

## Stakeholder evidence

- 6H.26 We received little evidence regarding this occupation from stakeholders. A couple of respondents to our CfE online questionnaire highlighted this occupation, in particular restaurant managers and assistant managers, as an area of concern when it came to recruitment. These concerns seemed to be part of a wider set of concerns regarding the hospitality sector's access to labour. We did not hear, for example, what specific barriers there were to hiring from the domestic labour market for these roles.

## Recommendation

- 6H.27 **We do not recommend adding SOC code 1223 (restaurant and catering establishment managers and proprietors) to the SOL.** The occupation ranks relatively highly in the RQF3-5 shortage rankings (33<sup>rd</sup>), in part because of stronger pay and employment growth over the last year, suggesting some evidence of shortage relative to other occupations. The occupation is also more reliant on workers born overseas than average, with the share of the workforce born in EEA countries (excluding the UK and the Republic of Ireland) double that of the labour force more generally (14 per cent vs seven per cent). The salary threshold employers will face under the Skilled Worker route is approximately the median for full-time workers in the occupation, and the discounted threshold if placed on the SOL would be around the 25<sup>th</sup> percentile.
- 6H.28 We do not have enough information to know what, if any barriers, to hiring from the domestic labour market exist for this occupation other than the more general view expressed by stakeholders that UK workers do not see hospitality as an attractive sector to work in.

## SOC 1224: Publicans and managers of licensed premises

Summary table: SOC 1224 Publicans and managers of licensed premises																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	9%																		
Share of employees born outside the EEA (APS, 2017-19)	2%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	20%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£28,000																		
25th percentile full-time annual wage (ASHE, 2019)	£20,700																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	83%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.35</td> </tr> <tr> <td>2013/14</td> <td>0.15</td> </tr> <tr> <td>2014/15</td> <td>0.15</td> </tr> <tr> <td>2015/16</td> <td>0.15</td> </tr> <tr> <td>2016/17</td> <td>0.22</td> </tr> <tr> <td>2017/18</td> <td>0.15</td> </tr> <tr> <td>2018/19</td> <td>0.21</td> </tr> <tr> <td>2019/20</td> <td>0.18</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.35	2013/14	0.15	2014/15	0.15	2015/16	0.15	2016/17	0.22	2017/18	0.15	2018/19	0.21	2019/20	0.18
Year	Ratio																		
2012/13	0.35																		
2013/14	0.15																		
2014/15	0.15																		
2015/16	0.15																		
2016/17	0.22																		
2017/18	0.15																		
2018/19	0.21																		
2019/20	0.18																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	63																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6H.29 We received little information regarding this occupation from stakeholders. A representative organisation in the sector reported that its members had difficulties recruiting for roles in this occupation, but the focus of their submission was on food preparation roles.

## Recommendation

6H.30 **We do not recommend adding SOC code 1224 (publicans and managers of licensed premises) to the SOL.** There was limited stakeholder evidence to recommend placing the occupation on the SOL. This occupation ranks towards the middle of the RQF3-5 shortage rankings (63<sup>rd</sup>). A similar share of employees in the occupation and in the labour market more generally were born in the EEA, while the share born outside the EEA is lower in this occupation than more generally. However, there is considerable uncertainty given small sample sizes. The salary threshold faced by employers under the Skilled Worker route is below the median full-time annual earnings of employees in this occupation.

## SOC 1225: Leisure and sports managers

Summary table: SOC 1225 Leisure and sports managers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	5%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	12%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£31,500																		
25th percentile full-time annual wage (ASHE, 2019)	£24,200																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	58%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.35																		
2013/14	0.35																		
2014/15	0.30																		
2015/16	0.25																		
2016/17	0.30																		
2017/18	0.25																		
2018/19	0.30																		
2019/20	0.25																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	25																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6H.31 We received limited evidence regarding this occupation from stakeholders. A national casino and bingo operator did highlight the job roles of casino manager/bingo manager as being of concern. However, the main subject of their response focused around access to skilled croupiers and dealers, which fall under the occupation sports and leisure assistants (6211) rather than managers – an occupation that does not currently meet the RQF3 skills threshold of the Skilled Worker route.

## Recommendation

- 6H.32 **We do not recommend adding SOC code 1225 (leisure and sports managers) to the SOL.** The occupation ranks relatively highly on the RQF3-5 shortage indicators (25<sup>th</sup>) but is not unusually reliant on workers born overseas (although this is based on small sample sizes). The salary requirement under the Skilled Worker route would be below median full-time earnings but likely somewhat above the 25th percentile.

## SOC 1226: Travel agency managers and proprietors

Summary table: SOC 1226 Travel agency managers and proprietors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	16%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	8%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	£24,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.25</td> </tr> <tr> <td>2013/14</td> <td>0.10</td> </tr> <tr> <td>2014/15</td> <td>0.08</td> </tr> <tr> <td>2015/16</td> <td>0.15</td> </tr> <tr> <td>2016/17</td> <td>0.18</td> </tr> <tr> <td>2017/18</td> <td>0.08</td> </tr> <tr> <td>2018/19</td> <td>0.22</td> </tr> <tr> <td>2019/20</td> <td>0.20</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.25	2013/14	0.10	2014/15	0.08	2015/16	0.15	2016/17	0.18	2017/18	0.08	2018/19	0.22	2019/20	0.20
Year	Ratio																		
2012/13	0.25																		
2013/14	0.10																		
2014/15	0.08																		
2015/16	0.15																		
2016/17	0.18																		
2017/18	0.08																		
2018/19	0.22																		
2019/20	0.20																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	.																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

6H.33 We did not receive any stakeholder evidence specifically regarding this occupation.

## Recommendation

6H.34 **We do not recommend adding SOC code 1226 (travel agency managers and proprietors) to the SOL.** In terms of employment this is a very small occupation, with likely fewer than 10,000 people working within it. For this reason, we are unable to produce reliable estimates of the nature of the occupation using the survey data available to us. In addition, there was a lack of stakeholder evidence to suggest a shortage.

## SOC 5434: Chefs

Summary table: SOC 5434 Chefs																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.8%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	16%																		
Share of employees born outside the EEA (APS, 2017-19)	26%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	25%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£22,900																		
25th percentile full-time annual wage (ASHE, 2019)	£18,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	53%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-62.6%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>2.9</td> </tr> <tr> <td>2013/14</td> <td>2.2</td> </tr> <tr> <td>2014/15</td> <td>2.5</td> </tr> <tr> <td>2015/16</td> <td>2.4</td> </tr> <tr> <td>2016/17</td> <td>2.6</td> </tr> <tr> <td>2017/18</td> <td>2.5</td> </tr> <tr> <td>2018/19</td> <td>2.1</td> </tr> <tr> <td>2019/20</td> <td>1.8</td> </tr> </tbody> </table>		Year	Ratio	2012/13	2.9	2013/14	2.2	2014/15	2.5	2015/16	2.4	2016/17	2.6	2017/18	2.5	2018/19	2.1	2019/20	1.8
Year	Ratio																		
2012/13	2.9																		
2013/14	2.2																		
2014/15	2.5																		
2015/16	2.4																		
2016/17	2.6																		
2017/18	2.5																		
2018/19	2.1																		
2019/20	1.8																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	29																		
<b>Recommendation</b>																			
Recommend removing from SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6H.35 We received several responses that highlighted Chefs as an area of shortage through our CfE online questionnaire. Stakeholders mentioned several specific job titles such as 'head chef', 'sous chef', 'chef de partie', 'chef managers', 'kitchen porter' and 'senior pizzaiolo' (pizza chef).
- 6H.36 The issue of shortages of chefs is a long running one that the MAC has been aware of for some time, having recommended chefs for the SOL in the very first review in 2008. Respondents pointed to their own experience of struggling to recruit and alluded to industry reports and other studies demonstrating a high number of vacancies for chefs in the UK. As our shortage indicator E1<sup>190</sup> shows, the ratio of number of vacancies to number of employees was around 8.3 per cent for the occupation Chefs in 2017 compared to a ratio of 3.5 per cent in the UK labour market. The 2017 EES also reported that around 16 per cent of all vacancies in the hospitality sector were for Chefs<sup>191</sup> despite that occupation only accounting for around 11 per cent of total employment in the sector in the same year<sup>192</sup>. Finally, the number of vacancies for Chefs grew by around 19 per cent between 2015 and 2017 compared to 8.5 per cent in the labour market more broadly<sup>193</sup>.
- 6H.37 When asked why there is a shortage of chefs, respondents pointed to several issues. These included a view that the hospitality sector is not considered by many UK-workers as an attractive destination, with young people associating jobs like chefs with working long anti-social hours for low pay. Respondents also highlighted that there will always be a need for employers to hire chefs with specialist knowledge in certain cuisines and that these chefs can often only be sourced from overseas. According to respondents, this, combined with the current immigration rules, has made it difficult to recruit the chefs they need.
- 6H.38 Stakeholders described how even though employers can in theory recruit chefs through the existing Tier 2 (General) route, as a subset of chefs considered to be sufficiently skilled are already on the SOL, the associated salary threshold of £29,570 made this an unrealistic prospect for many. Respondents quoted salaries of anywhere between £17,000 and £27,000 and some mentioned that even the reduced salary threshold under the new Skilled Worker route of £25,600 would be too high in many cases. As is shown in the summary box above, median full-time annual earnings in the occupation were £22,900 in 2019. When asked why it would not be possible to

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<sup>190</sup> Measures the ratio between number of vacancies reported by the 2017 ESS and the total number of employees as reported by the 2017 APS

<sup>191</sup> Around 20,000 out of a total of 122,000 vacancies in the hospitality sector were for chefs in the 2017 ESS.

<sup>192</sup> Analysis of Annual Population Survey 2017; sector defined as SICs 55 and 56; main and 2<sup>nd</sup> jobs

<sup>193</sup> Comparison of ESS 2015 and ESS 2017

meet the minimum salary requirement in the new system, respondents largely pointed to issues of affordability given a competitive environment and low margins.

6H.39 A representative organisation, in their response, set out that the strong growth in the hospitality sector, particularly in the casual dining sector, as a key determinant of labour shortages for chefs. They also point to a very high turnover of staff, with a recent survey of their members suggesting an average length of service of under one year – although it is not clear this referred to chefs only. They suggested that seasonal demands, notably summer and Christmas, meant that being able to recruit additional staff quickly was important in meeting customer demand, and explained that the ratio of EU to UK workers in some pubs was much higher in the summer compared to other times of year.

6H.40 Several industry reports have also highlighted areas affecting the supply of chefs in the UK. For example, a 2017 report on chef shortages by the consultancy firm People 1<sup>st</sup><sup>194</sup> pointed to the strong growth in the demand for chefs, low apprenticeship numbers, a high dropout rate of student chefs and a high rate of chefs leaving the profession in response to poor terms and conditions as factors aggravating shortages.

6H.41 A 2019 report by Centre for London<sup>195</sup> looking at the market for chefs in London mirrored these findings. It also highlighted the view that there is a disconnect between what catering students learn in Further Education (FE) settings and the skills employers are looking for. The report highlighted a view, expressed by some of the 30 people interviewed for the study, that catering courses were too theoretical in their approach and that a key determinate of the success of aspirant chefs was their resilience in the face of difficult working conditions and long hours – something that could only be built through work experience and not in an educational setting. There was also the view that the range of skills taught were too narrowly technical when characteristics such as flair, teamwork and entrepreneurship are just as important. Finally, it was argued that the provision of catering training in London lacks differentiation – with many generalist FE colleges offering chef and catering courses but with little dedicated high-end training establishments outside of expensive private culinary schools.

6H.42 The Centre for London report also focused on the role that poor terms and conditions and hostile working environments have played in the high turnover of chefs in the sector. They point to long working hours, with many overtime hours going unpaid. They also report that, of those chefs responding to an industry survey<sup>196</sup>, nine out of ten said they had “*experienced or witnessed abuse in their careers*”. The report also raises questions over the extent to which working practises in often male dominated

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<sup>194</sup> <https://people1st.co.uk/getattachment/Insight-opinion/Latest-insights/21st-century-chef/Report-download/Full-report- The-chef-shortage-A-solvable-crisis.pdf>

<sup>195</sup> [https://www.centreforlondon.org/wp-content/uploads/2019/03/Kitchen\\_Skills.pdf](https://www.centreforlondon.org/wp-content/uploads/2019/03/Kitchen_Skills.pdf)

<sup>196</sup> [https://www.centreforlondon.org/wp-content/uploads/2019/03/Kitchen\\_Skills.pdf](https://www.centreforlondon.org/wp-content/uploads/2019/03/Kitchen_Skills.pdf)

professional kitchens represent barriers to female chefs' career aspirations and progression.

6H.43 When asked about the steps they were taking to help overcome shortages, respondents to the CfE online questionnaire tended to report that they were improving salaries, increasing training opportunities, increasing recruitment spend and using new recruitment channels, as well as recruiting non-UK nationals. Understandably, given the nature of the work chefs do, fewer respondents reported trying to automate roles or use less labour. Some respondents also pointed to the forthcoming catering T-level as one potential way that interest in catering as a profession among young people might improve going forward.

6H.44 A representative organisation said that recruiting overseas workers was one of the main ways employers dealt with shortages currently but also highlighted that most of its members offer apprenticeships at level 2, 3 and 4 with some planning to offer higher level apprenticeships in the future. However, they also noted that limited demand for these apprenticeships presented a barrier to their members making use of the funds available to them via the Apprenticeship Levy. Stakeholders also indicated that several wider efforts were being made to improve the image and awareness of hospitality careers, including chefs, among young people, for example the BPPA's Young Pub Chef of the Year award.

## Use of the SOL

6H.45 The occupation 'chefs, cooks' (5434 under SOC 2000) or 'chefs' (5434 under SOC 2010) have been on the SOL since its introduction. In the inaugural SOL report in 2008<sup>197</sup> the MAC concluded that the occupation 'chefs, cooks' was overall not skilled to the RQF3 threshold required of Tier 2 (General) applicants at the time. However, based on stakeholder evidence the MAC accepted the argument that employers would need to have access to chefs from outside the EEA. For that reason, a subset of chefs was identified that did meet the RQF3 threshold, estimated to be around one-third of chefs in the SOC. These skilled chefs were defined based on pay, with skilled chefs being added to the SOL on the requirement that they were paid at least £8.10 per hour (estimated to be approximately the 70<sup>th</sup> percentile for the occupation at the time).

6H.46 The evidence received that resulted in that decision centred, to a large extent, around specialist cuisines. Stakeholders argued that chefs preparing such cuisines needed to have specific knowledge and experience of the type of food being prepared and that these qualities are hard to teach to anyone without the relevant cultural background. The MAC was sceptical about some elements of this argument, but was worried that stopping the flow of non-EEA chefs into the UK could result in the sector facing adjustments that were too "*sudden and severe*" and so on balance recommended

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<sup>197</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/257245/shortageoccupationlistreport.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/257245/shortageoccupationlistreport.pdf)

skilled chefs be added to the SOL – making chefs eligibility for Tier 2 dependent on being on the SOL. At the same time the MAC was clear that it expected the sector to take steps to improve the training of chefs for these cuisines in the UK.

*“We were told by various individuals and groups that there was a willingness to engage in a longer-term strategy to address shortages. So far this has not happened. We look forward to the catering industry taking this on.”*

MAC; *Skilled, Shortage, Sensible*; p.173, Sep 2008

6H.47 In the following SOL review in 2009<sup>198</sup> the MAC expressed disappointment that it had not seen enough evidence of the sector making progress to train UK labour to meet shortages. Nonetheless skilled chefs were kept on the SOL subject to the additional requirement that migrants must have at least three years of relevant experience.

*“For the time being, skilled chefs remain on our recommended list. However, we have not yet seen fully convincing evidence that Chinese, Bangladeshi and Indian restaurants are making a concerted and sustained effort to train UK labour and, for reasons set out in the report, we are minded to remove skilled chefs from our recommended list in 2010 unless there is evidence of a coherent strategy to train substantial numbers of chefs being in place by then.”*

MAC; *Skilled, Shortage, Sensible*; p.1, Oct 2009

6H.48 The definition of skilled chefs was re-considered in March 2011<sup>199</sup> as part of the raising of the Tier 2 (General) skill threshold from RQF3 to RQF4. As part of this the MAC sought to identify only those chefs which met the new RQF4 requirement. These were determined to be chefs that were paid at least £28,260, had five years of relevant experience and did not work in a fast food or standard fare outlet. At the same time the Independent Chief Inspector of Borders and Immigration reported on incidents of caseworkers encountering migrants applying as skilled chefs but where caseworkers did not believe they met the criteria<sup>200</sup>. Additional requirements were then introduced on employers sponsoring migrant chefs. This included limiting the number and type of chefs that could be sponsored by any one establishment e.g. sous chefs were limited

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<sup>198</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/257249/mac-2nd-review-09.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/257249/mac-2nd-review-09.pdf)

<sup>199</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/257255/report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/257255/report.pdf)

<sup>200</sup> <https://www.gov.uk/government/publications/inspection-report-on-how-the-uk-border-agency-receives-and-uses-intelligence-may-2011>

to one for every four kitchen staff per establishment. Chefs were also reviewed as part of a SOL report later in 2011<sup>201</sup> and were kept on the SOL with the criteria unchanged.

6H.49 Shortages of chefs was once again considered as part of a full review of the SOL by the MAC in 2013<sup>202</sup>. Stakeholders again highlighted ongoing shortages of chefs with expertise in non-European cuisines. Some evidence of greater efforts to train UK workers was provided, with the expansion of apprenticeships and training programs. However, there was also scepticism among employers of the potential for these schemes to alleviate shortages given the low levels of interest UK workers had taken in the opportunities they were trying to offer. This disengagement was attributed to negative perceptions of the profession as requiring long hours and being associated with low pay. The MAC recommended that skilled chefs (RQF4+) remain on the SOL but with the minimum salary uprated to £29,570. This was in recognition of the need for the sector to have on-going access to top chefs from outside the EEA.

6H.50 Skilled chefs were also reviewed in the 2015<sup>203</sup> and 2019<sup>204</sup> SOL reports. In the 2015 report it was noted that, with the rise in the salary threshold and other requirements, stakeholders were reporting that they were finding it very difficult to recruit non-EEA chefs through Tier 2 (General) and that the shortage situation had exacerbated since 2011. The MAC recommended keeping skilled chefs on the SOL and left it to the government to decide if they wanted to commission a review of the criteria that applied to chefs. Finally, in the 2019 review the MAC recommended keeping chefs on the SOL but also recommended removing the condition that establishments offering a take-away service cannot use the SOL, reflecting changes in the industry.

6H.51 Figure 6H.5 below shows what impact these changes in eligibility and requirements had on employers use of Tier 2 (General) to sponsor migrants as chefs. It shows a sharp reduction in the number of Certificates of Sponsorship (CoS) being used to sponsor Chefs after the skills threshold was raised in 2011. We can also see this by looking at the share of total out-of-country<sup>205</sup> CoS skilled chefs accounted for. In 2010 approximately 15 per cent of all out-of-country CoS were being used to sponsor a migrant in a skilled chef role, this fell to around five per cent in 2011 and then around, or below, 0.5 per cent from each year onwards.

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<sup>201</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/257269/skilled-report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/257269/skilled-report.pdf)

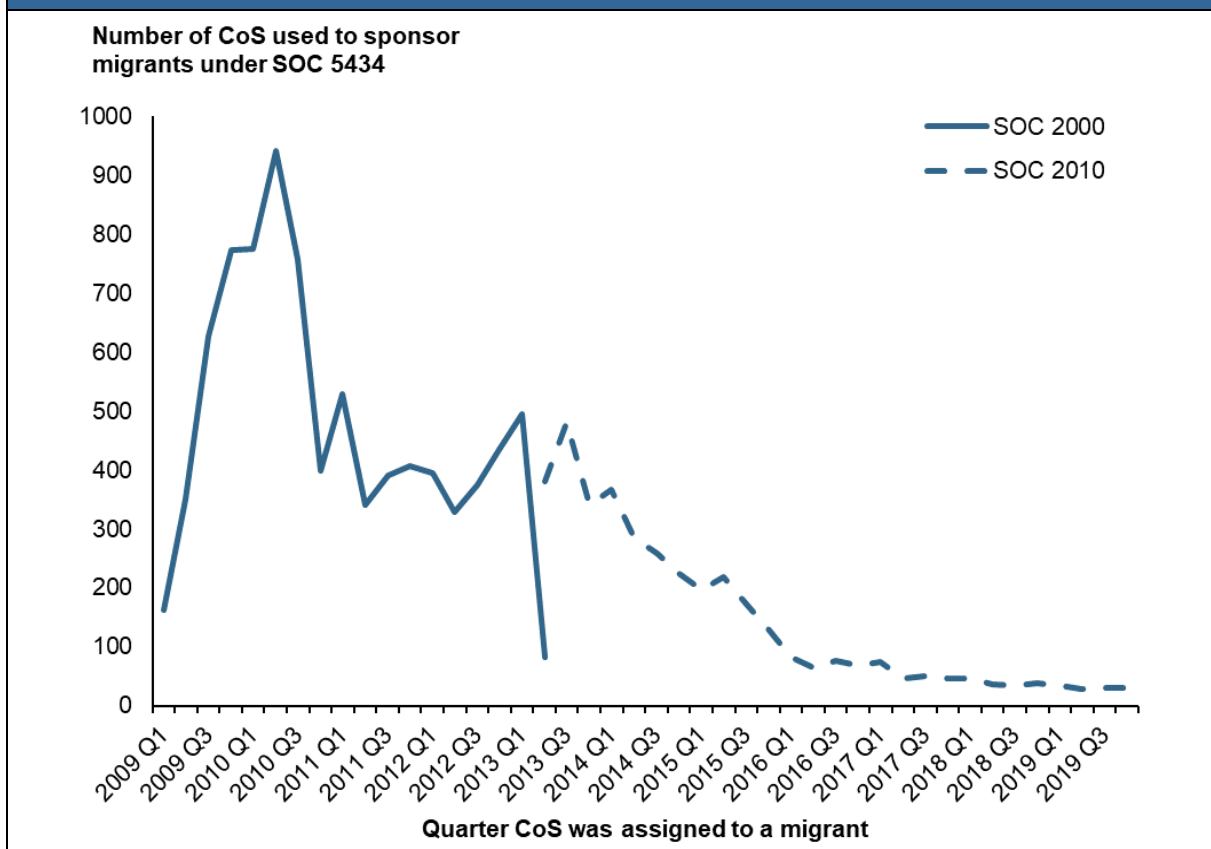
<sup>202</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/257241/mac-report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/257241/mac-report.pdf)

<sup>203</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/406775/Partial\\_review\\_of\\_the\\_SOL\\_for\\_UK\\_and\\_Scotland\\_Report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/406775/Partial_review_of_the_SOL_for_UK_and_Scotland_Report.pdf)

<sup>204</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/806331/28\\_05\\_2019\\_Full\\_Review\\_SOL\\_Final\\_Report\\_1159.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/806331/28_05_2019_Full_Review_SOL_Final_Report_1159.pdf)

<sup>205</sup>

**Figure 6H.5: Number of Certificates of Sponsorship (CoS) used to sponsor migrants under SOC code 5434 (Chefs) by the date the CoS was assigned**



Source: MAC analysis of Home Office management information; includes all CoS used for all reasons (e.g. including extensions, switching etc).

6H.52 With the skill threshold reverting to RQF3 under the new Skilled Worker route, there is a question regarding whether the occupation chefs (5434) should be considered as meeting the skills threshold in its entirety or not. In 2008 it was the MACs view was that it did not. However, that was based on the SOC 2000 occupation ‘chefs, cooks’ (5434). Under SOC 2010 this occupation was split up across separate occupations for chefs (5434) and cooks (5435) as well as catering and bar managers (5436), and to a lesser extent kitchen and catering assistants (9272). Despite this, calculating the top-down skilled indicators used in previous SOL reviews on 2019 data, it is still the case that the SOC 2010 occupation chefs (5434) only meets one out of the three thresholds required to be considered as meeting the RQF3 skill level<sup>206</sup>.

<sup>206</sup> The occupation Chefs (5434) is part of the SOC 2010 sub-major group 54 which is part of skill level 3 (out of four categories, with skill level 1 being the most skilled). It therefore passes the ONS skill indicator, however the share of workers in the occupation with RQF3 and above qualifications and the median hourly earnings in the occupation are below the thresholds for an RQF3 occupation using ASHE and APS 2019.



6H.53 As stated elsewhere, we hope to use the move from the SOC 2010 to SOC 2020 occupational taxonomies to review the skill levels assigned to individual occupations. For this reason, we do not intend on commenting on the skill level of chefs in this report.

6H.54 As the Home Office's July policy statement makes clear<sup>207</sup> it is the intention that the occupation chefs (5434) will be treated as being eligible for the Skilled Worker route in full regardless of whether it is included on the SOL or not. This means that employers will be able to sponsor a greater breadth of chef roles through the new route than they were able to under Tier 2 (General). Of course, at the same time free movement is ending and there is the potential for the difficulties employers have faced recruiting non-EEA migrants for specialist cuisines to be replicated among European migrants with regard to European cuisines.

## Recommendation

6H.55 **We recommend removing SOC code 5434 (chefs) from the SOL.** This is due to the reduced restrictions and lower salary threshold for chefs under the Skilled Worker route compared to Tier 2 (General), and the on-going and persistent concerns that not enough is being done to train chefs from within the domestic workforce.

6H.56 It is clear that there remains a shortage of chefs in the UK and that employers remain highly reliant on migrant workers to fill vacancies in this area. It is also the case that the salary threshold employers will face under the Skilled Worker route (£25,600) is well above the median full-time wage in the occupation, sitting at around the 70th percentile of full-time annual earnings<sup>208</sup>.

6H.57 However, we must also consider whether it remains sensible to use migrant labour to alleviate these shortages. The persistence of the shortage and the failure of employers to successfully improve the pipeline of suitably skilled applicants from within the domestic workforce combined with evidence of relatively poor terms and conditions and hostile working environments speaks against keeping chefs on the SOL – as this would in effect help to maintain the status quo. It also seems likely that in the short term there will be reduced demand for chefs as a result of COVID-19 as most forecasters currently predict a slow recovery for the hospitality sector.

6H.58 Set against this is the potential that without being placed on the SOL employers might struggle to meet consumer demand for high quality cuisine, especially speciality and ethnic cuisines – at least over the short to medium term. With all firms placed in the same position this could force an improvement in the pay of existing chefs and

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<sup>207</sup> <https://www.gov.uk/government/publications/uk-points-based-immigration-system-further-details-statement/uk-points-based-immigration-system-further-details-statement>

<sup>208</sup> Mean bite of experienced binding threshold between 2017 and 2019 based on proposed policy for the Skilled Worker route using ASHE.

encourage more into the profession but perhaps at the cost of more expensive meals for consumers.

6H.59 With a threshold at around the 70<sup>th</sup> percentile of full-time earnings, this more or less mirrors the position faced by employers who sought to employ chefs from outside the EEA prior to 2011 – a position which saw chefs account for 15 per cent of all out-country CoS in 2010. Clearly circumstances are different today, notably with the ending of free movement, and so the past may not be a good guide of the future. To that end we will continue to monitor the level of shortages of chefs and the steps employers are taking to improve the situation for the longer term and review this decision in our next SOL report in 2021.

## SOC 5436: Catering and bar managers

Summary table: SOC 5436 Catering and bar managers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	10%																		
Share of employees born outside the EEA (APS, 2017-19)	13%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	14%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£22,000																		
25th percentile full-time annual wage (ASHE, 2019)	£18,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	44%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-60.2%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>2.3</td> </tr> <tr> <td>2013/14</td> <td>1.3</td> </tr> <tr> <td>2014/15</td> <td>2.1</td> </tr> <tr> <td>2015/16</td> <td>1.9</td> </tr> <tr> <td>2016/17</td> <td>1.8</td> </tr> <tr> <td>2017/18</td> <td>2.2</td> </tr> <tr> <td>2018/19</td> <td>1.9</td> </tr> <tr> <td>2019/20</td> <td>1.5</td> </tr> </tbody> </table>		Year	Ratio	2012/13	2.3	2013/14	1.3	2014/15	2.1	2015/16	1.9	2016/17	1.8	2017/18	2.2	2018/19	1.9	2019/20	1.5
Year	Ratio																		
2012/13	2.3																		
2013/14	1.3																		
2014/15	2.1																		
2015/16	1.9																		
2016/17	1.8																		
2017/18	2.2																		
2018/19	1.9																		
2019/20	1.5																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	71																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6H.60 We received little evidence regarding this occupation from stakeholders. One large national pub chain did highlight the job title of 'Kitchen Manager' in their response through the CfE online questionnaire. The concerns expressed were similar to the other hospitality occupations we have already considered.

## Recommendation

- 6H.61 **We do not recommend adding SOC code 5436 (catering and bar managers) to the SOL.** There is limited stakeholder response for this occupation and no overwhelming evidence from the data of shortage.
- 6H.62 The occupation ranks in the bottom half RQF3-5 shortage rankings (71<sup>st</sup>). However, employers will also face a salary threshold substantially above median full-time earnings for the occupation and it is slightly more reliant on EEA labour when compared to the labour market more broadly (10 per cent v seven per cent).

## 6I: Other Occupations

### Introduction

- 6I.1 Other occupations covers a wide range of occupations, all at RQF3-4 level. There are seven unique SOC codes in the ONS SOC 2010 structure and coding index<sup>209</sup>.

### Sector Overview

- 6I.2 There are seven occupations that are included in our analysis in this chapter. They are as follows:

- i. Property, housing and estate managers (1251)
- ii. Garage managers and proprietors (1252)
- iii. Managers and proprietors in other services n.e.c.(1259)
- iv. Merchandisers and window dressers (7125)
- v. Sales supervisors (7130)
- vi. Market research interviewers (7215)
- vii. Customer service managers and supervisors (7220)

- 6I.3 This is not one homogenous group of occupations, so unlike in other chapters, we do not try to provide an overarching review of the industry that the occupations fall into. Therefore, there is not one standard to measure these occupations by and each one is analysed independently. Table 6I.1 shows that none of the occupations considered here has a non-UK workforce share that is significantly larger than for the overall economy, and the self-employment share varies widely across these occupations. Similarly, Table 6I.2 shows wide variation in wage levels across these occupations.

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<sup>209</sup><https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassification/soc/soc2010/soc2010volume2thestructureandcodingindex>

**Table 6I.1: Employment in selected occupations**

Occupation	Total employment	% who are self employed	% born in EEA (ex. UK)	% born outside EEA	% born in UK
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Property, housing and estate managers	217,400	46%	3%	9%	88%
Garage managers and proprietors	28,800	42%	4%	7%	89%
Merchandisers and window dressers	26,400	5%	9%	9%	82%
Sales supervisors	188,100	3%	8%	11%	81%
Market research interviewers	16,500	19%	6%	11%	83%
Customer service managers and supervisors	165,300	3%	4%	8%	88%
Managers and proprietors in other services n.e.c.	227,100	37%	4%	10%	86%

Source: APS (2017-19)

All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes

**Table 6I.2: Pay in selected occupations**

<b>Occupation</b>	<b>Median gross annual pay for full-time employees 2019</b>	<b>25<sup>th</sup> percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
Property, housing and estate managers	£35,100	£26,300	-4%
Garage managers and proprietors	-	£30,200	-
Merchandisers and window dressers	£23,100	£19,100	-5%
Sales supervisors	£22,100	£18,900	+9%
Market research interviewers	-	£9,800	-
Customer service managers and supervisors	£29,500	£22,900	+0%
Managers and proprietors in other services n.e.c.	£31,700	£22,700	-6%

Source: ASHE (2019)

Non-reported estimates are due to insufficient sample sizes

## SOC 1251: Property, Housing and Estate Managers

Summary table: SOC 1251 Property, housing and estate managers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.4%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	7%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£35,100																		
25th percentile full-time annual wage (ASHE, 2019)	£26,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£26,300																		
Minimum salary required with SOL points	£21,040																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	10%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-6.8%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.25</td> </tr> <tr> <td>2013/14</td> <td>1.25</td> </tr> <tr> <td>2014/15</td> <td>1.25</td> </tr> <tr> <td>2015/16</td> <td>1.35</td> </tr> <tr> <td>2016/17</td> <td>1.70</td> </tr> <tr> <td>2017/18</td> <td>1.60</td> </tr> <tr> <td>2018/19</td> <td>1.30</td> </tr> <tr> <td>2019/20</td> <td>1.15</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.25	2013/14	1.25	2014/15	1.25	2015/16	1.35	2016/17	1.70	2017/18	1.60	2018/19	1.30	2019/20	1.15
Year	Ratio																		
2012/13	1.25																		
2013/14	1.25																		
2014/15	1.25																		
2015/16	1.35																		
2016/17	1.70																		
2017/18	1.60																		
2018/19	1.30																		
2019/20	1.15																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	59																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

- 6I.4 In our Call for Evidence (CfE), SOC code 1251 was highlighted on two occasions. The job title mentioned on both occasions was estate manager.
- 6I.5 Stakeholder responses suggest that recruiting at the more senior level is where there are particular issues. However, responses suggest that recruitment can occur in four-to-six months and therefore it could be taken that this has a relatively limited impact on the performance of their companies.

## Recommendation

- 6I.6 **We do not recommend including SOC code 1251 (property, Housing and Estate Managers) on the SOL.** Despite the occupation having a medium ranking (59<sup>th</sup>) in our RQF3-5 shortage indicators, there is relatively limited current employment of migrants within the occupation. There was not enough stakeholder evidence to suggest that this occupation was in shortage.

## SOC 1252: Garage Managers and Proprietors

Summary table: SOC 1252 Garage managers and proprietors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	4%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	£30,200																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£30,200																		
Minimum salary required with SOL points	£24,160																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>0.15</td></tr> <tr><td>2013/14</td><td>0.12</td></tr> <tr><td>2014/15</td><td>0.13</td></tr> <tr><td>2015/16</td><td>0.11</td></tr> <tr><td>2016/17</td><td>0.10</td></tr> <tr><td>2017/18</td><td>0.10</td></tr> <tr><td>2018/19</td><td>0.18</td></tr> <tr><td>2019/20</td><td>0.10</td></tr> </tbody> </table>		Year	Ratio	2012/13	0.15	2013/14	0.12	2014/15	0.13	2015/16	0.11	2016/17	0.10	2017/18	0.10	2018/19	0.18	2019/20	0.10
Year	Ratio																		
2012/13	0.15																		
2013/14	0.12																		
2014/15	0.13																		
2015/16	0.11																		
2016/17	0.10																		
2017/18	0.10																		
2018/19	0.18																		
2019/20	0.10																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	58																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6I.7 There is a small proportion of people working in the occupation who were born outside of the UK.
- 6I.8 In our CfE, SOC code 1252 was not mentioned as being in shortage.

## Recommendation

- 6I.9 **We do not recommend including SOC code 1252 (garage Managers and Proprietors) on the SOL.** There was no stakeholder evidence to suggest this occupation was in shortage and the data we have shows no signs of shortage.

## SOC 1259: Managers and Proprietors in other services n.e.c.

Summary table: SOC 1259 Managers and proprietors in other services n.e.c.																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.5%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	4%																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	9%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£31,700																		
25th percentile full-time annual wage (ASHE, 2019)	£22,700																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	12%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-24.7%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>6.8</td></tr> <tr><td>2013/14</td><td>6.7</td></tr> <tr><td>2014/15</td><td>7.2</td></tr> <tr><td>2015/16</td><td>6.9</td></tr> <tr><td>2016/17</td><td>7.8</td></tr> <tr><td>2017/18</td><td>7.7</td></tr> <tr><td>2018/19</td><td>5.8</td></tr> <tr><td>2019/20</td><td>5.0</td></tr> </tbody> </table>		Year	Ratio	2012/13	6.8	2013/14	6.7	2014/15	7.2	2015/16	6.9	2016/17	7.8	2017/18	7.7	2018/19	5.8	2019/20	5.0
Year	Ratio																		
2012/13	6.8																		
2013/14	6.7																		
2014/15	7.2																		
2015/16	6.9																		
2016/17	7.8																		
2017/18	7.7																		
2018/19	5.8																		
2019/20	5.0																		
<b>Shortage indicator rank</b> (only including SOCs for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	17																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6I.10 In our CfE, SOC code 1259 was mentioned only once relating to line managers at a university.
- 6I.11 Stakeholders explained that recruitment was not a significant issue within the occupation, although finding those at the skill level required was a challenge in the region where they were based (North West England).

## Recommendation

- 6I.12 **We do not recommend including SOC code 1259 (managers and proprietors in other services n.e.c.) on the SOL.** Despite ranking highly in our RQF3-5 shortage rankings (17<sup>th</sup>) and having an above average vacancy rate, there was a lack of stakeholder evidence to suggest a shortage in the occupation.

## SOC 7125: Merchandisers and window dressers

Summary table: SOC 7125 Merchandisers and window dressers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	8%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	17%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£23,100																		
25th percentile full-time annual wage (ASHE, 2019)	£19,100																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	38%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-35.1%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>3.5</td> </tr> <tr> <td>2013/14</td> <td>2.8</td> </tr> <tr> <td>2014/15</td> <td>2.5</td> </tr> <tr> <td>2015/16</td> <td>2.6</td> </tr> <tr> <td>2016/17</td> <td>2.7</td> </tr> <tr> <td>2017/18</td> <td>2.4</td> </tr> <tr> <td>2018/19</td> <td>2.2</td> </tr> <tr> <td>2019/20</td> <td>2.1</td> </tr> </tbody> </table>		Year	Ratio	2012/13	3.5	2013/14	2.8	2014/15	2.5	2015/16	2.6	2016/17	2.7	2017/18	2.4	2018/19	2.2	2019/20	2.1
Year	Ratio																		
2012/13	3.5																		
2013/14	2.8																		
2014/15	2.5																		
2015/16	2.6																		
2016/17	2.7																		
2017/18	2.4																		
2018/19	2.2																		
2019/20	2.1																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	131																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6I.13 Two representative bodies responded to the CfE.
- 6I.14 Both stakeholders ran surveys of those they represent and neither provided persuasive arguments from their members that this occupation was in shortage. Just under four in 10 (38 per cent) of those in a survey conducted by a representative organisation suggested SOC 7125 was in shortage. In fact, in the same survey, over 70 per cent of those surveyed said that recruiting fashion stylists (closest to merchandiser) remained easy.

## Recommendation

- 6I.15 **We do not recommend including SOC code 7125 (merchandisers and window dressers) on the SOL.** The occupation ranked low (131<sup>st</sup>) in our RQF3-5 shortage indicators. There was limited stakeholder evidence that this occupation was in shortage.

## SOC 7130: Sales supervisors

Summary table: SOC 7130 Sales supervisors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.7%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	9%																		
Share of employees born outside the EEA (APS, 2017-19)	10%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	11%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£22,100																		
25th percentile full-time annual wage (ASHE, 2019)	£18,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	44%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-42.1%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.7</td> </tr> <tr> <td>2013/14</td> <td>1.5</td> </tr> <tr> <td>2014/15</td> <td>1.35</td> </tr> <tr> <td>2015/16</td> <td>1.45</td> </tr> <tr> <td>2016/17</td> <td>1.5</td> </tr> <tr> <td>2017/18</td> <td>1.4</td> </tr> <tr> <td>2018/19</td> <td>1.2</td> </tr> <tr> <td>2019/20</td> <td>1.2</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.7	2013/14	1.5	2014/15	1.35	2015/16	1.45	2016/17	1.5	2017/18	1.4	2018/19	1.2	2019/20	1.2
Year	Ratio																		
2012/13	1.7																		
2013/14	1.5																		
2014/15	1.35																		
2015/16	1.45																		
2016/17	1.5																		
2017/18	1.4																		
2018/19	1.2																		
2019/20	1.2																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	103																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

- 6I.16 In our CfE, SOC code 7130 was highlighted once as being in shortage but no extensive detail was provided.

## Recommendation

- 6I.17 **We do not recommend including SOC code 7130 (sales supervisors) on the SOL.** It has a low RQF3-5 shortage indicator ranking (103<sup>rd</sup>) and vacancies not differing significantly with the average. There was also limited stakeholder evidence.

## SOC 7215: Market research interviewers

Summary table: SOC 7215 Market research interviewers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	8%																		
Share of employees born outside the EEA (APS, 2017-19)	13%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	26%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	-																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.0</td> </tr> <tr> <td>2013/14</td> <td>0.6</td> </tr> <tr> <td>2014/15</td> <td>1.0</td> </tr> <tr> <td>2015/16</td> <td>1.0</td> </tr> <tr> <td>2016/17</td> <td>0.4</td> </tr> <tr> <td>2017/18</td> <td>0.3</td> </tr> <tr> <td>2018/19</td> <td>0.35</td> </tr> <tr> <td>2019/20</td> <td>0.45</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.0	2013/14	0.6	2014/15	1.0	2015/16	1.0	2016/17	0.4	2017/18	0.3	2018/19	0.35	2019/20	0.45
Year	Ratio																		
2012/13	1.0																		
2013/14	0.6																		
2014/15	1.0																		
2015/16	1.0																		
2016/17	0.4																		
2017/18	0.3																		
2018/19	0.35																		
2019/20	0.45																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	134																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6I.18 There was no stakeholder evidence provided for this occupation.

## Recommendation

6I.19 **We do not recommend including SOC code 7215 (market research interviewers) on the SOL.** The occupation ranks very low (134<sup>th</sup>) in our shortage indicators. There was no stakeholder evidence that this occupation was in shortage.

## SOC 7220: Customer service managers and supervisors

Summary table: SOC 7220 Customer service managers and supervisors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.6%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	4%																		
Share of employees born outside the EEA (APS, 2017-19)	8%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£29,500																		
25th percentile full-time annual wage (ASHE, 2019)	£22,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	22%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-20.4%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	1.15																		
2013/14	1.20																		
2014/15	1.25																		
2015/16	1.35																		
2016/17	1.20																		
2017/18	1.15																		
2018/19	0.90																		
2019/20	0.75																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	40																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6I.20 In our CfE, SOC code 7220 was highlighted only once as being in shortage and the response did not provide any supporting evidence of shortages in relation to the specific SOC code.

## Recommendation

- 6I.21 **We do not recommend including SOC code 7220 (customer service managers and supervisors) on the SOL.** Although it has a fairly high ranking in the RQF3-5 shortage rankings (40<sup>th</sup>), there was no persuasive demonstration of shortage made by stakeholders.

## 6J: Retail and wholesale

### Introduction

6J.1 We have identified four eligible occupations skilled below RQF6 that sit within the broad description of retail and wholesale.

- i. Managers and directors in storage and warehousing (1162)
- ii. Managers and directors in retail and wholesale (1190)
- iii. Hairdressing and beauty salon managers and proprietors (1253)
- iv. Shopkeepers and proprietors – wholesale and retail (1254)

6J.2 While around 70 per cent of workers in these four occupations work in the wholesale and retail trade sector (SICs 45-47) they only represent around 10 per cent of total workers in that sector<sup>210</sup>.

### Sector overview

6J.3 The retail sector is a lower paid sector on average, with a higher concentration of jobs in occupations with lower training requirements, greater use of part-time workers and has a somewhat younger workforce. The mix of nationalities in the sector are broadly reflective of the labour market, as is the share of new workers and the use of zero-hours contracts.

6J.4 Table 6J.1 below provides some selected labour market statistics for the occupations in this group. The share of employees who are born in or outside of the EEA is roughly in line with the wider labour market. The majority of individuals within the hairdressing and beauty salon managers and proprietors occupation (68 per cent), and shopkeepers and proprietors – wholesale and retail occupation (75 per cent) are self-employed.

6J.5 Table 6J.2 below shows that all occupations, except hairdressing and beauty salon managers and proprietors (1253), have a median wage above the general £25,600 salary threshold.

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<sup>210</sup>Annual Population Survey 2017-19

<b>Table 6J.1: Employment in selected occupations</b>					
<b>Occupation</b>	<b>Total employment</b>	<b>% who are self employed</b>	<b>% born in EEA (ex. UK)</b>	<b>% born outside EEA</b>	<b>% born in UK</b>
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Managers and directors in storage and warehousing	112,400	3%	9%	9%	82%
Managers and directors in retail and wholesale	345,400	20%	5%	10%	85%
Hairdressing and beauty salon managers and proprietors	23,600	68%	4%	6%	91%
Shopkeepers and proprietors – wholesale and retail	147,400	75%	2%	24%	74%

Source: APS (2017-19)

All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes

<b>Table 6J.2: Pay in selected occupations</b>			
<b>Occupation</b>	<b>Median gross annual pay for full-time employees 2019</b>	<b>25<sup>th</sup> percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
Managers and directors in storage and warehousing	£30,000	£24,300	-6%
Managers and directors in retail and wholesale	£29,100	£21,900	+1%
Hairdressing and beauty salon managers and proprietors	£24,400	£19,300	+10%
Shopkeepers and proprietors – wholesale and retail	£27,600	£24,600	-

Source: ASHE (2019)

Non-reported estimates are due to insufficient sample sizes

## Shortages

- 6J.6 The most recent Employer Skills Survey (ESS) from 2017<sup>211</sup> found that the retail sector had a slightly lower vacancy to employment rate compared to the overall economy, at 3.1 per cent compared to 3.5 per cent<sup>212</sup>. Furthermore, the percentage of vacancies that were hard-to-fill was lower in the retail sector at 26 per cent compared to 33 per cent overall<sup>213</sup>. The share of those hard-to-fill vacancies that were related to applicants lacking skills, qualifications or experience (so called skill-shortage vacancies) was broadly in line with the figure for the UK overall (69 per cent vs 67 per cent).
- 6J.7 Based on the vacancy information we have, both the 2017 ESS and the ONS Vacancy Survey, the Retail sector does not appear to be particularly affected by high levels of vacancies. However, that is not to say that within the sector, and within particular occupations, employers are not facing difficulties in finding the right workers.
- 6J.8 The middling level of vacancies in the sector is perhaps not so surprising when considered in relation to the growth of the number of employees employed in the sector which has only been around three per cent since 1997 – with the sector’s share of total private sector employees falling from around 21 per cent to around 17 per cent over the same period.
- 6J.9 Within the three division level industries that make up the wholesale and retail sector, growth in number of employees between 2010 and 2019 was greatest in the wholesale trade sector (SIC 46) at eight per cent, compared to seven per cent in the wholesale and retail trade and repair of motor vehicles (SIC 45) and just two per cent in the retail trade sector (SIC 47)<sup>214</sup>. The British Retail Consortium (BRC) highlighted in their submission to our Call for Evidence (CfE) that, while retail jobs were falling, employment in warehousing was rising, reflecting structural changes in the way retail operates.
- 6J.10 The reduced labour intensity of the sector is reflected in its comparatively strong productivity growth, with output per hour increasing by 26 per cent between 2010 and 2019 compared to just four per cent across the economy as a whole<sup>215</sup>. There are likely to be several structural factors driving this change in the retail industry, such as the rise of e-commerce and greater automation. A representative organisation noted that, even prior to COVID-19, there had been substantial investment in technology and a reshaping of the workforce, in order to drive productivity growth in the sector. As a result of this, retail employers were said to be increasingly competing with other

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<sup>211</sup> <https://www.gov.uk/government/publications/employer-skills-survey-2017-uk-report>

<sup>212</sup> ESS 2017 Table A.3.1 p.158

<sup>213</sup> ESS 2017 Table A.3.12 p.171

<sup>214</sup> Annual Population Survey 2010 and 2019, employees only, main job only

<sup>215</sup> ONS Labour Productivity Table 1 and Table 4

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/datasets/labourproductivitytables110andr1>



sectors for labour with specialist skills in areas like data analytics and software engineering – many roles within occupations which are already covered by the SOL.

- 6J.11 The main areas of shortage that retailers highlighted to us are in fact not covered by the four occupations we focus on in this section. Some key areas of concern for retailers responding to our CfE were warehouse operatives and HGV drivers, which sit under elementary storage occupations (9260) and large goods vehicle drivers (8211) respectively. Neither of these occupations meet the skill threshold for the Skilled Worker route and so are not eligible for the SOL.
- 6J.12 Other areas of concern from retail stakeholders included jobs in RQF6 occupations such as transport managers and pharmacists, as well as RQF3-5 roles such as merchandise planner, reward analyst and data analysts – all of which are considered elsewhere in this report.

### Steps being taken to alleviate shortages

- 6J.13 The British Retail Consortium (BRC)'s Better Jobs campaign<sup>216</sup> is an example of what the industry is doing to ensure “*future jobs in retail are as attractive and fulfilling as possible*”. The campaign tracks success by monitoring official statistics on productivity and pay and by conducting a survey of workforce engagement, with the objectives of increasing productivity, improving the engagement of the retail workforce and closing the gap between retail pay and the UK average.
- 6J.14 The BRC also pointed to the role apprenticeships could play in helping to meet skill gaps in the future. However, they argued that this is a long-term intervention which will do little to alleviate current shortages. They also pointed to difficulties with the design of the Apprenticeship Levy, including a lack of flexibility over what the funds can be spent on, which are preventing employers from making the most use of the scheme.
- 6J.15 One large national retailer told us how they had increased the pay of several technology roles in order to combat shortages, including increasing pay bands by 15 per cent for roles such as software engineer, cyber security, data analytics and technology design.

### COVID-19 impact

- 6J.16 We know that the retail sector has been especially impacted by the COVID-19 crisis. HMRC statistics show that by the 31 August 2020 the wholesale, retail and repair of motor vehicles sector had made the largest volume and value of claims against the Coronavirus Job Retention Scheme (CJRS)<sup>217</sup>.

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<sup>216</sup> <https://brc.org.uk/making-a-difference/priorities/better-jobs/>

<sup>217</sup> <https://www.gov.uk/government/statistics/coronavirus-job-retention-scheme-statistics-august-2020>

- 6J.17 A survey commissioned by the Resolution Foundation and Health Foundation and carried out in early May found that the non-food retail and wholesale trade sector was the second worst hit in terms of employees being furloughed due to COVID-19, losing their jobs and facing reduced hours<sup>218</sup> – only behind the hospitality sector. In contrast, the food retail sector was far less impacted with only seven per cent of employees furloughed compared to 44 per cent for non-food retail.
- 6J.18 The ONS Business Impact of Coronavirus Survey<sup>219</sup> shows that the share of businesses in the retail sector reporting having temporarily closed or paused trading was roughly in line with all industries. In wave 2 of the survey (23<sup>rd</sup> March to 5<sup>th</sup> April) 27 per cent of retail business reported having temporarily closed falling to seven per cent in wave seven (1<sup>st</sup> June to 14<sup>th</sup> June) – which compares to a fall from 24 per cent to around 13 per cent across all respondents to the survey.
- 6J.19 While the data are still coming in it is likely that the impact of COVID-19 on retail businesses will differ substantially along certain characteristics, such as between food and non-food retail as well as primarily physical retailers versus those operating primarily online. It is possible that the pandemic will accelerate shifts in the structure of the retail sector that were already happening before the crisis. This may in turn result in the type of labour the sector requires changing, with both roles below RQF3 in warehousing and delivery and RQF6 roles in technology becoming increasingly important.
- 6J.20 Ultimately the long-run impact of the COVID-19 crisis on the retail sector is uncertain and will depend on factors we cannot predict, such as the epidemiological conditions, government policy and consumer behaviour. Given the available data we are largely restricted to considering the picture of labour supply and demand for occupations as they appeared prior to COVID-19. As mentioned elsewhere we intend to review the SOL next year, by which point we hope to have a much better understanding of the extent to which current circumstances have translated into longer-run changes for the sector as well as for individual occupations within retail.

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<sup>218</sup> “The Full Monty”, figure 13, page 26

<https://www.resolutionfoundation.org/app/uploads/2020/06/The-Full-Monty.pdf>

<sup>219</sup><https://www.ons.gov.uk/economy/economicoutputandproductivity/output/datasets/businessimpactofcovid19surveybicsresults>

## SOC 1162: Managers and directors in storage and warehousing

Summary table: SOC 1162 Managers and directors in storage and warehousing																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.4%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	9%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	12%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£30,000																		
25th percentile full-time annual wage (ASHE, 2019)	£24,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	30%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	+21.9%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>0.68</td></tr> <tr><td>2013/14</td><td>0.75</td></tr> <tr><td>2014/15</td><td>0.63</td></tr> <tr><td>2015/16</td><td>0.75</td></tr> <tr><td>2016/17</td><td>0.62</td></tr> <tr><td>2017/18</td><td>0.68</td></tr> <tr><td>2018/19</td><td>0.58</td></tr> <tr><td>2019/20</td><td>0.55</td></tr> </tbody> </table>		Year	Ratio	2012/13	0.68	2013/14	0.75	2014/15	0.63	2015/16	0.75	2016/17	0.62	2017/18	0.68	2018/19	0.58	2019/20	0.55
Year	Ratio																		
2012/13	0.68																		
2013/14	0.75																		
2014/15	0.63																		
2015/16	0.75																		
2016/17	0.62																		
2017/18	0.68																		
2018/19	0.58																		
2019/20	0.55																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	93																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6J.21 We did not receive any stakeholder evidence regarding this occupation.

## Recommendation

6J.22 **We do not recommend adding SOC 1162 (managers and directors in storage and warehousing) to the SOL.** The occupation ranks low in the RQF3-5 shortage indicator rankings (93<sup>rd</sup>) and has a reliance on workers born outside the UK that is similar to the labour market more broadly and faces a salary threshold that is only around six per cent higher than its 25<sup>th</sup> percentile. This combined with little evidence from stakeholders, means we do not recommend managers and directors in storage and warehousing for inclusion on the SOL at this time.

## SOC 1190: Managers and directors in retail and wholesale

Summary table: SOC 1190 Managers and directors in retail and wholesale																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	8%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	8%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£29,100																		
25th percentile full-time annual wage (ASHE, 2019)	£21,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	31%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-42.3%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.50</td> </tr> <tr> <td>2013/14</td> <td>0.42</td> </tr> <tr> <td>2014/15</td> <td>0.40</td> </tr> <tr> <td>2015/16</td> <td>0.48</td> </tr> <tr> <td>2016/17</td> <td>0.55</td> </tr> <tr> <td>2017/18</td> <td>0.52</td> </tr> <tr> <td>2018/19</td> <td>0.45</td> </tr> <tr> <td>2019/20</td> <td>0.35</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.50	2013/14	0.42	2014/15	0.40	2015/16	0.48	2016/17	0.55	2017/18	0.52	2018/19	0.45	2019/20	0.35
Year	Ratio																		
2012/13	0.50																		
2013/14	0.42																		
2014/15	0.40																		
2015/16	0.48																		
2016/17	0.55																		
2017/18	0.52																		
2018/19	0.45																		
2019/20	0.35																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	32																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6J.23 We did not receive any stakeholder evidence regarding this occupation.

## Recommendation

6J.24 **We do not recommend adding SOC 1190 (managers and directors in retail and wholesale).** The occupation ranks fairly high based on our RQF3-5 shortage indicators (32<sup>nd</sup>), driven by stronger 3-year wage growth (P2) and a relatively smaller stock of unemployed/inactive people who last worked in this occupation (AV1). It also faces a salary threshold around 17 per cent above its 25<sup>th</sup> percentile – although significantly below its median.

6J.25 However, given the lack of stakeholder evidence and the relatively average levels of migrants employed we do not recommend managers and directors in retail and wholesale for the SOL at this time.

## SOC 1253: Hairdressing and beauty salon managers and proprietors

Summary table: SOC 1253 Hairdressing and beauty salon managers and proprietors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	6%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£24,400																		
25th percentile full-time annual wage (ASHE, 2019)	£19,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.75																		
2013/14	0.50																		
2014/15	0.45																		
2015/16	0.35																		
2016/17	0.25																		
2017/18	0.40																		
2018/19	0.20																		
2019/20	0.10																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	130																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6J.26 We received very limited evidence from stakeholders regarding this occupation. The job title of Spa Manager was raised by one respondent in the context of wider concerns about the impact of the new migration system on the tourism industry.

## Recommendation

- 6J.27 **We do not recommend adding SOC 1253 (hairdressing and beauty salon managers and proprietors) to the SOL.** The occupation is relatively small in terms of employment (around 24,000 workers<sup>220</sup>) and around two thirds of workers in it are self-employed<sup>221</sup>, meaning that the volume of inflows through the Skilled Worker route using this occupation are likely to be small regardless of whether or not it is placed on the SOL. Our RQF3-5 shortage indicators do not point towards a shortage (it ranks low at 130<sup>th</sup>), but employers will face a salary threshold above median full-time earnings for the occupation.
- 6J.28 Given the lack of evidence from stakeholders pointing to specific barriers preventing hiring from the existing workforce we do not recommend hairdressing and beauty salon managers and proprietors for the SOL at this time.

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<sup>220</sup> Annual Population Survey 2017-19, main and second jobs

<sup>221</sup> Annual Population Survey 2017-19, main and second jobs



## SOC 1254: Shopkeepers and proprietors – wholesale and retail

Summary table: SOC 1254 Shopkeepers and proprietors – wholesale and retail																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	21%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	11%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£27,600																		
25th percentile full-time annual wage (ASHE, 2019)	£24,600																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	27%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.42																		
2013/14	0.30																		
2014/15	0.25																		
2015/16	0.25																		
2016/17	0.22																		
2017/18	0.25																		
2018/19	0.22																		
2019/20	0.22																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	132																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6J.29 We did not receive any stakeholder evidence regarding this occupation.

## Recommendation

6J.30 **We do not recommend adding SOC 1254 (shopkeepers and proprietors – wholesale and retail) to the SOL.** The occupation ranks near the very bottom of our RQF3-5 shortage indicators (132<sup>nd</sup>) and will face a salary threshold that is only around four per cent above the 25<sup>th</sup> percentile of full-time earnings for the occupation. Importantly a significant majority of those working in this occupation are self-employed (approximately 75 per cent<sup>222</sup>) suggesting that this occupation is not well suited to the Skilled Worker route, which requires an employer sponsor. While the share of the workforce born outside the EEA is high, the share born in the EEA is lower than in the labour market more generally.

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<sup>222</sup> Annual Population Survey 2017-19, main and second jobs

## 6K: Other Transport

### Introduction

6K.1 This chapter covers occupations grouped under transport. We have identified six occupations that are eligible for the SOL:

- i. Air traffic controllers (SOC 3511)
- ii. Ship and hovercraft officers (SOC 3513)
- iii. Air travel assistants (SOC 6214)
- iv. Rail travel assistants (SOC 6215)
- v. Driving instructors (SOC 8215)
- vi. Marine and waterways transport operatives (SOC 8232)

6K.2 Although we did not receive evidence from stakeholders for these eligible occupations, we did receive evidence for transport occupations not eligible, LGV drivers (SOC 8211), which are discussed in Chapter 5.

### Sector Overview

6K.3 These occupations work largely in three industries: land, water and air transport (2-digit SICs 49, 50 and 51), apart from driving instructors, where 93 per cent operate under the education sector.

Table 6K.1: Employment in selected occupations					
Occupation	Total employment	% who are self employed	% born in EEA (ex. UK)	% born outside EEA	% born in UK
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Air travel assistants	50,000	-	13%	8%	78%
Rail travel assistants	18,400	-	11%	14%	75%
Air traffic controllers	6,200	-	-	-	94%
Ship and hovercraft officers	13,700	10%	2%	6%	92%
Driving instructors	32,100	90%	2%	11%	87%
Marine and waterways transport operatives	6,900	4%	-	7%	88%

Source: APS (2017-19)

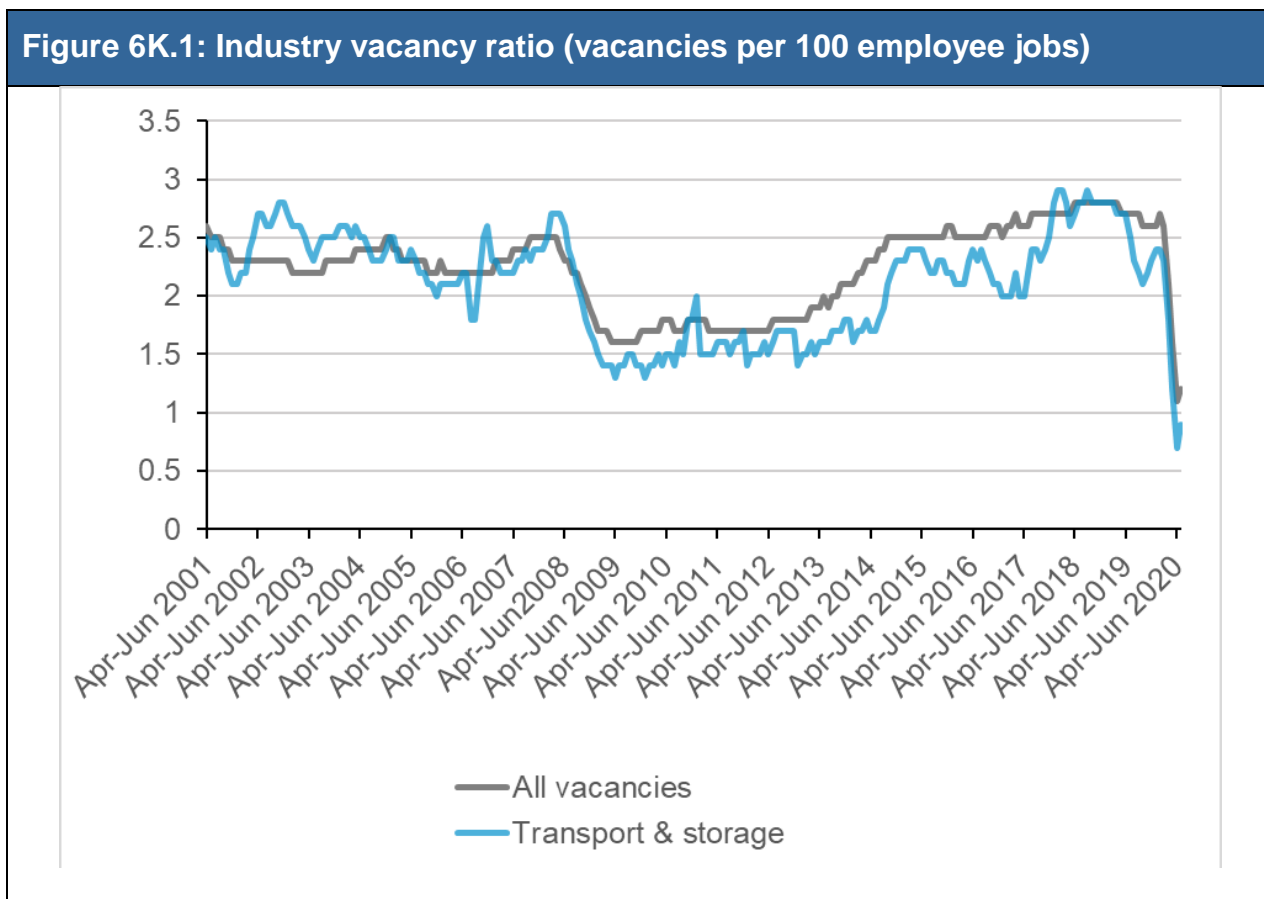
All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes

6K.4 The occupations within this group (other – transport) account for less than one per cent of the working-age population of employees in the UK (Table 6K.1). Some occupations (air and rail travel assistants) have slightly larger percentages of workers born in the EEA than the UK economy in total.

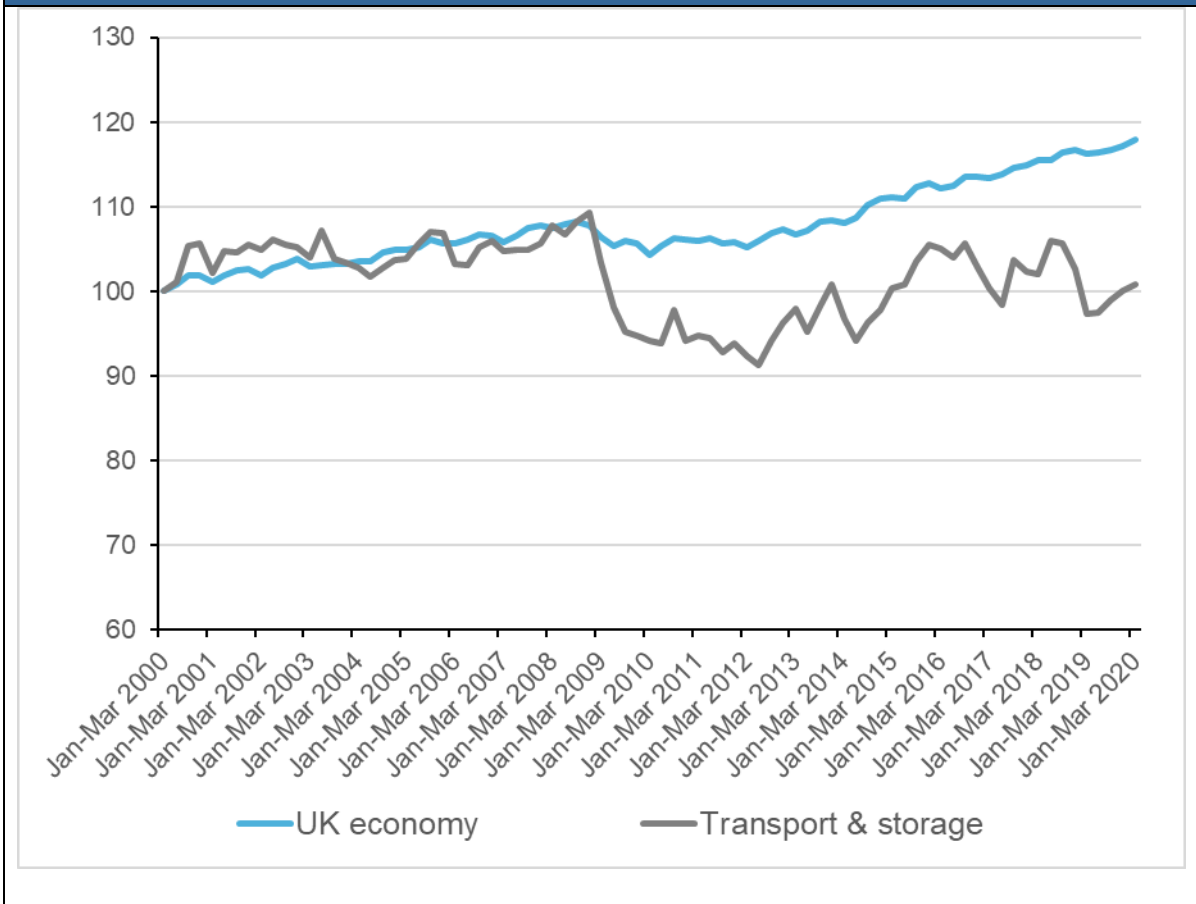
6K.5 Figure 6K.1 shows the vacancy ratio of the transport and storage sector of the economy in comparison to the whole of the UK. The vacancy ratio has been similar to the UK as a whole other than around 2012-2017 where the vacancy ratio was lower.



Source: ONS - VACS02 Vacancies by industry

6K.6 Figure 6K.2 shows the number of employees in the transport and storage sector compared with the whole UK economy, indexed to January 2000. Whilst employment in the UK has risen by around 20 per cent, employment in transport and storage has been around 10 per cent below that of the UK economy, with seasonal fluctuations.

**Figure 6K.2: Indexed number of employees in sector (Jan-Mar 2000=100)**



Source: ONS - EMP14 Employees and self-employed by industry

**6K.7** Table 6K.2 shows that the median pay for the occupations in this group is above the general salary threshold of £25,600 for the Skilled Worker route, except for air travel assistants, whose pay would be below the minimum threshold required even if they were on the SOL. Due to small sample size, there is no 2019 median pay data for driving instructors. Median pay for driving instructors in 2018 was £25,400, which suggests they could be around the threshold.

**Table 6K.2: Pay in selected occupations**

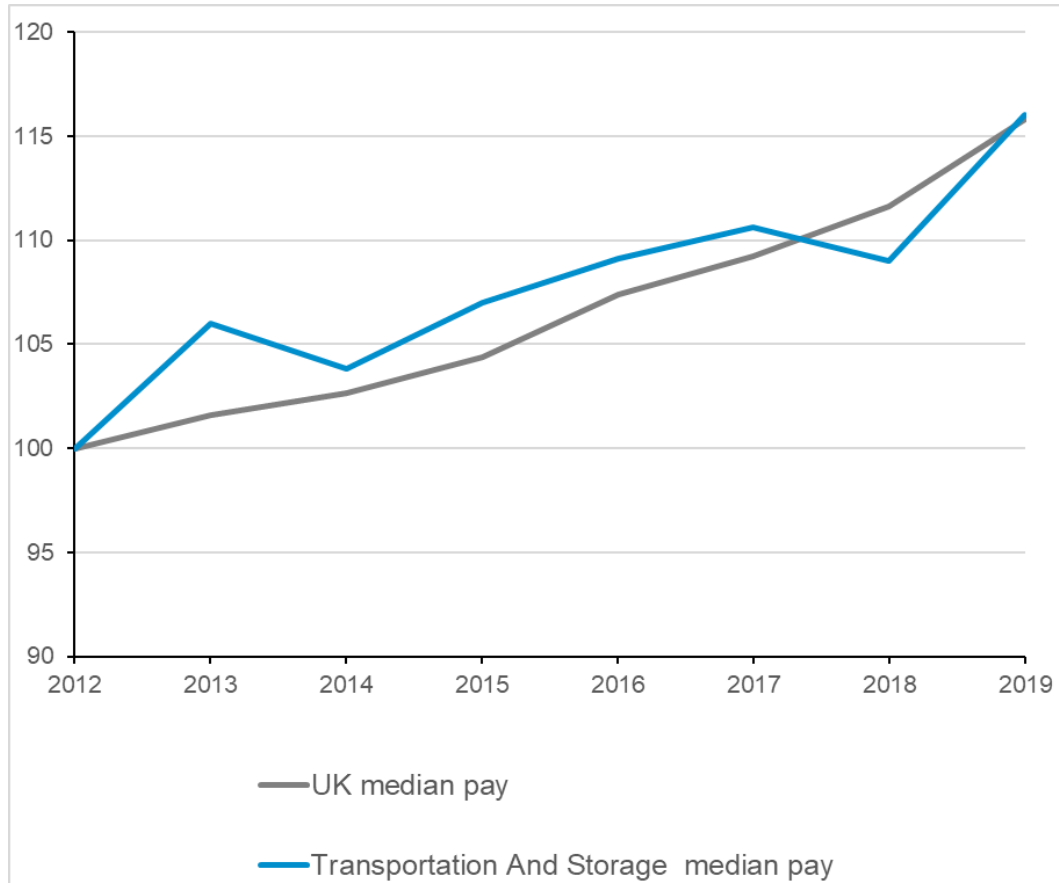
<b>Occupation</b>	<b>Median gross annual pay for full-time employees 2019</b>	<b>25<sup>th</sup> percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
Air travel assistants	£22,700	£17,600	-13%
Rail travel assistants	£37,300	£31,400	+10%
Air traffic controllers	£94,400	£82,400	+5%
Ship and hovercraft officers	£42,400	£32,900	-
Driving instructors	-	£22,800	-
Marine and waterways transport operatives	£31,800	£30,200	-17%

Source: ASHE (2019)

Non-reported estimates are due to insufficient sample sizes

- 6K.8** Air travel assistants and marine and waterways transport operatives have seen negative real pay growth between 2016 and 2019. Rail travel assistants have pay growth substantially above the national average.
- 6K.9** Figure 6K.2, shows that that wage growth in the sector has been slightly above UK median pay since 2012, with a dip in 2018.

Figure 6.K.2: Indexed wage level in sector (2012=100)



Source: ASHE (2012-19)

## COVID-19 impact

- 6K.10 We did not receive any evidence from stakeholders in this group of occupations regarding the impact of COVID-19. The occupations are ranked as 'low' for exposure to diseases within the ONS classification, except for air travel assistants who were ranked as 'medium'.
- 6K.11 All the occupations are rated as 'high' risk for proximity to others.

## SOC 3511: Air traffic controllers

Summary table: SOC 3511 Air traffic controllers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	-																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£94,400																		
25th percentile full-time annual wage (ASHE, 2019)	£82,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£82,400																		
Minimum salary required with SOL points	£65,920																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.0</td> </tr> <tr> <td>2013/14</td> <td>0.8</td> </tr> <tr> <td>2014/15</td> <td>0.8</td> </tr> <tr> <td>2015/16</td> <td>0.7</td> </tr> <tr> <td>2016/17</td> <td>1.5</td> </tr> <tr> <td>2017/18</td> <td>1.2</td> </tr> <tr> <td>2018/19</td> <td>1.0</td> </tr> <tr> <td>2019/20</td> <td>0.7</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.0	2013/14	0.8	2014/15	0.8	2015/16	0.7	2016/17	1.5	2017/18	1.2	2018/19	1.0	2019/20	0.7
Year	Ratio																		
2012/13	1.0																		
2013/14	0.8																		
2014/15	0.8																		
2015/16	0.7																		
2016/17	1.5																		
2017/18	1.2																		
2018/19	1.0																		
2019/20	0.7																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	.																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

6K.12 We did not receive any stakeholder evidence regarding this occupation.

## Recommendation

6K.13 **We do not recommend adding SOC code 3511 (air traffic controllers) to the SOL.** There were insufficient shortage indicators to rank this occupation and the online job posts to employee ratio has decreased since 2016/17 to below the median of eligible occupations. We did not receive any stakeholder evidence that this occupation is in shortage.

## SOC 3513: Ship and hovercraft officers

Summary table: SOC 3513 Ship and hovercraft officers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & Rol) (APS, 2017-19)	2%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	6%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£42,400																		
25th percentile full-time annual wage (ASHE, 2019)	£32,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£32,900																		
Minimum salary required with SOL points	£26,320																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.18</td> </tr> <tr> <td>2013/14</td> <td>0.50</td> </tr> <tr> <td>2014/15</td> <td>0.60</td> </tr> <tr> <td>2015/16</td> <td>0.50</td> </tr> <tr> <td>2016/17</td> <td>0.48</td> </tr> <tr> <td>2017/18</td> <td>0.55</td> </tr> <tr> <td>2018/19</td> <td>1.00</td> </tr> <tr> <td>2019/20</td> <td>0.70</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.18	2013/14	0.50	2014/15	0.60	2015/16	0.50	2016/17	0.48	2017/18	0.55	2018/19	1.00	2019/20	0.70
Year	Ratio																		
2012/13	0.18																		
2013/14	0.50																		
2014/15	0.60																		
2015/16	0.50																		
2016/17	0.48																		
2017/18	0.55																		
2018/19	1.00																		
2019/20	0.70																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	.																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6K.15 We did not receive any stakeholder evidence regarding this occupation.

## Recommendation

6K.16 **We do not recommend adding the SOC 3513 (ship and hovercraft officers) to the SOL.** There were insufficient shortage indicators to rank this occupation and the online job posts to employee ratio has been below the median of eligible occupations. We did not receive any stakeholder evidence that this occupation is in shortage.

## SOC 6214: Air travel assistants

Summary table: SOC 6214 Air travel assistants																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	14%																		
Share of employees born outside the EEA (APS, 2017-19)	8%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	14%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£22,700																		
25th percentile full-time annual wage (ASHE, 2019)	£17,600																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	80%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>1.0</td></tr> <tr><td>2013/14</td><td>1.0</td></tr> <tr><td>2014/15</td><td>1.0</td></tr> <tr><td>2015/16</td><td>1.0</td></tr> <tr><td>2016/17</td><td>1.0</td></tr> <tr><td>2017/18</td><td>1.0</td></tr> <tr><td>2018/19</td><td>1.0</td></tr> <tr><td>2019/20</td><td>1.0</td></tr> </tbody> </table>		Year	Ratio	2012/13	1.0	2013/14	1.0	2014/15	1.0	2015/16	1.0	2016/17	1.0	2017/18	1.0	2018/19	1.0	2019/20	1.0
Year	Ratio																		
2012/13	1.0																		
2013/14	1.0																		
2014/15	1.0																		
2015/16	1.0																		
2016/17	1.0																		
2017/18	1.0																		
2018/19	1.0																		
2019/20	1.0																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	75																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6K.18 We did not receive any stakeholder evidence regarding this occupation.

## Recommendation

6K.19 **We do not recommend adding SOC code 6214 (air travel assistants) to the SOL.** It ranks amongst the middle of the RQF3-5 shortage indicators (75<sup>th</sup>) and the online job posts to employee ratio has been below the median of eligible occupations. We did not receive any stakeholder evidence that this occupation is in shortage.

## SOC 6215: Rail travel assistants

Summary table: SOC 6215 Rail travel assistants																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	11%																		
Share of employees born outside the EEA (APS, 2017-19)	14%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	20%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£37,300																		
25th percentile full-time annual wage (ASHE, 2019)	£31,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£31,400																		
Minimum salary required with SOL points	£25,120																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.05																		
2013/14	0.10																		
2014/15	0.08																		
2015/16	0.12																		
2016/17	0.12																		
2017/18	0.08																		
2018/19	0.10																		
2019/20	0.12																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	99																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6K.20 We did not receive any stakeholder evidence regarding this occupation.

## Recommendation

6K.21 **We do not recommend adding SOC code 6215 (rail travel assistants) to the SOL.** It ranks amongst the lower third of the RQF3-5 shortage indicators (99<sup>th</sup>) and the online job posts to employee ratio has been below the median of eligible occupations. We did not receive any stakeholder evidence that this occupation is in shortage.

## SOC 8215: Driving instructors

Summary table: SOC 8215 Driving instructors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	£22,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	1.0																		
2013/14	1.2																		
2014/15	2.5																		
2015/16	3.5																		
2016/17	2.8																		
2017/18	5.5																		
2018/19	5.8																		
2019/20	9.5																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	111																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

6K.22 We did not receive any stakeholder evidence regarding this occupation.

## Recommendation

6K.23 **We do not recommend adding SOC code 8215 (driving instructors) to the SOL.** It ranks amongst the lower third of the RQF3-5 shortage indicators (111<sup>th</sup>) and although the online job posts to employee ratio has been above the median of eligible occupations, it does not have a reliance on workers born outside the UK. We did not receive any stakeholder evidence that this occupation is in shortage.

## SOC 8232: Marine and waterways transport operatives

Summary table: SOC 8232 Marine and waterways transport operatives																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	11%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£31,800																		
25th percentile full-time annual wage (ASHE, 2019)	£30,200																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£30,200																		
Minimum salary required with SOL points	£24,160																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.75</td> </tr> <tr> <td>2013/14</td> <td>0.50</td> </tr> <tr> <td>2014/15</td> <td>0.60</td> </tr> <tr> <td>2015/16</td> <td>0.65</td> </tr> <tr> <td>2016/17</td> <td>0.35</td> </tr> <tr> <td>2017/18</td> <td>0.75</td> </tr> <tr> <td>2018/19</td> <td>0.95</td> </tr> <tr> <td>2019/20</td> <td>0.60</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.75	2013/14	0.50	2014/15	0.60	2015/16	0.65	2016/17	0.35	2017/18	0.75	2018/19	0.95	2019/20	0.60
Year	Ratio																		
2012/13	0.75																		
2013/14	0.50																		
2014/15	0.60																		
2015/16	0.65																		
2016/17	0.35																		
2017/18	0.75																		
2018/19	0.95																		
2019/20	0.60																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	135																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6K.24 We did not receive any stakeholder evidence regarding this occupation.

## Recommendation

6K.25 **We do not recommend adding SOC code 8232 (marine and waterways transport operatives) to the SOL.** It ranks in the bottom third of the RQF3-5 shortage indicators (135<sup>th</sup>) and the online job posts to employee ratio has been below the median of eligible occupations. We did not receive any stakeholder evidence that this occupation is in shortage.

## 6L: Other caring occupations

### Introduction

6L.1 We have identified eleven eligible occupations skilled between RQF3-5 within the broad description of other caring occupations:

- i. Youth and community workers (3231)
- ii. Housing officers (3234)
- iii. Counsellors (3235)
- iv. Welfare and housing associate professionals n.e.c. (3239)
- v. Childminders and related occupations (6122)
- vi. Playworkers (6123)
- vii. Teaching assistants (6125)
- viii. Educational support assistants (6126)
- ix. Veterinary nurses (6131)
- x. Animal care services occupations n.e.c. (6139)
- xi. Houseparents and residential wardens (6144)

6L.2 This group of occupations is very heterogenous and are employed in a wide range of sectors. Most of the employment across these occupations sits within Residential and Social Care, Education, Public Administration, Professional Service and Non-Professional Administrative and Support Service Activities. A smaller proportion sit within other sectors including Agriculture and Construction<sup>223</sup>.

### Sector overview

6L.3 The sectors covered by this varied group of occupations are analysed in detail within other sections of the report, including vacancies and the COVID-19 impact (see Health and Caring occupations on page 260).

6L.4 Instead, here we look at some of the characteristics of employment in the specific occupations. In total, this group of occupations covers just over 1.1 million jobs in the UK, and seven per cent of jobs are undertaken by EEA workers and 10 per cent by non-EEA workers. Within each of the other caring occupations defined here, the proportion of EEA workers and non-EEA workers is relatively lower except for childminders.

6L.5 Childminders, animal care services occupations n.e.c. and counsellors all have a relatively high proportion of self-employed workers. It is important to note that the advantages of the SOL only apply to the Skilled Worker route, which requires employer sponsorship and therefore self-employed workers would not be eligible. In occupations

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<sup>223</sup> 3-year Annual Population Survey 2016-18

where a high proportion of workers are self-employed, the benefits of being on the SOL will be more limited.

<b>Table 6L.1: Employment in selected occupations</b>					
<b>Occupation</b>	<b>Total employment</b>	<b>% who are self employed</b>	<b>% born in EEA (ex. UK)</b>	<b>% born outside EEA</b>	<b>% born in UK</b>
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Youth and community workers	75,300	3%	2%	6%	93%
Housing officers	52,700	-	3%	9%	88%
Counsellors	27,600	39%	2%	7%	91%
Welfare and housing associate professionals n.e.c.	146,300	6%	3%	8%	88%
Playworkers	36,400	4%	2%	8%	90%
Childminders and related occupations	112,800	61%	11%	13%	76%
Teaching assistants	324,500	0.7%	3%	7%	89%
Educational support assistants	172,900	0.7%	3%	6%	90%
Houseparents and residential wardens	48,500	32%	3%	8%	89%
Veterinary nurses	19,300	-	6%	4%	90%
Animal care services occupations n.e.c.	90,000	50%	3%	3%	93%

Source: APS (2017-19)

All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes

**6L.6** The median pay for most of these occupations is below the general salary threshold of £25,600 for the Skilled Worker route. For some occupations, such as playworkers and teaching assistants, the median pay is below the minimum threshold required even if an occupation is on the SOL. Therefore, migrants coming to the UK into these occupations under the Skilled Worker route would need to be earning at the upper end of the pay distribution within that occupation.

**6L.7** After adjusting for inflation, pay growth in most of these occupations was negative between 2016 and 2019. There was some growth in pay for childminders and houseparents and residential wardens.

**Table 6L.2: Pay in selected occupations**

<b>Occupation</b>	<b>Median gross annual pay for full-time employees 2019</b>	<b>25<sup>th</sup> percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
Youth and community workers	£25,500	£22,200	-5%
Housing officers	£27,900	£24,200	+0%
Counsellors	£24,400	£20,800	-7%
Welfare and housing associate professionals n.e.c.	£24,200	£20,900	-3%
Playworkers	£17,500	£12,700	-5%
Childminders and related occupations	£21,400	£17,600	+3%
Teaching assistants	£17,100	£14,400	-1%
Educational support assistants	£16,200	£13,800	-4%
Houseparents and residential wardens	£23,400	£19,700	+2%
Veterinary nurses	£20,600	£16,900	-1%
Animal care services occupations n.e.c.	-	£16,100	-

Source: ASHE (2019)

Non-reported estimates are due to insufficient sample sizes

## SOC 3231: Youth and community workers

Summary table: SOC 3231 Youth and community workers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.3%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	2%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	20%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£25,500																		
25th percentile full-time annual wage (ASHE, 2019)	£22,200																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	11%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-11.2%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.22</td> </tr> <tr> <td>2013/14</td> <td>0.25</td> </tr> <tr> <td>2014/15</td> <td>0.27</td> </tr> <tr> <td>2015/16</td> <td>0.28</td> </tr> <tr> <td>2016/17</td> <td>0.25</td> </tr> <tr> <td>2017/18</td> <td>0.27</td> </tr> <tr> <td>2018/19</td> <td>0.29</td> </tr> <tr> <td>2019/20</td> <td>0.35</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.22	2013/14	0.25	2014/15	0.27	2015/16	0.28	2016/17	0.25	2017/18	0.27	2018/19	0.29	2019/20	0.35
Year	Ratio																		
2012/13	0.22																		
2013/14	0.25																		
2014/15	0.27																		
2015/16	0.28																		
2016/17	0.25																		
2017/18	0.27																		
2018/19	0.29																		
2019/20	0.35																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	76																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6L.8 We did not receive any stakeholder evidence on this occupation.

## Recommendation

6L.9 **We do not recommend adding SOC code 3231 (youth and community workers) to the SOL.** It ranks amongst the middle of the RQF3-5 shortage indicators (76<sup>th</sup>) and the online job posts to employee ratio has been below the median of eligible occupations. We did not receive any stakeholder evidence that this occupation is in shortage.



## SOC 3234: Housing officer

Summary table: SOC 3234 Housing officers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	13%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£27,900																		
25th percentile full-time annual wage (ASHE, 2019)	£24,200																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	+21.3%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.42</td> </tr> <tr> <td>2013/14</td> <td>0.50</td> </tr> <tr> <td>2014/15</td> <td>0.40</td> </tr> <tr> <td>2015/16</td> <td>0.45</td> </tr> <tr> <td>2016/17</td> <td>0.55</td> </tr> <tr> <td>2017/18</td> <td>0.50</td> </tr> <tr> <td>2018/19</td> <td>0.52</td> </tr> <tr> <td>2019/20</td> <td>0.52</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.42	2013/14	0.50	2014/15	0.40	2015/16	0.45	2016/17	0.55	2017/18	0.50	2018/19	0.52	2019/20	0.52
Year	Ratio																		
2012/13	0.42																		
2013/14	0.50																		
2014/15	0.40																		
2015/16	0.45																		
2016/17	0.55																		
2017/18	0.50																		
2018/19	0.52																		
2019/20	0.52																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	48																		
<b>Recommendation</b>																			
Recommend adding entire occupation to Scotland-only SOL and Northern Ireland-only SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6L.10 We received information from stakeholders relating to shortages in this occupation in Northern Ireland and Scotland.
- 6L.11 The evidence from Northern Ireland showed that in the 2017 Employer Skills Survey, 100 per cent of Housing officer vacancies in Northern Ireland were defined as hard-to-fill. There were 33 of these in total.
- 6L.12 We received evidence that in Scotland 58 per cent of housing support service vacancies were defined as hard-to-fill in 2018<sup>224</sup>. This was part of a study undertaken by the Care Inspectorate and Scottish Social Services Council where they surveyed registered care services. 71 per cent responded that the housing support vacancies were reported to be hard to fill because there were too few applicants, 31 per cent reported there were too few qualified applicants and 61 per cent reported there were too few applicants with experience. We note that some of the roles defined within housing services may also fall within the definition of social care occupations which are covered separately in this report.

## Recommendation

- 6L.13 **We recommend adding SOC code 3234 (housing officers) to the Northern Ireland-only SOL** as there is evidence that these vacancies are hard-to-fill. However, we note that the number of vacancies is relatively small in this occupation in Northern Ireland and would expect further evidence for this occupation to remain on the SOL in the next review.
- 6L.14 **We recommend adding SOC code 3234 (housing officers) to the Scotland-only SOL.** There is evidence of high vacancy rates and a shortage in skills for roles within this occupation. Given the limited stakeholder evidence, we would expect further evidence for this occupation to remain on the SOL in the next review.
- 6L.15 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 9th percentile of full-time earnings in this occupation, meaning that nine per cent of full-time employees in this occupation in the UK earn less than the salary threshold.
- 6L.16 **We do not recommend adding SOC code 3234 (housing officers) to the UK-wide SOL** as there is not stakeholder evidence demonstrating shortages across the whole of the UK. It ranks amongst the middle in the RQF3-5 shortage indicators (48<sup>th</sup>) and the vacancies to employee ratio shows that there are less UK-wide vacancies per job relative to the median of eligible occupations.

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<sup>224</sup><https://www.careinspectorate.com/images/documents/5532/Staff%20vacancies%20in%20care%20services%202018.pdf>

## SOC 3235: Counsellors

Summary table: SOC 3235 Counsellors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	24%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£24,400																		
25th percentile full-time annual wage (ASHE, 2019)	£20,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	+21.1%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.0</td> </tr> <tr> <td>2013/14</td> <td>0.95</td> </tr> <tr> <td>2014/15</td> <td>1.05</td> </tr> <tr> <td>2015/16</td> <td>1.45</td> </tr> <tr> <td>2016/17</td> <td>1.55</td> </tr> <tr> <td>2017/18</td> <td>2.0</td> </tr> <tr> <td>2018/19</td> <td>2.2</td> </tr> <tr> <td>2019/20</td> <td>1.9</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.0	2013/14	0.95	2014/15	1.05	2015/16	1.45	2016/17	1.55	2017/18	2.0	2018/19	2.2	2019/20	1.9
Year	Ratio																		
2012/13	1.0																		
2013/14	0.95																		
2014/15	1.05																		
2015/16	1.45																		
2016/17	1.55																		
2017/18	2.0																		
2018/19	2.2																		
2019/20	1.9																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	37																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6L.17 We did not receive any stakeholder evidence on this occupation.

## Recommendation

6L.18 **We do not recommend adding SOC code 3235 (counsellors) to the SOL.** Despite the occupation ranking relatively highly (37<sup>th</sup>) in the RQF3-5 shortage indicators, we have not received any evidence from stakeholders that this occupation is in shortage.

## SOC 3239: Welfare and housing associate professionals n.e.c.

Summary table: SOC 3239 Welfare and housing associate professionals n.e.c.																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.5%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	8%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	17%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£24,200																		
25th percentile full-time annual wage (ASHE, 2019)	£20,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	7%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-28.8%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.97</td> </tr> <tr> <td>2013/14</td> <td>1.00</td> </tr> <tr> <td>2014/15</td> <td>1.00</td> </tr> <tr> <td>2015/16</td> <td>1.00</td> </tr> <tr> <td>2016/17</td> <td>0.95</td> </tr> <tr> <td>2017/18</td> <td>0.90</td> </tr> <tr> <td>2018/19</td> <td>0.88</td> </tr> <tr> <td>2019/20</td> <td>0.87</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.97	2013/14	1.00	2014/15	1.00	2015/16	1.00	2016/17	0.95	2017/18	0.90	2018/19	0.88	2019/20	0.87
Year	Ratio																		
2012/13	0.97																		
2013/14	1.00																		
2014/15	1.00																		
2015/16	1.00																		
2016/17	0.95																		
2017/18	0.90																		
2018/19	0.88																		
2019/20	0.87																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	23																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6L.19 We received evidence that welfare and housing associate professionals n.e.c. had around 300 vacancies in Northern Ireland in the Employer Skills Survey 2017. Of these, 37 per cent were defined as hard-to-fill<sup>225</sup>. We did not receive any other information from stakeholders on this occupation.

## Recommendation

- 6L.20 **We do not recommend adding SOC code 3239 (welfare and housing associate professionals n.e.c.) to the SOL.** Whilst the occupation ranks relatively highly (23rd) in the RQF3-5 shortage indicators, the vacancy to employee ratio has been decreasing over the last few years. There is limited stakeholder evidence on shortages within this occupation.

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<sup>225</sup> Employers reporting vacancies are hard-to-fill

## SOC 6122: Childminders and related occupations

Summary table: SOC 6122 Childminders and related occupations																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	15%																		
Share of employees born outside the EEA (APS, 2017-19)	16%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	18%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£21,400																		
25th percentile full-time annual wage (ASHE, 2019)	£17,600																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	16%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	+8.1%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>2.7</td> </tr> <tr> <td>2013/14</td> <td>3.1</td> </tr> <tr> <td>2014/15</td> <td>4.3</td> </tr> <tr> <td>2015/16</td> <td>1.4</td> </tr> <tr> <td>2016/17</td> <td>2.5</td> </tr> <tr> <td>2017/18</td> <td>2.7</td> </tr> <tr> <td>2018/19</td> <td>1.5</td> </tr> <tr> <td>2019/20</td> <td>1.6</td> </tr> </tbody> </table>		Year	Ratio	2012/13	2.7	2013/14	3.1	2014/15	4.3	2015/16	1.4	2016/17	2.5	2017/18	2.7	2018/19	1.5	2019/20	1.6
Year	Ratio																		
2012/13	2.7																		
2013/14	3.1																		
2014/15	4.3																		
2015/16	1.4																		
2016/17	2.5																		
2017/18	2.7																		
2018/19	1.5																		
2019/20	1.6																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	115																		
<b>Recommendation</b>																			
Recommend adding entire occupation to Scotland-only SOL																			

## Stakeholder evidence

- 6L.21 We received several responses from stakeholders in Scotland relating to the early learning and childcare workforce, of which some roles will be within the nursery nurses and playworkers occupations.
- 6L.22 In Scotland, the Scottish Government have committed to increase the provision of funded Early Learning and Childcare from 600 to 1,140 hours per annum for all three- and four-year olds, and eligible two-year olds by 2020. One stakeholder reported this would require over 4,000 additional workers, another reported it would require between 8,000 to 11,000 additional workers<sup>226</sup>. Some of these roles will be within the childminder and related occupations group, and the Scottish Government has said they expect childminders to play a vital part in this delivery<sup>227</sup>.
- 6L.23 Stakeholders noted there was a recruitment campaign held from 2017 for the early learning and childcare workforce and a range of actions to support development of skills including apprenticeships and training<sup>228</sup>. There was no evidence provided on whether this campaign had been successful.
- 6L.24 A survey of over 800 childminders in Scotland found that the main reasons for leaving the occupation were for higher pay, due to long hours, for career progression, to seek permanent employment and for childcare responsibilities/other caring responsibilities<sup>229</sup>. In a response to our CfE a stakeholder noted that the rules around part-time working for those on the Skilled Worker route cause issues in this sector.
- 6L.25 Evidence from Scotland suggests that most childminders are self-employed. As the SOL only confers advantages for those on the Skilled Worker route who must be

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<sup>226</sup> <https://www.gov.scot/binaries/content/documents/govscot/publications/independent-report/2020/03/implications-national-local-labour-markets-social-care-workforce-report-scottish-government-cosla/documents/early-learning-childcare-workforce-final-report-scottish-government-cosla/early-learning-childcare-workforce-final-report-scottish-government-cosla/govscot%3Adocument/early-learning-childcare-workforce-final-report-scottish-government-cosla.pdf>

<sup>227</sup> <https://digitalpublications.parliament.scot/ResearchBriefings/Report/2019/4/16/The-expansion-of-early-learning-and-childcare#Childminders>

<sup>228</sup> <https://www.gov.scot/binaries/content/documents/govscot/publications/independent-report/2020/03/implications-national-local-labour-markets-social-care-workforce-report-scottish-government-cosla/documents/early-learning-childcare-workforce-final-report-scottish-government-cosla/early-learning-childcare-workforce-final-report-scottish-government-cosla/govscot%3Adocument/early-learning-childcare-workforce-final-report-scottish-government-cosla.pdf>

<sup>229</sup> <https://www.gov.scot/binaries/content/documents/govscot/publications/independent-report/2020/03/implications-national-local-labour-markets-social-care-workforce-report-scottish-government-cosla/documents/early-learning-childcare-workforce-final-report-scottish-government-cosla/early-learning-childcare-workforce-final-report-scottish-government-cosla/govscot%3Adocument/early-learning-childcare-workforce-final-report-scottish-government-cosla.pdf>



sponsored by an employer, adding this occupation to the SOL may have limited benefit.

- 6L.26 We did not receive evidence from stakeholders relating to childminders outside of Scotland.

### Recommendation

- 6L.27 **We recommend adding SOC code 6122 (childminders and related occupations) to the Scotland-only SOL.** Stakeholders have provided evidence that the commitment to provide early learning and childcare has increased the demand for workers in this occupation. Whilst the commitment is temporarily paused due to COVID-19, stakeholders noted it was to be reintroduced in the future.
- 6L.28 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 48th percentile of full-time earnings in this occupation, meaning that 48 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.
- 6L.29 **We do not recommend adding SOC code 6122 (childminders and related occupations) to the UK-wide SOL.** There is limited evidence from stakeholders of shortages across the UK and it ranks low in the RQF3-5 shortage indicators (115<sup>th</sup>).

## SOC 6123: Playworkers

Summary table: SOC 6123 Playworkers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	2%																		
Share of employees born outside the EEA (APS, 2017-19)	8%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	23%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£17,500																		
25th percentile full-time annual wage (ASHE, 2019)	£12,700																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	41%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.25</td> </tr> <tr> <td>2013/14</td> <td>0.22</td> </tr> <tr> <td>2014/15</td> <td>0.18</td> </tr> <tr> <td>2015/16</td> <td>0.19</td> </tr> <tr> <td>2016/17</td> <td>0.17</td> </tr> <tr> <td>2017/18</td> <td>0.17</td> </tr> <tr> <td>2018/19</td> <td>0.19</td> </tr> <tr> <td>2019/20</td> <td>0.25</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.25	2013/14	0.22	2014/15	0.18	2015/16	0.19	2016/17	0.17	2017/18	0.17	2018/19	0.19	2019/20	0.25
Year	Ratio																		
2012/13	0.25																		
2013/14	0.22																		
2014/15	0.18																		
2015/16	0.19																		
2016/17	0.17																		
2017/18	0.17																		
2018/19	0.19																		
2019/20	0.25																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	85																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6L.30 We received evidence from a council in Scotland who expressed difficulties in recruiting playworkers over the last year, but did not consider that this occupation should be on the SOL.

## Recommendation

- 6L.31 **We do not recommend SOC code 6123 (playworkers) to be included on the SOL.** It ranks amongst the middle (85<sup>th</sup>) in the RQF3-5 shortage indicators and has a low vacancy to employee ratio. We did not receive any evidence making a case for it to be on the SOL. We are aware that some playworkers may be affected to some extent by the target in Scotland on Early Learning and Childcare provision discussed in the childminders occupation but have not received evidence that most workers in SOC code 6123 will be affected by this.

## SOC 6125: Teaching assistants

Summary table: SOC 6125 Teaching assistants																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	16%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£17,100																		
25th percentile full-time annual wage (ASHE, 2019)	£14,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	9%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	+6.0%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.5</td> </tr> <tr> <td>2013/14</td> <td>0.6</td> </tr> <tr> <td>2014/15</td> <td>0.7</td> </tr> <tr> <td>2015/16</td> <td>0.75</td> </tr> <tr> <td>2016/17</td> <td>0.9</td> </tr> <tr> <td>2017/18</td> <td>1.0</td> </tr> <tr> <td>2018/19</td> <td>1.2</td> </tr> <tr> <td>2019/20</td> <td>1.3</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.5	2013/14	0.6	2014/15	0.7	2015/16	0.75	2016/17	0.9	2017/18	1.0	2018/19	1.2	2019/20	1.3
Year	Ratio																		
2012/13	0.5																		
2013/14	0.6																		
2014/15	0.7																		
2015/16	0.75																		
2016/17	0.9																		
2017/18	1.0																		
2018/19	1.2																		
2019/20	1.3																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	34																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6L.32 We received two responses to the CfE which mentioned shortages of teaching assistants in the same area of the South East of England. They noted difficulties in recruiting “*lower paid classroom based and site management roles predominantly because of competition from other sectors and higher cost of living in the South East*”. It was reported that the proximity to London (which attracted the London weighting for pay) had exacerbated recruitment challenges, whilst there was a rise in demand for teaching assistants for behaviour management.
- 6L.33 One stakeholder said they were actively recruiting support staff into roles where they could then develop to complete teacher training, which continued to leave hard-to-fill vacancies. They noted the demographic change in the area with an increase in school age children had increased demand and the remote location of some roles meant it was challenging to recruit. It was reported that multiple different methods had been tried to fill vacancies, including increasing salaries, increasing training, increasing advertising/recruitment spend, new recruitment methods and redefining existing jobs.

## Recommendation

- 6L.34 **We do not recommend adding SOC code 6125 (teaching assistants) to the SOL.** The vacancy to employee ratio has risen over the last few years and the occupation ranks relatively highly in the RQF3-5 shortage indicators (34<sup>th</sup>). However, stakeholder evidence suggested a very localised shortage in this occupation, rather than a widespread shortage.

## SOC 6126: Educational support assistants

Summary table: SOC 6126 Educational support assistants																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.6%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	19%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£16,200																		
25th percentile full-time annual wage (ASHE, 2019)	£13,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	5%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	+29.3%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.25</td> </tr> <tr> <td>2013/14</td> <td>0.22</td> </tr> <tr> <td>2014/15</td> <td>0.25</td> </tr> <tr> <td>2015/16</td> <td>0.22</td> </tr> <tr> <td>2016/17</td> <td>0.20</td> </tr> <tr> <td>2017/18</td> <td>0.25</td> </tr> <tr> <td>2018/19</td> <td>0.32</td> </tr> <tr> <td>2019/20</td> <td>0.38</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.25	2013/14	0.22	2014/15	0.25	2015/16	0.22	2016/17	0.20	2017/18	0.25	2018/19	0.32	2019/20	0.38
Year	Ratio																		
2012/13	0.25																		
2013/14	0.22																		
2014/15	0.25																		
2015/16	0.22																		
2016/17	0.20																		
2017/18	0.25																		
2018/19	0.32																		
2019/20	0.38																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	45																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6L.35 One council in Scotland highlighted they experienced difficulties in recruiting for educational support assistants over the past year, but did not consider that this occupation should be on the SOL.
- 6L.36 Another stakeholder in Scotland noted the role of pupil support assistants to support pupils with additional needs and said it was imperative that immigration rules allow EU nationals to continue to fulfil these roles now and fill vacancies in the future.

## Recommendation

- 6L.37 **We do not recommend adding SOC code 6126 (educational support assistants) to the SOL.** We have not received strong evidence from stakeholders that there is a shortage within this occupation. It ranks relatively highly within the RQF3-5 shortage indicators (45<sup>th</sup>) but has a low online job post to employee ratio.

## SOC 6131: Veterinary nurses

Summary table: SOC 6131 Veterinary nurses																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	7%																		
Share of employees born outside the EEA (APS, 2017-19)	4%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	22%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£20,600																		
25th percentile full-time annual wage (ASHE, 2019)	£16,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	High																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	21%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.3</td> </tr> <tr> <td>2013/14</td> <td>0.4</td> </tr> <tr> <td>2014/15</td> <td>0.8</td> </tr> <tr> <td>2015/16</td> <td>1.2</td> </tr> <tr> <td>2016/17</td> <td>1.4</td> </tr> <tr> <td>2017/18</td> <td>1.3</td> </tr> <tr> <td>2018/19</td> <td>1.35</td> </tr> <tr> <td>2019/20</td> <td>1.9</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.3	2013/14	0.4	2014/15	0.8	2015/16	1.2	2016/17	1.4	2017/18	1.3	2018/19	1.35	2019/20	1.9
Year	Ratio																		
2012/13	0.3																		
2013/14	0.4																		
2014/15	0.8																		
2015/16	1.2																		
2016/17	1.4																		
2017/18	1.3																		
2018/19	1.35																		
2019/20	1.9																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	5																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

- 6L.38 There was one response to our CfE providing a case for this occupation to be put on the SOL. We received a response from the Scottish Government who highlighted that in their previous evidence for our 2019 review, they had requested veterinary nurses to be included on the SOL.
- 6L.39 They noted that veterinary nurses are essential to support the work of veterinarians, who are currently on the SOL. Entrants must obtain employment at an approved veterinary practice to get a minimum of two years' experience and take professional exams before qualifying as a veterinary nurse. The response highlighted that the rural nature of these roles meant it was challenging to get staff to relocate, which exacerbated recruitment challenges.

## Recommendation

- 6L.40 **We recommend adding SOC code 6131 (veterinary nurses) to the SOL.** Whilst we received one response on this occupation from stakeholders in Scotland, it was noted in the 2019 review of the SOL that the Royal College of Veterinary Surgeons and others had highlighted this occupation as facing a shortage of labour in the UK. In our 2019 review we said "*it is argued veterinary nurses share many of the same difficulties as veterinary surgeons (which were removed from the SOL in 2011), with the sector growing, too few practices offering training and a limited ability to attract candidates from outside a narrow demographic*"<sup>230</sup>. It ranks highly in the RQF3-5 shortage indicators (5<sup>th</sup>) and the ratio of online job posts to employees is higher than the median.
- 6L.41 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 47th percentile of full-time earnings in this occupation, meaning that 47 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.
- 6L.42 We expect this occupation has been relatively more impacted due to COVID-19 which may have impacted on stakeholder's ability to engage with this review. In order to maintain a position on the UK-wide SOL in the next review, we would expect further evidence on shortages in this occupation from stakeholders.

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[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/806331/28\\_05\\_2019\\_Full\\_Review\\_SOL\\_Final\\_Report\\_1159.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/806331/28_05_2019_Full_Review_SOL_Final_Report_1159.pdf)

## SOC 6139: Animal care services occupations n.e.c.

Summary table: SOC 6139 Animal care services occupations n.e.c.																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	4%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	20%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	£16,100																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	24%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.6																		
2013/14	0.55																		
2014/15	0.68																		
2015/16	0.4																		
2016/17	0.58																		
2017/18	0.55																		
2018/19	0.58																		
2019/20	0.7																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	18																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6L.43 We received evidence that in Northern Ireland, 100 per cent of the vacancies in animal care services n.e.c. were defined as hard-to-fill in the 2017 Employer Skills Survey. However, there were only 15 vacancies in total in this occupation in Northern Ireland reported in the same survey.
- 6L.44 We received evidence from one stakeholder making a case for several roles in horse racing within this occupation be included on the SOL, including work riders, racing grooms, stallion handlers, foaling specialists, stud grooms and stud hands. The largest number of roles they reported they needed to recruit for were for work riders (500 roles), grooms (400 roles), and stud hands (200 roles) across the UK. The other job titles were reported to have 50 or less roles to recruit.
- 6L.45 They reported using many different methods of advertising roles and that they had to look outside the UK to find applicants with the work experience needed.
- 6L.46 There were a few reasons reported to be inhibiting recruitment in horse racing, including fewer young people at the required weight required to ride racehorses, unsociable hours, outdoor working conditions, and higher wages attracting workers to larger towns. The main issues they found with recruitment were having a low number of applicants, particularly with the required motivation, personality or aptitude and unsociable hours. They commonly had difficulties finding candidates with the job specific and specialist skills needed to perform the role.
- 6L.47 They reported that organisations had undertaken a range of actions to overcome filling vacancies including increasing salaries, increasing training, increasing advertising/recruitment spend, using new recruitment methods, expanding trainee programmes, changing the structure of hours and reducing hours. They noted that increasing salaries had not been effective in filling vacancies, whereas recruiting non-UK nationals and getting contractors to do the work were very effective.
- 6L.48 The stakeholder reported that some staff in the organisations they represent were not fully proficient at their job and it was a major concern, leading to the inability to grow business or take on new clients. It was reported that businesses would not be able to meet the increases in salary required.

## Recommendation

- 6L.49 **We do not recommend adding SOC code 6139 (animal care services occupations n.e.c.) to the SOL.** Whilst the occupation ranks highly in the RQF3-5 shortage indicators (18<sup>th</sup>), we did not receive stakeholder evidence demonstrating a significant shortage in roles outside of horse racing within this occupation and the ratio of online job posts to employment is relatively low.

6L.50 When the occupation was eligible for Tier 2, work riders were on the SOL from 2008 to 2011. This required evidence that an individual had three or more years of paid experience in this job at the NQF3 level or above. They also had to be registered by the British Horseracing Authority. The evidence received for this review on roles within this occupation group in horseracing was similar to the evidence we received historically and more should be done to encourage UK workers into these roles. Therefore, we do not recommend for these roles to be added to the SOL.

## SOC 6144: Houseparents and residential wardens

Summary table: SOC 6144 Houseparents and residential wardens																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	8%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	9%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£23,400																		
25th percentile full-time annual wage (ASHE, 2019)	£19,700																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	High																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	20%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.55</td> </tr> <tr> <td>2013/14</td> <td>0.65</td> </tr> <tr> <td>2014/15</td> <td>0.50</td> </tr> <tr> <td>2015/16</td> <td>0.90</td> </tr> <tr> <td>2016/17</td> <td>0.80</td> </tr> <tr> <td>2017/18</td> <td>0.40</td> </tr> <tr> <td>2018/19</td> <td>0.45</td> </tr> <tr> <td>2019/20</td> <td>0.35</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.55	2013/14	0.65	2014/15	0.50	2015/16	0.90	2016/17	0.80	2017/18	0.40	2018/19	0.45	2019/20	0.35
Year	Ratio																		
2012/13	0.55																		
2013/14	0.65																		
2014/15	0.50																		
2015/16	0.90																		
2016/17	0.80																		
2017/18	0.40																		
2018/19	0.45																		
2019/20	0.35																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	79																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6L.51 We received one response to our CfE making a case for this occupation to be put on the SOL. The stakeholder reported shortages due to shortages in skills, competition from the retail sector in terms of wages for “*arguably less demanding work.*” It was highlighted the roles involved meeting emotional and behavioural needs of very challenging people with unsociable working hours.
- 6L.52 The changes in demographics and aging population were cited as a reason for the increasing demand in this occupation.

## Recommendation

- 6L.53 **We recommend adding SOC code 6144 (houseparents and residential wardens) to the SOL.** Whilst it ranks amongst the middle of the RQF3-5 shortage indicators (79<sup>th</sup>) and has a lower vacancy to employee ratio compared to the median of eligible occupations, we expect this occupation is relatively more impacted by COVID-19 which may have limited the ability of stakeholders in this sector to respond.
- 6L.54 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 31st percentile of full-time earnings in this occupation, meaning that 31 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.
- 6L.55 Under our ‘sensible’ criteria, we have to consider the potential impact of a shortage and whether the occupation has high public value. During the COVID-19 pandemic, we consider that a shortage in this occupation would have a significant negative impact on the welfare of people within residential homes, particularly the elderly. Therefore, we recommend this occupation for inclusion on the SOL and would expect additional evidence that this occupation is in shortage for it to remain on the SOL in our next review.

## 6M: Public service associate professionals

### Introduction

- 6M.1 This chapter covers occupations grouped under public service associate professionals. We have identified 10 occupations that are eligible:
- i. Police officers (sergeant and below) (SOC 3312)
  - ii. Fire service officers (watch manager and below) (SOC 3313)
  - iii. Protective service associate professionals n.e.c. (SOC 3319)
  - iv. Conservation and environmental associate professionals (SOC 3550)
  - v. Public services associate professionals (SOC 3561)
  - vi. Human resources and industrial relations officers (SOC 3562)
  - vii. Vocational and industrial trainers and instructors (SOC 3563)
  - viii. Careers advisers and vocational guidance specialists (SOC 3564)
  - ix. Inspectors of standards and regulations (SOC 3565)
  - x. Health and safety officers (SOC 3567)
- 6M.2 None of these occupations have previously been on the SOL.

### Sector overview

- 6M.3 The occupations in this group have the highest concentration in the public administration, defence and compulsory social security sector, but they are represented in many different sectors. Public service associate professional occupations account for two per cent of total employment in the UK.
- 6M.4 The table 6M.1 provides some selected labour market statistics for the occupations in this group. The share of employees who are born in or outside of the EEA is roughly in line with the wider labour market.

Table 6M.1: Employment in selected occupations					
Occupation	Total employment	% who are self employed	% born in EEA (ex. UK)	% born outside EEA	% born in UK
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Public services associate professionals	91,200	0.8%	2%	6%	92%
Human resources and industrial relations officers	153,700	8%	6%	8%	86%
Vocational and industrial trainers and instructors	161,300	16%	4%	5%	91%
Careers advisers and vocational guidance specialists	29,200	6%	4%	13%	83%
Inspectors of standards and regulations	43,500	7%	3%	7%	90%
Health and safety officers	59,800	15%	1%	5%	93%
Police officers (sergeant and below)	153,200	-	1%	3%	96%
Fire service officers (watch manager and below)	54,600	-	3%	-	97%
Protective service associate professionals n.e.c.	61,200	3%	2%	7%	90%
Conservation and environmental associate professionals	9,700	8%	-	5%	90%

Source: APS (2017-19)

All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes

**6M.5** Table 6M.2 shows that all occupations, except conservation and environmental associate professionals (3550), have a median wage above the general £25,600 salary threshold.



<b>Table 6M.2: Pay in selected occupations</b>			
<b>Occupation</b>	<b>Median gross annual pay for full-time employees 2019</b>	<b>25<sup>th</sup> percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
Public services associate professionals	£33,400	£29,800	+5%
Human resources and industrial relations officers	£29,500	£23,500	-4%
Vocational and industrial trainers and instructors	£28,700	£23,400	-2%
Careers advisers and vocational guidance specialists	£28,300	£24,500	-6%
Inspectors of standards and regulations	£32,300	£26,600	-4%
Health and safety officers	£35,800	£29,500	-3%
Police officers (sergeant and below)	£41,300	£35,400	-3%
Fire service officers (watch manager and below)	£36,300	£32,200	+4%
Protective service associate professionals n.e.c.	£34,600	£29,900	-7%
Conservation and environmental associate professionals	£22,600	£20,900	-5%

Source: ASHE (2019)

## **COVID-19 impact**

- 6M.6** We did not receive any evidence from stakeholders in this group of occupations regarding the impact of COVID-19. All but two of the 10 occupations are ranked as 'low' for exposure to diseases within the ONS classification. The two occupations ranked as 'medium' were Police and Fire Service officers.
- 6M.7** The occupations are split in half as rated being either 'medium' or 'high' risk for proximity to others.

6M.8 The Coronavirus Job Retention Scheme statistics from HMRC<sup>231</sup> for July 2020 showed that a relatively low proportion of workers within occupations in public administration had been furloughed. There was a slightly higher proportion of furloughed workers in the East Midlands and Northern Ireland within occupations in public administration.

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<sup>231</sup> <https://www.gov.uk/government/statistics/coronavirus-job-retention-scheme-statistics-july-2020>

## SOC 3312: Police officers (sergeant and below)

Summary table: SOC 3312 Police officers (sergeant and below)																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.6%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	1%																		
Share of employees born outside the EEA (APS, 2017-19)	3%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	8%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£41,300																		
25th percentile full-time annual wage (ASHE, 2019)	£35,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£35,400																		
Minimum salary required with SOL points	£28,320																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	+10.2%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.1</td> </tr> <tr> <td>2013/14</td> <td>0.15</td> </tr> <tr> <td>2014/15</td> <td>0.18</td> </tr> <tr> <td>2015/16</td> <td>0.2</td> </tr> <tr> <td>2016/17</td> <td>0.18</td> </tr> <tr> <td>2017/18</td> <td>0.22</td> </tr> <tr> <td>2018/19</td> <td>0.21</td> </tr> <tr> <td>2019/20</td> <td>0.22</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.1	2013/14	0.15	2014/15	0.18	2015/16	0.2	2016/17	0.18	2017/18	0.22	2018/19	0.21	2019/20	0.22
Year	Ratio																		
2012/13	0.1																		
2013/14	0.15																		
2014/15	0.18																		
2015/16	0.2																		
2016/17	0.18																		
2017/18	0.22																		
2018/19	0.21																		
2019/20	0.22																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	109																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6M.9 We did not receive any stakeholder evidence that this occupation is in shortage.

## Recommendation

6M.10 **We do not recommend adding SOC code 3312 (police officers (sergeant and below)) to the SOL.** It ranks 109th of the RQF3-5 shortage indicators and the online job posts to employee ratio has been below the median of eligible occupations. We did not receive any stakeholder evidence that this occupation is in shortage.

## SOC 3313: Fire service officers (watch manager and below)

Summary table: SOC 3313 Fire service officers (watch manager and below)																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	8%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£36,300																		
25th percentile full-time annual wage (ASHE, 2019)	£32,200																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£32,200																		
Minimum salary required with SOL points	£25,760																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.1</td> </tr> <tr> <td>2013/14</td> <td>0.18</td> </tr> <tr> <td>2014/15</td> <td>0.18</td> </tr> <tr> <td>2015/16</td> <td>0.18</td> </tr> <tr> <td>2016/17</td> <td>0.19</td> </tr> <tr> <td>2017/18</td> <td>0.18</td> </tr> <tr> <td>2018/19</td> <td>0.23</td> </tr> <tr> <td>2019/20</td> <td>0.21</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.1	2013/14	0.18	2014/15	0.18	2015/16	0.18	2016/17	0.19	2017/18	0.18	2018/19	0.23	2019/20	0.21
Year	Ratio																		
2012/13	0.1																		
2013/14	0.18																		
2014/15	0.18																		
2015/16	0.18																		
2016/17	0.19																		
2017/18	0.18																		
2018/19	0.23																		
2019/20	0.21																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	122																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6M.11 We did not receive any stakeholder evidence that this occupation is in shortage.

## Recommendation

6M.12 **We do not recommend adding SOC code 3313 (fire service officers (watch manager and below)) to the SOL.** It ranks 122nd of the RQF3-5 shortage indicators and the online job posts to employee ratio has been below the median of eligible occupations. We did not receive any stakeholder evidence that this occupation is in shortage.

## SOC 3319: Protective service associate professionals n.e.c.

Summary table: SOC 3319 Protective service associate professionals n.e.c.																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	2%																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£34,600																		
25th percentile full-time annual wage (ASHE, 2019)	£29,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£29,900																		
Minimum salary required with SOL points	£23,920																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	6%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.35</td> </tr> <tr> <td>2013/14</td> <td>0.45</td> </tr> <tr> <td>2014/15</td> <td>0.42</td> </tr> <tr> <td>2015/16</td> <td>0.50</td> </tr> <tr> <td>2016/17</td> <td>0.45</td> </tr> <tr> <td>2017/18</td> <td>0.55</td> </tr> <tr> <td>2018/19</td> <td>0.48</td> </tr> <tr> <td>2019/20</td> <td>0.42</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.35	2013/14	0.45	2014/15	0.42	2015/16	0.50	2016/17	0.45	2017/18	0.55	2018/19	0.48	2019/20	0.42
Year	Ratio																		
2012/13	0.35																		
2013/14	0.45																		
2014/15	0.42																		
2015/16	0.50																		
2016/17	0.45																		
2017/18	0.55																		
2018/19	0.48																		
2019/20	0.42																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	11																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6M.13 We did not receive any stakeholder evidence that this occupation is in shortage.

## Recommendation

6M.14 **We do not recommend adding SOC code 3319 (protective service associate professionals n.e.c.) to the SOL.** Although it ranks in the top quarter of the RQF3-5 shortage indicators (11th) the online job posts to employee ratio has been below the median of eligible occupations. We did not receive any stakeholder evidence that this occupation is in shortage.



## SOC 3550: Conservation and environmental associate professionals

Summary table: SOC 3550 Conservation and environmental associate professionals																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£22,600																		
25th percentile full-time annual wage (ASHE, 2019)	£20,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>0.10</td></tr> <tr><td>2013/14</td><td>0.12</td></tr> <tr><td>2014/15</td><td>0.15</td></tr> <tr><td>2015/16</td><td>0.10</td></tr> <tr><td>2016/17</td><td>0.12</td></tr> <tr><td>2017/18</td><td>0.10</td></tr> <tr><td>2018/19</td><td>0.18</td></tr> <tr><td>2019/20</td><td>0.10</td></tr> </tbody> </table>		Year	Ratio	2012/13	0.10	2013/14	0.12	2014/15	0.15	2015/16	0.10	2016/17	0.12	2017/18	0.10	2018/19	0.18	2019/20	0.10
Year	Ratio																		
2012/13	0.10																		
2013/14	0.12																		
2014/15	0.15																		
2015/16	0.10																		
2016/17	0.12																		
2017/18	0.10																		
2018/19	0.18																		
2019/20	0.10																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	107																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6M.15 We did not receive any stakeholder evidence that this occupation is in shortage.

## Recommendation

6M.16 **We do not recommend adding SOC code 3550 (conservation and environmental associate professionals) to the SOL.** It ranks 107th of the RQF3-5 shortage indicators and the online job posts to employee ratio has been below the median of eligible occupations. We did not receive any stakeholder evidence that this occupation is in shortage.

## SOC 3561: Public services associate professionals

Summary table: SOC 3561 Public services associate professionals																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.3%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	2%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	9%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£33,400																		
25th percentile full-time annual wage (ASHE, 2019)	£29,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£29,800																		
Minimum salary required with SOL points	£23,840																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.1																		
2013/14	0.15																		
2014/15	0.2																		
2015/16	0.15																		
2016/17	0.18																		
2017/18	0.18																		
2018/19	0.22																		
2019/20	0.2																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	98																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6M.17 We did not receive any stakeholder evidence that this occupation is in shortage.

## Recommendation

6M.18 **We do not recommend adding SOC code 3561 (public services associate professionals) to the SOL.** It ranks in the lower third of the RQF3-5 shortage indicators (98th) and the online job posts to employee ratio has been below the median of eligible occupations. We did not receive any stakeholder evidence that this occupation is in shortage.

## SOC 3562: Human resources and industrial relations officers

Summary table: SOC 3562 Human resources and industrial relations officers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.5%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	7%																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	27%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£29,500																		
25th percentile full-time annual wage (ASHE, 2019)	£23,500																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	17%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-54.8%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>5.0</td> </tr> <tr> <td>2013/14</td> <td>4.8</td> </tr> <tr> <td>2014/15</td> <td>4.5</td> </tr> <tr> <td>2015/16</td> <td>5.7</td> </tr> <tr> <td>2016/17</td> <td>5.7</td> </tr> <tr> <td>2017/18</td> <td>5.2</td> </tr> <tr> <td>2018/19</td> <td>5.0</td> </tr> <tr> <td>2019/20</td> <td>4.2</td> </tr> </tbody> </table>		Year	Ratio	2012/13	5.0	2013/14	4.8	2014/15	4.5	2015/16	5.7	2016/17	5.7	2017/18	5.2	2018/19	5.0	2019/20	4.2
Year	Ratio																		
2012/13	5.0																		
2013/14	4.8																		
2014/15	4.5																		
2015/16	5.7																		
2016/17	5.7																		
2017/18	5.2																		
2018/19	5.0																		
2019/20	4.2																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	15																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6M.19 We received evidence from two stakeholders. They told us about roles that require foreign-language speakers at the native proficiency level to cover over 20 countries. There are insufficient highly-skilled language speakers in the UK. This means employers are recruiting directly from EEA countries or EEA nationals already in the UK.

## Recommendation

- 6M.20 **We do not recommend adding SOC code 3562 (human resources and industrial relations officers) to the SOL.** It ranks in the top third of the RQF3-5 shortage indicators (15th) and the online job posts to employee ratio is above the median of eligible occupations. However, there was little stakeholder evidence of a national shortage to include this occupation on the SOL.

## SOC 3563: Vocational and industrial trainers and instructors

Summary table: SOC 3563 Vocational and industrial trainers and instructors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.5%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	5%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	16%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£28,700																		
25th percentile full-time annual wage (ASHE, 2019)	£23,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	20%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-44.3%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.65</td> </tr> <tr> <td>2013/14</td> <td>0.80</td> </tr> <tr> <td>2014/15</td> <td>0.75</td> </tr> <tr> <td>2015/16</td> <td>0.90</td> </tr> <tr> <td>2016/17</td> <td>0.80</td> </tr> <tr> <td>2017/18</td> <td>0.85</td> </tr> <tr> <td>2018/19</td> <td>0.85</td> </tr> <tr> <td>2019/20</td> <td>0.90</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.65	2013/14	0.80	2014/15	0.75	2015/16	0.90	2016/17	0.80	2017/18	0.85	2018/19	0.85	2019/20	0.90
Year	Ratio																		
2012/13	0.65																		
2013/14	0.80																		
2014/15	0.75																		
2015/16	0.90																		
2016/17	0.80																		
2017/18	0.85																		
2018/19	0.85																		
2019/20	0.90																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	71																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6M.21 We did not receive any stakeholder evidence that this occupation is in shortage.

## Recommendation

6M.22 **We do not recommend adding SOC code 3563 (vocational and industrial trainers and instructors) to the SOL.** It ranks around the middle of the RQF3-5 shortage indicators (71st) and the online job posts to employee ratio has been below the median of eligible occupations. We did not receive any stakeholder evidence that this occupation is in shortage.



## SOC 3564: Careers advisers and vocational guidance specialists

Summary table: SOC 3564 Careers advisers and vocational guidance specialists																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	14%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	23%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£28,300																		
25th percentile full-time annual wage (ASHE, 2019)	£24,500																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.9																		
2013/14	0.75																		
2014/15	0.55																		
2015/16	0.6																		
2016/17	0.65																		
2017/18	0.65																		
2018/19	0.85																		
2019/20	0.85																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	20																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6M.23 We did not receive any stakeholder evidence that this occupation is in shortage.

## Recommendation

6M.24 **We do not recommend adding SOC code 3564 (careers advisers and vocational guidance specialists) to the SOL.** Whilst it ranks in the top third of the RQF3-5 shortage indicators (20th) the online job posts to employee ratio has been below the median of eligible occupations. We did not receive any stakeholder evidence that this occupation is in shortage.

## SOC 3565: Inspectors of standards and regulations

Summary table: SOC 3565 Inspectors of standards and regulations																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	9%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£32,300																		
25th percentile full-time annual wage (ASHE, 2019)	£26,600																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£26,600																		
Minimum salary required with SOL points	£21,280																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	17%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-7.7%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.65</td> </tr> <tr> <td>2013/14</td> <td>0.70</td> </tr> <tr> <td>2014/15</td> <td>0.68</td> </tr> <tr> <td>2015/16</td> <td>0.90</td> </tr> <tr> <td>2016/17</td> <td>0.78</td> </tr> <tr> <td>2017/18</td> <td>0.95</td> </tr> <tr> <td>2018/19</td> <td>0.75</td> </tr> <tr> <td>2019/20</td> <td>0.90</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.65	2013/14	0.70	2014/15	0.68	2015/16	0.90	2016/17	0.78	2017/18	0.95	2018/19	0.75	2019/20	0.90
Year	Ratio																		
2012/13	0.65																		
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2015/16	0.90																		
2016/17	0.78																		
2017/18	0.95																		
2018/19	0.75																		
2019/20	0.90																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	87																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6M.25 We received evidence from two stakeholders, regarding Meat Hygiene Inspectors (MHI), also known as Official Auxiliaries (OA), which is a job title within the SOC code 3565.
- 6M.26 This a specialist technical role which supports official veterinarians undertaking statutory post-mortem inspection of carcasses and offal and is key to food safety and standards as part of official controls enforced by the Food Standards Agency (FSA) and the Department of Agriculture, Environment and Rural Affairs (DAERA) in Northern Ireland.
- 6M.27 We were told that it is hard to find suitable candidates, as it is physically demanding and takes place in a temperature-controlled work environment that is close to the slaughter of animals. This occupation is not considered attractive for UK applicants and has relied on EEA workers.
- 6M.28 The training requirements are laid down in legislation and are incorporated in a Level 4 Diploma for Proficiency in Meat Inspection awarded by the Royal Society for Public Health (RSPH) and Food and Drink Qualification (FDQ). The qualification programme duration is 9-12 months for those that do not have any previous background and relevant qualifications. Individuals with relevant previous qualifications can complete this training in 2-3 months.
- 6M.29 The salary structures for the MHI role are fixed and part of a framework that involves those carrying out these and other official control duties. The costs of these are shared by the meat industry and by the taxpayer. The average salary for the job role is £23,271.
- 6M.30 We were told by the FSA that in the latest data up to 2019 Q4, the number of inspectors who work in FSA approved meat establishments is around 385 employees, of which three per cent are from the EEA, and contract staff of around 310, of which 76 per cent are from the EEA. The total number of MHIs is around 700 of which 35 per cent are EEA nationals.

## Recommendation

- 6M.31 **We recommend adding the job title Meat Hygiene Inspectors, also known as Official Auxiliaries, under SOC code 3565 (inspectors of standards and regulations) to the SOL.** Whilst the occupation as a whole ranks amongst the middle of the RQF3-5 shortage indicators (87th) and has a lower vacancy to employee ratio compared to the median of eligible occupations, there is stakeholder evidence to suggest the share of EEA workers is high and that this particular job title may be impacted once freedom of movement ends.

6M.32 However, as the training programme for new entrants is 9-12 months, we expect employers to be actively seeking UK residents to fill these roles and we are unlikely to be sympathetic to an extended time on the SOL.

6M.33 With the discount applied for SOL occupations, the salary threshold for this occupation would be £21,280. This salary threshold is at the 4th percentile of full-time earnings in this occupation, meaning that four per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

## SOC 3567: Health and safety officers

Summary table: SOC 3567 Health and safety officers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	1%																		
Share of employees born outside the EEA (APS, 2017-19)	5%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	12%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£35,800																		
25th percentile full-time annual wage (ASHE, 2019)	£29,500																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£29,500																		
Minimum salary required with SOL points	£23,600																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	25%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-18.3%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	2.5																		
2013/14	2.7																		
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2015/16	2.8																		
2016/17	2.9																		
2017/18	2.7																		
2018/19	2.0																		
2019/20	2.4																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	28																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6M.34 We did not receive any stakeholder evidence that this occupation is in shortage.

## Recommendation

6M.35 **We do not recommend adding SOC code 3567 (health and safety officers) to the SOL.** Although it ranks in the top third of the RQF3-5 shortage indicators (28<sup>th</sup>) and the online job posts to employee ratio has been above the median of eligible occupations, we did not receive any stakeholder evidence that this occupation is in shortage.

## 6N: Science, engineering and technology associate professionals

### Introduction

- 6N.1 In this section we cover all science, engineering and technology (SET) associate occupations, presenting analysis by SOC code.
- 6N.2 There are 11 occupations in this group potentially eligible for inclusion on the SOL:
- i. 3111 Laboratory technicians
  - ii. 3112 Electrical and electronics technicians
  - iii. 3113 Engineering technicians
  - iv. 3114 Building and civil engineering technicians,
  - v. 3115 Quality assurance technicians,
  - vi. 3116 Planning, process and production technicians,
  - vii. 3119 Science, engineering and production technicians n.e.c.,
  - viii. 3121 Architectural and town planning technicians,
  - ix. 3122 Draughtspersons,
  - x. 3131 IT operations technicians,
  - xi. 3132 IT user support technicians.
- 6N.3 We received 67 responses to the Call for Evidence (CfE) regarding this occupation group; 43 complete responses, 4 with limited ability to respond, 19 partially completed responses and one with no ability to respond.

### Sector overview

- 6N.4 Occupations in this group fall under three broader occupation groups, 311: science and engineering technicians, 312: architectural technicians and 313: IT technicians.
- 6N.5 These occupations are all categorised as RQF3-4, but these jobs are often taken on by candidates with higher qualifications – it is not uncommon for workers across all these occupations to be skilled to RQF6+.
- 6N.6 Table 6N.1 shows the level and characteristics of employment in the occupation group by SOC codes.



Table 6N.1: Employment in selected occupations					
Occupation	Total employment	% who are self employed	% born in EEA (ex. UK)	% born outside EEA	% born in UK
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Laboratory technicians	75,200	1%	8%	12%	81%
Electrical and electronics technicians	36,100	6%	5%	9%	86%
Engineering technicians	104,900	6%	6%	6%	88%
Building and civil engineering technicians	24,800	18%	10%	8%	82%
Quality assurance technicians	30,700	6%	11%	11%	78%
Planning, process and production technicians	23,700	2%	4%	5%	91%
Science, engineering and production technicians n.e.c.	51,100	4%	8%	4%	88%
Architectural and town planning technicians	29,000	15%	9%	9%	82%
Draughtspersons	38,300	18%	8%	6%	86%
IT operations technicians	108,600	5%	4%	11%	85%
IT user support technicians	100,300	5%	5%	10%	84%

Source: APS (2017-19)

All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

- 6N.7** The largest SOC code by employment in the occupation group is 3113; Engineering technicians, which comprises 18 per cent of employment within the occupations in the group and accounts for 104,900 jobs in the UK.
- 6N.8** SET associate professionals work across many different sectors. Out of the 88 industries coded in the APS data, only nine contained no engineers working in the 11 SET associate professional-related SOC codes that we are considering for inclusion on the SOL.
- 6N.9** The pay distribution between occupations in the group also vary significantly. Laboratory technicians (3111) receive median annual earnings of £20,900, compared

with electrical and electronics technicians (3112), who receive a median salary of £35,900<sup>232</sup>.

6N.10 Table 6N.2 demonstrates that many SOC codes within the group have seen a downwards trend in wage growth over the period from 2016-19. Whilst typically not indicative of shortage, the concentration of SET associate professions in universities that have experienced weak pay growth in recent years may be a contributing factor.

<b>Table 6N.2: Pay in selected occupations</b>			
<b>Occupation</b>	<b>Median gross annual pay for full-time employees 2019</b>	<b>25<sup>th</sup> percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
Laboratory technicians	£20,900	£18,200	-6%
Electrical and electronics technicians	£35,900	£28,100	+5%
Engineering technicians	£33,400	£27,300	-10%
Building and civil engineering technicians	-	£23,400	-
Quality assurance technicians	£27,600	£23,600	+1%
Planning, process and production technicians	£29,800	£25,200	-5%
Science, engineering and production technicians n.e.c.	£28,500	£22,000	+1%
Architectural and town planning technicians	£29,200	£23,800	-3%
Draughtspersons	£30,200	£25,800	-2%
IT operations technicians	£31,800	£24,500	+4%
IT user support technicians	£30,300	£24,400	-1%

Source: ASHE (2019)

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

6N.11 The 25<sup>th</sup> percentile of earnings in each occupation, aside from electrical and electronics technicians and engineering technicians, falls below the general salary threshold of £25,600. As such, the binding salary threshold for employment in these occupations would be the general threshold.

<sup>232</sup> Full time working-age earnings as reported in ASHE 2018/19 data.

6N.12 Vacancy postings for IT technicians and architectural technicians have demonstrated a downward trend. The picture for science and engineering technician occupations is not quite as clear – most have remained largely constant, but postings have increased for science, engineering and production technicians n.e.c. (3119).

### **Drivers of shortage**

6N.13 The most common response given in the CfE from employers of SET professionals when asked about the reason for labour market shortages was that there is insufficient supply in the UK with adequate skills and experience to fill shortages.

6N.14 Industry reports have cited an ageing workforce as an issue amongst SET associate professionals. According to the 2019 APS data, 30 per cent of full-time, working age employees in this occupation group are over 50, compared with 32 per cent across all occupations.

6N.15 Most responses received from stakeholders for all SOC codes in this group were from universities. One stakeholder reported that around 25 per cent of roles that higher education institutions reported difficulties recruiting for were technician roles in some form.

6N.16 Amongst universities, there is some evidence of structural elements to the cause of shortage in this occupation group. Many respondents to the CfE cited their minimum qualification level for vacancies to be degree level. All SET associate professional occupations are classified as RQF3-4, which requires workers to be skilled to A-level qualifications or equivalent.

6N.17 In 2017, almost 90 per cent of EU and non-EU technicians at Russell Group universities were educated to RQF6+.

6N.18 Restricting the pool of applicants to be only those skilled to RQF6+ will exacerbate shortages, as salaries in the SET associate professional group cannot compete with those offered by RQF6+ occupations.

### **Steps being taken to alleviate shortages**

6N.19 Evidence from stakeholders suggested that a wide range of attempts to alleviate shortage across SET associate professional occupations had been undertaken, with mixed responses surrounding the effectiveness of each.

6N.20 The methods that most employers found to be at least somewhat effective most frequently include increasing salaries, increasing training in existing workforce, expanding trainee and apprenticeship programmes.

6N.21 The single method of addressing shortage that was cited universally as effective was employing non-UK nationals.

## SOC 3111: Laboratory technicians

Summary table: SOC 3111 Laboratory technicians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.3%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	8%																		
Share of employees born outside the EEA (APS, 2017-19)	12%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	16%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£20,900																		
25th percentile full-time annual wage (ASHE, 2019)	£18,200																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	7%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-8.1%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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2019/20	0.66																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	49																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6N.22 We received 13 responses to the CfE regarding SOC code 3111.
- 6N.23 Stakeholders told us that they were experiencing difficulty recruiting for lab technicians. The most commonly cited reason for the perceived shortage was that there were insufficient numbers of adequately skilled UK workers applying for these positions.
- 6N.24 Laboratory technicians are classified as an RQF3 occupation, which requires employees to be skilled to A-level. A number of respondents listed their minimum qualification for laboratory technician vacancies as degree level, which restricts the eligible applicant pool to only those qualified to RQF6+. Workers skilled to RQF6+ may be more attracted to other occupations that are considered to require RQF6+ skill levels and may pay more.
- 6N.25 Most employers that responded highlighted that they paid wages above the going rate for this occupation, though it is worth highlighting that for those employers specifying degree-level qualifications as a requirement, these wages were still below those that could be obtained in occupations classified as RQF6+.
- 6N.26 One respondent highlighted difficulty finding candidates at the right level and indicated that excluding EEA applicants would result in a lower quality applicant pool.
- 6N.27 Universities comprised most respondents for this occupation, and also highlighted another reason for shortage as difficulty competing with private sector employers due to the use of national pay scales to set wages.
- 6N.28 The response from the Northern Irish Department for the Economy stated that there may be a rapid increase in demand for laboratory technicians in Northern Ireland's agri-food industry the near future in response to new regulatory requirements introduced by the Northern Ireland Protocol. This is due to the role of these occupations in verifying the standards of products for human consumption.
- 6N.29 The Scottish Government's response to the CfE flagged science and engineering technician occupations as vital for '*maintaining the UKs reputation for excellence in research and innovation*'.
- 6N.30 Laboratory technicians were also recommended for inclusion on the SOL in the Welsh Government's response, where the occupation was included amongst a variety of health-related occupations.
- 6N.31 We also received one response highlighting difficulty in employing seed analysts due to the lack of British workers willing to take part in seasonal work.

## Recommendation

- 6N.32** We recommend that **SOC code 3111 (laboratory technician)** is added to the SOL. The occupation does not rank highly (49<sup>th</sup>) in our RQF3-5 shortage indicators and the vacancy rate is below average, but we received substantial evidence from stakeholders across the UK indicating shortage spanning multiple sectors.
- 6N.33** Laboratory technicians play an important role in delivering laboratory capacity for COVID-19 testing. One of the criteria the MAC uses for inclusion on the SOL focuses on the public value of the occupation. The importance of laboratory technicians throughout COVID-19 has contributed to the decision to recommend SOC code 3111 (laboratory technicians) for inclusion on the SOL.
- 6N.34** With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 41<sup>st</sup> percentile of full-time earnings in this occupation, meaning that 41 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

## SOC 3112: Electrical and electronics technicians

Summary table: SOC 3112 Electrical and electronics technicians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	14%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£35,900																		
25th percentile full-time annual wage (ASHE, 2019)	£28,100																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£28,100																		
Minimum salary required with SOL points	£22,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	19%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-18.4%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	1.25																		
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2019/20	1.00																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	16																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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## Stakeholder evidence

- 6N.35 We received seven responses to the CfE referencing electrical and electronics technicians.
- 6N.36 Most responses received for this SOC code were from universities, which cited similar reasons for shortage as SOC 3111, namely; a lack of skills, qualification and experience amongst UK workers, and difficulty competing with the private sector.
- 6N.37 SOC 3112 is also classified as an RQF3 occupation, but two of the four responses received for this group specified the minimum qualification to be degree-level. The salaries offered for these roles was below the average for RQF6+ occupations, so may be undesirable relative to other higher paying roles requiring similar qualifications. This may contribute to perceived shortages in this occupation.
- 6N.38 Stakeholders cited challenges in hiring electrical and electronics technician roles into the recycling sector in Northern Ireland. Demand for labour in this sector has risen due to the ongoing development of sustainability and Green Growth.
- 6N.39 Stakeholders in Scotland and Northern Ireland also highlighted electrical and electronics technicians for inclusion on the SOL amongst other SOC codes in the science and engineering associate professional occupation class.

## Recommendation

- 6N.40 **We do not recommend including SOC code 3112 (electrical and electronics technicians) to the shortage occupation list.** Although the occupation ranks highly in the RQF3-5 shortage indicators (16<sup>th</sup>), the vacancy rate has remained at or below the average since 2016/17, and we received limited evidence of persistent shortage in the occupation from stakeholders.



## SOC 3113: Engineering technicians

Summary table: SOC 3113 Engineering technicians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.4%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	6%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£33,400																		
25th percentile full-time annual wage (ASHE, 2019)	£27,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£27,300																		
Minimum salary required with SOL points	£21,840																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	10%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-30.6%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>4.5</td></tr> <tr><td>2013/14</td><td>4.2</td></tr> <tr><td>2014/15</td><td>5.0</td></tr> <tr><td>2015/16</td><td>5.8</td></tr> <tr><td>2016/17</td><td>5.5</td></tr> <tr><td>2017/18</td><td>4.8</td></tr> <tr><td>2018/19</td><td>4.0</td></tr> <tr><td>2019/20</td><td>4.5</td></tr> </tbody> </table>		Year	Ratio	2012/13	4.5	2013/14	4.2	2014/15	5.0	2015/16	5.8	2016/17	5.5	2017/18	4.8	2018/19	4.0	2019/20	4.5
Year	Ratio																		
2012/13	4.5																		
2013/14	4.2																		
2014/15	5.0																		
2015/16	5.8																		
2016/17	5.5																		
2017/18	4.8																		
2018/19	4.0																		
2019/20	4.5																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	106																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6N.41 We received 13 responses to the CfE regarding SOC code 3113.
- 6N.42 One stakeholder reported shortage in the nuclear industry, due to relevant knowledge for new reactors being primarily held abroad where these technologies are already being exploited. They cited long training delays as a key barrier for addressing shortage immediately.
- 6N.43 Evidence from councils suggested that greater remuneration and benefits offered by private sector companies exacerbated the recruitment and retention challenges already posed by a limited supply of technical engineering skills.
- 6N.44 We received responses from a range of employers from this SOC code, including job titles such as commissioning engineers, highways technicians and vehicle emissions engineering technician, but there was limited evidence from these.
- 6N.45 The response from the Northern Ireland's Minister for the Economy identified median salaries for engineering technicians to be 22 per cent lower than the UK median for the occupation in line with many other occupations incurring lower wages in Northern Ireland than the UK average.

## Recommendation

- 6N.46 **We do not recommend including SOC code 3113 (engineering technician) to the shortage occupation list.** The vacancy rate is consistently above the average, but the occupation ranks low in the RQF3-5 shortage indicators (106<sup>th</sup>). We received some responses from employers in this industry demonstrating shortage, though this was somewhat limited, and not sufficient to demonstrate persistent shortages across the whole occupation.
- 6N.47 The share of EEA workers in the occupation is low, so we do not expect that shortages will be substantially exacerbated following the end of free movement.

## SOC 3114: Building and civil engineering technicians

Summary table: SOC 3114 Building and civil engineering technicians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	12%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	14%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	£23,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	14%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.25</td> </tr> <tr> <td>2013/14</td> <td>1.45</td> </tr> <tr> <td>2014/15</td> <td>1.45</td> </tr> <tr> <td>2015/16</td> <td>1.25</td> </tr> <tr> <td>2016/17</td> <td>1.40</td> </tr> <tr> <td>2017/18</td> <td>1.75</td> </tr> <tr> <td>2018/19</td> <td>1.75</td> </tr> <tr> <td>2019/20</td> <td>1.15</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.25	2013/14	1.45	2014/15	1.45	2015/16	1.25	2016/17	1.40	2017/18	1.75	2018/19	1.75	2019/20	1.15
Year	Ratio																		
2012/13	1.25																		
2013/14	1.45																		
2014/15	1.45																		
2015/16	1.25																		
2016/17	1.40																		
2017/18	1.75																		
2018/19	1.75																		
2019/20	1.15																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	6																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6N.48 We received only two responses regarding SOC code 3114, and both were provided by employers highlighting multiple SET associate professionals as in shortage.
- 6N.49 The responses for this occupation reiterated the difficulty in competing with the private sector for technician roles whilst supply is low, and general shortage of required skills, but provided no occupation-specific evidence.

## Recommendation

- 6N.50 **We do not recommend adding SOC code 3114 (building and civil engineering technicians) to the SOL.** The occupation ranks very highly in the RQF3-5 shortage indicators (6<sup>th</sup>), and has a vacancy rate of above average, but we received limited stakeholder evidence of shortage in this occupation.
- 6N.51 The occupation does have a relatively high share of EEA workers, so may be more susceptible to shortages following the end of freedom of movement from the EEA if supply is restricted. We will continue to review the level of shortage in this occupation.

## SOC 3115: Quality assurance technicians

Summary table: SOC 3115 Quality assurance technicians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	12%																		
Share of employees born outside the EEA (APS, 2017-19)	10%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	16%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£27,600																		
25th percentile full-time annual wage (ASHE, 2019)	£23,600																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	15%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-40.2%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>3.9</td> </tr> <tr> <td>2013/14</td> <td>3.5</td> </tr> <tr> <td>2014/15</td> <td>3.4</td> </tr> <tr> <td>2015/16</td> <td>3.3</td> </tr> <tr> <td>2016/17</td> <td>3.2</td> </tr> <tr> <td>2017/18</td> <td>4.1</td> </tr> <tr> <td>2018/19</td> <td>3.9</td> </tr> <tr> <td>2019/20</td> <td>3.2</td> </tr> </tbody> </table>		Year	Ratio	2012/13	3.9	2013/14	3.5	2014/15	3.4	2015/16	3.3	2016/17	3.2	2017/18	4.1	2018/19	3.9	2019/20	3.2
Year	Ratio																		
2012/13	3.9																		
2013/14	3.5																		
2014/15	3.4																		
2015/16	3.3																		
2016/17	3.2																		
2017/18	4.1																		
2018/19	3.9																		
2019/20	3.2																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	4																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6N.52 We received three responses citing this occupation as hard to fill, but two of these responses did not recommend placing this occupation on the SOL.
- 6N.53 One stakeholder cited challenges in hiring quality assurance technician roles into the recycling sector in Northern Ireland.

## Recommendation

- 6N.54 **We do not recommend adding SOC code 3115 (quality assurance technicians) on the SOL.** The occupation has a vacancy rate above average and ranks very highly (4<sup>th</sup>) in the RQF3-5 shortage indicator rankings, but we received little stakeholder evidence to support this.
- 6N.55 The occupation does have relatively high share of EEA workers, so may be more susceptible to shortages following the end of freedom of movement if supply is restricted. We will continue to review the level of shortage in this occupation.

## SOC 3116: Planning, process and production technicians

Summary table: SOC 3116 Planning, process and production technicians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	4%																		
Share of employees born outside the EEA (APS, 2017-19)	5%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	7%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£29,800																		
25th percentile full-time annual wage (ASHE, 2019)	£25,200																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	34%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-39.2%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>4.2</td></tr> <tr><td>2013/14</td><td>4.2</td></tr> <tr><td>2014/15</td><td>4.4</td></tr> <tr><td>2015/16</td><td>4.7</td></tr> <tr><td>2016/17</td><td>5.1</td></tr> <tr><td>2017/18</td><td>5.8</td></tr> <tr><td>2018/19</td><td>5.0</td></tr> <tr><td>2019/20</td><td>4.4</td></tr> </tbody> </table>		Year	Ratio	2012/13	4.2	2013/14	4.2	2014/15	4.4	2015/16	4.7	2016/17	5.1	2017/18	5.8	2018/19	5.0	2019/20	4.4
Year	Ratio																		
2012/13	4.2																		
2013/14	4.2																		
2014/15	4.4																		
2015/16	4.7																		
2016/17	5.1																		
2017/18	5.8																		
2018/19	5.0																		
2019/20	4.4																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	36																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6N.56 We received three responses regarding SOC 3116, all from employers which reported shortage across multiple SET associate professional occupations.
- 6N.57 Respondents reiterated general difficulty in employing into SET associate professional occupations, referencing insufficient number of individuals in the UK with the required skillset, and the higher quality of EEA applicants.
- 6N.58 The evidence indicated that all respondents paid above occupation-specific salary threshold for planning, process and production technicians,

## Recommendation

- 6N.59 **We do not recommend adding SOC code 3116 (planning, process and production technicians) to the SOL.** The occupation has a higher than average vacancy rate, and a relatively high ranking in the RQF3-5 shortage indicators (36<sup>th</sup>), but we did not receive sufficient evidence to demonstrate that this specific occupation may be in shortage.



## SOC 3119: Science, engineering and production technicians n.e.c.

Summary table: SOC 3119 Science, engineering and production technicians n.e.c.																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	8%																		
Share of employees born outside the EEA (APS, 2017-19)	5%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	14%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£28,500																		
25th percentile full-time annual wage (ASHE, 2019)	£22,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	9%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-23.7%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	4.5																		
2013/14	5.0																		
2014/15	5.2																		
2015/16	6.5																		
2016/17	7.0																		
2017/18	5.5																		
2018/19	6.0																		
2019/20	6.5																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	70																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6N.60 SOC code 3119 is an ‘not elsewhere classified’ occupation, which captures all job titles not grouped elsewhere in the SET associate professional occupation grouping. We received 12 responses for this SOC code, from employers of a wide range of job titles, such as packaging technicians, workshop technicians and research technicians.
- 6N.61 The wide-ranging coverage of responses from this SOC code cited similar issues of recruitment to other SET associate professional occupations. Chiefly that the specialised skills required for these occupations were not available in sufficient numbers amongst the UK workforce.
- 6N.62 One response cited an aging workforce and the issue of the upcoming workforce not considering technician occupations as a cause of shortage in the occupation.
- 6N.63 Stakeholders indicated to us that they attempted several different ways to overcome difficulties filling vacancies, such as widening their recruitment channels, raising wages and carrying out additional training. Of the responses we received for this occupation group, almost all employers paid above the going rate, but still reported shortages.

## Recommendation

- 6N.64 **We do not recommend adding SOC code 3119 (science, engineering and production technicians n.e.c.) to the SOL.** This occupation ranks in the middle in the RQF3-5 shortage indicators (70<sup>th</sup>), but the vacancy rate is above average and has increased over the last few years.
- 6N.65 The nature of ‘not elsewhere classified’ occupations means that there can be substantial heterogeneity in the roles captured by the SOC code. The evidence provided by stakeholders for this occupation spanned many different job titles, and there was not sufficient evidence for any one job title to justify the addition of the whole SOC code or specific job titles within the occupation to demonstrate persistent shortage.

## SOC 3121: Architectural and town planning technicians

Summary table: SOC 3121 Architectural and town planning technicians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	8%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£29,200																		
25th percentile full-time annual wage (ASHE, 2019)	£23,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	19%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>0.05</td></tr> <tr><td>2013/14</td><td>0.05</td></tr> <tr><td>2014/15</td><td>0.08</td></tr> <tr><td>2015/16</td><td>0.10</td></tr> <tr><td>2016/17</td><td>0.08</td></tr> <tr><td>2017/18</td><td>0.07</td></tr> <tr><td>2018/19</td><td>0.06</td></tr> <tr><td>2019/20</td><td>0.06</td></tr> </tbody> </table>		Year	Ratio	2012/13	0.05	2013/14	0.05	2014/15	0.08	2015/16	0.10	2016/17	0.08	2017/18	0.07	2018/19	0.06	2019/20	0.06
Year	Ratio																		
2012/13	0.05																		
2013/14	0.05																		
2014/15	0.08																		
2015/16	0.10																		
2016/17	0.08																		
2017/18	0.07																		
2018/19	0.06																		
2019/20	0.06																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	123																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6N.66 We did not receive any occupation specific evidence demonstrating that this occupation is in shortage.
- 6N.67 There was one response for this SOC code which cited the occupation as hard to fill, and recommended that it be included on the SOL. The respondent also highlighted multiple other occupations within the SET associate professional group and cited there to be a “*shortage in region and skills*”.

## Recommendation

- 6N.68 **We do not recommend adding SOC code 3121 (architectural and town planning engineers) to the SOL.** The occupation has a very low vacancy rate, and 123<sup>rd</sup> out of 136 occupations in the RQF3-5 shortage indicator ranking. We also did not receive any stakeholder evidence to demonstrate that this specific occupation may be in shortage.

## SOC 3122: Draughtspersons

Summary table: SOC 3122 Draughtspersons																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	10%																		
Share of employees born outside the EEA (APS, 2017-19)	4%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	18%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£30,200																		
25th percentile full-time annual wage (ASHE, 2019)	£25,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,800																		
Minimum salary required with SOL points	£20,640																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	24%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-46.2%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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2019/20	3.8																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	43																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6N.69 We received evidence from one stakeholder referring to multiple different job titles within this SOC code; computer aided design engineer, computer aided engineer analyst and creative designer.
- 6N.70 The respondent highlighted that the unprecedented pace of change in the automotive sector, through electrification and autonomous driving, draughtspersons are in high demand. The lack of available skills in this occupation combined with increasing demand has led to a requirement to recruit from outside the UK.
- 6N.71 SOC code 3122 is classified as RQF3, which specifies a minimum qualification level to be A-levels. The respondent reported a minimum qualification level for applicants to be degree-level, i.e. RQF6, but also reported earnings above the median earnings in occupations classified as RQF6+.

## Recommendation

- 6N.72 **We do not recommend adding SOC code 3122 (draughtsperson) to the SOL.** The occupation has a higher than average vacancy rate and ranks in the relatively highly in our RQF3-5 shortage indicator rankings (43<sup>rd</sup>) but we received limited stakeholder evidence of a shortage of draughtspersons.

## SOC 3131: IT operations technicians

Summary table: SOC 3131 IT operations technicians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.4%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	11%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	16%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£31,800																		
25th percentile full-time annual wage (ASHE, 2019)	£24,500																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	14%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-20.0%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	4.6																		
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2018/19	2.8																		
2019/20	2.8																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	9																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6N.73 The IT operations technician SOC code received the largest number of responses out of all SET associate professional occupations, receiving responses from 13 employers. Employers submitted evidence for a range of job titles including IT technicians, computer games tester, database administrator, network planner and Linux developer.
- 6N.74 Many responses referenced multiple different SOC codes within the SET associate professional group, so many cited reasons for shortage as the same as other occupations in the group, i.e. shortage of required skills in sufficient numbers amongst the UK workforce.
- 6N.75 In addition, more employers cited regional recruitment issues compared with other occupations in the group. One stakeholder reported difficulty filling IT vacancies for nearly a decade. The main issue referenced is that the employer is located in an area where house prices are similar to that of London, but wages set by the public sector agenda for change pay scales do not allow the 20 per cent London-weighting pay uplift. Other employers reported problems finding the required level of technical skills in the local labour market.
- 6N.76 One respondent referenced the competitive nature of the industry, and highlighted that after long and costly training programmes, it is common to lose talent to competitors, and therefore have a regular need to recruit. They reported that if they were to rely on the UK domestic labour market solely, it would be necessary to increase salaries, which would subsequently increase costs and have a negative impact on investment.
- 6N.77 All respondents reported attempts to overcome recruitment difficulties through methods such as widening recruitment methods used and increasing training amongst the existing workforce. Only some respondents had attempted to increase wages, but almost all reported that they already pay above the going rate.

## Recommendation

- 6N.78 **We recommend that SOC 3131 (IT operation technicians) is added to the SOL.** The occupation ranks highly in the RQF3-5 shortage indicator overall rank (9<sup>th</sup>) and has a vacancy rate above average. Stakeholder evidence also highlighted evidence of national shortages in this occupation.
- 6N.79 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 12th percentile of full-time earnings in this occupation, meaning that 12 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.



## SOC 3132: IT user support technicians

Summary table: SOC 3132 IT user support technicians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.3%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	10%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	14%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£30,300																		
25th percentile full-time annual wage (ASHE, 2019)	£24,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	-																		
Proximity to others	-																		
Share of employees furloughed (LFS, 2020)	9%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-29.1%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>5.2</td> </tr> <tr> <td>2013/14</td> <td>5.1</td> </tr> <tr> <td>2014/15</td> <td>5.3</td> </tr> <tr> <td>2015/16</td> <td>5.5</td> </tr> <tr> <td>2016/17</td> <td>5.2</td> </tr> <tr> <td>2017/18</td> <td>5.3</td> </tr> <tr> <td>2018/19</td> <td>3.6</td> </tr> <tr> <td>2019/20</td> <td>4.0</td> </tr> </tbody> </table>		Year	Ratio	2012/13	5.2	2013/14	5.1	2014/15	5.3	2015/16	5.5	2016/17	5.2	2017/18	5.3	2018/19	3.6	2019/20	4.0
Year	Ratio																		
2012/13	5.2																		
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<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	19																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6N.80 We received responses from two employers that cited IT user support technicians as a hard-to-fill vacancy as part of their submissions regarding multiple SET associate professional occupations.
- 6N.81 These responses cited the same challenges as those across the SET associate professional group, i.e. shortage of skills available domestically. Further occupation-specific information was not supplied.

## Recommendation

- 6N.82 **We do not recommend adding SOC code 3132 (IT user support technicians) to the SOL.** The occupation ranks highly (19<sup>th</sup>) in the RQF3-5 shortage indicator rankings and has a higher than average vacancy rate. However, the stakeholder evidence was limited.

## 6O: Skilled Construction & Building Trades

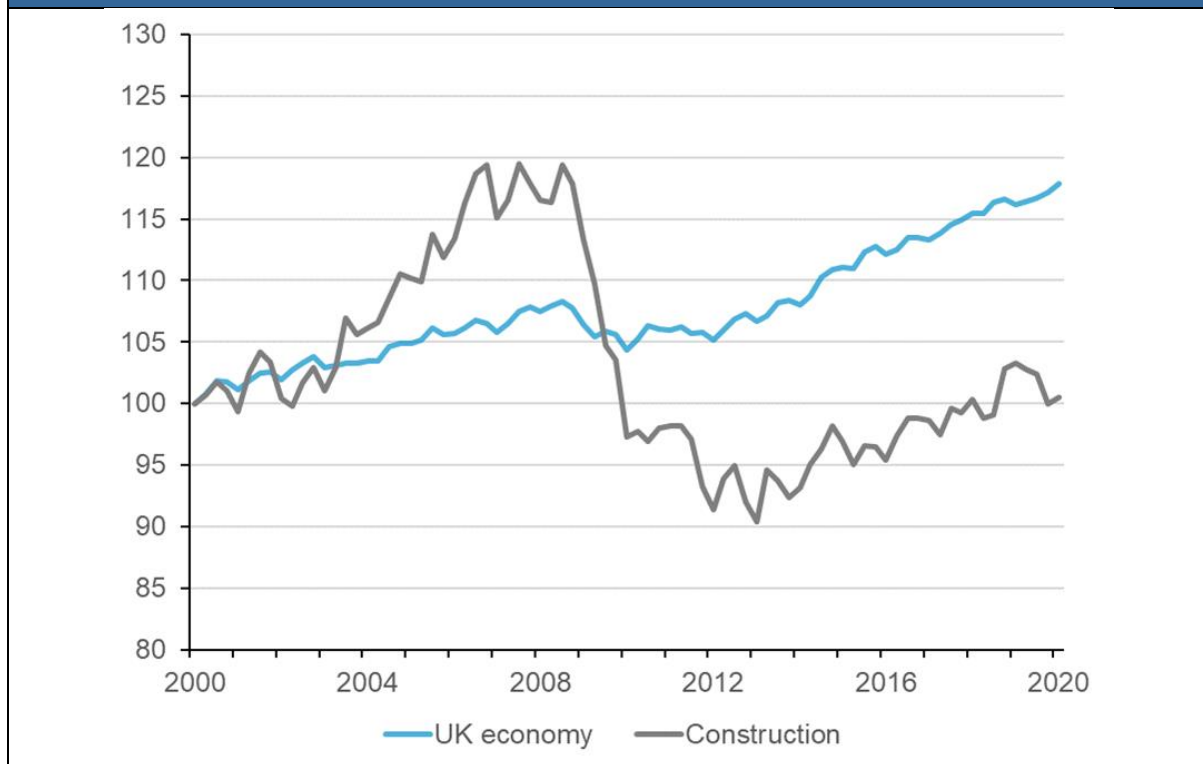
### Introduction

- 6O.1 In this section we cover 11 construction-related occupations in the skilled construction and building trades occupation group, presenting analysis by SOC code. The occupations under consideration are:
- i. Steel erectors (SOC 5311)
  - ii. Bricklayers and masons (SOC 5312)
  - iii. Roofers, roof tilers and slaters (SOC 5313)
  - iv. Plumbers and heating and ventilating engineers (SOC 5314)
  - v. Carpenters and joiners (SOC5315)
  - vi. Glaziers, window fabricators and fitters (SOC 5316)
  - vii. Construction and building trades n.e.c. (SOC 5319)
  - viii. Plasterers (SOC 5321)
  - ix. Floorers and wall tilers (SOC 5322)
  - x. Painters and decorators (SOC 5323)
  - xi. Construction and building trades supervisors (SOC 5330)

### Sector overview

- 6O.2 These occupations mainly work in the construction industry. The construction sector accounts for approximately seven per cent of employment in the UK. Figure 6.O.1 shows the number of employees indexed to 2000 Q1. As is well known, construction is one of the most volatile industries. The construction industry suffered a sharp decrease in employment during the financial crisis of 2008. Since then – until the COVID-19 crisis – it has grown at a similar rate to total UK employment.
- 6O.3 According to the 3-year average Annual Population Survey from 2017-19, there are approximately 2.4 million people working in the construction industry.

Figure 6O.1: Indexed number of employees in sector (Jan-Mar 2000=100)



Source: ONS - EMP14 Employees and self-employed by industry

- 6O.4 The 11 construction-related SOC codes potentially eligible for inclusion on the SOL account for 3.4 per cent of total employment in the UK<sup>233</sup>. Outside the construction industry, the 'other manufacturing' is the other main sector employing steel erectors and glaziers (codes 5311 and 5316 respectively). The industry workforce has grown by approximately 15 per cent since 2000.
- 6O.5 The skilled construction and building trades occupation group has a high proportion of self-employed workers compared to employed workers. This is important as the advantages of an occupation being on the SOL apply to the Skilled Worker route where migrants must be sponsored by an employer and do not apply to self-employed migrants.
- 6O.6 Table 6O.1 shows employment in the skilled construction and building trade occupation groups by country of birth compared to employment across all occupations in the UK. Of those employed in skilled construction and building trade occupations, approximately 86 per cent are UK and RoI nationals, around nine per cent are EEA nationals with under five per cent being Non-EEA nationals.

<sup>233</sup> APS, 2017-19

**Table 6O.1: Employment in selected occupations**

Occupation	Total employment	% who are self employed	% born in EEA (ex. UK)	% born outside EEA	% born in UK
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Steel erectors	7,900	30%	10%	-	89%
Bricklayers and masons	81,800	69%	13%	3%	85%
Roofers, roof tilers and slaters	52,700	65%	4%	4%	91%
Plumbers and heating and ventilating engineers	187,800	46%	4%	4%	92%
Carpenters and joiners	235,100	61%	9%	4%	87%
Glaziers, window fabricators and fitters	38,100	32%	11%	4%	85%
Construction and building trades n.e.c.	250,700	66%	15%	7%	78%
Plasterers	53,900	76%	5%	2%	93%
Floorers and wall tilers	35,100	73%	4%	3%	94%
Painters and decorators	127,200	75%	11%	4%	85%
Construction and building trades supervisors	61,300	18%	6%	7%	86%

Source: APS (2017-19)

All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes

## Wages

6O.7 Occupations in this group generally earn below median full-time earnings relative to the whole of the UK economy. Only two occupations in 2019 earned above median UK earnings: SOC code 5330 (construction and building trades supervisors) and SOC code 5314 (plumbers and heating and ventilating engineers), with full-time gross median earnings approximately £37,600 and £31,400 respectively (Table 6O.2).

**Table 6O.2: Pay in selected occupations**

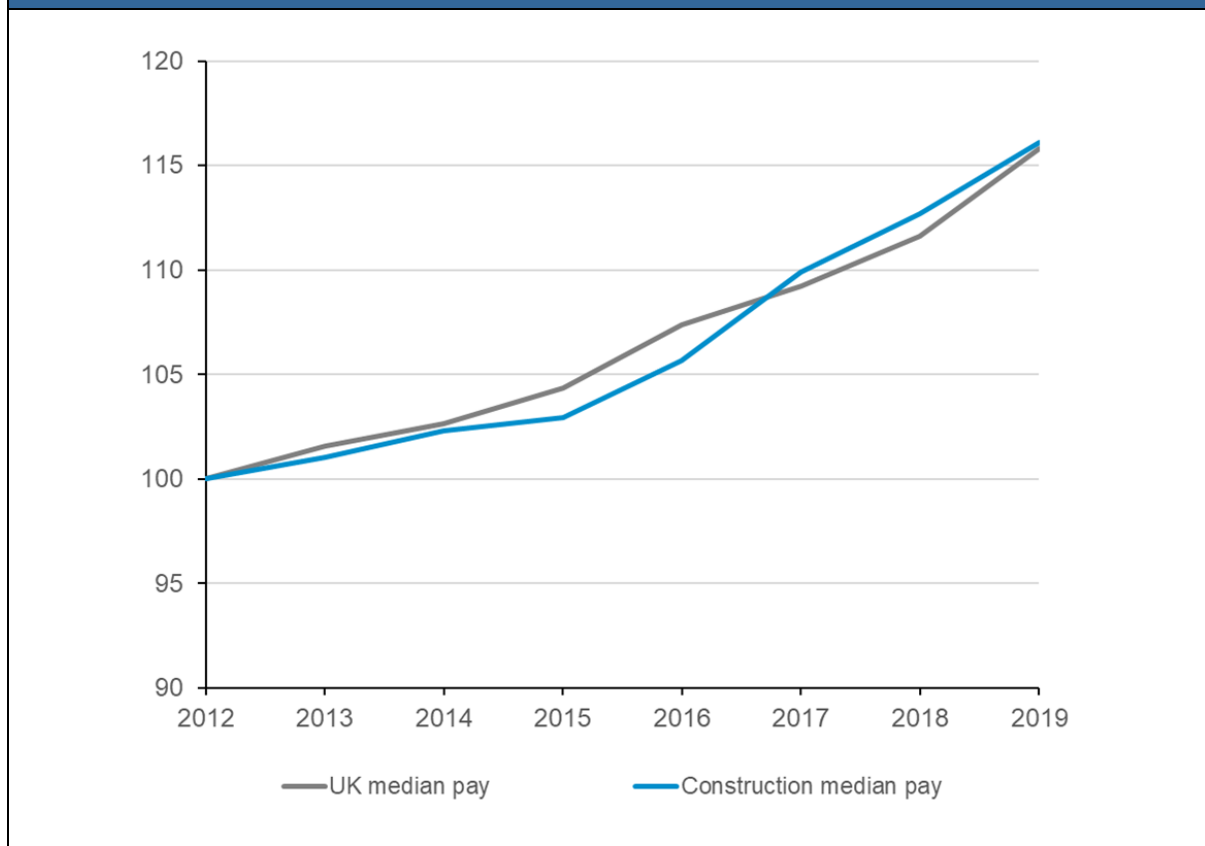
<b>Occupation</b>	<b>Median gross annual pay for full-time employees 2019</b>	<b>25<sup>th</sup> percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
Steel erectors	£26,600	£23,700	-10%
Bricklayers and masons	£26,800	£23,000	+3%
Roofers, roof tilers and slaters	£25,200	£21,400	+3%
Plumbers and heating and ventilating engineers	£31,400	£25,800	+3%
Carpenters and joiners	£27,100	£22,300	-1%
Glaziers, window fabricators and fitters	£22,400	£19,100	-0%
Construction and building trades n.e.c.	£27,500	£23,000	+6%
Plasterers	£28,200	£24,300	+10%
Floorers and wall tilers	£25,000	£21,800	-9%
Painters and decorators	£24,900	£21,400	-0%
Construction and building trades supervisors	£37,600	£31,400	+4%

Source: ASHE (2019)

Non-reported estimates are due to insufficient sample sizes

**6O.8** The construction sector has seen median wage growth in line with the UK median pay (Figure 6O.2)

**Figure 6.O.2: Indexed wage level in sector (2012=100)**



Source: ASHE (2012-19)

## An aging workforce

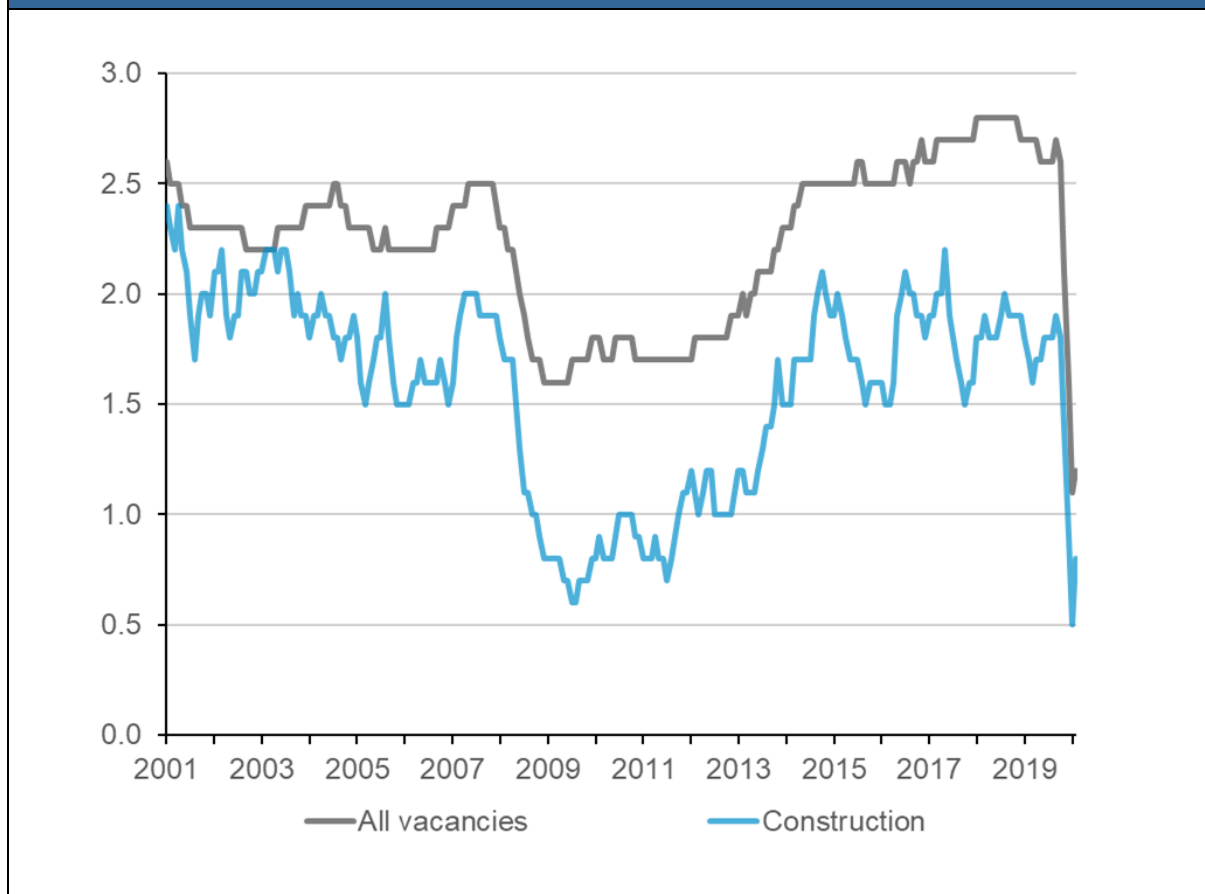
**6O.9** In responses to the Call for Evidence (CfE), stakeholders report that the construction sector workforce is relatively old compared to the rest of the UK workforce. Both the UK economy and construction industry have a very similar proportion of 50 to 64-year olds in employment. However, the construction industry has a lower proportion of younger workers than the UK workforce.

**6O.10** This is highlighted in various CfE responses made by the industry for this current report. Many stated that take up of apprenticeship schemes is decreasing in the construction industry. Stakeholders said there was a lack of interest from younger generations to go into the construction industry.

## Shortage

**6O.11** Vacancy ratios across the construction industry are lower than the ratio across the UK economy. Figure 6.O.3 shows vacancies per 100 employees over time for the construction industry compared to all industries.

Figure 6.O.3: Industry vacancy ratio (vacancies per 100 employee jobs)



Source: ONS - VACS02 Vacancies by industry

- 60.12 Using data on vacancies available, shortages do not seem to be prominent across the construction industry.
- 60.13 However, a representative organisation reported that around half of firms faced a skill shortage in the UK construction industry, which they saw as being the biggest restriction on their activity in the next 12 months. More of the organisation's members said they were planning to increase hiring of subcontractors than said they were planning to reduce subcontracting.
- 60.14 Respondents to the CfE stated that a lack of candidates with suitable skills was hampering firms' abilities to recruit in the areas they require. Some stakeholders noted that due to a low number of applicants there was more competition between employers for a candidate, with larger firms offering a better remuneration package to candidates than small firms.



## Steps taken to alleviate shortage

- 60.15 A report by the Construction Industry Training Board (CITB) said that their aim was to have an extra 44,000 British-based people in construction by 2025<sup>234</sup>, and that they intended to achieve this through apprenticeships, retaining workers in the sector for longer and exploiting technological advances. However, the report also said these actions would not alleviate shortages in the short-term, and that therefore the sector had seen an increase in non-UK-born workers in the sector.
- 60.16 Other stakeholders stated that training was the best long-term solution to shortages they foresee, with apprenticeship uptake decreasing and no immediate access to non-EEA migration under Tier 2 (General) until the expansion to include RQF3+ skilled occupations.

## COVID-19 impact

- 60.17 Employers in the construction industry have been amongst the largest users of the Government's Job Retention Scheme. As of July 2020, construction had 769,300 employments furloughed, a 60 per cent take up rate of eligible employments. Only the wholesale and retail and the repair of motor vehicles industry had more employers using the scheme<sup>235</sup>.
- 60.18 Stakeholders noted that the COVID-19 pandemic has forced construction firms to operate at lower levels of capacity, which they said would hamper productivity levels. There was concern among CfE respondents that although depressed recruitment and a looser labour market may mean skills shortages are unlikely to be that common in the short-term, cutbacks in apprenticeship recruitment and gaps in training provision risk creating a skill gap in future.

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<sup>234</sup> <https://www.citb.co.uk/about-citb/construction-industry-research-reports/search-our-construction-industry-research-reports/mobility-and-migration/migration-and-construction-2019-report/>

<sup>235</sup> CJRS claims by sector <https://www.gov.uk/government/statistics/coronavirus-job-retention-scheme-statistics-august-2020>

## SOC 5311: Steel erectors

Summary table: SOC 5311 Steel erectors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & Rol) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	8%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£26,600																		
25th percentile full-time annual wage (ASHE, 2019)	£23,700																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
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<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	136																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 60.19 We received evidence from one employer in this occupation. They noted that a low number of applicants was often an issue in filling vacancies along with too much competition from other employers. In addition, they said “*we know of welders, for example, that have been temporarily recruited from abroad to work on major projects.*” (Note that welding roles will generally be allocated to a different SOC code: 5215 welding trades.)
- 60.20 The employer said they had tried several methods to overcome difficulties filling vacancies, including bringing back retired staff on an ad hoc basis, succession planning or offering longer contracts to younger recruits.

## Recommendation

- 60.21 **We do not recommend adding SOC code 5311 (steel erectors) to the SOL.** This occupation ranks bottom in the RQF3-5 shortage indicators (136th) and whilst we received some related evidence from stakeholders, it is not sufficient to demonstrate a shortage in this occupation at this time.

## SOC 5312: Bricklayers and masons

Summary table: SOC 5312 Bricklayers and masons																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & Rol) (APS, 2017-19)	25%																		
Share of employees born outside the EEA (APS, 2017-19)	2%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	17%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£26,800																		
25th percentile full-time annual wage (ASHE, 2019)	£23,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	52%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-9.6%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	1.05																		
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2015/16	0.65																		
2016/17	0.55																		
2017/18	0.75																		
2018/19	0.85																		
2019/20	0.80																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	92																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 60.22 We received evidence from three stakeholders regarding this occupation, with two stakeholders arguing that this occupation should go on the SOL. Stakeholders stated that there were a low number of applicants with the required skills and qualifications needed, especially for more specialist and heritage projects. There was concern that an aging workforce and a lack of young people entering and remaining in the industry will cause shortage in the future.
- 60.23 One stakeholder noted that they had recruitment difficulties for stone masons in some of the remote locations in Scotland, which they did not have when hiring in more centralised regions. They felt inclusion on the SOL would help widen the selection pool to address these challenges.
- 60.24 One representative body who responded reported they had undertaken a recent survey of employers. They report that 54 per cent of members had continued to experience a shortage of adequate applicants for bricklayers (32 per cent experienced some difficulties and 22 per cent experienced severe difficulties when recruiting over the past 12 months), and that this figure had increased from a previous survey they conducted, where 17 per cent had experienced some difficulties and 13 per cent experienced severe difficulties when recruiting for the role.

## Recommendation

- 60.25 **We recommend adding SOC code 5312 (bricklayers and masons) to the SOL.** Whilst this occupation ranks low on the RQF3-5 shortage indicators (92<sup>nd</sup>), there is evidence from stakeholders suggesting a shortage.
- 60.26 The proportion of EEA workers coupled with turnover of workers in this occupation is relatively high, and therefore the occupation may be more impacted once freedom of movement ends. However, we should highlight that this occupation has a high proportion (around 69 per cent) of self-employed workers and therefore the benefits to the occupation of being on the SOL will be limited. The benefits of the SOL only apply to the visa route where workers must be sponsored by an employer, so the benefits do not apply to self-employed migrants.
- 60.27 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 15th percentile of full-time earnings in this occupation, meaning that 15 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

## SOC 5313: Roofers, roof tilers and slaters

Summary table: SOC 5313 Roofers, roof tilers and slaters																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	4%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	11%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£25,200																		
25th percentile full-time annual wage (ASHE, 2019)	£21,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	48%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.9</td> </tr> <tr> <td>2013/14</td> <td>1.05</td> </tr> <tr> <td>2014/15</td> <td>0.65</td> </tr> <tr> <td>2015/16</td> <td>0.65</td> </tr> <tr> <td>2016/17</td> <td>0.5</td> </tr> <tr> <td>2017/18</td> <td>0.35</td> </tr> <tr> <td>2018/19</td> <td>0.45</td> </tr> <tr> <td>2019/20</td> <td>0.65</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.9	2013/14	1.05	2014/15	0.65	2015/16	0.65	2016/17	0.5	2017/18	0.35	2018/19	0.45	2019/20	0.65
Year	Ratio																		
2012/13	0.9																		
2013/14	1.05																		
2014/15	0.65																		
2015/16	0.65																		
2016/17	0.5																		
2017/18	0.35																		
2018/19	0.45																		
2019/20	0.65																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	79																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

60.28 We did not receive any evidence from stakeholders regarding this occupation.

## Recommendation

60.29 **We do not recommend adding SOC code 5313 (roofers, roof tilers and slaters) to the SOL.** This occupation ranks in the middle of the RQF3-5 shortage indicators (79th) and has a relatively low vacancy to employee ratio. We have not received any evidence from stakeholders that this occupation is in shortage. This occupation also has a high proportion of self-employed workers (around 65 per cent) so there would be limited benefits even if it were added to the SOL. The advantages of an occupation being on the SOL only apply to the Skilled Worker visa route where you must be an employee with an employer sponsor.

## SOC 5314: Plumbers and heating and ventilating engineers

Summary table: SOC 5314 Plumbers and heating and ventilating engineers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.4%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	3%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	13%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£31,400																		
25th percentile full-time annual wage (ASHE, 2019)	£25,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,800																		
Minimum salary required with SOL points	£20,640																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	26%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-4.6%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.0</td> </tr> <tr> <td>2013/14</td> <td>0.9</td> </tr> <tr> <td>2014/15</td> <td>0.85</td> </tr> <tr> <td>2015/16</td> <td>1.2</td> </tr> <tr> <td>2016/17</td> <td>1.35</td> </tr> <tr> <td>2017/18</td> <td>1.25</td> </tr> <tr> <td>2018/19</td> <td>1.2</td> </tr> <tr> <td>2019/20</td> <td>1.2</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.0	2013/14	0.9	2014/15	0.85	2015/16	1.2	2016/17	1.35	2017/18	1.25	2018/19	1.2	2019/20	1.2
Year	Ratio																		
2012/13	1.0																		
2013/14	0.9																		
2014/15	0.85																		
2015/16	1.2																		
2016/17	1.35																		
2017/18	1.25																		
2018/19	1.2																		
2019/20	1.2																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	61																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

- 60.30 We received evidence from one stakeholder on this occupation. They noted that candidates do not have the required skills or experience to undertake some positions. Across several occupations, they said they have redefined jobs and used new recruitment methods or channels to address difficulties filling vacancies, but mostly did not find this had been effective.

## Recommendation

- 60.31 **We do not recommend adding SOC code 5314 (plumbers and heating and ventilation engineers) to the SOL.** Although this occupation ranks towards the middle of the RQF3-5 shortage indicators (61<sup>st</sup>) and vacancy posts were slightly above the median of all occupations, the occupation has a relatively low proportion of non-UK-born workers. We received some evidence from stakeholders but on balance conclude that the evidence is not extensive or strong enough to indicate a shortage in this occupation.

## SOC 5315: Carpenters and joiners

Summary table: SOC 5315 Carpenters and joiners																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.3%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	7%																		
Share of employees born outside the EEA (APS, 2017-19)	5%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£27,100																		
25th percentile full-time annual wage (ASHE, 2019)	£22,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	46%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-24.0%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.5</td> </tr> <tr> <td>2013/14</td> <td>1.1</td> </tr> <tr> <td>2014/15</td> <td>0.85</td> </tr> <tr> <td>2015/16</td> <td>0.95</td> </tr> <tr> <td>2016/17</td> <td>1.1</td> </tr> <tr> <td>2017/18</td> <td>1.0</td> </tr> <tr> <td>2018/19</td> <td>0.95</td> </tr> <tr> <td>2019/20</td> <td>1.0</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.5	2013/14	1.1	2014/15	0.85	2015/16	0.95	2016/17	1.1	2017/18	1.0	2018/19	0.95	2019/20	1.0
Year	Ratio																		
2012/13	0.5																		
2013/14	1.1																		
2014/15	0.85																		
2015/16	0.95																		
2016/17	1.1																		
2017/18	1.0																		
2018/19	0.95																		
2019/20	1.0																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	53																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 60.32 We received evidence from two stakeholders regarding this occupation. Stakeholders in this occupation stated that they face recruitment difficulties in finding people of suitable skills with low total application numbers and lower numbers of applications from people with suitable skills, especially for smaller businesses. Only one of the stakeholders stated they wanted this occupation to be included on the SOL.
- 60.33 One representative body had undertaken a recent survey of employers. They reported that 44 per cent of members had continued to have trouble recruiting carpenters and joiners (30 per cent experienced some difficulty and 14 per cent experienced severe difficulty in recruiting for this occupation).

*“In the last recession we saw many skilled construction workers leave due to the lack of job opportunities. We have started to see the same happen during this pandemic and apprentices have also been hit meaning that going forwards construction companies will need to find the time and funds to train future recruits. If construction companies can access carpenters and joiners from outside the UK this means that a temporary skills gap will be filled and help business confidence to return so that they can then invest, train and recruit future skilled workers.”*

Representative Organisation; Construction; UK-wide

## Recommendation

- 60.34 **We do not recommend adding SOC code 5315 (carpenters and joiners) to the SOL.** This occupation ranks towards the middle of the RQF3-5 shortage indicators (53<sup>rd</sup>). and the vacancy to employee ratio in this occupation is around the median for all occupations. There is some evidence from stakeholders which suggests a shortage may be emerging, though the extent shortages materialise will depend on the future impacts of COVID-19. There is evidence that if a recession occurs this might lead to a pool of non-employed ex-construction workers.
- 60.35 We would encourage stakeholders to submit further evidence on this occupation for our next review. We also note that around 61 per cent of workers in this occupation are self-employed, and therefore the benefits of this occupation being on the SOL would be limited as the advantages of the SOL are applied to the visa route where workers must be sponsored by an employer.

## SOC 5316: Glaziers, window fabricators and fitters

Summary table: SOC 5316 Glaziers, window fabricators and fitters																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & Rol) (APS, 2017-19)	10%																		
Share of employees born outside the EEA (APS, 2017-19)	4%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£22,400																		
25th percentile full-time annual wage (ASHE, 2019)	£19,100																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	56%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>0.25</td></tr> <tr><td>2013/14</td><td>0.45</td></tr> <tr><td>2014/15</td><td>0.35</td></tr> <tr><td>2015/16</td><td>0.40</td></tr> <tr><td>2016/17</td><td>0.35</td></tr> <tr><td>2017/18</td><td>0.25</td></tr> <tr><td>2018/19</td><td>0.45</td></tr> <tr><td>2019/20</td><td>0.30</td></tr> </tbody> </table>		Year	Ratio	2012/13	0.25	2013/14	0.45	2014/15	0.35	2015/16	0.40	2016/17	0.35	2017/18	0.25	2018/19	0.45	2019/20	0.30
Year	Ratio																		
2012/13	0.25																		
2013/14	0.45																		
2014/15	0.35																		
2015/16	0.40																		
2016/17	0.35																		
2017/18	0.25																		
2018/19	0.45																		
2019/20	0.30																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	100																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

60.36 We did not receive any evidence from stakeholders regarding this occupation.

## Recommendation

60.37 **We do not recommend adding SOC code 5316 (glaziers, window fabricators and fitters) to the SOL.** This occupation ranks low in the RQF3-5 shortage indicator rankings (100<sup>th</sup>) and the vacancy to employee ratio is well below the median for all eligible occupations. We did not receive any evidence from stakeholders that this occupation is in shortage.

## SOC 5319: Construction and building trades n.e.c.

Summary table: SOC 5319 Construction and building trades n.e.c.																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.3%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	10%																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£27,500																		
25th percentile full-time annual wage (ASHE, 2019)	£23,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	32%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-23.1%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.95</td> </tr> <tr> <td>2013/14</td> <td>1.10</td> </tr> <tr> <td>2014/15</td> <td>0.90</td> </tr> <tr> <td>2015/16</td> <td>0.92</td> </tr> <tr> <td>2016/17</td> <td>0.88</td> </tr> <tr> <td>2017/18</td> <td>0.80</td> </tr> <tr> <td>2018/19</td> <td>0.82</td> </tr> <tr> <td>2019/20</td> <td>0.88</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.95	2013/14	1.10	2014/15	0.90	2015/16	0.92	2016/17	0.88	2017/18	0.80	2018/19	0.82	2019/20	0.88
Year	Ratio																		
2012/13	0.95																		
2013/14	1.10																		
2014/15	0.90																		
2015/16	0.92																		
2016/17	0.88																		
2017/18	0.80																		
2018/19	0.82																		
2019/20	0.88																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	90																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 60.38 We received one call from a stakeholder in Wales in the public sector asking for this SOC code to be placed on the SOL. They noted that their members had issues in recruiting for workers in trade and facilities, particularly due to competition with the private sector.

## Recommendation

- 60.39 **We do not recommend adding SOC code 5319 (construction and building trades n.e.c.) to the SOL.** We note that this occupation has the largest employment in the skilled construction and building trade occupational group and has one of the highest proportions of migrant workers (drawn from EEA and non-EEA countries). Around 66 per cent of the workforce is self-employed, therefore many workers in this occupation would not be eligible for the SOL benefits given they only apply to the employer sponsored visa route.
- 60.40 There is minimal evidence that there is a significant shortage within this occupation and the ranking is relatively low in the RQF3-5 shortage indicators (90<sup>th</sup>).

## SOC 5321: Plasterers

Summary table: SOC 5321 Plasterers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	3%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£28,200																		
25th percentile full-time annual wage (ASHE, 2019)	£24,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.65</td> </tr> <tr> <td>2013/14</td> <td>1.0</td> </tr> <tr> <td>2014/15</td> <td>0.85</td> </tr> <tr> <td>2015/16</td> <td>1.0</td> </tr> <tr> <td>2016/17</td> <td>1.1</td> </tr> <tr> <td>2017/18</td> <td>0.7</td> </tr> <tr> <td>2018/19</td> <td>0.8</td> </tr> <tr> <td>2019/20</td> <td>1.25</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.65	2013/14	1.0	2014/15	0.85	2015/16	1.0	2016/17	1.1	2017/18	0.7	2018/19	0.8	2019/20	1.25
Year	Ratio																		
2012/13	1.65																		
2013/14	1.0																		
2014/15	0.85																		
2015/16	1.0																		
2016/17	1.1																		
2017/18	0.7																		
2018/19	0.8																		
2019/20	1.25																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	83																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

6O.41 We did not receive any evidence from stakeholders regarding this occupation.

## Recommendation

6O.42 **We do not recommend adding SOC code 5321 (plasterers) to the SOL.** This occupation ranks in the bottom half of the RQF3-5 shortage indicators (83<sup>rd</sup>) and we have not received evidence from stakeholders that this occupation is in shortage.

## SOC 5322: Floorers and wall tilers

Summary table: SOC 5322 Floorers and wall tilers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£25,000																		
25th percentile full-time annual wage (ASHE, 2019)	£21,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	68%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.38																		
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2016/17	0.70																		
2017/18	0.55																		
2018/19	1.15																		
2019/20	1.05																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	120																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6O.43 We did not receive any evidence from stakeholders regarding this occupation.

## Recommendation

6O.44 **We do not recommend adding SOC code 5322 (floorers and wall tilers) to the SOL.** This occupation ranks low in the RQF3-5 shortage indicators (120th) and we have not received any stakeholder evidence demonstrating a shortage.

## SOC 5323: Painters and decorators

Summary table: SOC 5323 Painters and decorators																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	7%																		
Share of employees born outside the EEA (APS, 2017-19)	4%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	9%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£24,900																		
25th percentile full-time annual wage (ASHE, 2019)	£21,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	62%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-29.3%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	1.45																		
2013/14	1.60																		
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2015/16	1.20																		
2016/17	1.55																		
2017/18	1.00																		
2018/19	1.20																		
2019/20	1.55																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	113																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

60.45 We did not receive any evidence from stakeholders regarding this occupation.

## Recommendation

60.46 **We do not recommend adding SOC code 5323 (painters and decorators) to the SOL.** This occupation ranks low (113th) in the RQF3-5 shortage indicators. The salary threshold currently stands slightly above the median full-time annual wage, though the vacancy to employee ratio is somewhat above the median for eligible occupations. There is no evidence from stakeholders that this occupation is in shortage.

## SOC 5330: Construction and building trades supervisors

Summary table: SOC 5330 Construction and building trades supervisors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	4%																		
Share of employees born outside the EEA (APS, 2017-19)	5%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	8%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£37,600																		
25th percentile full-time annual wage (ASHE, 2019)	£31,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£31,400																		
Minimum salary required with SOL points	£25,120																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	22%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.3</td> </tr> <tr> <td>2013/14</td> <td>0.35</td> </tr> <tr> <td>2014/15</td> <td>0.38</td> </tr> <tr> <td>2015/16</td> <td>0.4</td> </tr> <tr> <td>2016/17</td> <td>0.45</td> </tr> <tr> <td>2017/18</td> <td>0.5</td> </tr> <tr> <td>2018/19</td> <td>0.48</td> </tr> <tr> <td>2019/20</td> <td>0.42</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.3	2013/14	0.35	2014/15	0.38	2015/16	0.4	2016/17	0.45	2017/18	0.5	2018/19	0.48	2019/20	0.42
Year	Ratio																		
2012/13	0.3																		
2013/14	0.35																		
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2015/16	0.4																		
2016/17	0.45																		
2017/18	0.5																		
2018/19	0.48																		
2019/20	0.42																		
<b>Shortage indicator rank (only including SOCs for which at least 5 indicators could be calculated)</b>																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	56																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 60.47 We received evidence from two stakeholders regarding this occupation; one in the construction sector and one working in heritage. Stakeholders stated that there is a low number of applicants generally and a low number of applicants with the specific and specialist skills required.
- 60.48 One representative body who responded reported they had undertaken a recent survey of employers. They reported that construction and building trades supervisors had continued to experience a shortage of adequate applicants (38 per cent experienced some difficulties and 17 per cent experienced severe difficulties).
- 60.49 They reported to have undertaken several actions to fill vacancies including increasing training of the existing workforce and using new recruitment channels. One stakeholder reported that it is hard to attract new talent due to the poor perception of the sector. They also reported that the cost and time taken to acquire a Construction Skills certification scheme (CSCs) card acts as a barrier to some people who wish to work or remain in construction.

## Recommendation

- 60.50 **We do not recommend adding SOC code 5330 (construction and building trades supervisors) to the SOL.** This occupation is mid-rank (56th) in the RQF3-5 shortage indicators, however the vacancy to employee ratio is substantially lower than the median for eligible occupations.
- 60.51 There is not a large share of EEA and non-EEA workers employed in this occupation and turnover (measured by employee who have been in their role less than 12 months) is relatively low compared to all occupations, meaning we would not expect a rapid change in employment in this occupation when freedom of movement ends for EEA workers.
- 60.52 We received some stakeholder evidence suggesting there may be shortages emerging in the occupation, though the extent of these will depend on the future impacts of COVID-19 and we encourage stakeholders to submit further evidence on this occupation for our next review.

## 6P: Skilled metal, welding and fitting instrument making trades

### Introduction

6P.1 We have identified 11 eligible occupations skilled between RQF3-5 that sit within the broad description of skilled metal, welding and fitting instrument making trades:

- i. Smiths and forge workers (5211)
- ii. Moulders, core makers and die casters (5212)
- iii. Sheet metal workers (5213)
- iv. Metal plate workers and riveters (5214)
- v. Welding trades (5215)
- vi. Pipe fitters (5216)
- vii. Metal machining setters and setter-operators (5221)
- viii. Tool makers, tool fitters and markers-out (5222)
- ix. Metal working production and maintenance fitters (5223)
- x. Precision instrument makers and repairers (5224)
- xi. Air conditioning and refrigeration engineers (5225)

6P.2 For most of the occupations in this grouping we received either no evidence from stakeholders, or one or two stakeholder responses. Two occupations were mentioned more than twice: welding trades (five times) and metal working production and maintenance fitters (ten times).

### Sector overview

6P.3 Most employment across these occupations is found within the manufacturing sector. Smaller proportions of employees work in other sectors such as construction and the wholesale/retail trade sector. The largest occupation within this occupation group is metal working production and maintenance fitters which makes up 53 per cent of the total employment.

6P.4 Approximately 430,000 jobs are covered by this list of occupations. 12 per cent of this workforce is made up of migrant labour (8 per cent born in the EEA and 4 per cent from outside). Of the occupations, metal working production and maintenance fitters has the highest number of migrant workers, simply due to the size of this occupation compared to the other SOC codes. Moulders, core makers and die casters had the highest percentage share of migrant employees (around 40 per cent); however, it is worth noting that this is an extremely small occupation group (1,400 employees) and so results will be subject to a degree of imprecision due to sampling issues.

6P.5 Smiths and forge workers and pipe fitters have a relatively high percentage of self-employed workers. It is important to note that occupations with a high share of self-



employed workers would have limited benefits from being on the SOL as an employer is needed to sponsor them, and self-employed workers are not eligible for the skilled worker visa route.

6P.6 Table 6P.1 shows employment and the proportion of migrants in this set of occupations, using data for 2017-19.

Table 6P.1: Employment in selected Occupations					
Occupation	Total employment	% who are self employed	% born in EEA (ex. UK)	% born outside EEA	% born in UK
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Smiths and forge workers	4,600	59%	-	-	95%
Moulders, core makers and die casters	1,400	-	-	-	61%
Sheet metal workers	15,800	10%	8%	-	91%
Metal plate workers, and riveters	6,900	15%	17%	-	79%
Welding trades	60,300	11%	14%	4%	83%
Pipe fitters	8,900	28%	9%	-	91%
Metal machining setters and setter-operators	51,700	3%	12%	4%	84%
Tool makers, tool fitters and markers-out	12,200	12%	-	-	96%
Metal working production and maintenance fitters	225,400	12%	6%	5%	89%
Precision instrument makers and repairers	27,400	16%	7%	3%	90%
Air-conditioning and refrigeration engineers	14,200	29%	6%	-	92%

Source: APS (2017-19)

All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes

6P.7 Table 6P.2 shows salaries of the occupations in this grouping. For all occupations except pipe fitters and air-conditioning and refrigeration engineers the occupation-specific threshold (25<sup>th</sup> percentile) falls beneath the £25,600 general salary threshold.

- 6P.8 Moulders, core makers and die casters is the lowest paid occupation of this grouping with even their median pay, at about £21,900, still falling far below the general threshold.
- 6P.9 Pipe fitters are the occupation with the largest increase in pay between 2016 to 2019 at 19 per cent, the next biggest wage growth is welding trades at four per cent. Precision instrument makers and repairers had the largest decrease in pay at three per cent.

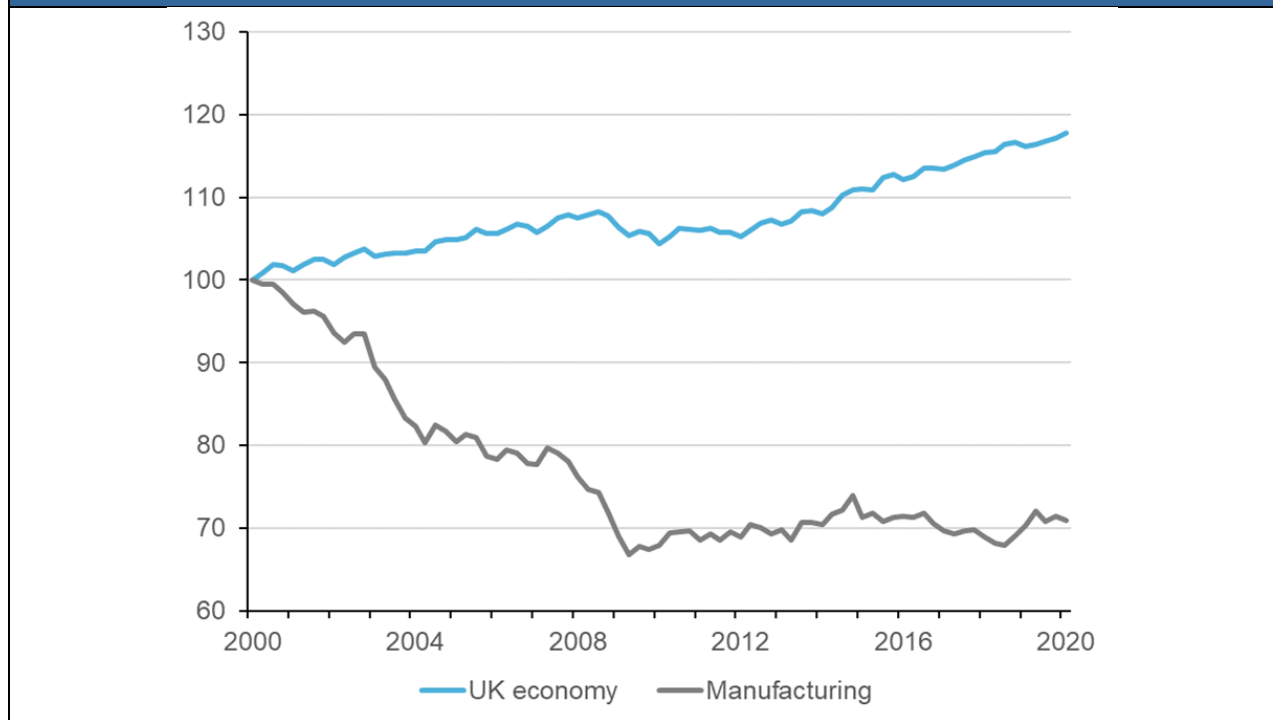
<b>Table 6P.2- 25th percentile of each occupation's annual wage</b>			
<b>Occupation</b>	<b>Median gross annual pay for full-time employees</b>	<b>25th percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
Smiths and forge workers	-	£20,400	-
Moulders, core makers and die casters	£21,900	£17,300	-
Sheet metal workers	£26,500	£21,800	-1%
Metal plate workers, and riveters	£30,500	£25,300	-0%
Welding trades	£27,400	£22,800	+4%
Pipe fitters	£43,000	£32,300	+19%
Metal machining setters and setter-operators	£27,700	£22,000	+0%
Tool makers, tool fitters and markers-out	£29,900	£24,700	+0%
Metal working production and maintenance fitters	£33,200	£25,300	+2%
Precision instrument makers and repairers	£26,200	£21,000	-3%
Air-conditioning and refrigeration engineers	£35,600	£26,800	+3%

Source: ASHE (2019)

Non-reported estimates are due to insufficient sample sizes

**6P.10** Figure 6P.1 shows the number of employees in the manufacturing sector of the economy compared to the UK as a whole. It shows that there was a decrease in the number of employees between 2000 to 2009 and it has remained relatively steady since. This in comparison to the UK showing steady employee growth over the 20 years.

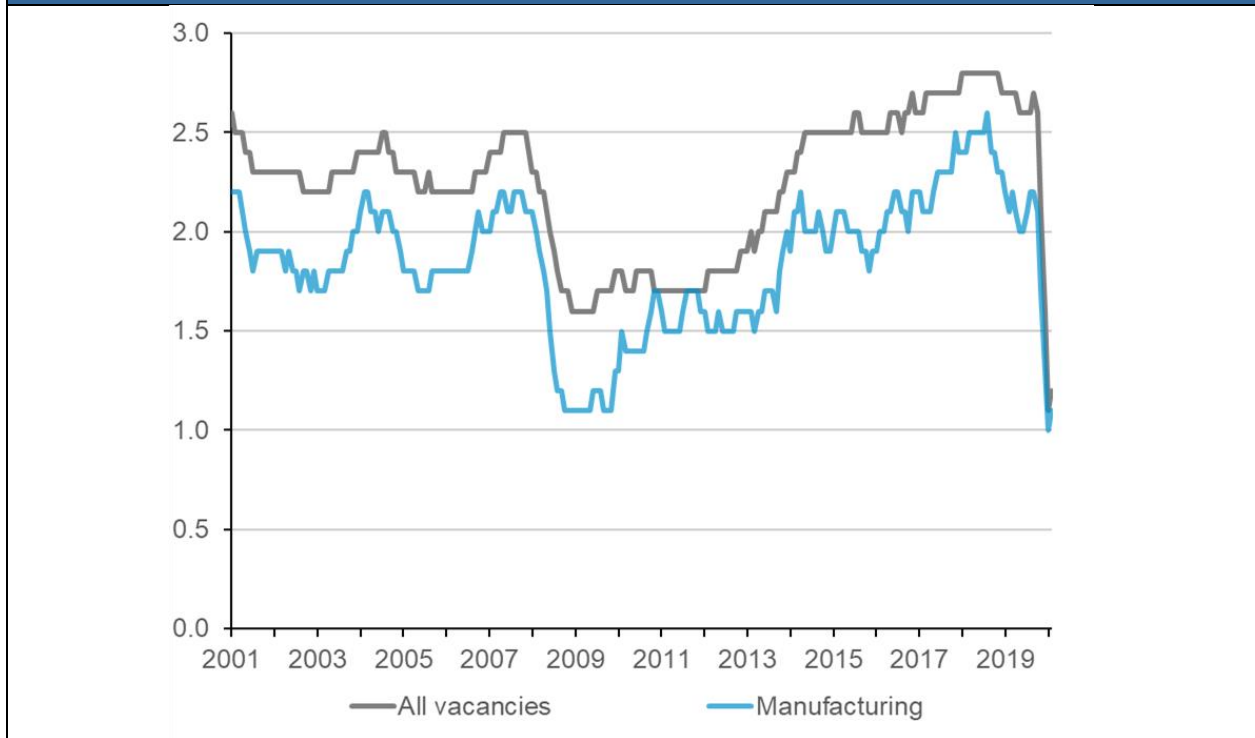
Figure 6P.1: Indexed number of employees in sector (Jan-Mar 2000=100)



Source: ONS - EMP14 Employees and self-employed by industry

- 6P.11 Figure 6P.2 shows the vacancy ratio of the manufacturing sector of the economy in comparison to the whole of the UK. The manufacturing vacancy ratio has been consistently lower than the UK as a whole other than around 2010-2011 where the vacancy ratio was approximately the same.
- 6P.12 It is worth noting that the vacancy ratio decreased significantly in both the manufacturing sector and the whole economy in April-June 2020. This was due to the COVID-19 pandemic and the lockdown that took place because of it.

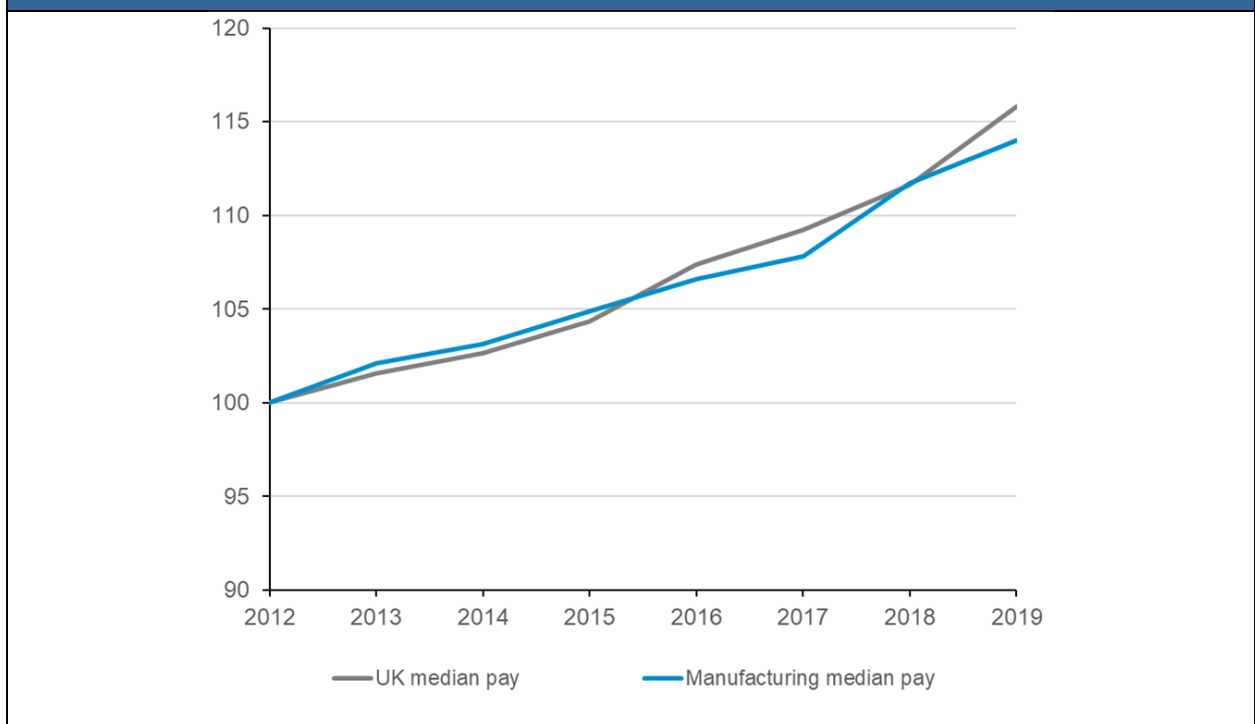
**Figure 6P.2: Industry vacancy ratio (vacancies per 100 employee jobs)**



Source: ONS – VACS02 Vacancies by industry

**6P.13** Figure 6P.3 shows the indexed wage level from 2012-2019. It shows that wage growth in the manufacturing sector has grown consistently alongside the UK average to be up around 15 points over the last seven years.

**Figure 6P.3: Indexed wage level in sector (2012=100)**



Source: ASHE (2012-2019)

## SOC 5211: Smith and forge workers

Summary table: SOC 5211 Smiths and forge workers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	-																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	£20,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.35																		
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2019/20	0.42																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	.																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

6P.14 The sample size for some of the data did not meet the minimum requirement hence they have been excluded from this summary table. There were not enough indicators to be able to generate a shortage rank for this occupation.

### Stakeholder evidence

6P.15 We did not receive any stakeholder evidence on this occupation.

### Recommendation

6P.16 **We do not recommend adding SOC code 5211 (smiths and forge workers) to the SOL.** There was no stakeholder evidence and insufficient data to be able to say that there is a shortage of smith and forge workers. This occupation employs an extremely small number of migrant workers. It also had a relatively high percentage of self-employed workers at 59 per cent compared to the average of 18 per cent in this occupational grouping. Self-employed workers do not benefit from being on the SOL as they need an employer to sponsor them.

## SOC 5212: Moulders, core makers and die casters

Summary table: SOC 5212 Moulders, core makers and die casters																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	-																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£21,900																		
25th percentile full-time annual wage (ASHE, 2019)	£17,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>3.5</td> </tr> <tr> <td>2013/14</td> <td>4.0</td> </tr> <tr> <td>2014/15</td> <td>4.5</td> </tr> <tr> <td>2015/16</td> <td>6.0</td> </tr> <tr> <td>2016/17</td> <td>25.0</td> </tr> <tr> <td>2017/18</td> <td>9.0</td> </tr> <tr> <td>2018/19</td> <td>14.5</td> </tr> <tr> <td>2019/20</td> <td>4.5</td> </tr> </tbody> </table>		Year	Ratio	2012/13	3.5	2013/14	4.0	2014/15	4.5	2015/16	6.0	2016/17	25.0	2017/18	9.0	2018/19	14.5	2019/20	4.5
Year	Ratio																		
2012/13	3.5																		
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2015/16	6.0																		
2016/17	25.0																		
2017/18	9.0																		
2018/19	14.5																		
2019/20	4.5																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	.																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



6P.17 The sample size for some of the data did not meet the minimum requirement hence they have been excluded from this summary table. There were not enough indicators to be able to generate a shortage rank for this occupation.

### Stakeholder evidence

6P.18 We received limited evidence from one stakeholder regarding this occupation (alongside other occupations that the stakeholder represents). The stakeholder stated that, across the 5000+ companies that are represented by the stakeholder, the median wage for this occupation was £18,300. The ASHE data median of £21,900 also indicates that this is a low-paying occupation. The stakeholder argued that employers would be unable to pay the employee the extra amount required to meet the minimum salary requirement without additional points. They argued that the consequent lower productivity without migrant workers (combined with their skill levels, and a recovering economy) was sufficient reason for inclusion on the SOL.

6P.19 The stakeholder also noted “*significant regional variations*” in salaries. Going forward, they said that they would like to see the salary threshold be more reflective of the region, in particular the North East and the North West of England. The ASHE data corroborates this by showing that the median weekly pay in London is 32 per cent higher than in the North East of England and 26 per cent higher than in the North West of England.

### Recommendation

6P.20 **We recommend adding SOC code 5212 (moulders, core makers and die casters) to the SOL.** After increasing markedly in 2016/17 to a very high level (about 25 times higher than the median across all occupations eligible for the Skilled Worker route), the vacancy ratio has been on a downward trend over the last four years but remains around five times higher than the average. As this is a small occupation, there are few other formal shortage indicators available and no overall rank can be calculated. There workforce in this occupation is made up almost entirely of employees according to APS data, so firms rely on direct employment to fulfil related tasks and appear heavily reliant on migrant labour. Pay in this occupation is relatively low. Adding this occupation to the SOL will mean that the salary threshold lies around the lower quartile for the occupation, rather than close to the top of the occupational pay distribution, which will make it possible for employers to recruit skilled migrants to work as moulders, core makers and die casters if, as an employer representative organisation suggested is likely, current apprenticeship and training schemes do not yield sufficient workers.

6P.21 Going forward, we will need to receive more occupation specific evidence for SOC code 5212 to remain on the SOL after next year’s review.

6P.22 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 27th percentile of full-time earnings in this occupation, meaning that 27 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

## SOC 5213: Sheet metal workers

Summary table: SOC 5213 Sheet metal workers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	9%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	9%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£26,500																		
25th percentile full-time annual wage (ASHE, 2019)	£21,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.92																		
2013/14	1.00																		
2014/15	0.82																		
2015/16	1.00																		
2016/17	1.00																		
2017/18	0.98																		
2018/19	1.15																		
2019/20	1.05																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	95																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

6P.23 The sample size for share of employees continuously employed for 12 months or less did not meet the minimum requirement hence those data are excluded from this summary table.

### Stakeholder evidence

6P.24 We received limited evidence from one stakeholder about this occupation. The stakeholder indicated that there was an absence of skilled UK workers with the correct qualifications and experience. They also stated that 'vital' skills have yet to be developed in the UK whereas in countries such as Denmark and Germany a lot of workers carry these skills. To strengthen the evidence, the MAC would like to hear more from stakeholders about these vital skills: what skills are these, how are they currently acquired (if by training: who does the training and what is its duration; if by experience/training on the job: how long does it take before workers are considered skilled to various levels?); and what are the barriers to or difficulties faced in training resident workers?

### Recommendation

6P.25 **We do not recommend adding SOC code 5213 (sheet metal workers) to the SOL.** This occupation ranked in the bottom third on the RQF3-5 shortage indicator ranking (95th) and had a vacancy ratio that has been very close to the median for the last five years. More than half of workers in this occupation are paid above the salary threshold. There was evidence received from one stakeholder on this occupation and although they made good points, it was not detailed or specific enough to warrant adding this occupation to the SOL. The MAC would welcome future evidence in relation to this occupation at subsequent reviews.

## SOC 5214: Metal plate workers and riveters

Summary table: SOC 5214 Metal plate workers, and riveters																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	18%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	8%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£30,500																		
25th percentile full-time annual wage (ASHE, 2019)	£25,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.1																		
2013/14	0.1																		
2014/15	0.08																		
2015/16	0.15																		
2016/17	0.25																		
2017/18	0.1																		
2018/19	0.18																		
2019/20	0.15																		
<b>Shortage indicator rank</b> (only including SOCs for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	.																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6P.26 We received limited evidence from two stakeholders on this occupation. One stakeholder said that due to COVID-19 they expected to see a “*looser labour market*” meaning that “*skill shortages were unlikely to be common in the short term*”. However, the stakeholder also indicated that, because of reduced apprenticeship recruitment and gaps in training provision they still expected to see skills shortage in the long term.

## Recommendation

- 6P.27 **We do not currently recommend that SOC code 5214 (metal plate workers and riveters) is put on the SOL.** This occupation is relatively small (approximately 7,000 employees, compared to a median occupation size of 14,000 in this occupational grouping). Its vacancy ratio has averaged around only 0.2 over the last eight years; recruitment difficulties typically lead to a much larger vacancy ratio. Median pay in this occupation is well above the salary threshold. However, this occupation currently employs a large proportion (18 per cent) of migrant workers from EEA countries, according to APS data. If the labour market follows the pattern predicted by stakeholders in this occupation, whereby no shortage is apparent in the short term as vacancies can be filled by resident workers, but shortages emerge as the labour market tightens and the economy recovers, the MAC would be pleased to receive evidence on emerging shortages for future SOL reviews.

## SOC 5215: Welding trades

Summary table: SOC 5215 Welding trades																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	13%																		
Share of employees born outside the EEA (APS, 2017-19)	4%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	17%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£27,400																		
25th percentile full-time annual wage (ASHE, 2019)	£22,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	35%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-39.8%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.7</td> </tr> <tr> <td>2013/14</td> <td>1.0</td> </tr> <tr> <td>2014/15</td> <td>0.9</td> </tr> <tr> <td>2015/16</td> <td>1.1</td> </tr> <tr> <td>2016/17</td> <td>1.4</td> </tr> <tr> <td>2017/18</td> <td>1.5</td> </tr> <tr> <td>2018/19</td> <td>1.6</td> </tr> <tr> <td>2019/20</td> <td>1.5</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.7	2013/14	1.0	2014/15	0.9	2015/16	1.1	2016/17	1.4	2017/18	1.5	2018/19	1.6	2019/20	1.5
Year	Ratio																		
2012/13	1.7																		
2013/14	1.0																		
2014/15	0.9																		
2015/16	1.1																		
2016/17	1.4																		
2017/18	1.5																		
2018/19	1.6																		
2019/20	1.5																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	65																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6P.28 We received evidence from five stakeholders on this occupation. Multiple stakeholders stated that there was a lack of sufficiently skilled and experienced workers in the UK work force. For future SOL reviews, the MAC would welcome further evidence regarding these skills: what tasks do they enable, how are the skills acquired (duration, type and location of experience or training to be regarded as skilled to various levels); and what are the obstacles to training resident workers?
- 6P.29 One stakeholder reported that UK workers had a lack of experience and that lower paid work was not attractive to British people. Another expressed concern prior to the COVID-19 pandemic that 47 per cent of employers they represent had experienced difficulties when recruiting skilled workers<sup>236</sup>.

## Recommendation

- 6P.30 Currently, the RQF6+ SOL includes part of this occupation, with a restriction designed to limit access to the UK labour market to highly skilled (experienced) welders: the RQF6 SOL includes 'high integrity pipe welders where the job requires three or more years' related on-the-job experience'.
- 6P.31 **We recommend adding the whole of SOC code 5215 (welding trades) to the SOL.** This extension to the whole SOC reflects the fact that the SOL has been expanded to cover middle-skilled workers. The RQF3-5 shortage indicator rank of 65th places this occupation around the middle in terms of overall shortage rank. Median pay for welding trades exceeds the salary threshold. However, the vacancy ratio has been well above the median for six of the last eight years and has been around 1.5 for the last three years. Furthermore, a relatively large proportion of employees in this occupation are from EEA countries (13 per cent). We received evidence from a number of sources suggesting that there may be a shortage of workers in welding trades.
- 6P.32 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 13th percentile of full-time earnings in this occupation, meaning that 13 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

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<sup>236</sup> CITB's report "Skills and Training in the Construction Industry 2018"



## SOC 5216: Pipe fitters

Summary table: SOC 5216 Pipe fitters																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	13%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	25%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£43,000																		
25th percentile full-time annual wage (ASHE, 2019)	£32,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£32,300																		
Minimum salary required with SOL points	£25,840																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.2</td> </tr> <tr> <td>2013/14</td> <td>2.3</td> </tr> <tr> <td>2014/15</td> <td>2.3</td> </tr> <tr> <td>2015/16</td> <td>1.5</td> </tr> <tr> <td>2016/17</td> <td>2.3</td> </tr> <tr> <td>2017/18</td> <td>2.3</td> </tr> <tr> <td>2018/19</td> <td>2.4</td> </tr> <tr> <td>2019/20</td> <td>4.6</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.2	2013/14	2.3	2014/15	2.3	2015/16	1.5	2016/17	2.3	2017/18	2.3	2018/19	2.4	2019/20	4.6
Year	Ratio																		
2012/13	1.2																		
2013/14	2.3																		
2014/15	2.3																		
2015/16	1.5																		
2016/17	2.3																		
2017/18	2.3																		
2018/19	2.4																		
2019/20	4.6																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	50																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6P.33 We did not receive any stakeholder evidence on this occupation.

## Recommendation

6P.34 **We do not currently recommend adding SOC code 5216 (pipe fitters) to the SOL.** The RQF3-5 shortage indicator ranking was mid-ranking (50th). The online job posts to employee ratio is high and may be increasing, but no stakeholder evidence was received.

## SOC 5221: Metal machining setters and setter-operators

Summary table: SOC 5221 Metal machining setters and setter-operators																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	12%																		
Share of employees born outside the EEA (APS, 2017-19)	4%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£27,700																		
25th percentile full-time annual wage (ASHE, 2019)	£22,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-53.8%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	2.1																		
2013/14	2.0																		
2014/15	1.4																		
2015/16	1.7																		
2016/17	1.8																		
2017/18	2.0																		
2018/19	2.5																		
2019/20	2.1																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	41																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

6P.35 We received evidence from one stakeholder mentioning this occupation, although the evidence statements were quite general relating to metal forming, welding and related trades in general rather than to metal machining setters and setter-operators specifically. The stakeholder stated that key skills remained in shortage in the UK, despite employer investment in higher level/longer apprenticeships and other training. The stakeholder said that there was a lack of candidates with the necessary experience and technical skills to meet the demands of the sector despite the investment by employers in “*a long-standing and expansive apprenticeship training programme*”. It was reported that the insufficient number of candidates was down to a lack of quality training and a lack of candidates with the necessary qualifications.

## Recommendation

6P.36 **We do not recommend adding SOC code 5221 (metal machining setters and setter-operators) to the SOL.** The vacancy ratio has been consistently higher than the median for the last five years and it ranks relatively high on the RQF3-5 shortage indicator rank (41st). EEA migrant workers have been quite important in this occupation, making up 12 per cent of employees. There was one response to the Call for Evidence (CfE) with strong arguments relating to shortage in several metal forming and fitting-related occupations. However, there was no specific evidence relating to this 4-digit SOC. Most workers are paid more than the salary threshold. On balance we conclude the evidence of shortage in this occupation is insufficient. We will welcome further evidence relating to this occupation in future SOL reviews.

## SOC 5222: Tool makers, tool fitters and markers-out

Summary table: SOC 5222 Tool makers, tool fitters and markers-out																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	8%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£29,900																		
25th percentile full-time annual wage (ASHE, 2019)	£24,700																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	1.35																		
2013/14	1.00																		
2014/15	0.75																		
2015/16	1.05																		
2016/17	1.05																		
2017/18	1.05																		
2018/19	1.00																		
2019/20	1.05																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	126																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

6P.37 The sample size for share of employees continuously employed for 12 months or less did not meet the minimum requirement hence they have been excluded from this summary table.

### Stakeholder evidence

6P.38 We did not receive any stakeholder information for this occupation.

### Recommendation

6P.39 **We do not recommend adding SOC code 5222 (tool makers, tool fitters and markers-out) to the SOL.** The RQF3-5 shortage indicator rank was one of the lowest (126th) and the vacancy ratio has hovered around the median for the last five years. Migrant workers form a relatively low proportion of this occupation's employment. Additionally, there was no stakeholder evidence to support a shortage in this occupation.

## SOC 5223: Metal working production and maintenance fitters

Summary table: SOC 5223 Metal working production and maintenance fitters																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.7%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	6%																		
Share of employees born outside the EEA (APS, 2017-19)	5%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	12%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£33,200																		
25th percentile full-time annual wage (ASHE, 2019)	£25,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	23%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-28.9%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.45</td> </tr> <tr> <td>2013/14</td> <td>0.50</td> </tr> <tr> <td>2014/15</td> <td>0.45</td> </tr> <tr> <td>2015/16</td> <td>0.55</td> </tr> <tr> <td>2016/17</td> <td>0.60</td> </tr> <tr> <td>2017/18</td> <td>0.50</td> </tr> <tr> <td>2018/19</td> <td>0.48</td> </tr> <tr> <td>2019/20</td> <td>0.50</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.45	2013/14	0.50	2014/15	0.45	2015/16	0.55	2016/17	0.60	2017/18	0.50	2018/19	0.48	2019/20	0.50
Year	Ratio																		
2012/13	0.45																		
2013/14	0.50																		
2014/15	0.45																		
2015/16	0.55																		
2016/17	0.60																		
2017/18	0.50																		
2018/19	0.48																		
2019/20	0.50																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	54																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

- 6P.40 We received evidence from ten stakeholders on this occupation. The claims of a shortage in this role came from numerous different industries such as engineering, manufacturing, agriculture and fashion.
- 6P.41 One stakeholder stated that over 85 per cent of businesses had reported difficulty recruiting in the last 12 months in the meat industry. They believed that this was because of a lack of available and skilled workforce in that area. They also stated that in areas where there is an available workforce there is a high level of competition among similar businesses which makes it harder to recruit.
- 6P.42 One stakeholder reported that they did not believe the employment needs of the sector could be met alone through organisations that develop relevant skills (such as the National Skills Academy for Food and Drink). The stakeholder also highlighted particularly challenging rural areas (such as Cambridgeshire, Suffolk, Northamptonshire and Cumbria) where they said it could be hard to find employees, especially in times of low unemployment. They made the point that more mobile migrant labour was more likely to move into these areas to work than UK nationals are to relocate.
- 6P.43 Stakeholders highlighted the general lack of available UK workforce. Some noted that this may not be the case in the short term due to the high unemployment rate as a result of COVID-19. However, looking towards the long term, they believe that it is an issue that will persist without migrant labour.

## Recommendation

- 6P.44 **We recommend adding SOC code 5223 (metal working production and maintenance fitters) to the SOL.** It ranks towards the middle of the RQF3-5 shortage indicator rank (54th), although its vacancy ratio was only around half that of all eligible occupations. There was evidence received from a wide range of industries that suggested there was an insufficient number of UK workforce currently available to fill these roles. Although there are programmes (including apprenticeships and the National Skills Academy for Food and Drink) in place in order to train and develop workers, stakeholders did not believe this supply would be able to meet the demand.
- 6P.45 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 13th percentile of full-time earnings in this occupation, meaning that 13 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.



## SOC 5224: Precision instrument makers and repairers

Summary table: SOC 5224 Precision instrument makers and repairers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	8%																		
Share of employees born outside the EEA (APS, 2017-19)	2%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£26,200																		
25th percentile full-time annual wage (ASHE, 2019)	£21,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	40%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.4</td> </tr> <tr> <td>2013/14</td> <td>0.4</td> </tr> <tr> <td>2014/15</td> <td>0.4</td> </tr> <tr> <td>2015/16</td> <td>0.25</td> </tr> <tr> <td>2016/17</td> <td>0.25</td> </tr> <tr> <td>2017/18</td> <td>0.25</td> </tr> <tr> <td>2018/19</td> <td>0.28</td> </tr> <tr> <td>2019/20</td> <td>0.3</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.4	2013/14	0.4	2014/15	0.4	2015/16	0.25	2016/17	0.25	2017/18	0.25	2018/19	0.28	2019/20	0.3
Year	Ratio																		
2012/13	0.4																		
2013/14	0.4																		
2014/15	0.4																		
2015/16	0.25																		
2016/17	0.25																		
2017/18	0.25																		
2018/19	0.28																		
2019/20	0.3																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	133																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6P.46 We did not receive any stakeholder evidence for this occupation.

## Recommendation

6P.47 **We do not recommend adding SOC code 5224 (precision instrument makers and repairers) to the SOL.** The RQF3-5 shortage indicator rank was one of the lowest (133rd) and had a notably lower vacancy ratio than the median over the last eight years. There were also no responses to our CfE.

## SOC 5225: Air-conditioning and refrigeration engineers

Summary table: SOC 5225 Air-conditioning and refrigeration engineers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	4%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	13%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£35,600																		
25th percentile full-time annual wage (ASHE, 2019)	£26,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£26,800																		
Minimum salary required with SOL points	£21,440																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	17%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.38																		
2013/14	0.58																		
2014/15	0.44																		
2015/16	0.46																		
2016/17	0.60																		
2017/18	0.80																		
2018/19	0.74																		
2019/20	0.98																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	119																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6P.48 We did not receive any stakeholder evidence on this occupation.

## Recommendation

6P.49 **We do not recommend adding SOC code 5225 (air-conditioning and refrigeration engineers) to the SOL.** The occupation ranks low in the RQF3-5 shortage indicator ranking (119th) and vacancy ratio is currently around the median. In addition, we did not receive any evidence from stakeholders.

## 6Q: Skilled vehicle, electrical and electronic trades

### Introduction

- 6Q.1 In this section we cover all occupations included within the group of skilled vehicle, electrical and electronic trades, presenting analysis by SOC code.
- 6Q.2 There are 12 occupations skilled below RQF6 in this group that are potentially eligible for inclusion on the SOL:
- i. Vehicle technicians, mechanics and electricians (5231)
  - ii. Vehicle body builders and repairers (5232)
  - iii. Vehicle paint technicians (5234)
  - iv. Aircraft maintenance and related trades (5235)
  - v. Boat and ship builders and repairers (5236)
  - vi. Rail and rolling stock builders and repairers (5237)
  - vii. Electricians and electrical fitters (5241)
  - viii. Telecommunications engineers (5242)
  - ix. TV, video and audio engineers (5244)
  - x. IT engineers (5245)
  - xi. Electrical and electronic trades n.e.c. (5249)
  - xii. Skilled metal, electrical and electronic trades supervisors (5250)
- 6Q.3 We received over 30 responses to the Call for Evidence (CfE) that included information on these occupations.
- 6Q.4 This group represents a 2.2 per cent share of total UK employees<sup>237</sup> with just under 750,000 workers represented. Over half of this occupation group's employees are made up of just two of the twelve occupations, vehicle technicians, mechanics and electricians (5231) and electricians and electrical fitters (5241).

### Sector overview

- 6Q.5 Occupations within this group are included in three wider occupation groups:
- i. Vehicle trades (523)
  - ii. Electrical and electronic trades (524)
  - iii. Skilled metal, electrical and electronic trades supervisors (525)
- 6Q.6 The share of migrants varies between occupations, as outlined in Table 6Q.1 Most of these occupations include at least 10 per cent non-UK born employees.

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<sup>237</sup> APS 2019

6Q.7 There is a considerable range in the percentage of self-employed workers between occupations in this group, from three per cent to 34 per cent.

6Q.8 Vehicle technicians, mechanics and electricians (5231) and electricians and electrical fitters (5241) have the two biggest shares of employees in this occupation group with 23 per cent and 33 per cent of the occupations in the group respectively.

Table 6Q.1: Employment in selected occupations					
Occupation	Total employment	% who are self employed	% born in EEA (ex. UK)	% born outside EEA	% born in UK
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Vehicle technicians, mechanics and electricians	175,000	18%	6%	4%	89%
Vehicle body builders and repairers	27,000	29%	16%	5%	79%
Vehicle paint technicians	12,800	10%	16%	3%	81%
Aircraft maintenance and related trades	26,000	3%	1%	5%	94%
Boat and ship builders and repairers	14,300	23%	3%	-	93%
Rail and rolling stock builders and repairers	11,000	3%	-	9%	88%
Electricians and electrical fitters	244,600	34%	5%	4%	91%
Telecommunications engineers	62,600	10%	4%	10%	86%
TV, video and audio engineers	12,200	19%	-	7%	91%
IT engineers	38,500	12%	7%	10%	83%
Electrical and electronic trades n.e.c.	82,400	11%	3%	7%	90%
Skilled metal, electrical and electronic trades supervisors	34,500	3%	3%	7%	90%

Source: APS (2017-19)

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Non-reported estimates are due to insufficient sample sizes

6Q.9 The median pay for the eleven occupations with data available is above the general skilled worker salary threshold of £25,600 by at least £1,000 (Table 6Q.2).

6Q.10 There were varying levels of pay growth in most occupations from 2016 to 2019, after adjusting for inflation (Table 6Q.2). Rail and rolling stock builders and repairers (5237),

telecommunications engineers (5242) and skilled metal, electrical and electronic trades supervisors (5250) all saw a reduction of between 0.3 per cent and three per cent pay over the same period.

<b>Table 6Q.2: Pay in selected occupations</b>			
<b>Occupation</b>	<b>Median gross annual pay for full-time employees 2019</b>	<b>25<sup>th</sup> percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
Vehicle technicians, mechanics and electricians	£28,300	£21,900	+2%
Vehicle body builders and repairers	£26,900	£20,700	+0.1%
Vehicle paint technicians	£26,800	£23,000	+3%
Aircraft maintenance and related trades	£38,200	£31,700	+5%
Boat and ship builders and repairers	£33,300	£25,000	+20%
Rail and rolling stock builders and repairers	£42,100	£37,200	-3%
Electricians and electrical fitters	£33,200	£27,200	+1%
Telecommunications engineers	£33,300	£30,300	-3%
TV, video and audio engineers	£33,100	£28,300	+4%
IT engineers	£32,300	£24,400	+11%
Electrical and electronic trades n.e.c.	£34,500	£28,000	+4%
Skilled metal, electrical and electronic trades supervisors	-	£30,300	-0.3%

Source: APS (2017-19)

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Non-reported estimates are due to insufficient sample sizes

## **COVID-19 impact**

6Q.11 We would expect that most of these roles would not be possible to undertake at home. However, each of the 12 occupations are considered to have a low exposure to disease.

## SOC 5231: Vehicle technicians, mechanics and electricians

Summary table: SOC 5231 Vehicle technicians, mechanics and electricians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.5%																		
Share of employees born in the EEA (ex.UK & Rol) (APS, 2017-19)	6%																		
Share of employees born outside the EEA (APS, 2017-19)	3%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	13%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£28,300																		
25th percentile full-time annual wage (ASHE, 2019)	£21,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	44%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-36.4%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	1.05																		
2013/14	1.25																		
2014/15	1.15																		
2015/16	1.60																		
2016/17	1.65																		
2017/18	1.90																		
2018/19	1.80																		
2019/20	1.55																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	73																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

- 6Q.12 We received six responses to our CfE regarding SOC code 5231 stating that this occupation was in shortage. Two represent 5,000+ businesses/organisations. Two others have over 500 employees.
- 6Q.13 Most respondents agreed that they would leave a position unfulfilled for a period whilst waiting for an applicant with most of the relevant skills, whilst another said they would leave a position open indefinitely whilst waiting on a candidate that is a very good fit.
- 6Q.14 Most respondents highlighted more attractive work for the same or higher salary as a factor in their challenges attracting candidates to roles, with one employer citing competition from the retail sector.
- 6Q.15 All respondents highlighted a general lack of applications, as well as a lack of applicants with the required skills and qualifications.
- 6Q.16 Most respondents said that they had already attempted several methods to overcome difficulties filling vacancies including increasing salaries, offering more training to existing employees, increasing recruitment spending and using new recruitment methods. Increased training was generally considered to be quite effective, whilst most other methods were reported as not very effective
- 6Q.17 Four of the six stakeholders reported to have recruited non-UK nationals in order to deal with a shortage and all reiterated its effectiveness.

## Recommendation

- 6Q.18 **We recommend that the SOC code 5231 (vehicle technicians, mechanics and electricians) is added to the SOL.** This occupation ranks in the middle of the RQF3-5 shortage indicator rank (73<sup>rd</sup>) and has a higher vacancy to employee ratio than the median of eligible occupations. We also received evidence from several stakeholders suggesting that this occupation is in shortage.
- 6Q.19 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 18<sup>th</sup> percentile of full-time earnings in this occupation, meaning that 18 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

## SOC 5232: Vehicle body builders and repairers

Summary table: SOC 5232 Vehicle body builders and repairers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	20%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	23%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£26,900																		
25th percentile full-time annual wage (ASHE, 2019)	£20,700																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	42%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-53.5%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.9</td> </tr> <tr> <td>2013/14</td> <td>2.0</td> </tr> <tr> <td>2014/15</td> <td>1.7</td> </tr> <tr> <td>2015/16</td> <td>1.7</td> </tr> <tr> <td>2016/17</td> <td>2.7</td> </tr> <tr> <td>2017/18</td> <td>2.0</td> </tr> <tr> <td>2018/19</td> <td>1.7</td> </tr> <tr> <td>2019/20</td> <td>1.8</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.9	2013/14	2.0	2014/15	1.7	2015/16	1.7	2016/17	2.7	2017/18	2.0	2018/19	1.7	2019/20	1.8
Year	Ratio																		
2012/13	0.9																		
2013/14	2.0																		
2014/15	1.7																		
2015/16	1.7																		
2016/17	2.7																		
2017/18	2.0																		
2018/19	1.7																		
2019/20	1.8																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	82																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6Q.20 We received no stakeholder evidence regarding SOC code 5232.

## Recommendation

6Q.21 **We do not recommend adding SOC code 5232 (vehicle body builders and repairers) to the SOL.** This occupation ranks in the middle of the RQF3-5 shortage indicators (82<sup>nd</sup>) and has a higher vacancy to employee ratio than the median for eligible occupations but we received no stakeholder evidence that this occupation is in shortage.

## SOC 5234: Vehicle paint technicians

Summary table: SOC 5234 Vehicle paint technicians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	13%																		
Share of employees born outside the EEA (APS, 2017-19)	3%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	18%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£26,800																		
25th percentile full-time annual wage (ASHE, 2019)	£23,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
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<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.42</td> </tr> <tr> <td>2013/14</td> <td>0.52</td> </tr> <tr> <td>2014/15</td> <td>0.58</td> </tr> <tr> <td>2015/16</td> <td>0.55</td> </tr> <tr> <td>2016/17</td> <td>0.62</td> </tr> <tr> <td>2017/18</td> <td>0.70</td> </tr> <tr> <td>2018/19</td> <td>1.05</td> </tr> <tr> <td>2019/20</td> <td>0.62</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.42	2013/14	0.52	2014/15	0.58	2015/16	0.55	2016/17	0.62	2017/18	0.70	2018/19	1.05	2019/20	0.62
Year	Ratio																		
2012/13	0.42																		
2013/14	0.52																		
2014/15	0.58																		
2015/16	0.55																		
2016/17	0.62																		
2017/18	0.70																		
2018/19	1.05																		
2019/20	0.62																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	27																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6Q.22 We received evidence from one stakeholder regarding SOC code 5234.
- 6Q.23 The respondent tended to disagree that there were applicants in the UK with the necessary skills, and highlighted a lack of domestic experience and training, as well as lower pay, as reasons for a shortage in this occupation.
- 6Q.24 The stakeholder strongly agreed that they had to look outside of the UK in order to find applicants with the skills, qualifications and work experience that they needed.
- 6Q.25 The only methods implemented to overcome a shortage were recruiting non-UK nationals and using contractors. Both were deemed very effective.

## Recommendation

- 6Q.26 **We do not recommend adding SOC code 5234 (vehicle paint technicians) to the SOL.** The occupation ranks highly in the RQF3-5 shortage indicator rankings (27th) but has a lower vacancy to employee ratio than the median of eligible occupations and there was limited stakeholder evidence that this occupation is in shortage.

## SOC 5235: Aircraft maintenance and related trades

Summary table: SOC 5235 Aircraft maintenance and related trades																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	1%																		
Share of employees born outside the EEA (APS, 2017-19)	5%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	5%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£38,200																		
25th percentile full-time annual wage (ASHE, 2019)	£31,700																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£31,700																		
Minimum salary required with SOL points	£25,360																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	23%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.05</td> </tr> <tr> <td>2013/14</td> <td>0.15</td> </tr> <tr> <td>2014/15</td> <td>0.18</td> </tr> <tr> <td>2015/16</td> <td>0.10</td> </tr> <tr> <td>2016/17</td> <td>0.15</td> </tr> <tr> <td>2017/18</td> <td>0.15</td> </tr> <tr> <td>2018/19</td> <td>0.18</td> </tr> <tr> <td>2019/20</td> <td>0.10</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.05	2013/14	0.15	2014/15	0.18	2015/16	0.10	2016/17	0.15	2017/18	0.15	2018/19	0.18	2019/20	0.10
Year	Ratio																		
2012/13	0.05																		
2013/14	0.15																		
2014/15	0.18																		
2015/16	0.10																		
2016/17	0.15																		
2017/18	0.15																		
2018/19	0.18																		
2019/20	0.10																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	12																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6Q.27 We received no stakeholder evidence regarding SOC code 5235.

## Recommendation

6Q.28 **We do not recommend adding SOC code 5235 (aircraft maintenance and related trades) to the SOL.** The occupation ranks highly in our RQF3-5 shortage indicator rankings (12th) but has a lower vacancy to employee ratio than the median of eligible occupations and no stakeholder evidence that this occupation is in shortage.

## SOC 5236: Boat and ship builders and repairers

Summary table: SOC 5236 Boat and ship builders and repairers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	4%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	19%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£33,300																		
25th percentile full-time annual wage (ASHE, 2019)	£25,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>0.05</td></tr> <tr><td>2013/14</td><td>0.08</td></tr> <tr><td>2014/15</td><td>0.05</td></tr> <tr><td>2015/16</td><td>0.08</td></tr> <tr><td>2016/17</td><td>0.09</td></tr> <tr><td>2017/18</td><td>0.07</td></tr> <tr><td>2018/19</td><td>0.07</td></tr> <tr><td>2019/20</td><td>0.05</td></tr> </tbody> </table>		Year	Ratio	2012/13	0.05	2013/14	0.08	2014/15	0.05	2015/16	0.08	2016/17	0.09	2017/18	0.07	2018/19	0.07	2019/20	0.05
Year	Ratio																		
2012/13	0.05																		
2013/14	0.08																		
2014/15	0.05																		
2015/16	0.08																		
2016/17	0.09																		
2017/18	0.07																		
2018/19	0.07																		
2019/20	0.05																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	109																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder evidence

6Q.29 We received no stakeholder evidence regarding SOC code 5236.

## Recommendation

6Q.30 **We do not recommend adding SOC code 5236 (boat and ship builders and repairers) to the SOL.** The occupation ranks low in the RQF3-5 shortage indicator rankings (109th) and has a lower vacancy to employee ratio than the median of eligible occupations. We received no stakeholder evidence that this occupation is in shortage.

## SOC 5237: Rail and rolling stock builders and repairers

Summary table: SOC 5237 Rail and rolling stock builders and repairers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	13%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£42,100																		
25th percentile full-time annual wage (ASHE, 2019)	£37,200																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£37,200																		
Minimum salary required with SOL points	£29,760																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.1																		
2013/14	0.05																		
2014/15	0.08																		
2015/16	0.05																		
2016/17	0.08																		
2017/18	0.05																		
2018/19	0.1																		
2019/20	0.05																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	.																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

6Q.31 We received no stakeholder evidence regarding SOC code 5237.

## Recommendation

6Q.32 **We do not recommend adding SOC code 5237 (rail and rolling stock builders and repairers) to the SOL.** The occupation has a lower vacancy to employee ratio than the median of eligible occupations and we received no stakeholder evidence that this occupation is in shortage. There is not enough data to allow for the calculation of at least five indicators, therefore this occupation is not ranked in the RQF3-5 shortage indicators.

## SOC 5241: Electricians and electrical fitters

Summary table: SOC 5241 Electricians and electrical fitters																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.6%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	5%																		
Share of employees born outside the EEA (APS, 2017-19)	4%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	13%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£33,200																		
25th percentile full-time annual wage (ASHE, 2019)	£27,200																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£27,200																		
Minimum salary required with SOL points	£21,760																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	33%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-13.4%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.72</td> </tr> <tr> <td>2013/14</td> <td>0.76</td> </tr> <tr> <td>2014/15</td> <td>0.66</td> </tr> <tr> <td>2015/16</td> <td>0.82</td> </tr> <tr> <td>2016/17</td> <td>0.96</td> </tr> <tr> <td>2017/18</td> <td>0.96</td> </tr> <tr> <td>2018/19</td> <td>0.91</td> </tr> <tr> <td>2019/20</td> <td>1.00</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.72	2013/14	0.76	2014/15	0.66	2015/16	0.82	2016/17	0.96	2017/18	0.96	2018/19	0.91	2019/20	1.00
Year	Ratio																		
2012/13	0.72																		
2013/14	0.76																		
2014/15	0.66																		
2015/16	0.82																		
2016/17	0.96																		
2017/18	0.96																		
2018/19	0.91																		
2019/20	1.00																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	35																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6Q.33 The SOC code 5241 received the most responses of the whole occupation group with nine responses to our CfE. Stakeholders submitted evidence for a range of job titles including electricians, electrical fitters and wirers.
- 6Q.34 One respondent reported a shortage in Scotland, with the rest reporting a shortage in the whole of the UK. All respondents agreed they would rather wait for an applicant with most of the required skills, except for one stakeholder who would wait indefinitely for someone who is a very good fit.
- 6Q.35 Stakeholders from the further education sector reiterated competition from the private sector as a key factor of shortage in this occupation.
- 6Q.36 All stakeholders cited a lack of domestic skills and experience, although not all gave detailed reasoning behind this. A common reason given was the lack of skills required for newer positions created as a result of increasingly environmentally aware industries.
- 6Q.37 All respondents reported at least some attempts to overcome shortages including increasing training amongst the existing workforce, expanding trainee or apprentice programmes, offering higher salaries and widening recruitment methods. Stakeholders were split when considering the effectiveness of raising salaries, but mostly agreed the rest of the measures taken were effective.

## Recommendation

- 6Q.38 **We recommend that SOC code 5241 (electricians and electrical fitters) is added to the SOL.** The occupation ranks fairly high in our RQF3-5 shortage indicator rankings (35<sup>th</sup>) and has a vacancy to employee ratio in line with that of the median of eligible occupations. We received evidence from a wide range of stakeholders for this occupation group which demonstrated a shortage of workers in this SOC code in the UK.
- 6Q.39 With the discount applied for SOL occupations, the salary threshold for this occupation would be £21,760. This salary threshold is at the 13<sup>th</sup> percentile of full-time earnings in this occupation, meaning that 13 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

## SOC 5242: Telecommunications engineers

Summary table: SOC 5242 Telecommunications engineers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	4%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	12%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£33,300																		
25th percentile full-time annual wage (ASHE, 2019)	£30,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£30,300																		
Minimum salary required with SOL points	£24,240																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-13.3%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	1.0																		
2013/14	1.05																		
2014/15	0.9																		
2015/16	1.1																		
2016/17	1.0																		
2017/18	0.95																		
2018/19	0.55																		
2019/20	0.8																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	69																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6Q.41 We received five responses to our CfE regarding SOC code 5242 stating that this occupation was in shortage.
- 6Q.42 Most stakeholders stated that they did not agree that they had to look outside of the UK to find applicants with the skills, qualifications and work experience needed, but they did struggle to recruit appropriate UK candidates.
- 6Q.43 Most cited a lack of skills, usually due to the evolution of requirements and technologies, as reasoning for a shortage of appropriate candidates. However, most agreed that there was an availability of appropriately skilled UK workers for this occupation, but they had issues recruiting them.
- 6Q.44 Overall, all the respondents made at least some attempts to overcome recruitment difficulties and mostly reported fairly positive results.

## Recommendation

- 6Q.45 **We do not recommend adding SOC code 5242 (telecommunications engineers) to the SOL.** The occupation ranks in the middle of the RQF3-5 shortage indicator rankings (69<sup>th</sup>) and has a vacancy to employee ratio in line with that of the median of eligible occupations. Though we received a number of stakeholder responses regarding the difficulty in recruiting, there was little evidence provided that there were insufficient resident workers to fill vacancies.

## SOC 5244: TV, video and audio engineers

Summary table: SOC 5244 TV, video and audio engineers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	11%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£33,100																		
25th percentile full-time annual wage (ASHE, 2019)	£28,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£28,300																		
Minimum salary required with SOL points	£22,640																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.32</td> </tr> <tr> <td>2013/14</td> <td>0.58</td> </tr> <tr> <td>2014/15</td> <td>0.68</td> </tr> <tr> <td>2015/16</td> <td>0.60</td> </tr> <tr> <td>2016/17</td> <td>0.45</td> </tr> <tr> <td>2017/18</td> <td>0.42</td> </tr> <tr> <td>2018/19</td> <td>0.68</td> </tr> <tr> <td>2019/20</td> <td>0.48</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.32	2013/14	0.58	2014/15	0.68	2015/16	0.60	2016/17	0.45	2017/18	0.42	2018/19	0.68	2019/20	0.48
Year	Ratio																		
2012/13	0.32																		
2013/14	0.58																		
2014/15	0.68																		
2015/16	0.60																		
2016/17	0.45																		
2017/18	0.42																		
2018/19	0.68																		
2019/20	0.48																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	37																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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## Stakeholder evidence

- 6Q.46 We received two responses to our CfE regarding SOC code 5244 stating that this occupation was in shortage.
- 6Q.47 Both cited a lack of specific skills. One said that a low number of applicants in general, a low number of appropriately skilled applicants and a low number of applicants with required qualifications were often an issue.
- 6Q.48 One respondent reported attempting various methods in order to fill vacancies including increasing salaries, widening the scope of recruitment and expanding trainee or apprentice programmes and reported most measures taken as being effective. The other stakeholder was unclear in what actions had been taken to fill vacancies.

## Recommendation

- 6Q.49 **We do not recommend adding SOC code 5244 (TV, video and audio engineers) to the SOL.** The occupation ranks fairly high in the RQF3-5 shortage indicator rankings (37<sup>th</sup>) but has a lower vacancy to employee ratio than the median of eligible occupations. We received limited stakeholder evidence that this occupation is in shortage.

## SOC 5245: IT engineers

Summary table: SOC 5245 IT engineers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & Rol) (APS, 2017-19)	7%																		
Share of employees born outside the EEA (APS, 2017-19)	10%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	16%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£32,300																		
25th percentile full-time annual wage (ASHE, 2019)	£24,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.05</td> </tr> <tr> <td>2013/14</td> <td>0.8</td> </tr> <tr> <td>2014/15</td> <td>0.65</td> </tr> <tr> <td>2015/16</td> <td>0.7</td> </tr> <tr> <td>2016/17</td> <td>0.55</td> </tr> <tr> <td>2017/18</td> <td>0.6</td> </tr> <tr> <td>2018/19</td> <td>0.4</td> </tr> <tr> <td>2019/20</td> <td>0.5</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.05	2013/14	0.8	2014/15	0.65	2015/16	0.7	2016/17	0.55	2017/18	0.6	2018/19	0.4	2019/20	0.5
Year	Ratio																		
2012/13	1.05																		
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2018/19	0.4																		
2019/20	0.5																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	42																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6Q.50 We received one response to our CfE regarding SOC code 5245 stating that this occupation was in shortage.
- 6Q.51 The stakeholder provided very limited detail in terms of the cause and extent of the shortage. There was no indication of implementing any measures in order to attract workers into the occupation.

## Recommendation

- 6Q.52 **We do not recommend adding SOC code 5245 (IT engineers) to the SOL.** The occupation ranks in the upper third of the RQF3-5 shortage indicator rankings (42<sup>nd</sup>) but has a lower vacancy to employee ratio than the median of eligible occupations and we received very limited stakeholder evidence that this occupation is in shortage.

## SOC 5249: Electrical and electronic trades n.e.c.

Summary table: SOC 5249 Electrical and electronic trades n.e.c.																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.3%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	11%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£34,500																		
25th percentile full-time annual wage (ASHE, 2019)	£28,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£28,000																		
Minimum salary required with SOL points	£22,400																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	33%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-18.5%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>2.1</td> </tr> <tr> <td>2013/14</td> <td>1.7</td> </tr> <tr> <td>2014/15</td> <td>2.1</td> </tr> <tr> <td>2015/16</td> <td>2.5</td> </tr> <tr> <td>2016/17</td> <td>3.1</td> </tr> <tr> <td>2017/18</td> <td>2.8</td> </tr> <tr> <td>2018/19</td> <td>2.4</td> </tr> <tr> <td>2019/20</td> <td>2.5</td> </tr> </tbody> </table>		Year	Ratio	2012/13	2.1	2013/14	1.7	2014/15	2.1	2015/16	2.5	2016/17	3.1	2017/18	2.8	2018/19	2.4	2019/20	2.5
Year	Ratio																		
2012/13	2.1																		
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2017/18	2.8																		
2018/19	2.4																		
2019/20	2.5																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	10																		
<b>Recommendation</b>																			
Recommend partially adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6Q.53 SOC code 5249 is a 'not elsewhere classified' occupation, capturing job titles not grouped elsewhere in this occupation grouping. Occupations within this code include alarm engineers, electronics engineers, field engineers, linesman and service engineers.
- 6Q.54 We received four responses to our CfE regarding this SOC code from employers of a range of job titles such as fire alarm technicians, field engineers and electronics hardware design engineers.
- 6Q.55 All respondents said they would rather wait for an applicant with most or all the required skills.
- 6Q.56 All answering stakeholders reiterated a lack of appropriate skills. This was due to an increase in demand for electro-technical skills because of digitalisation, electrification of various services and net zero carbon emission targets, as well as applicants not possessing the specific skills required by carrying out this occupation within certain niche industries, such as fire safety and healthcare. Some stakeholders reported that applicants often do not have the qualifications required.
- 6Q.57 All responding stakeholders indicated implementing various measures in order to fill vacancies including raising salaries, offering increased training and widening recruitment channels and expenditure. Increased pay and training, contracting out work, and recruiting non-UK nationals were all deemed to be effective in most cases, whilst other measures were not.
- 6Q.58 The shortage in fire alarm technicians was described as potentially dangerous if the work were to be carried out by unsuitably qualified workers, and detrimental to the construction industry if delayed whilst waiting for a fire alarm technician to be available.
- 6Q.59 A specific shortage in electronics hardware design engineers was attributed to a movement towards greener technologies as well as other technological advancements, such as autonomous vehicles, leading an increase in demand that cannot be currently met by enough appropriately skilled and trained UK workers.

## Recommendation

- 6Q.60 **We recommend that two job titles from the SOC code 5249 (electrical and electronic trades n.e.c.), fire alarm technicians and electronics hardware design engineers, are added to the SOL.** This occupation ranks very highly in the RQF3-5 shortage indicator rank (10<sup>th</sup>) and has a higher vacancy to employee ratio than the median of eligible occupations. Evidence provided by stakeholders highlights significant efforts have been made to attract workers into the occupation, but these have not been entirely successful.

6Q.61 With the discount applied for SOL occupations, the salary threshold for eligible occupations within this occupation would be £22,400. This salary threshold is at the 9<sup>th</sup> percentile of full-time earnings in this occupation, meaning that nine per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

## SOC 5250: Skilled metal, electrical and electronic trades supervisors

Summary table: SOC 5250 Skilled metal, electrical and electronic trades supervisors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & Rol) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	8%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£35,200																		
25th percentile full-time annual wage (ASHE, 2019)	£30,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£30,300																		
Minimum salary required with SOL points	£24,240																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	26%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.35</td> </tr> <tr> <td>2013/14</td> <td>0.35</td> </tr> <tr> <td>2014/15</td> <td>0.42</td> </tr> <tr> <td>2015/16</td> <td>0.55</td> </tr> <tr> <td>2016/17</td> <td>0.48</td> </tr> <tr> <td>2017/18</td> <td>0.50</td> </tr> <tr> <td>2018/19</td> <td>0.45</td> </tr> <tr> <td>2019/20</td> <td>0.42</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.35	2013/14	0.35	2014/15	0.42	2015/16	0.55	2016/17	0.48	2017/18	0.50	2018/19	0.45	2019/20	0.42
Year	Ratio																		
2012/13	0.35																		
2013/14	0.35																		
2014/15	0.42																		
2015/16	0.55																		
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2017/18	0.50																		
2018/19	0.45																		
2019/20	0.42																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	91																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 6Q.62 We received two responses to our CfE regarding SOC code 5250 stating that this occupation was in shortage.
- 6Q.63 One stakeholder suggested that there were an insufficient number of appropriately trained domestic workers to cater for a growing demand for electro-technical skills because of digitalisation, electrification of various services and net zero carbon emission targets.
- 6Q.64 Several measures had been implemented by one, or both, of the respondents in order to overcome difficulties filling vacancies including raising salaries, offering more training and widening the scope and budget of recruitment. Raising salaries was the only undertaken measure not deemed to be effective by either stakeholder.

## Recommendation

- 6Q.65 **We do not recommend adding SOC code 5250 (skilled metal, electrical and electronic trades supervisors) to the SOL.** The occupation ranks low in the RQF3-5 shortage indicator rankings (91<sup>st</sup>), has a lower vacancy to employee ratio than the median of eligible occupations and we received limited stakeholder evidence that this occupation is in shortage.



## 6R: Textiles, Printing and other Skilled Trades

### Introduction

**6R.1** This section covers 15 SOC codes that broadly sit within textiles, printing and other skilled trades, all of which are within RQF3-5. This covers a wide range of typically manual occupations, ranging from butchers to florists, that are involved in the preparation and manufacturing of a variety of physical goods.

**6R.2** The 15 occupations covered here are:

- i. Weavers and knitters (5411)
- ii. Upholsterers (5412)
- iii. Footwear and leather working trades (5413)
- iv. Tailors and dressmakers (5414)
- v. Textiles, garments and related trades n.e.c. (5419)
- vi. Pre-press technicians (5421)
- vii. Printers (5422)
- viii. Print finishing and binding workers (5423)
- ix. Butchers (5431)
- x. Bakers and flour confectioners (5432)
- xi. Fishmongers and poultry dressers (5433)
- xii. Glass and ceramics makers, decorators and finishers (5441)
- xiii. Furniture makers and other craft woodworkers (5442)
- xiv. Florists (5443)
- xv. Other skilled trades n.e.c. (5449)

**6R.3** This group of occupations is wide ranging and workers are employed across multiple industries. These occupations primarily fall into the Other Manufacturing, Wholesale and Retail Trade, and Non-Professional Administrative and Support Service Activities industries<sup>238</sup>. The concentration of occupations within industries varies depending on the occupation.

### Sector Overview

**6R.4** Many of the occupations in this grouping are characterised by performing some role in the supply chain of manufacturers serving in the textiles or printing sector. This group also includes occupations which are varied in nature and are employed across many different sectors such as food preparation and retail.

**6R.5** Table 6R.1 presents the levels of employment and characteristics of workers in the selected occupations. Overall, the 15 occupations examined constitute approximately one per cent of the total workforce in the UK. The breakdown shows that workers in

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<sup>238</sup> ONS Annual Population Survey 2017-2019

these occupations are on average more likely to be self-employed than workers in other occupations, and over half of these occupations are more reliant on non-UK labour than the average across all other occupations.

**6R.6** It is important to note that the benefits of being on the SOL are only applied to workers sponsored by an employer through the skilled worker visa route. Therefore, there is a more limited advantage to being on the SOL where there is a high proportion of self-employed workers in an occupation.

Table 6R.1: Employment in selected occupations					
Occupation	Total employment	% who are self employed	% born in EEA (ex. UK)	% born outside EEA	% born in UK
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Weavers and knitters	3,500	32%	11%	-	86%
Upholsterers	14,300	50%	20%	5%	74%
Footwear and leather working trades	8,400	28%	3%	-	94%
Tailors and dressmakers	16,300	53%	18%	24%	59%
Textiles, garments and related trades n.e.c.	14,600	23%	6%	23%	71%
Pre-press technicians	4,300	13%	-	12%	83%
Printers	31,600	18%	6%	5%	89%
Print finishing and binding workers	13,300	8%	12%	-	84%
Butchers	34,800	9%	14%	17%	69%
Bakers and flour confectioners	31,500	32%	13%	11%	76%
Fishmongers and poultry dressers	9,600	4%	38%	-	58%
Glass and ceramics makers, decorators and finishers	13,200	48%	6%	2%	91%
Furniture makers and other craft woodworkers	36,400	46%	6%	2%	92%
Florists	12,100	45%	12%	3%	85%
Other skilled trades n.e.c.	42,600	49%	7%	5%	88%

Source: APS (2017-19)

All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes

6R.7 Table 6R.2 presents a set of labour market statistics focused on the pay in these selected occupations compared to all occupations. The median full-time annual salary for each of the selected occupations is considerably below the median across all UK occupations. Similarly, the median full-time annual pay in most of these occupations

is also below the £25,600 threshold for the Skilled Worker route. The pay growth in these occupations varies over time depending on the occupation.

<b>Table 6R.2: Pay in selected occupations</b>			
<b>Occupation</b>	<b>Median gross annual pay for full-time employees 2019</b>	<b>25<sup>th</sup> percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
Weavers and knitters	£24,900	£19,300	+23%
Upholsterers	£24,200	£18,500	+12%
Footwear and leather working trades	£20,500	£17,300	+4%
Tailors and dressmakers	-	£16,200	-
Textiles, garments and related trades n.e.c.	£19,000	£18,300	-26%
Pre-press technicians	-	£19,900	-
Printers	£25,500	£20,800	-10%
Print finishing and binding workers	£22,700	£19,800	+6%
Butchers	£22,000	£19,300	+7%
Bakers and flour confectioners	£19,400	£17,300	-3%
Fishmongers and poultry dressers	£18,900	£17,100	+12%
Glass and ceramics makers, decorators and finishers	-	£17,800	+5%
Furniture makers and other craft woodworkers	-	£18,900	-5%
Florists	-	£14,000	-
Other skilled trades n.e.c.	-	£22,300	+6%

Source: ASHE (2019)

Non-reported estimates are due to insufficient sample sizes

## Impacts of COVID-19

6R.8 We received limited evidence from stakeholders in this group of occupations regarding the impact of COVID-19, as very few stakeholders referred to the pandemic in their responses. Most occupations examined in this grouping are considered to be 'medium'

in terms of their workers' proximity to others, and all 15 occupations are considered to be 'low' in terms of their exposure to disease.

**6R.9** We are aware that workers in textile related occupations are a crucial part of the Personal Protective Equipment (PPE) supply in the UK: for example, the textiles firm Don and Low has been contracted by the UK government to produce 12 million metres squared of fabric for gowns over the next six months<sup>239</sup>. Similarly, other companies where textiles are a part of their supply chains have reallocated resources to produce PPE. For instance, the car manufacturer Aston Martin has transferred resources previously focused on producing textile car interiors to manufacturing tubing and fabric for PPE equipment<sup>240</sup>.

**6R.10** Whilst we did not receive specific evidence from stakeholders regarding the manufacturing of PPE, some of the occupations covered in this section may be involved in producing this equipment.

**6R.11** As we did not receive evidence on PPE manufacturing, it is not clear which SOC codes these roles would fall into and what proportion of workers in these occupations are involved in producing PPE. Therefore, we recommend the Government considers this issue and could add specific roles involved in PPE manufacture to the SOL on a temporary basis if necessary.

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<sup>239</sup> <https://www.gov.uk/government/news/government-significantly-boosts-uk-ppe-supply-with-more-than-100-new-deals>

<sup>240</sup> <https://media.astonmartin.com/aston-martin-providing-ppe-to-frontline-nhs-workers/>

## SOC 5411: Weavers and knitters

Summary table: SOC 5411 Weavers and knitters																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	15%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	9%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£24,900																		
25th percentile full-time annual wage (ASHE, 2019)	£19,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.2																		
2013/14	0.55																		
2014/15	0.45																		
2015/16	0.35																		
2016/17	0.45																		
2017/18	0.3																		
2018/19	0.25																		
2019/20	0.45																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	.																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

- 6R.12 We received evidence from three stakeholders regarding this occupation, all of whom suggested that a lack of new entrants and sufficiently skilled domestic workers has exacerbated shortages in this occupation.
- 6R.13 It was highlighted that competition from other employers and a lack of candidates (both suitably qualified and otherwise) were among the main issues faced. A common theme was employer preferences in this occupation to wait for a candidate who had most of the required skills, even if this meant leaving a role vacant.
- 6R.14 Stakeholders suggested that they had taken measures to reduce shortages, including increasing automation, redefining job roles as well as increasing training and advertising. However, few stakeholders indicated that they would be willing to increase worker wages to meet the required salary for sponsorship.

## Recommendation

- 6R.15 **We do not recommend adding SOC Code 5411 (weavers and knitters) to the SOL.** There is only quantitative data available to calculate a single shortage indicator for this occupation, which falls below the number of indicators required to make a reasonable quantitative estimate of shortages in the relevant occupation.
- 6R.16 Stakeholder evidence suggested there may be some shortage but the ratio of job postings to employees is below the median of eligible occupations. Furthermore, a considerable proportion of workers in this occupation (32 per cent) are self-employed and would not benefit from SOL inclusion. On balance, there is not sufficient evidence to show that this occupation has a UK-wide shortage.
- 6R.17 We note that there is a high share of EEA workers in this occupation compared to across the total UK workforce. There is potential therefore for a shortage to emerge once freedom of movement ends and we would welcome more evidence from stakeholders on this as part of the next SOL review.

## SOC 5412: Upholsterers

Summary table: SOC 5412 Upholsterers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	24%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	9%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£24,200																		
25th percentile full-time annual wage (ASHE, 2019)	£18,500																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	41%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.75</td> </tr> <tr> <td>2013/14</td> <td>1.1</td> </tr> <tr> <td>2014/15</td> <td>0.5</td> </tr> <tr> <td>2015/16</td> <td>0.8</td> </tr> <tr> <td>2016/17</td> <td>0.6</td> </tr> <tr> <td>2017/18</td> <td>0.85</td> </tr> <tr> <td>2018/19</td> <td>0.75</td> </tr> <tr> <td>2019/20</td> <td>0.55</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.75	2013/14	1.1	2014/15	0.5	2015/16	0.8	2016/17	0.6	2017/18	0.85	2018/19	0.75	2019/20	0.55
Year	Ratio																		
2012/13	0.75																		
2013/14	1.1																		
2014/15	0.5																		
2015/16	0.8																		
2016/17	0.6																		
2017/18	0.85																		
2018/19	0.75																		
2019/20	0.55																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	102																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder Evidence

- 6R.18 We received evidence from three stakeholders regarding this occupation. All the responses were from representative groups who suggested that this occupation suffered from shortages due to a lack of domestic talent and a lengthy training period for new entrants as well as a historic lack of investment.
- 6R.19 Stakeholders indicated in their responses that competition from other employers as well as a lack of applicants (suitable and otherwise) were key issues faced as a result of shortages. Most of the stakeholders considered this to be a highly skilled occupation that requires months to years of training. There was also a suggestion that there is little interest amongst the UK workforce due to relatively low pay in the profession.
- 6R.20 Stakeholders stated that they had taken measures to alleviate shortages in the profession, although the steps taken varied. Some stakeholders said they had increased automation, improved training schemes and redefined existing jobs to accommodate shortages. However, very few indicated that they had increased salaries due to concerns about tight margins, with labour being the highest fixed cost. Applicants were uniform in stating that they had looked to employ migrant labour to fill these shortages.

## Recommendations

- 6R.21 **We do not recommend adding SOC Code 5412 (upholsterers) to the SOL.** Upholsterers rank low (102<sup>nd</sup>) in the RQF3-5 shortage indicators. Similarly, the ratio of online job postings to employees is below the median of eligible occupations which does not suggest a shortage. Furthermore, around half of workers in this occupation are self-employed and would not benefit from inclusion on the SOL.
- 6R.22 Whilst stakeholders have reported that there are shortages, the data does not show that there are UK-wide shortages at present. We acknowledge that 24 per cent of workers in this occupation are from the EEA, so shortages may increase following the end of freedom of movement.

## SOC 5413: Footwear and leather working trades

Summary table: SOC 5413 Footwear and leather working trades																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	13%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£20,500																		
25th percentile full-time annual wage (ASHE, 2019)	£17,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.75</td> </tr> <tr> <td>2013/14</td> <td>0.9</td> </tr> <tr> <td>2014/15</td> <td>0.6</td> </tr> <tr> <td>2015/16</td> <td>0.4</td> </tr> <tr> <td>2016/17</td> <td>0.5</td> </tr> <tr> <td>2017/18</td> <td>0.7</td> </tr> <tr> <td>2018/19</td> <td>1.35</td> </tr> <tr> <td>2019/20</td> <td>0.8</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.75	2013/14	0.9	2014/15	0.6	2015/16	0.4	2016/17	0.5	2017/18	0.7	2018/19	1.35	2019/20	0.8
Year	Ratio																		
2012/13	0.75																		
2013/14	0.9																		
2014/15	0.6																		
2015/16	0.4																		
2016/17	0.5																		
2017/18	0.7																		
2018/19	1.35																		
2019/20	0.8																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	.																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

- 6R.23 We received evidence from two stakeholders about this occupation.
- 6R.24 Stakeholders indicated in their responses that competition from other employers, a low number of suitable applicants as well as a lack of applicants generally were among the main issues faced in this occupation. Similarly, stakeholders reported that the occupation was highly skilled and required specialised workers. They reported it was hard to learn these skills without a training or apprenticeship programme and that a lack of proficiency amongst existing staff was a key driver in exacerbating shortages in this role.
- 6R.25 Responses indicated that stakeholders had taken steps to alleviate shortages, including raising salaries, using new recruitment methods and contracting work out. In addition, all stakeholders commenting stated that they had hired non-UK nationals to work in this occupation. Despite being willing to pay higher wages, stakeholders stated that the required wage for a sponsored worker was too high, which aligns with our own analysis that suggests the median salary for workers in this occupation is significantly below the required threshold for sponsorship under the Skilled Worker route.

## Recommendations

- 6R.26 **We do not recommend adding SOC Code 5413 (footwear and leather workers) to the SOL.** We received limited stakeholder evidence for this occupation. Due to data availability in this relatively small occupation, we were only able to produce three shortage indicators which means we are unable to produce a shortage ranking for this occupation.
- 6R.27 The ratio of job postings to employees relative to the median for eligible occupations does not suggest the occupation is in shortage, as the ratio for this occupation does not deviate noticeably from the median of eligible occupations apart from a temporary uptick in 2018/2019. In addition, the share of employees working in this occupation born outside the UK is lower than the national average at four per cent, and 28 per cent of workers in this occupation are self-employed and such workers would not benefit from inclusion on the SOL.

## SOC 5414: Tailors and dressmakers

Summary table: SOC 5414 Tailors and dressmakers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	23%																		
Share of employees born outside the EEA (APS, 2017-19)	31%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	£16,200																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>3.4</td> </tr> <tr> <td>2013/14</td> <td>2.5</td> </tr> <tr> <td>2014/15</td> <td>1.2</td> </tr> <tr> <td>2015/16</td> <td>1.6</td> </tr> <tr> <td>2016/17</td> <td>1.0</td> </tr> <tr> <td>2017/18</td> <td>1.0</td> </tr> <tr> <td>2018/19</td> <td>1.2</td> </tr> <tr> <td>2019/20</td> <td>1.0</td> </tr> </tbody> </table>		Year	Ratio	2012/13	3.4	2013/14	2.5	2014/15	1.2	2015/16	1.6	2016/17	1.0	2017/18	1.0	2018/19	1.2	2019/20	1.0
Year	Ratio																		
2012/13	3.4																		
2013/14	2.5																		
2014/15	1.2																		
2015/16	1.6																		
2016/17	1.0																		
2017/18	1.0																		
2018/19	1.2																		
2019/20	1.0																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	.																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

- 6R.28 We received evidence from five stakeholders on this occupation. Stakeholder responses reported shortages of workers in this occupation, due to a lack of workers with the relevant skills as well as lengthy training periods required to fulfil the role, ranging from 1-3 months to a year. Most stakeholders believed that this occupation should be considered for the SOL.
- 6R.29 Stakeholder responses indicated that an overall lack of candidates was one of the primary issues that they faced. Stakeholders stated that they had low numbers of applicants with the appropriate skills, qualifications and personal traits, in addition to a low number of applicants generally. Other concerns were raised, such as competition among employers for applicants and unsociable hours negatively impacting recruitment, but these were not as profound as the general lack of applicants.
- 6R.30 Stakeholders suggested that they had taken steps to alleviate these shortages. The actions taken varied by individual response, but most stakeholders stated that they had used new recruitment methods, increased training as well as redefined jobs and outsourced roles in order to resolve shortages. Evidence was mixed regarding increasing salaries, which some of the respondents stated they had done. One unifying theme amongst respondents was that all of them had chosen to fill vacancies by recruiting non-UK nationals. This is supported by our own quantitative analysis of employment in this occupation, as the percentage of employees born outside of the UK is well above the average across all occupations (54 per cent)<sup>241</sup>. In addition, our analysis suggests that over half of employees within this occupation are self-employed.

## Recommendations

- 6R.31 **We do not recommend adding SOC Code 5414 (tailors and dressmakers) to the SOL.** There is little data available for this occupation given it is relatively small in size, therefore we were unable to produce the sufficient number of indicators required to calculate the shortage indicator ranking.
- 6R.32 Since 2014/2015 the ratio of vacancies to employees has fallen so that it is now in line with the median of eligible occupations. Our analysis does however suggest that migrants make up a relatively high proportion of the workforce in this occupation; 23 per cent of workers are born inside the EEA and 31 per cent are born outside the EEA. Both figures are well above the average for the UK workforce. This suggests that shortages may worsen following the end of freedom of movement.

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<sup>241</sup> ONS Annual Population Survey 2017-2019

6R.33 We note there is some evidence from stakeholders suggesting a shortage, but a high proportion (53 per cent) of those in this occupation are self-employed: workers must be sponsored by an employer to benefit from being on the SOL, so does not benefit self-employed migrants.

## SOC 5419: Textiles, garments and related trades n.e.c.

Summary table: SOC 5419 Textiles, garments and related trades n.e.c.																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	7%																		
Share of employees born outside the EEA (APS, 2017-19)	25%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	32%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£19,000																		
25th percentile full-time annual wage (ASHE, 2019)	£18,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	64%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>2.4</td> </tr> <tr> <td>2013/14</td> <td>4.7</td> </tr> <tr> <td>2014/15</td> <td>2.8</td> </tr> <tr> <td>2015/16</td> <td>4.0</td> </tr> <tr> <td>2016/17</td> <td>2.0</td> </tr> <tr> <td>2017/18</td> <td>1.2</td> </tr> <tr> <td>2018/19</td> <td>2.1</td> </tr> <tr> <td>2019/20</td> <td>1.7</td> </tr> </tbody> </table>		Year	Ratio	2012/13	2.4	2013/14	4.7	2014/15	2.8	2015/16	4.0	2016/17	2.0	2017/18	1.2	2018/19	2.1	2019/20	1.7
Year	Ratio																		
2012/13	2.4																		
2013/14	4.7																		
2014/15	2.8																		
2015/16	4.0																		
2016/17	2.0																		
2017/18	1.2																		
2018/19	2.1																		
2019/20	1.7																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	.																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

- 6R.34 We received responses from two stakeholders regarding this occupation. Stakeholders stated that they believed this occupation to be highly skilled and required months to years of training. Stakeholders highlighted a lack of UK workers who are skilled in key areas (primarily technical skills related to this occupation), as well as an aging workforce and a failure to attract young people into the industry.
- 6R.35 Stakeholders highlighted a range of issues driving shortages in this occupation. These issues included too much competition from other employers and an insufficient number of applicants. Stakeholders suggested that both the volume and quality of applicants (in terms of qualifications, skill and personal traits) were too low.
- 6R.36 Stakeholders suggested that they had undertaken a variety of measures to overcome these difficulties filling vacancies. Stakeholders suggested that they had increased automation, increased training and recruitment initiatives, outsourcing work as well as redefining existing jobs and recruiting migrant workers. The only method they appeared not to have attempted from the options specified in our CfE was increasing salaries.

## Recommendations

- 6R.37 **We do not recommend adding SOC Code 5419 (textiles, garments and related trades n.e.c.) to the SOL.** We were unable to produce a shortage rank for this occupation.
- 6R.38 The ratio of job postings to employees has been consistently above the median of eligible occupations since 2012. However, in recent years it has decreased. There is a high proportion of non-EEA born workers in this occupation compared to the average across all occupations.
- 6R.39 Overall, there is some evidence of historical shortage within the occupation based on stakeholder evidence and the data. However, the vacancy to employee ratio has decreased over the last few years and there is limited evidence of a UK-wide shortage at present. We also expect that workers in this occupation may be involved in the manufacturing of PPE but did not receive any stakeholder evidence regarding this. We welcome evidence from stakeholders regarding PPE manufacturing, which will be taken into consideration in our next SOL review.



## SOC 5421: Pre-press technicians

Summary table: SOC 5421 Pre-press technicians																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	13%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	£19,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	2.8																		
2013/14	3.1																		
2014/15	4.2																		
2015/16	2.1																		
2016/17	2.3																		
2017/18	6.7																		
2018/19	3.4																		
2019/20	4.1																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	.																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

6R.40 We did not receive any stakeholder evidence regarding this occupation.

## Recommendations

6R.41 **We do not recommend adding SOC Code 5421 (pre press technicians) to the SOL.** Due to the lack of data available for this relatively small occupation, we were unable to calculate a shortage indicator ranking.

6R.42 The ratio of job postings to employees has been above the median of eligible occupations for the duration of the period assessed, with a noticeable peak around 2017/18. Similarly, the proportion of workers born outside of the EEA is slightly above the average for the total UK workforce.

6R.43 Given there has been no stakeholder evidence provided for this occupation and there is insufficient wage and shortage indicator data, there is not enough information to discern whether this occupation is in shortage.

## SOC 5422: Printers

Summary table: SOC 5422 Printers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	6%																		
Share of employees born outside the EEA (APS, 2017-19)	4%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	8%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£25,500																		
25th percentile full-time annual wage (ASHE, 2019)	£20,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	61%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.38</td> </tr> <tr> <td>2013/14</td> <td>0.52</td> </tr> <tr> <td>2014/15</td> <td>0.45</td> </tr> <tr> <td>2015/16</td> <td>0.50</td> </tr> <tr> <td>2016/17</td> <td>0.60</td> </tr> <tr> <td>2017/18</td> <td>0.55</td> </tr> <tr> <td>2018/19</td> <td>0.70</td> </tr> <tr> <td>2019/20</td> <td>0.65</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.38	2013/14	0.52	2014/15	0.45	2015/16	0.50	2016/17	0.60	2017/18	0.55	2018/19	0.70	2019/20	0.65
Year	Ratio																		
2012/13	0.38																		
2013/14	0.52																		
2014/15	0.45																		
2015/16	0.50																		
2016/17	0.60																		
2017/18	0.55																		
2018/19	0.70																		
2019/20	0.65																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	128																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

6R.44 We did not receive any stakeholder evidence regarding this occupation.

## Recommendations

6R.45 **We do not recommend adding SOC Code 5422 (printers) to the SOL.** This occupation ranks low in our RQF3-5 indicators (128<sup>th</sup>) and the ratio of job postings to employees for this occupation is below the median of eligible occupations.

## SOC 5423: Print finishing and binding workers

Summary table: SOC 5423 Print finishing and binding workers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	14%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	6%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£22,700																		
25th percentile full-time annual wage (ASHE, 2019)	£19,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.1																		
2013/14	0.2																		
2014/15	0.18																		
2015/16	0.25																		
2016/17	0.3																		
2017/18	0.2																		
2018/19	0.4																		
2019/20	0.4																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	52																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

6R.46 We did not receive any stakeholder evidence for this occupation.

## Recommendations

6R.47 **We do not recommend adding SOC Code 5423 (print finishing and binding workers) to the SOL.** This occupation ranks in the middle in the RQF3-5 shortage indicators (52<sup>nd</sup>). In terms of vacancies, the ratio of job postings to employees was below the median of eligible occupations for the duration of the time period assessed.

## SOC 5431: Butchers

Summary table: SOC 5431 Butchers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	15%																		
Share of employees born outside the EEA (APS, 2017-19)	16%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	13%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£22,000																		
25th percentile full-time annual wage (ASHE, 2019)	£19,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.30</td> </tr> <tr> <td>2013/14</td> <td>0.30</td> </tr> <tr> <td>2014/15</td> <td>0.35</td> </tr> <tr> <td>2015/16</td> <td>0.32</td> </tr> <tr> <td>2016/17</td> <td>0.32</td> </tr> <tr> <td>2017/18</td> <td>0.25</td> </tr> <tr> <td>2018/19</td> <td>0.30</td> </tr> <tr> <td>2019/20</td> <td>0.35</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.30	2013/14	0.30	2014/15	0.35	2015/16	0.32	2016/17	0.32	2017/18	0.25	2018/19	0.30	2019/20	0.35
Year	Ratio																		
2012/13	0.30																		
2013/14	0.30																		
2014/15	0.35																		
2015/16	0.32																		
2016/17	0.32																		
2017/18	0.25																		
2018/19	0.30																		
2019/20	0.35																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	30																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

- 6R.48 We received evidence from eleven stakeholders regarding this occupation. They reported there were shortages in a range of job roles within this occupation code, including butchers, abattoir workers, meat boners and quality controllers. Stakeholders highlighted a range of recruitment difficulties that they were facing in this occupation, ranging from competition from other employers to adverse working conditions. Stakeholders reported that this occupation was struggling with a lack of available and suitably skilled workers.
- 6R.49 One of the primary issues stakeholders highlighted was that this occupation is deemed to be unattractive to workers. Stakeholders discussed the adverse working conditions involved in butchery, which includes working long hours in chilled conditions often with very early start times. A report by the British Meat Processors Association reiterated these challenging perceptions, despite high factory standards “*particularly around the fabric of the building machinery and worker hygiene and safety*”<sup>242</sup>. The perceptions of this occupation played a key role in recruitment difficulties.
- 6R.50 Stakeholders discussed issues in recruiting UK workers, since the UK lacks an existing pool of skilled butchers, as well as the lack of vocational training programmes that lead to a career in butchery. Stakeholders noted that young British people are often not equipped with the right skillset and qualifications before seeking work in the industry. One of the key reasons cited for this is that there has been a lack of awareness of the opportunity within the industry, possibly due to the reduction of high street butchers’ shops and the public visibility of butchers. Furthermore, stakeholders reported that certain vocational courses within colleges have cancelled their butchery courses due to low uptake, and most small to medium size firms do not have the capabilities to carry out their training in house to compensate for this. Stakeholders agreed that they suffer from a low number of applicants, both appropriately skilled/qualified and otherwise.
- 6R.51 Stakeholders stressed the need for migrant workers to fill vacancies in the industry that they could not source domestically; all respondents indicated that they had sourced migrant labour to fill job gaps. Some employers reported a large share of their employees were migrants. For example, one employer indicated that 75 per cent of their current workforce were born outside of the UK. Stakeholders reported that shortages had been exacerbated further by a widespread shortage of butchers across Western Europe, as well as EU exit.
- 6R.52 Stakeholders reported that they had taken steps to alleviate shortages within this occupation, including increasing training and recruitment initiatives by engaging with local schools and colleges and developing their own in-house training programmes. Many respondents indicated that they had attempted to increase automation to

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<sup>242</sup> <https://britishmeatindustry.org/industry/workforce/>



alleviate shortages, with limited success as elements of butchery rely heavily on human involvement. For example, many stakeholders reported investing in automation equipment only to remove it due to it decreasing yields, which in an industry which was reported to have tight profit margins was considered unacceptable.

6R.53 All stakeholders who responded to the Call for Evidence (CfE) on this occupation reported that they had increased salaries but still struggled with labour shortages. One stakeholder stated that pay increases are limited due to the already tight margins and stated that any increase in wages may have to be passed onto consumers.

6R.54 This occupation has been on the SOL in the past. In both the MAC's October 2009 and March 2010 partial reviews of the SOL, the MAC suggested that this occupation should be on the SOL. However, this was limited to the 'Skilled Meat Boner'<sup>243</sup> and 'Skilled Meat Trimmer' job titles, and not the entire occupation. At that time, it was indicated by stakeholders that efforts were being made to train domestic workers and that in the short term they would need access to migrant labour to fill any shortages.

*The industry recognises that a reliance on non-EEA labour is not good for the industry but argues that in the short term they would fill a need and would help to train up lower-skilled workers.*

MAC; *Skilled, Shortage, Sensible*; p.152, Oct 2008

6R.55 This occupation became ineligible for the Tier 2 (General) visa route in 2011, as part of the skill level changes for this route.

## Recommendations

6R.56 **We recommend adding SOC code 5431 (butchers) on the SOL.** Within this occupation, 15 per cent of employees are EEA-born and 16 per cent are non-EEA born, compared to total UK employees of seven per cent and 10 per cent respectively<sup>244</sup>. Based on our shortage indicator analysis, this occupation ranks relatively high in the RQF3-5 shortage indicators (30<sup>th</sup>). However, the ratio of online job postings to employees was below the median of eligible occupations for the duration of the time period assessed.

6R.57 The salary for this occupation has increased over time (adjusting for inflation using CPIH), from £20,200 in 2011 to £22,000 in 2019<sup>245</sup>. This supports stakeholder evidence of these increases in wages. The stakeholder evidence and data does suggest a continued shortage of butchers in the UK. Under the Skilled Worker route, employers would face a salary threshold that is above the median full-time salary in this occupation, at the 80<sup>th</sup> percentile of full-time annual earnings. With the discount

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<sup>243</sup> The definition of skilled for this occupation was where the salary was at least £9 per hour

<sup>244</sup> ONS, Annual Population Survey 2017-19

<sup>245</sup> ONS, Annual Survey of Hours and Earnings 2011 and 2019

applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 43rd percentile of full-time earnings in this occupation, meaning that 43 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

**6R.58** However, the issues reported by stakeholders in this occupation are very similar to those reported in 2008, at which time it was reported to be a temporary issue whilst workers were trained. Whilst the circumstances are different, there are persistent concerns that more should be done to train butchers in the domestic workforce to resolve these issues. On balance, we recommend placing butchers on the SOL. However, we expect employers to continue to engage with us and demonstrate they are undertaking measures to reduce shortages in this occupation. It is important that employers do not rely on a permanent source of migrant workers to fill vacancies in this occupation.

## SOC 5432: Bakers and flour confectioners

Summary table: SOC 5432 Bakers and flour confectioners																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	15%																		
Share of employees born outside the EEA (APS, 2017-19)	11%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£19,400																		
25th percentile full-time annual wage (ASHE, 2019)	£17,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	9%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.4																		
2013/14	0.35																		
2014/15	0.3																		
2015/16	0.35																		
2016/17	0.4																		
2017/18	0.45																		
2018/19	0.45																		
2019/20	0.3																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	-																		
<b>Recommendation</b>																			
Recommend adding entire occupation to Northern Ireland-only SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

- 6R.59 We received evidence from the Northern Ireland Minister for the Economy stating that this occupation was in shortage and that the agri-food sector was of particular importance to the DA.

## Recommendations

- 6R.60 **We do not recommend adding SOC Code 5432 (bakers and flour confectioners) to the UK SOL but do recommend inclusion on the NI-only SOL.**
- 6R.61 The NI Executive highlighted the importance of this occupation for the agri-food sector in Northern Ireland. We have heard at several stakeholder events that the sector faces challenges as a result of the land border with the Republic of Ireland and so competing with local businesses that will retain access to EEA workers on an unrestricted basis. Stakeholders have suggested that this has reduced investment in the sector recently. Mindful of these challenges that NI businesses face, we recommend that this occupation be added to the NI-only SOL. We will closely monitor the use of this as the new system comes into operation.
- 6R.62 With the discount applied for SOL occupations, the salary threshold for this occupation would be £20,480. This salary threshold is at the 56th percentile of full-time earnings in this occupation, meaning that 56 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.
- 6R.63 For the UK-wide SOL we were unable to produce any shortage indicators for this occupation. The vacancy to employee ratio is lower than the median of eligible occupations and there is limited stakeholder evidence demonstrating a shortage in this occupation. Furthermore, almost a third (32 per cent) of workers in this occupation are self-employed<sup>246</sup>, and it is unlikely that self-employed workers would benefit from being on the SOL.

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<sup>246</sup> ONS, Annual Population Survey 2017-19

## SOC 5433: Fishmongers and poultry dressers

Summary table: SOC 5433 Fishmongers and poultry dressers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	40%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	14%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£18,900																		
25th percentile full-time annual wage (ASHE, 2019)	£17,100																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr><td>2012/13</td><td>0.05</td></tr> <tr><td>2013/14</td><td>0.08</td></tr> <tr><td>2014/15</td><td>0.10</td></tr> <tr><td>2015/16</td><td>0.08</td></tr> <tr><td>2016/17</td><td>0.05</td></tr> <tr><td>2017/18</td><td>0.05</td></tr> <tr><td>2018/19</td><td>0.08</td></tr> <tr><td>2019/20</td><td>0.10</td></tr> </tbody> </table>		Year	Ratio	2012/13	0.05	2013/14	0.08	2014/15	0.10	2015/16	0.08	2016/17	0.05	2017/18	0.05	2018/19	0.08	2019/20	0.10
Year	Ratio																		
2012/13	0.05																		
2013/14	0.08																		
2014/15	0.10																		
2015/16	0.08																		
2016/17	0.05																		
2017/18	0.05																		
2018/19	0.08																		
2019/20	0.10																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	114																		
<b>Recommendation</b>																			
Recommend adding entire occupation to Northern Ireland-only SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

- 6R.64 We received evidence from five stakeholders regarding this occupation. Stakeholders reported that this occupation was in shortage due to a lack of local workers willing to do the job. Furthermore, stakeholders suggested that automation was not the solution to this shortage as it was expensive to implement and not a suitable replacement for workers. All respondents stated that they believed this occupation should be on the SOL.
- 6R.65 The main issue reported was that this occupation was unattractive to UK workers. Stakeholders noted that this occupation requires working unsociable hours in adverse conditions, which local workers did not want to do and there was low unemployment across the UK (although this situation may change as a result of the ongoing pandemic.) Stakeholders reported that this issue was compounded by other sectors offering more competitive pay and better working conditions. As a result of this, stakeholders stated that they were heavily reliant on migrant labour, which is supported by our own analysis which states that 40 per cent of workers in this occupation were EEA-born<sup>247</sup>.
- 6R.66 The NI Executive highlighted this occupation to be in shortage, stating that it was of importance to the agri-food sector in Northern Ireland and citing differences in salaries between the two nations.
- 6R.67 Stakeholders across the board stated that they had undertaken every measure outlined in our CfE to alleviate shortages in this occupation. This included increasing training/recruitment efforts, redefining existing jobs, attempting automation and increasing salaries. However, our own quantitative analysis suggests that the median full-time salary in this occupation is almost £12,000 below the median full-time salary of all occupations<sup>248</sup>. When asked why they would be unable to meet the salary requirements for sponsorship, most respondents indicated that profit margins in this industry are tight.

## Recommendations

- 6R.68 **We do not recommend adding SOC Code 5433 (fishmongers and poultry dressers) to the SOL but recommend inclusion to the NI-only SOL.**
- 6R.69 We have heard at several stakeholder events that the agri-food sector in NI faces challenges as a result of the land border with the Republic of Ireland and so competing with local businesses that will retain access to EEA workers on an unrestricted basis. Stakeholders have suggested that this has reduced investment in the sector recently. We are mindful of these challenges that NI businesses face, we recommend that this

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<sup>247</sup> ONS, Annual Population Survey 2017-19

<sup>248</sup> ONS, Annual Survey of Hours and Earnings 2015-19

occupation be added to the NI-only SOL. We will closely monitor the use of this as the new system comes into operation.

**6R.70** For the UK-wide SOL, this occupation had a low ranking in the RQF3-5 shortage indicators and a low vacancy to employee ratio. Similarly, the median annual full-time salary for this occupation falls below the thresholds for both the Skilled Worker and SOL routes.

**6R.71** We acknowledge that this occupation has a high proportion of migrant labour, especially from the EEA and there is stakeholder evidence suggesting a shortage within the occupation. However, it is clear that there are underlying structural issues in this occupation across the UK which are exacerbating the shortages, such as its relatively low pay and unattractive working conditions. Considering this in the context of our sensible test, it would not be appropriate to add this occupation to the UK-wide SOL.

## SOC 5441: Glass and ceramics makers, decorators and finishers

Summary table: SOC 5441 Glass and ceramics makers, decorators and finishers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	10%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	12%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£21,300																		
25th percentile full-time annual wage (ASHE, 2019)	£17,800																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.3</td> </tr> <tr> <td>2013/14</td> <td>0.4</td> </tr> <tr> <td>2014/15</td> <td>0.15</td> </tr> <tr> <td>2015/16</td> <td>0.2</td> </tr> <tr> <td>2016/17</td> <td>0.25</td> </tr> <tr> <td>2017/18</td> <td>0.3</td> </tr> <tr> <td>2018/19</td> <td>0.35</td> </tr> <tr> <td>2019/20</td> <td>0.6</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.3	2013/14	0.4	2014/15	0.15	2015/16	0.2	2016/17	0.25	2017/18	0.3	2018/19	0.35	2019/20	0.6
Year	Ratio																		
2012/13	0.3																		
2013/14	0.4																		
2014/15	0.15																		
2015/16	0.2																		
2016/17	0.25																		
2017/18	0.3																		
2018/19	0.35																		
2019/20	0.6																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	14																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder Evidence

6R.72 We did not receive any stakeholder evidence regarding this occupation.

## Recommendations

6R.73 **We do not recommend adding SOC Code 5441 (glass and ceramics makers, decorators and finishers) to the SOL.** This occupation ranks highly (14<sup>th</sup>) in the RQF3-5 shortage indicators. However, the data may be skewed by the small number of workers in this occupation: there are just over 13,000<sup>249</sup> workers in this occupation, half of whom are self-employed. In terms of the vacancy to employee ratio it falls well below the median of eligible occupations, and we received no stakeholder evidence on this occupation.

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<sup>249</sup> ONS Annual Population Survey 2017-2019

## SOC 5442: Furniture makers and other craft woodworkers

Summary table: SOC 5442 Furniture makers and other craft woodworkers																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	11%																		
Share of employees born outside the EEA (APS, 2017-19)	1%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	12%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£23,500																		
25th percentile full-time annual wage (ASHE, 2019)	£18,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	41%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.2</td> </tr> <tr> <td>2013/14</td> <td>0.3</td> </tr> <tr> <td>2014/15</td> <td>0.25</td> </tr> <tr> <td>2015/16</td> <td>0.28</td> </tr> <tr> <td>2016/17</td> <td>0.32</td> </tr> <tr> <td>2017/18</td> <td>0.38</td> </tr> <tr> <td>2018/19</td> <td>0.25</td> </tr> <tr> <td>2019/20</td> <td>0.2</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.2	2013/14	0.3	2014/15	0.25	2015/16	0.28	2016/17	0.32	2017/18	0.38	2018/19	0.25	2019/20	0.2
Year	Ratio																		
2012/13	0.2																		
2013/14	0.3																		
2014/15	0.25																		
2015/16	0.28																		
2016/17	0.32																		
2017/18	0.38																		
2018/19	0.25																		
2019/20	0.2																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	127																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

6R.74 We received one response from stakeholders regarding this occupation from a representative body. They stated that 47 per cent of the businesses that they represent reported shortages, and that they believed this occupation should be on the SOL.

6R.75 This stakeholder indicated that the businesses it represented suffered from competition for workers with other employers and that they suffered from a low number of applicants, both in terms of appropriately skilled/qualified applicants and more generally. They reported having deployed a variety of measures to alleviate these shortages, including increasing salaries and training initiatives as well as redefining existing jobs and offering roles to less qualified applicants. The effectiveness of these measures varied: increasing salaries, increasing training, increasing automation as well as employing non-UK workers were considered effective in reducing shortages.

## Recommendations

6R.76 **We do not recommend adding SOC Code 5442 (furniture makers and other craft woodworkers) to the SOL.** We received some stakeholder evidence suggesting a shortage in this occupation. However, it ranked low in the RQF3-5 shortage indicators (127<sup>th</sup>) and the vacancy to employee ratio of this occupation is below the median of eligible occupations. Furthermore 46 per cent of workers in this occupation are self-employed<sup>250</sup> and such workers do not benefit from SOL inclusion.

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<sup>250</sup> ONS Annual Population Survey 2017-2019

## SOC 5443: Florists

Summary table: SOC 5443 Florists																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & Rol) (APS, 2017-19)	21%																		
Share of employees born outside the EEA (APS, 2017-19)	-																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	16%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	-																		
25th percentile full-time annual wage (ASHE, 2019)	£14,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.7</td> </tr> <tr> <td>2013/14</td> <td>0.5</td> </tr> <tr> <td>2014/15</td> <td>0.8</td> </tr> <tr> <td>2015/16</td> <td>0.2</td> </tr> <tr> <td>2016/17</td> <td>0.2</td> </tr> <tr> <td>2017/18</td> <td>0.15</td> </tr> <tr> <td>2018/19</td> <td>0.3</td> </tr> <tr> <td>2019/20</td> <td>0.3</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.7	2013/14	0.5	2014/15	0.8	2015/16	0.2	2016/17	0.2	2017/18	0.15	2018/19	0.3	2019/20	0.3
Year	Ratio																		
2012/13	0.7																		
2013/14	0.5																		
2014/15	0.8																		
2015/16	0.2																		
2016/17	0.2																		
2017/18	0.15																		
2018/19	0.3																		
2019/20	0.3																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	78																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

6R.77 We did not receive any stakeholder evidence on this occupation.

## Recommendations

6R.78 **We do not recommend adding SOC Code 5443 (florists) to the SOL.** This occupation ranks in the middle of RQF3-5 occupations in terms of its shortage rank (78<sup>th</sup>) and is relatively small in terms of the number of workers (just over 12,000), 45 per cent of whom are self-employed<sup>251</sup>. The vacancy to employee ratio is below the median of eligible occupations. Overall, this does not suggest there is a shortage in this occupation.

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<sup>251</sup> ONS Annual Population Survey 2017-2019

## SOC 5449: Other skilled trades n.e.c.

Summary table: SOC 5449 Other skilled trades n.e.c.																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	12%																		
Share of employees born outside the EEA (APS, 2017-19)	2%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	11%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£27,100																		
25th percentile full-time annual wage (ASHE, 2019)	£22,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	22%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-37.2%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>2.8</td> </tr> <tr> <td>2013/14</td> <td>3.2</td> </tr> <tr> <td>2014/15</td> <td>2.6</td> </tr> <tr> <td>2015/16</td> <td>3.4</td> </tr> <tr> <td>2016/17</td> <td>3.0</td> </tr> <tr> <td>2017/18</td> <td>2.8</td> </tr> <tr> <td>2018/19</td> <td>3.2</td> </tr> <tr> <td>2019/20</td> <td>3.6</td> </tr> </tbody> </table>		Year	Ratio	2012/13	2.8	2013/14	3.2	2014/15	2.6	2015/16	3.4	2016/17	3.0	2017/18	2.8	2018/19	3.2	2019/20	3.6
Year	Ratio																		
2012/13	2.8																		
2013/14	3.2																		
2014/15	2.6																		
2015/16	3.4																		
2016/17	3.0																		
2017/18	2.8																		
2018/19	3.2																		
2019/20	3.6																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/136 eligible occupations below RQF6)	68																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

- 6R.79 This occupation covers a wide range of job titles, including roles such as diamond mounters, engravers and piano tuners. We received one piece of stakeholder evidence regarding this occupation. They suggested that this occupation was highly skilled, and that most businesses they represented said it was difficult to find workers. However, the stakeholder did not specify which types of job roles in this occupation code were in shortage. This stakeholder believed that this occupation should be on the SOL.
- 6R.80 This stakeholder suggested that the groups they represented had a range of reasons for recruitment difficulties; this mainly revolved around having a low number of applicants, both appropriately skilled/qualified and otherwise as well as competition from other employers for a limited number of employees.
- 6R.81 The stakeholder stated that the businesses it represented had deployed a variety of measures to alleviate these recruitment difficulties, including increased training and recruitment initiatives, redefining existing jobs as well as hiring non-UK workers. The stakeholder suggested that increasing training and recruiting non-UK workers was effective at filling vacancies, but that the other measures were not.

## Recommendations

- 6R.82 **We do not recommend adding SOC Code 5449 (other skilled trades n.e.c.) on the SOL.** This occupation ranks in the middle of the RQF3-5 shortage indicators (68<sup>th</sup>) and the vacancy to employee ratio is above that of the median of eligible occupations.
- 6R.83 Despite some quantitative evidence that this occupation may be in shortage, its middling shortage rank combined with a lack of stakeholder evidence suggests that we should not put this occupation on the SOL. In addition, almost half (49 per cent<sup>252</sup>) of the workers in this occupation are self-employed. The benefits of the SOL are only applicable for the skilled worker visa route, where an employer sponsor is a requirement, and the benefits do not apply to self-employed migrants. Furthermore, this SOC code covers a wide range of miscellaneous job titles, a few of which may be driving the data trends.

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<sup>252</sup> ONS Annual Population Survey 2017-2019

## Chapter 7: RQF6+ occupations

### Summary

- We received stakeholder evidence referencing 45 unique RQF6+ occupations.
- We carried out a triage process to assess whether additional new evidence was provided, compared to our 2019 review. As a result, we took forward 14 occupations for a full review.
- We recommend inclusion of three occupations to the UK-wide SOL, one additional inclusion of a specific job title on the UK-wide SOL and one to be included on to the Wales-only SOL.
- Recommend inclusion on UK-wide SOL: SOC 1181 Health services and public health managers and directors, SOC 2213 Pharmacists, and SOC 2221 Physiotherapists.
- Recommend part inclusion on the UK-wide SOL: 2314 Secondary Education and Teaching Professionals - Modern Foreign Language Teachers only.
- Recommend inclusion to the Wales-only SOL: SOC 2219 Health professionals n.e.c.

### Introduction

- 7.1 The Home Secretary's commissioning letter<sup>253</sup> highlighted that in addition to reviewing RQF3-5 occupations for inclusion on the SOL, the MAC may also want to consider whether any amendments were needed to the existing SOLs for occupations at RQF6 and above.
- 7.2 A full review of the SOL was carried out in 2019, covering all RQF6+ occupations. Considering the labour market uncertainty posed by COVID-19 and the upcoming changes to the immigration system, we recommend that all RQF6+ occupations placed on the SOL in the 2019 review should remain on the list at this time.
- 7.3 The Call for Evidence (CfE) asked stakeholders for information on newly eligible RQF3-5 occupations and RQF6+ occupations where new evidence could be provided, to reflect any changes in circumstance.
- 7.4 We received responses referencing 45 unique RQF6+ occupations. Of the occupations signposted by stakeholders we took forward 14 SOC codes for a full

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<sup>253</sup> See Annex A



detailed review. The review methodology and further detail of the occupations reviewed are presented below.

## **Triage process**

**7.5** To determine which RQF6+ SOC codes were suitable for a full review, we undertook a triage process, where the evidence provided by stakeholders in the 2020 CfE was compared against evidence received in 2019, to identify if any new circumstances had emerged.

**7.6** We used the following criteria to ascertain whether a full review was required:

- Could the situation have significantly changed since our 2019 review, for example as a result of COVID-19?
- Has additional compelling evidence been provided by stakeholders? For example, additional reports published, or additional analysis completed since the 2019 review?
- What actions have been taken to remedy shortages? Have these worked?
- Did several different stakeholders identify occupations in shortage?

**7.7** Whilst we initially sought to review only the occupations that provided new evidence, we deemed a small number of occupations suitable for further review where there was demonstrably a persistent and chronic shortage.

**7.8** The occupations selected for further review were then subject to the same review process that has been undertaken for all RQF3-5 occupations in this report, detailed in Chapter 2.

## **Occupations selected for Review**

**7.9** Table 7.1 shows the 14 occupations selected for a full review alongside the justification for review:

Table 7.1: Occupations selected for detailed review			
Group	SOC Code	Occupation	Justification
Health and Social Care	1181	Health services and public health managers and directors	Due to COVID-19, all healthcare occupations for which new evidence was received have been re-examined
	1184	Social services managers and directors	
	2213	Pharmacists	
	2218	Podiatrists	
	2219	Health Professionals n.e.c.	
	2221	Physiotherapists	
	2229	Therapy Professionals n.e.c.	
Teaching	2312	Further Education Teaching Professionals	Some evidence that further education faces some similar shortage issues to secondary education. May benefit from a more detailed review
	2314	Secondary Education Teaching Professionals	Some evidence that additional secondary education teachers are in shortage, e.g. Modern Foreign Languages; supply will likely reduce following Brexit
	2315	Primary and Nursery Teachers	Additional Reports/analysis provided by respondents
	2317	Senior professionals of educational establishments	Additional Reports/analysis provided by respondents
	2319	Teaching and other educational professions n.e.c.	Considered as part of the overall review of teaching occupations
Other	2423	Management Consultants and business analysts	Identified as in shortage by a large number of respondents
	2452	Archivists and curators	Niche area, persistent issues cited as in 2019 by large employers

7.10 Whilst evidence was provided for other occupations, the MAC assessed that these did not satisfy the criteria for further review at this stage. Another review of occupations will be carried out after the introduction of the new points-based system.

7.11 We received evidence from NI citing 2463 Environmental Health professionals to be in shortage. They cited greater tightness in the labour market and the reliance on agri-food to be of concern and feedback from industry that they faced difficulty recruiting. However, the use of this SOC code in the current Tier 2 (General) visa is very limited and so it is unclear how significant any shortage is and the extent to which migration

is a sensible solution. We would be grateful for further detail of the specific issues on the drivers of shortage and what has been done to address these issues at the next review to justify inclusion.

7.12 Table 7.2 shows employment across the 14 occupations selected for review. There is a varied picture as the occupations cover a range of industries. Podiatrists have the highest percentage of employees born in the UK (92 per cent) compared to 77 per cent for management consultants and business analysts.

7.13 Table 7.3 shows that all but two of the occupations experienced pay reductions from 2016 to 2019. Social service managers and directors and therapy professions n.e.c. experienced modest growth.

Table 7.2: Employment in selected occupations					
Occupation	Total employment	% who are self employed	% born in EEA (ex. UK)	% born outside EEA	% born in UK
<b>Total UK Economy</b>	<b>33,603,100</b>	<b>16%</b>	<b>7%</b>	<b>10%</b>	<b>83%</b>
Pharmacists	65,500	14%	3%	18%	79%
Health services and public health managers and directors	72,400	7%	2%	11%	86%
Physiotherapists	70,000	18%	6%	7%	87%
Podiatrists	15,400	55%	-	7%	92%
Therapy professionals n.e.c.	64,200	58%	7%	8%	86%
Health professionals n.e.c.	68,900	8%	3%	9%	87%
Social services managers and directors	32,800	6%	1%	9%	90%
Archivists and curators	19,000	11%	4%	H5%	91%
Management consultants and business analysts	196,700	29%	7%	16%	77%
Senior professionals of educational establishments	99,900	1%	4%	5%	91%
Primary and nursery education teaching professionals	450,500	1%	2%	5%	93%
Secondary education teaching professionals	403,500	3%	4%	8%	88%
Further education teaching professionals	130,200	7%	6%	9%	85%
Teaching and other educational professionals n.e.c.	281,300	42%	6%	10%	84%

Source: APS (2017-19)

All estimates include all employment, including those who are self-employed

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes

<b>Table 7.3: Pay in selected occupations</b>			
<b>Occupation</b>	<b>Median gross annual pay for full-time employees 2019</b>	<b>25<sup>th</sup> percentile of gross annual pay for full-time employees 2019</b>	<b>Pay growth 2016-2019 adjusted for inflation</b>
Pharmacists	£42,700	£35,100	-5%
Health services and public health managers and directors	£50,000	£38,400	-0%
Physiotherapists	£32,300	£28,000	+0%
Podiatrists	£35,600	£27,000	+0%
Therapy professionals n.e.c.	£32,300	£23,600	+3%
Health professionals n.e.c.	£34,900	£27,400	-5%
Social services managers and directors	£39,700	£29,400	+2%
Archivists and curators	£27,100	£23,600	-5%
Management consultants and business analysts	£41,700	£30,900	-4%
Senior professionals of educational establishments	£53,700	£39,000	-4%
Primary and nursery education teaching professionals	£35,700	£28,500	-5%
Secondary education teaching professionals	-	£31,700	-3%
Further education teaching professionals	-	£30,900	-4%
Teaching and other educational professionals n.e.c.	-	£21,300	-7%

Source: ASHE (2019)

Non-reported estimates are due to insufficient sample sizes

## SOC 1181: Health services and public health managers and directors

Summary table: SOC 1181 Health services and public health managers and directors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	11%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	7%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£50,000																		
25th percentile full-time annual wage (ASHE, 2019)	£38,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£38,400																		
Minimum salary required with SOL points	£30,720																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	+15.1%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>3.1</td> </tr> <tr> <td>2013/14</td> <td>2.8</td> </tr> <tr> <td>2014/15</td> <td>2.8</td> </tr> <tr> <td>2015/16</td> <td>3.7</td> </tr> <tr> <td>2016/17</td> <td>3.3</td> </tr> <tr> <td>2017/18</td> <td>3.5</td> </tr> <tr> <td>2018/19</td> <td>3.1</td> </tr> <tr> <td>2019/20</td> <td>2.7</td> </tr> </tbody> </table>		Year	Ratio	2012/13	3.1	2013/14	2.8	2014/15	2.8	2015/16	3.7	2016/17	3.3	2017/18	3.5	2018/19	3.1	2019/20	2.7
Year	Ratio																		
2012/13	3.1																		
2013/14	2.8																		
2014/15	2.8																		
2015/16	3.7																		
2016/17	3.3																		
2017/18	3.5																		
2018/19	3.1																		
2019/20	2.7																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/95 RQF6+ occupations)	1																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

- 7.14 We received evidence from a business that employs 500+ people in the UK. This organisation suggested that they found it difficult to find workers with technical skills and hands on experience when recruiting. They believed that this occupation should be on the SOL.
- 7.15 The stakeholder highlighted a variety of reasons why they were suffering with recruitment difficulties: this included too much competition from other employers, a low number of applicants with the required skills and a low volume of applicants generally. The stakeholder stated that they had undertaken measures to alleviate shortages in this occupation, including redefining existing jobs, increasing advertising and training as well as recruiting non-UK workers. The stakeholder suggested that each of these measures had been very effective at filling vacancies.

## Recommendations

- 7.16 **We recommend adding SOC 1181 (health services and public health managers and directors) to the SOL.** This occupation ranked top in our RQF6+ shortage indicators and the vacancy to employee ratio ranks above that of the median of eligible occupations for the entire period assessed.
- 7.17 We received some evidence of a shortage from one stakeholder. We did not receive any information regarding the impact of COVID-19 for this occupation, and it is considered medium risk in terms of exposure to disease and proximity to others. In our 2019 review of the SOL, we acknowledged the quantitative evidence of a shortage but did not receive any stakeholder evidence at that time<sup>254</sup>. One of the criteria the MAC uses for inclusion on the SOL focuses on the public value of the occupation. Based on the new stakeholder evidence and quantitative data suggesting a persistent shortage in this occupation, there is now sufficient evidence to suggest that this occupation is in shortage and should be placed on the SOL.
- 7.18 With the discount applied for SOL occupations, the salary threshold for this occupation would be £30,720. This salary threshold is at the 13<sup>th</sup> percentile of full-time earnings in this occupation, meaning that 13 per cent of full-time employees in this occupation in the UK earn less than the salary threshold.

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<sup>254</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/806331/28\\_05\\_2019\\_Full\\_Review\\_SOL\\_Final\\_Report\\_1159.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/806331/28_05_2019_Full_Review_SOL_Final_Report_1159.pdf)

## SOC 1184: Social services managers and directors

Summary table: SOC 1184 Social services managers and directors																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	1%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	8%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£39,700																		
25th percentile full-time annual wage (ASHE, 2019)	£29,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£29,400																		
Minimum salary required with SOL points	£23,520																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-29.5%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	0.35																		
2013/14	0.70																		
2014/15	0.75																		
2015/16	0.95																		
2016/17	0.80																		
2017/18	1.15																		
2018/19	1.15																		
2019/20	1.00																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/95 RQF6+ occupations)	77																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%



## Stakeholder Evidence

- 7.19 We received evidence from one stakeholder, a local council based in the South East of England, regarding this occupation. The specific job title cited as being in shortage was Service Managers. This stakeholder believed that this occupation should be on the SOL but did not provide any further justification.
- 7.20 The stakeholder highlighted a variety of reasons why they were suffering with recruitment difficulties. This included a low number of applicants with the required qualifications and that the occupation required shift work and working unsociable hours. Other issues regarding applicants, such as a lack of applicants with the required personal traits and more generally a lack of applicants were also considered issues to a lesser extent, along with competition from other employers for workers.
- 7.21 The respondent suggested that they had undertaken a variety of measures to alleviate recruitment difficulties, including increasing training and recruitment as well as recruiting workers who are non-UK nationals. Each of these measures was considered to be quite effective in alleviating recruitment difficulties.

## Recommendations

- 7.22 **We do not recommend adding SOC 1184 (social services managers and directors) to the SOL.** This occupation ranks low in our RQF6+ shortage indicators (77<sup>th</sup>), and the vacancy to employee ratio does not fall above the median of eligible occupations apart from a slight growth from 2017 to 2019.
- 7.23 We did not receive any information regarding the impact of COVID-19 for this occupation, and it is considered low risk in terms of exposure to disease and medium risk in terms of proximity to others.
- 7.24 This occupation has never been on the SOL and was not placed on the SOL at the time of our 2019 review because of limited stakeholder evidence and insufficient quantitative evidence to suggest a shortage<sup>255</sup>. We also found that there was very minimal use of Tier 2 (General) visas within this occupation.

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<sup>255</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/806331/28\\_05\\_2019\\_Full\\_Review\\_SOL\\_Final\\_Report\\_1159.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/806331/28_05_2019_Full_Review_SOL_Final_Report_1159.pdf)

## SOC 2219: Health professionals n.e.c.

Summary table: SOC 2219 Health professionals n.e.c.																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	10%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	12%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£34,900																		
25th percentile full-time annual wage (ASHE, 2019)	£27,400																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	Pay scales apply																		
Minimum salary required with SOL points	Pay scales apply																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	High																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	9%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	+8.8%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.05</td> </tr> <tr> <td>2013/14</td> <td>1.40</td> </tr> <tr> <td>2014/15</td> <td>1.35</td> </tr> <tr> <td>2015/16</td> <td>1.20</td> </tr> <tr> <td>2016/17</td> <td>1.00</td> </tr> <tr> <td>2017/18</td> <td>1.05</td> </tr> <tr> <td>2018/19</td> <td>1.25</td> </tr> <tr> <td>2019/20</td> <td>1.40</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.05	2013/14	1.40	2014/15	1.35	2015/16	1.20	2016/17	1.00	2017/18	1.05	2018/19	1.25	2019/20	1.40
Year	Ratio																		
2012/13	1.05																		
2013/14	1.40																		
2014/15	1.35																		
2015/16	1.20																		
2016/17	1.00																		
2017/18	1.05																		
2018/19	1.25																		
2019/20	1.40																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/95 RQF6+ occupations)	75																		
<b>Recommendation</b>																			
Recommend adding entire occupation to Wales-only SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

- 7.25 One stakeholder reported that there were shortages of audiologists in the South East of England. However, they did not consider that this occupation should be placed on the SOL.
- 7.26 Two responses were from stakeholders reporting shortages of this occupation in Wales. The Welsh Government recommended this occupation for consideration on the Wales-only SOL based on their quantitative analysis of shortage indicators in Wales.
- 7.27 The other stakeholder was a representative body in Wales and highlighted a variety of reasons why they were suffering with recruitment difficulties. Areas of concern were a low number of applicants generally, and a low number of applicants with the required skills. They reported that Wales had experienced higher vacancy levels and longer recruitment times in this occupation, resulting in some roles having to be advertised more than three times. Regarding COVID-19, one stakeholder suggested that both the immediate supply of staff and the ability to train more had been impacted by the pandemic, thus exacerbating recruitment difficulties. They referred specifically to operating department practitioners, dieticians and allied health professionals being in shortage within this SOC code

*“Given the long-stemming recruitment issues identified above, the Welsh NHS has put in place many resources to increase their workforce. Despite these efforts, the demand for healthcare services continues to outstrip the supply of labour. Despite the focus on developing a draft national workforce strategy, and local efforts to attract and train domestically, this does not offer a quick supply solution. Both immediate supply pipelines and training capacity now face additional setbacks because of COVID-19.”*

Welsh NHS Confederation; Response to MAC consultation

- 7.28 The stakeholders reported deploying a variety of measures to alleviate recruitment difficulties including increased recruitment and training initiatives as well as recruiting non-UK nationals and contract workers.
- 7.29 The Scottish Government disagreed with the removal of 2219 from the UK SOL at our last review, but we would require further evidence on shortages to support inclusion.

## Recommendations

- 7.30 **We recommend adding SOC 2219 (health professionals n.e.c.) to the Wales-only SOL.** This occupation ranks low in terms of our UK-wide RQF6+ shortage indicators (75<sup>th</sup>), whilst the vacancy to employee ratio is generally somewhat above the median of eligible occupations. We received stakeholder evidence that there is a shortage

within this occupation in Wales, with no comparable evidence being provided for the rest of the UK.

- 7.31 Stakeholders cited issues that the COVID-19 pandemic posed in terms of the increasing demand expected for health and social care services. In addition, this occupation is considered to be high risk in terms of exposure to disease and proximity to others. Therefore, this occupation is likely to be more affected by the pandemic.

*“The workforce needs in a post-COVID world are not yet known, but there will be even greater demand for health and social care services and therefore the staff.”*

Welsh NHS Confederation; Response to MAC consultation

- 7.32 A few job titles within this occupation have been on the SOL in the past. These job titles were: neurophysiology healthcare scientists, neurophysiology practitioners, nuclear medicine scientists, orthotists and prosthetists. These were added in 2015 and subsequently removed in our 2019 review due to limited stakeholder and quantitative evidence<sup>256</sup>.

- 7.33 We do not have evidence of a shortage in this occupation outside of Wales and we do not recommend adding SOC 2219 (health professionals n.e.c.) to the UK-wide SOL. We recognise some job roles within this SOC code may be impacted by COVID-19 and we would encourage stakeholders to provide further evidence on this for the next SOL review.

- 7.34 It should be noted that the practical benefits of being included on the SOL for this occupation are somewhat limited. The occupation will not benefit from the salary threshold discount because the threshold is determined by national pay scales. In addition, this occupation will be eligible for the Health and Social Care Visa, so would benefit from lower visa fees even if it were not on the SOL.

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<sup>256</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/806331/28\\_05\\_2019\\_Full\\_Review\\_SOL\\_Final\\_Report\\_1159.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/806331/28_05_2019_Full_Review_SOL_Final_Report_1159.pdf)

## SOC 2229: Therapy professionals n.e.c.

Summary table: SOC 2229 Therapy professionals n.e.c.																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	7%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	13%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£32,300																		
25th percentile full-time annual wage (ASHE, 2019)	£23,600																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	Pay scales apply																		
Minimum salary required with SOL points	Pay scales apply																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	+12.6%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.75</td> </tr> <tr> <td>2013/14</td> <td>1.25</td> </tr> <tr> <td>2014/15</td> <td>1.35</td> </tr> <tr> <td>2015/16</td> <td>1.50</td> </tr> <tr> <td>2016/17</td> <td>1.35</td> </tr> <tr> <td>2017/18</td> <td>1.15</td> </tr> <tr> <td>2018/19</td> <td>1.10</td> </tr> <tr> <td>2019/20</td> <td>1.15</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.75	2013/14	1.25	2014/15	1.35	2015/16	1.50	2016/17	1.35	2017/18	1.15	2018/19	1.10	2019/20	1.15
Year	Ratio																		
2012/13	0.75																		
2013/14	1.25																		
2014/15	1.35																		
2015/16	1.50																		
2016/17	1.35																		
2017/18	1.15																		
2018/19	1.10																		
2019/20	1.15																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/95 RQF6+ occupations)	48																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

- 7.35 We received two responses to the CfE which mentioned this occupation. The Welsh Government recommended this occupation for consideration on the Wales-only SOL based on their quantitative analysis of shortage indicators in Wales. The Welsh methodology uses a similar set of indicators to the MAC's methodology to replicate the analysis for Wales<sup>257</sup>, and requires there to be at least five shortage indicators to produce a shortage ranking. However, their analysis is based on 3-digit SOC codes and so does not uniquely relate to this occupation. No further detail was provided on the causes of shortage or actions taken to address shortages for this occupation.
- 7.36 An industry body suggested additional demand for physiotherapy may not be met under the new points-based system.

## Recommendations

- 7.37 **We do not recommend adding SOC 2229 (therapy professionals n.e.c.) to the SOL.** This occupation ranks in the middle (48<sup>th</sup>) in terms of our RQF6+ shortage indicators. The vacancy to employee ratio for this occupation has generally been somewhat above the median of eligible occupations, though has fallen back in the last couple of years.
- 7.38 We did not receive detailed information regarding the impact of COVID-19 for this occupation, and it is considered low risk in terms of exposure to disease and medium risk in terms of proximity to others.
- 7.39 We did not recommend adding the occupation to the SOL in our 2019 review due to the lack of quantitative and stakeholder evidence to suggest it was in shortage. Our conclusion remains the same on the UK-wide SOL. Further evidence will be required at the next review to demonstrate shortage.
- 7.40 We received separate recommendations from the Welsh Government to consider this occupation for the DN only SOLs. However, we have not received detailed evidence on shortages in this occupation from stakeholders at this time.
- 7.41 It should be noted that the practical benefits of being included on the SOL for this occupation are somewhat limited. The occupation would not benefit from the salary threshold discount because the threshold is determined by national pay scales. In addition, this occupation will be eligible for the Health and Social Care Visa, so would benefit from lower visa fees even if it were not on the SOL.

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<sup>257</sup> Welsh Government response to Shortage Occupation List Call for Evidence annex

## SOC 2213: Pharmacists

Summary table: SOC 2213 Pharmacists																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	3%																		
Share of employees born outside the EEA (APS, 2017-19)	15%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	17%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£42,700																		
25th percentile full-time annual wage (ASHE, 2019)	£35,100																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	Pay scales apply																		
Minimum salary required with SOL points	Pay scales apply																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	High																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-27.8%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.55</td> </tr> <tr> <td>2013/14</td> <td>0.65</td> </tr> <tr> <td>2014/15</td> <td>0.75</td> </tr> <tr> <td>2015/16</td> <td>0.70</td> </tr> <tr> <td>2016/17</td> <td>0.95</td> </tr> <tr> <td>2017/18</td> <td>0.95</td> </tr> <tr> <td>2018/19</td> <td>1.00</td> </tr> <tr> <td>2019/20</td> <td>1.25</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.55	2013/14	0.65	2014/15	0.75	2015/16	0.70	2016/17	0.95	2017/18	0.95	2018/19	1.00	2019/20	1.25
Year	Ratio																		
2012/13	0.55																		
2013/14	0.65																		
2014/15	0.75																		
2015/16	0.70																		
2016/17	0.95																		
2017/18	0.95																		
2018/19	1.00																		
2019/20	1.25																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/95 RQF6+ occupations)	40																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

- 7.42 We received evidence from two stakeholders regarding this occupation. Both stakeholders stated that they had struggled to source workers for these roles due to the specific skillset and qualifications required, as well as difficulties in recruiting pharmacists in the South East of England. Both stakeholders stated that they believed this occupation should be on the SOL.
- 7.43 Stakeholders suggested that there is a national shortage in this occupation due to a decline in the number of pharmacy graduates and increasing demand for their services. In their submissions, stakeholders stated that competition from other employers and a general low volume of applicants has caused them recruitment difficulties. One stakeholder stated that they struggled with recruiting in specific regions, as they struggled to relocate potential workers to areas of shortage. More specifically, they stated that living costs in Surrey were similar to that of London, but they did not benefit from the Agenda for Change (NHS pay scales) London weighting.
- 7.44 Stakeholders stated that they had undertaken a variety of measures to fill vacancies including increasing training and recruitment initiatives, redefining job roles, bringing in contract workers as well as recruiting non-UK nationals. One stakeholder suggested that they had increased salaries and provided relocation packages. The other said they had used a recruitment and retention allowance. Stakeholders stated that some of these measures such as increasing recruitment and training, had been effective. They were uniform however, in stating that recruiting non-UK workers had been very effective in alleviating shortages.
- 7.45 One stakeholder reported that pharmacists had played a vital role during COVID-19, in particular community pharmacists, who they said had often been the only immediate face to face access the public had had to healthcare.

## Recommendations

- 7.46 **We recommend adding SOC 2213 (pharmacists) to the SOL.** This occupation ranks in the middle of the RQF6+ shortage indicators (40<sup>th</sup>). The evidence in terms of vacancies is mixed: the vacancy to employee ratio has been generally lower than the median across all occupations but has exhibited a noticeable upward trend in recent years. This occupation has a salary threshold based on the NHS agenda for change pay scales<sup>258</sup>.
- 7.47 In our 2019 review of the SOL, we concluded there was not sufficient stakeholder evidence to demonstrate a shortage at that point. The evidence we have received in this review highlights the ongoing nature of the shortages. In addition, the situation

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[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/899755/UK\\_Points-Based\\_System\\_Further\\_Details\\_Web\\_Accessible.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/899755/UK_Points-Based_System_Further_Details_Web_Accessible.pdf)



has now changed due to COVID-19. We acknowledge that pharmacists have played an important role in addressing the ongoing challenges of the COVID-19 pandemic. Furthermore, this occupation is considered a high-risk occupation in terms of its exposure to disease and proximity to others which makes it particularly vulnerable to the issues COVID-19 poses. One of the criteria the MAC uses for inclusion on the SOL focuses on the public value of the occupation. For these reasons, we recommend that pharmacists should be added to the SOL at this time.

- 7.48 It should be noted that the practical benefits of being included on the SOL for this occupation are somewhat limited. The occupation will not benefit from the salary threshold discount because the threshold is determined by national pay scales. In addition, this occupation will be eligible for the Health and Social Care Visa, so would benefit from lower visa fees even if it were not on the SOL.

## SOC 2218: Podiatrists

Summary table: SOC 2218 Podiatrists																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	-																		
Share of employees born outside the EEA (APS, 2017-19)	16%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	11%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£35,600																		
25th percentile full-time annual wage (ASHE, 2019)	£27,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	Pay scales apply																		
Minimum salary required with SOL points	Pay scales apply																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	High																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
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Year	Ratio																		
2012/13	1.0																		
2013/14	0.7																		
2014/15	0.9																		
2015/16	0.75																		
2016/17	1.0																		
2017/18	1.0																		
2018/19	1.0																		
2019/20	1.8																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/95 RQF6+ occupations)	79																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

- 7.49 We received one response from a stakeholder regarding this occupation. They stated in their response that podiatry numbers had fallen every year except 2014/15, and that there had been a 49 per cent decline in student numbers across the south and an overall nationwide decline of 23 per cent since the comprehensive spending review. They believed that this occupation should be on the SOL.
- 7.50 The stakeholder response we received stated that several factors had caused problems in recruitment. This includes too much competition from other employers for workers and the roles suffering from recruitment difficulties required shift work, were often temporary and suffered from being in remote locations. A particular concern was the low number of applicants, especially applicants with the required skills to fulfil the role.
- 7.51 The stakeholder stated that the organisations they represented had used a variety of measures to alleviate recruitment difficulties in this occupation. This included automating roles, increasing salaries, redefining jobs, recruiting non-UK workers as well as increasing training and advertising. It was noted that most of these measures were considered quite effective and that recruiting non-UK workers had been very effective.
- 7.52 The stakeholder noted that at the time of responding, it was uncertain how COVID-19 would impact placement availability. For podiatry students, they said the pandemic may increase pressure on placements in the academic year 2020/21, in order to enable existing students to catch up on placements, and that this might exacerbate shortages in future.

## Recommendations

- 7.53 **We do not recommend adding SOC 2218 (podiatrists) to the SOL.** This occupation ranks low in the RQF6+ shortage indicators (79th). The evidence in terms of vacancies is mixed: the vacancy to employment ratio has been consistently below the median of eligible occupations until 2018/2019. Since then, the ratio has increased above the median of eligible occupations which may suggest that shortages are beginning to occur. Over half (55 per cent) of workers in this occupation are self-employed<sup>259</sup> and such workers do not benefit from being placed on the SOL as they are ineligible for the Skilled Worker route.
- 7.54 This occupation has not been on the SOL in the past. In our 2019 review of the SOL, we received evidence from stakeholders suggesting this occupation may be in shortage but did not recommend inclusion on the SOL and that the use of Tier 2 (General) visas for this occupation had been negligible. The occupation has a very low

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<sup>259</sup> ONS Annual Population Survey 2017-2019

share of EEA migrants, and so it is unlikely that there will be a substantial change in circumstances for employers after the end of the transition period.

**7.55** We are aware the ability of stakeholders in this sector to respond may be limited as a result of COVID-19. However, further evidence would be required to suggest that the situation has changed materially since our 2019 review of the SOL. We note that stakeholders have highlighted there is uncertainty around placements for podiatry students due to COVID-19 which may impact future supply and we encourage stakeholders to provide more evidence on this in the next review.

## SOC 2221: Physiotherapists

Summary table: SOC 2221 Physiotherapists																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	6%																		
Share of employees born outside the EEA (APS, 2017-19)	7%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£32,300																		
25th percentile full-time annual wage (ASHE, 2019)	£28,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	Pay scales apply																		
Minimum salary required with SOL points	Pay scales apply																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	6%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-14.0%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.9</td> </tr> <tr> <td>2013/14</td> <td>1.3</td> </tr> <tr> <td>2014/15</td> <td>1.7</td> </tr> <tr> <td>2015/16</td> <td>1.6</td> </tr> <tr> <td>2016/17</td> <td>1.75</td> </tr> <tr> <td>2017/18</td> <td>1.6</td> </tr> <tr> <td>2018/19</td> <td>1.35</td> </tr> <tr> <td>2019/20</td> <td>1.4</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.9	2013/14	1.3	2014/15	1.7	2015/16	1.6	2016/17	1.75	2017/18	1.6	2018/19	1.35	2019/20	1.4
Year	Ratio																		
2012/13	0.9																		
2013/14	1.3																		
2014/15	1.7																		
2015/16	1.6																		
2016/17	1.75																		
2017/18	1.6																		
2018/19	1.35																		
2019/20	1.4																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/95 RQF6+ occupations)	37																		
<b>Recommendation</b>																			
Recommend adding entire occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder Evidence

- 7.56 We received five pieces of evidence from stakeholders regarding this occupation, three of whom represented employers within the NHS. Stakeholders suggested that there were shortages of workers in this occupation in specific regions as well as nationwide. They said that demand was rising due to increasing population growth and growing numbers of people with long-term medical conditions, including those recovering from COVID-19. In addition, one of the stakeholders suggested that there was a shortage of physiotherapy lecturers, though we would expect these to sit within a different SOC code.
- 7.57 One of the respondents stated that the NHS national vacancy rates for physiotherapy vary between six per cent and 20 per cent, with private and charitable providers reporting similar recruitment difficulties. Furthermore, they expected demand for physiotherapy to grow due to the UK's aging population, population growth and growing numbers of people with chronic conditions requiring treatment. This demand is expected to rise even further due to COVID-19 rehabilitation needs. In addition, stakeholders reported that roughly 14 per cent of registered physiotherapists received their qualifications outside of the UK. This aligns with our analysis suggesting that that 13 per cent of employees within this occupation are born outside the UK<sup>260</sup>.
- 7.58 Stakeholders highlighted a variety of issues that have caused recruitment difficulties in this occupation. A lack of applicants with required qualifications was considered an issue by all stakeholders. Other issues were highlighted to a lesser extent, such as a low number of applicants generally, too much competition with other employers for workers and a lack of applicants with appropriate personal traits.
- 7.59 All the stakeholders we engaged with had undertaken measures to alleviate recruitment difficulties and were fairly uniform in the approaches they had taken. All stakeholders said they had increased recruitment and training initiatives, brought in contract workers and hired non-UK workers. Most respondents said they had increased salaries and redefined existing jobs to alleviate shortages, whilst two stakeholders had used automation to achieve this goal. Most stakeholders believed these measures had been quite effective at alleviating recruitment difficulties: recruiting non-UK workers was generally considered to be very effective.

## Recommendations

- 7.60 **We recommend adding SOC 2221 (physiotherapists) to the SOL.** It ranks relatively high in the RQF6+ shortage indicators (37<sup>th</sup>) and has had a vacancy to employment ratio above the median of eligible occupations for several years. This occupation has not appeared on the SOL in the past. In our 2019 review of the SOL we stated that we

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<sup>260</sup> ONS Annual Population Survey 2017-2019

had received no stakeholder evidence to suggest a nationwide shortage and that it had a low ranking in our shortage indicators<sup>261</sup>.

7.61 The stakeholder responses we received in this review mentioned the impact of the COVID-19 pandemic on this occupation. They suggested that physiotherapists would be in even greater demand due to the rehabilitation requirements among patients recovering from the virus. In conclusion, this suggests that the situation has changed materially since our 2019 review of the SOL and there is now sufficient evidence to suggest that physiotherapists are in shortage and should be placed on the SOL.

7.62 It should be noted that the practical benefits of being included on the SOL for this occupation are somewhat limited. The occupation will not benefit from the salary threshold discount because the threshold is determined by national pay scales. In addition, this occupation will be eligible for the Health and Social Care Visa, so would benefit from lower visa fees even if it were not on the SOL.

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<sup>261</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/806331/28\\_05\\_2019\\_Full\\_Review\\_SOL\\_Final\\_Report\\_1159.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/806331/28_05_2019_Full_Review_SOL_Final_Report_1159.pdf)

## Other Healthcare

- 7.63 We also received evidence on medical practitioners (2211) from the British Medical Association (BMA). They highlighted concerns that there could be increased competition for UK graduates who would be competing with migrants for places on vocational foundation training, a pre-requisite for full General Medical Council (GMC) certification. Places on the foundation training are restricted and the BMA suggested that by making full GMC registration a requirement for migrants on the SOL, this could alleviate excess demand for the foundation training.
- 7.64 The MAC has assessed the evidence, concluding that removing part of this SOC code from the SOL is not the solution. We encourage the Department for Health and Social Care and the Home Office to directly engage with the BMA on this matter.



## SOC 2312: Further Education Teaching Professionals

Summary table: SOC 2312 Further education teaching professionals																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.4%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	6%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	10%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£36,700																		
25th percentile full-time annual wage (ASHE, 2019)	£30,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	Pay scales apply																		
Minimum salary required with SOL points	Pay scales apply																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	8%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-14.2%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.25</td> </tr> <tr> <td>2013/14</td> <td>0.22</td> </tr> <tr> <td>2014/15</td> <td>0.25</td> </tr> <tr> <td>2015/16</td> <td>0.42</td> </tr> <tr> <td>2016/17</td> <td>0.38</td> </tr> <tr> <td>2017/18</td> <td>0.32</td> </tr> <tr> <td>2018/19</td> <td>0.32</td> </tr> <tr> <td>2019/20</td> <td>0.30</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.25	2013/14	0.22	2014/15	0.25	2015/16	0.42	2016/17	0.38	2017/18	0.32	2018/19	0.32	2019/20	0.30
Year	Ratio																		
2012/13	0.25																		
2013/14	0.22																		
2014/15	0.25																		
2015/16	0.42																		
2016/17	0.38																		
2017/18	0.32																		
2018/19	0.32																		
2019/20	0.30																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/95 RQF6+ occupations)	84																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 7.65 We received limited evidence for this occupation, with just one stakeholder response calling to add this occupation to the SOL. This was from a university, which stated that it experienced problems recruiting lecturers due to the specific qualifications required and the limited talent pool within the UK<sup>262</sup>. The organisation had found some success in overcoming these issues through using staff network to promote vacancies, increasing secondment opportunities to develop staff, and reviewing the scope of roles.

## Recommendation

- 7.66 **We do not recommend adding SOC code 2312 (Further Education Teaching Professionals) to the SOL.** In our 2019 review we recommended against including this occupation as it was ranked low within the RQF6+ shortage indicators (84<sup>th</sup>), the vacancy rate was below average, and there was insufficient stakeholder evidence that this occupation was in shortage.
- 7.67 There is insufficient evidence to suggest this has changed since the previous review, with little evidence of shortage in the data and relatively limited stakeholder evidence.

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<sup>262</sup> Whilst this submission referred to SOC 2312, typically higher education institutions would use SOC 2311 (Higher Education Teaching Professionals) to recruit lecturers.

## SOC 2314: Secondary Education Teaching Professionals

Summary table: SOC 2314 Secondary education teaching professionals																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	4%																		
Share of employees born outside the EEA (APS, 2017-19)	8%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£39,300																		
25th percentile full-time annual wage (ASHE, 2019)	£31,700																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	Pay scales apply																		
Minimum salary required with SOL points	Pay scales apply																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	2%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	+6.7%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.25</td> </tr> <tr> <td>2013/14</td> <td>1.00</td> </tr> <tr> <td>2014/15</td> <td>0.95</td> </tr> <tr> <td>2015/16</td> <td>1.00</td> </tr> <tr> <td>2016/17</td> <td>1.15</td> </tr> <tr> <td>2017/18</td> <td>1.40</td> </tr> <tr> <td>2018/19</td> <td>1.10</td> </tr> <tr> <td>2019/20</td> <td>1.00</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.25	2013/14	1.00	2014/15	0.95	2015/16	1.00	2016/17	1.15	2017/18	1.40	2018/19	1.10	2019/20	1.00
Year	Ratio																		
2012/13	1.25																		
2013/14	1.00																		
2014/15	0.95																		
2015/16	1.00																		
2016/17	1.15																		
2017/18	1.40																		
2018/19	1.10																		
2019/20	1.00																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/95 RQF6+ occupations)	68																		
<b>Recommendation</b>																			
Recommend adding some roles within occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 7.69 We received substantial evidence for this occupation. In total, we received five requests from a variety of stakeholders to add SOC 2314 to the SOL.
- 7.70 One organisation, representing members across a variety of educational settings, requested SOC 2314 to be added to the SOL and provided extensive detail as to the issues faced within the educational sector.
- 7.71 Though they welcomed some changes to the immigration system, for example, the removal of the Resident Labour Market Test, they were concerned that the new immigration system will create further barriers for recruitment. They argued that the system already suffers from acute shortages and that this would reduce flexibility further.
- 7.72 The submission noted that organisations had tried a wide range of methods to alleviate shortage, including using different recruitment channels, supporting teaching assistants into achieving qualified teacher status and providing support for career changers to gain experience of the classroom. However, this has not solved the problem, and the submission noted that there is often not just a shortage in terms of quantity of applicants, but also in the quality.
- 7.73 They highlighted data from the Teaching Regulation Agency on the number of Qualified Teacher Status (QTS) awards in England to demonstrate shortage in the sector. There has been a steady decline in QTS awards made to qualified teachers from the EEA and Switzerland. There were 2,458 in 2019/20, a decrease of 21 per cent compared to 2018/19 (3,103)<sup>263</sup>, which itself was a fall from 2017/18 (3,527)<sup>264</sup>. They argued that this was likely to fall further as a result of barriers to movement in the new immigration system. The number of QTS awards made to teachers from non-EEA countries covered under the scheme<sup>265</sup> rose slightly between 2017/18 and 2018/19 (1,477 to 1,530) before falling eight per cent in 2019/20 to 1,410.
- 7.74 In comparison, however it should be noted that Initial Teacher Training (ITT) intake numbers for all nationalities (England only) have risen in recent years, as shown in the following table.

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<sup>263</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/901156/TRA\\_Annual\\_Report\\_2019-20\\_FINAL\\_INTERACTIVE\\_DIGITAL\\_SINGLE.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/901156/TRA_Annual_Report_2019-20_FINAL_INTERACTIVE_DIGITAL_SINGLE.pdf)

<sup>264</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/823305/Teachers\\_Regulation\\_Agency\\_Accessible.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/823305/Teachers_Regulation_Agency_Accessible.pdf)

<sup>265</sup> Australia, Canada, New Zealand and the USA

**Table 7.4– New entrants to postgraduate ITT with a known nationality, time series by nationality group (England only)<sup>266</sup>**

	UK national	EEA national	Other nationality	Total with known nationality
<b>2016/17</b>	23,658	1,295	506	25,459
<b>2017/18</b>	24,223	1,294	532	26,049
<b>2018/19</b>	26,550	1,422	634	28,606
<b>2019/20</b>	26,650	1,484	751	28,859

- 7.75** Whilst the submission argued that that the entire SOC code should be included on the SOL, it also highlighted issues with in certain subjects, for example modern foreign languages, citing a low number of UK graduates with these skills. Data from the Higher Education Statistics Agency (HESA) does suggest the talent pool is declining, with the number of enrolments for language courses falling each year between 2014/15 to 2018/19. In 2014/15 there were 111,340 enrolments, but this was down to 99,365 by 2018/19<sup>267</sup>.
- 7.76** Further submissions from the Northern Ireland (NI) Minister for the Economy and the Scottish Government both contained sections on education. The submission from the NI Minister for the Economy references the 2019 NI Skills Barometer report<sup>268</sup>. This contains estimates for future demands in NI’s labour market, including, at the 3-digit SOC level, around 900 teaching and educational professionals per annum. However, this report also suggests that using the JACS taxonomy, the two most oversupplied RQF6+ subjects between 2018 and 2028 are likely to be training teachers and academic subjects in education.
- 7.77** The Scottish Government submission suggested they faced challenges in recruiting teachers to remote and rural areas. They argued that they had a shortage in secondary school teachers for subjects such as English, Home Economics, and Modern Languages.
- 7.78** The All-Party Parliamentary Group (APPG) on Modern Foreign Languages (MFL) also submitted evidence requesting that teachers of all modern foreign languages should be including on the SOL. They noted that Mandarin teachers are on the SOL but argued this should be expanded to include teachers of other languages.

<sup>266</sup> Data taken from table 9b of main tables at <https://www.gov.uk/government/statistics/initial-teacher-training-trainee-number-census-2019-to-2020>

<sup>267</sup> <https://www.hesa.ac.uk/data-and-analysis/students/what-study>

<sup>268</sup> <https://www.economy-ni.gov.uk/sites/default/files/publications/economy/Skills-Barometer-2019-Summary-Report.pdf>

- 7.79 The submission highlighted the reliance on migrants, particularly from the EEA, as MFL teachers, and argued that the UK cannot currently meet demand through domestic workers. This is supported by DfE statistics for teacher training in England. In 2019/20 30 per cent of MFL new entrants to postgraduate ITT were EEA nationals, compared to just six per cent for all secondary school subjects<sup>269</sup>.
- 7.80 As well as the make-up of those entering ITT, it is also important to consider the overall volumes. The following table shows the number of entrants to teaching training programmes across the UK by subject. This supports the stakeholder evidence suggesting shortage in MFL, but also more broadly shows that the number of entrants is below target across the three areas covered.
- 7.81 One Scottish local authority suggested they had struggled to fill vacancies for secondary school English teachers. Whilst the number of English teacher entrants to initial teacher education in Scotland is below the target, performance was higher than the all subject average in Scotland, and levels were above target in England.

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<sup>269</sup> Data from table 9 of main tables at <https://www.gov.uk/government/statistics/initial-teacher-training-trainee-number-census-2019-to-2020>

**Table 7.5 – Teacher training entrants as percentage of target by subject**

	England (2019/20) <sup>270</sup>	Scotland (2019/20) <sup>271</sup>	Wales (2018/19) <sup>272</sup>
Maths	64%	68%	61%
English	110%	86%	49%
Chemistry	70%	67%	-
Biology	166%	96%	-
Physics	43%	62%	-
MFL	65%	83%	27%
Design and Technology	41%	50%	77%
Computer Science	79%	83%	38%
Geography	119%	105%	47%
History	127%	117%	119%
PE	109%	108%	123%
<b>Total secondary</b>	<b>85%</b>	<b>80%</b>	<b>56%</b>

## Recommendation

- 7.82 SOC 2314 is already partly on the SOL. Currently secondary education teachers in the subjects of maths, physics, science (where an element of physics will be taught), computer science and Mandarin are on the SOL. Gaelic teachers are also included on the Scotland only SOL.
- 7.83 **We recommend, in addition, adding all modern foreign language teachers within SOC code 2314 (secondary education teaching professionals) to the SOL.** Overall the occupation has a relatively low RQF6+ shortage indicator rank and is less reliant on migrant employees than the UK average. Statistics show a gradual rise in the number of entrants to ITT (England only). However, there is also some evidence of shortage, particularly for MFL teachers, a subject more reliant of EEA employees.
- 7.84 The 2019 SOL review recommended the inclusion of teachers in the subjects of maths, physics, science (where an element of physics will be taught), computer science and

<sup>270</sup> Data from table 1c of main tables at <https://www.gov.uk/government/statistics/initial-teacher-training-trainee-number-census-2019-to-2020>

<sup>271</sup> <https://www.gov.scot/publications/initial-teacher-education-student-teacher-intake-2019/pages/pgde-and-other-routes-student-teacher-intake-figures/>

<sup>272</sup> Intake figures from <https://statswales.gov.wales/Catalogue/Education-and-Skills/Post-16-Education-and-Training/Higher-Education/Initial-Teacher-Training-ITT/students-in-Wales/FirstyearsonITEcoursesinWales-by-subject-year> and targets [https://www.hefcw.ac.uk/documents/publications/circulars/circulars\\_2017/W17%2036HE%20Secondary%20Initial%20Teacher%20Training%20Intake%20targets%202018\\_19.pdf](https://www.hefcw.ac.uk/documents/publications/circulars/circulars_2017/W17%2036HE%20Secondary%20Initial%20Teacher%20Training%20Intake%20targets%202018_19.pdf)

Mandarin. MFL were considered for inclusion but were ultimately rejected as there was insufficient evidence that teachers were being recruited from outside of the EEA to teach MFL<sup>273</sup>. Given the changes to free movement, and the continued evidence of shortage of MFL teachers we now recommend their inclusion. This occupation is subject to national pay scales and therefore will not have a salary threshold reduction as a result of being on the SOL.

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<sup>273</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/806331/28\\_05\\_2019\\_Full\\_Review\\_SOL\\_Final\\_Report\\_1159.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/806331/28_05_2019_Full_Review_SOL_Final_Report_1159.pdf)



## SOC 2315: Primary and Nursery Teachers

Summary table: SOC 2315 Primary and nursery education teaching professionals																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	2%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	2%																		
Share of employees born outside the EEA (APS, 2017-19)	5%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	15%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£35,700																		
25th percentile full-time annual wage (ASHE, 2019)	£28,500																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	Pay scales apply																		
Minimum salary required with SOL points	Pay scales apply																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	High																		
Share of employees furloughed (LFS, 2020)	4%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-10.3%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.05</td> </tr> <tr> <td>2013/14</td> <td>1.00</td> </tr> <tr> <td>2014/15</td> <td>1.10</td> </tr> <tr> <td>2015/16</td> <td>1.05</td> </tr> <tr> <td>2016/17</td> <td>1.08</td> </tr> <tr> <td>2017/18</td> <td>1.00</td> </tr> <tr> <td>2018/19</td> <td>0.90</td> </tr> <tr> <td>2019/20</td> <td>0.80</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.05	2013/14	1.00	2014/15	1.10	2015/16	1.05	2016/17	1.08	2017/18	1.00	2018/19	0.90	2019/20	0.80
Year	Ratio																		
2012/13	1.05																		
2013/14	1.00																		
2014/15	1.10																		
2015/16	1.05																		
2016/17	1.08																		
2017/18	1.00																		
2018/19	0.90																		
2019/20	0.80																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/95 RQF6+ occupations)	85																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 7.85 We received two requests to include this occupation on the SOL. One representative organisation noted that in the latest initial teacher training (ITT) figures, the target for primary recruitment was missed, falling seven percentage points in a year. The table below shows that the primary school trainee numbers were above target for three of the past five intakes (England only). The two years that missed the target did so narrowly and were both above the latest comparative figures for secondary school ITT (85 per cent). The equivalent primary school trainee figure for 2019/20 in Scotland was 106 per cent.

**Table 7.3 – New entrants to postgraduate primary education ITT over time (England only) compared to target<sup>274</sup>**

2015/16	2016/17	2017/18	2018/19	2019/20
112%	98%	103%	103%	96%

- 7.86 The submission also highlighted DfE data on school vacancies but suggests this under-reports the extent of the problem. In 2016, 8.9 per cent of primary schools had at least one advertised vacancy or temporarily-filled post on the census day in November, up from 6.9 per cent in 2015<sup>275</sup>.
- 7.87 This occupation was also referenced in the submission from the Scottish Government who stated shortages were predominately related to location issues and challenges in recruiting Gaelic primary teachers. It should be noted that Gaelic-medium teachers were added to the Scotland only SOL for this occupation following the 2019 SOL report.

## Recommendation

- 7.88 **We do not recommend adding SOC code 2315 (primary and nursery teachers) to the SOL.** Gaelic-medium primary and nursery teachers are already included on the Scotland-only SOL. We are not recommending a change to this.
- 7.89 In the 2019 review SOC 2315 was not recommended for inclusion to the SOL, with the exception of Scottish Gaelic-medium primary and nursery teachers for the Scotland SOL. Whilst the review acknowledged there was evidence of problems with the occupation which may lead to future shortage, the shortage indicator rank was low, the vacancy rate was below average, Tier 2 (General) usage was low, and ITT training intake numbers for England regularly exceed target.

<sup>274</sup> Data taken from table 1c of main tables at <https://www.gov.uk/government/statistics/initial-teacher-training-trainee-number-census-2019-to-2020>

<sup>275</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/620825/SFR25\\_2017\\_MainText.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/620825/SFR25_2017_MainText.pdf)

7.90 There is insufficient evidence this has changed since the 2019 review. Although the latest ITT intake figures for England are slightly below target this has been above target for three of the past five years and is above target in Scotland. In addition, the occupation employs relatively low levels of EEA workers, and the vacancy ratio has fallen further below the median since the previous review.

## SOC 2317: Senior professionals of educational establishments

Summary table: SOC 2317 Senior professionals of educational establishments																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.4%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	4%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	7%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£53,700																		
25th percentile full-time annual wage (ASHE, 2019)	£39,000																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£39,000																		
Minimum salary required with SOL points	£31,200																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	-																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-0.7%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>1.35</td> </tr> <tr> <td>2013/14</td> <td>1.30</td> </tr> <tr> <td>2014/15</td> <td>1.28</td> </tr> <tr> <td>2015/16</td> <td>1.27</td> </tr> <tr> <td>2016/17</td> <td>1.28</td> </tr> <tr> <td>2017/18</td> <td>1.15</td> </tr> <tr> <td>2018/19</td> <td>1.15</td> </tr> <tr> <td>2019/20</td> <td>1.05</td> </tr> </tbody> </table>		Year	Ratio	2012/13	1.35	2013/14	1.30	2014/15	1.28	2015/16	1.27	2016/17	1.28	2017/18	1.15	2018/19	1.15	2019/20	1.05
Year	Ratio																		
2012/13	1.35																		
2013/14	1.30																		
2014/15	1.28																		
2015/16	1.27																		
2016/17	1.28																		
2017/18	1.15																		
2018/19	1.15																		
2019/20	1.05																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/95 RQF6+ occupations)	54																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 7.91 We received limited evidence for this occupation. The Scottish Government suggested head teachers be added to the SOL as part of their submission but did not provide further evidence on shortages in this occupation. A representative body highlighted difficulties in recruitment and retention for this occupation, noting the high drop-out rate.
- 7.92 DfE data on headteacher retention suggests the issue is slightly more pronounced in secondary schools. Of headteachers new to post in 2013, 81 per cent were still in post three years later in primary schools, compared to 69 per cent in secondary schools. For both, these figures were a slight decline compared to those new to post in 2011 (84 per cent for primary and 77 per cent for secondary)<sup>276</sup>.
- 7.93 However, figures from the 2019 School Workforce Census show there were 27 headteacher vacancies in England in November 2019. This was down on the 2018 figure of 38, and broadly in line with the 2017 and 2016 figures of 23 and 36 respectively<sup>277</sup>. Similarly, the 2019 Teacher Vacancy Survey shows there were 54 primary education headteacher and depute headteacher vacancies and 10 secondary education headteacher and depute headteacher vacancies in Scotland<sup>278</sup>. Both are notably lower than the comparative 2018 figures of 102 vacancies in primary education and 25 for secondary<sup>279</sup>.
- 7.94 The breadth of this occupation should also be noted. The ONS occupation coding tool<sup>280</sup> includes the following titles for SOC 2317:
- Administrator (higher education, university)
  - Bursar
  - Head teacher (primary school)
  - Principal (further education)
  - Registrar (educational establishments)

## Recommendation

- 7.95 **We do not recommend adding SOC code 2317 (senior professionals of educational establishments) to the SOL.** The 2019 review did not recommend

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<sup>276</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/725118/Leadership\\_Analysis\\_2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/725118/Leadership_Analysis_2018.pdf)

<sup>277</sup> <https://explore-education-statistics.service.gov.uk/find-statistics/school-workforce-in-england#sectionBlocks-dataBlock-5722a8e9-e869-440a-af4b-93698f229235-tables>

<sup>278</sup> <https://www.gov.scot/binaries/content/documents/govscot/publications/statistics/2019/11/teacher-vacancy-survey-2016-to-2019/documents/teacher-vacancy-survey-2016-to-2019/teacher-vacancy-survey-2016-to-2019/govscot%3Adocument/Teacher%2Bvacancy%2Bsurvey%2B2016%2Bto%2B2019%2BPDF.pdf>

<sup>279</sup> <https://news.gov.scot/resources/2018-teacher-vacancy-survey-publication-tables-3>

<sup>280</sup> [https://onsdigital.github.io/dp-classification-tools/standard-occupational-classification/ONS\\_SOC\\_occupation\\_coding\\_tool.html](https://onsdigital.github.io/dp-classification-tools/standard-occupational-classification/ONS_SOC_occupation_coding_tool.html)

including this occupation on the SOL, noting the low RQF6+ shortage indicator rank, average vacancy ratio, low Tier 2 (General) usage, and insufficient stakeholder evidence.

7.96 Whilst the stakeholder evidence in this review highlighted issues around staff retention, data shows the vacancy ratio continues to decline. In addition, the occupation does not appear to be particularly reliant on migrant workers, with both proportions of EEA and non-EEA workers below the UK average.

## SOC 2319: Teaching and other educational professions n.e.c.

Summary table: SOC 2319 Teaching and other educational professionals n.e.c.																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.5%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	6%																		
Share of employees born outside the EEA (APS, 2017-19)	9%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	13%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£26,100																		
25th percentile full-time annual wage (ASHE, 2019)	£21,300																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Medium																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	20%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-15.6%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>2.1</td> </tr> <tr> <td>2013/14</td> <td>2.4</td> </tr> <tr> <td>2014/15</td> <td>2.1</td> </tr> <tr> <td>2015/16</td> <td>2.4</td> </tr> <tr> <td>2016/17</td> <td>2.7</td> </tr> <tr> <td>2017/18</td> <td>2.9</td> </tr> <tr> <td>2018/19</td> <td>2.8</td> </tr> <tr> <td>2019/20</td> <td>2.4</td> </tr> </tbody> </table>		Year	Ratio	2012/13	2.1	2013/14	2.4	2014/15	2.1	2015/16	2.4	2016/17	2.7	2017/18	2.9	2018/19	2.8	2019/20	2.4
Year	Ratio																		
2012/13	2.1																		
2013/14	2.4																		
2014/15	2.1																		
2015/16	2.4																		
2016/17	2.7																		
2017/18	2.9																		
2018/19	2.8																		
2019/20	2.4																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/95 RQF6+ occupations)	47																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 7.97 We received limited evidence for this occupation, with two requests to include SOC 2319 on the SOL through our online CfE.
- 7.98 One stakeholder highlighted the issues they experienced recruiting temporary English language teachers for summer camps and language schools. Given the fixed costs involved in the points-based Skilled Worker route, it is unlikely to be suitable for short-term appointments.
- 7.99 Another stakeholder provided evidence around difficulty in recruiting Indian Music Teachers. The stakeholder had tried a variety of methods to improve recruitment, such as redefining roles and using apprentice programmes but could not find candidates with the required skills.
- 7.100 This occupation includes jobs that are n.e.c. (not elsewhere classified), and therefore covers a diverse range of job titles. The ONS occupation coding tool<sup>281</sup> includes the following titles for SOC 2319:
- Adult education tutor
  - Education consultant
  - Music teacher
  - Nursery manager (day nursery)
  - Owner (nursery: children's)
  - Private tutor
  - TEFL

## Recommendation

- 7.101 **We do not recommend adding SOC code 2319 (teaching and other educational professions n.e.c.) to the SOL.** The 2019 review did not recommend including this occupation on the SOL. The review noted that although the vacancy rate was above average, the occupation was ranked relatively low in the RQF6+ shortage indicator rank, and limited stakeholder evidence was received.
- 7.102 There is insufficient evidence that this has changed since the previous report. The shortage indicator rank is around the middle of the 95 occupations, and although the vacancy ratio is still above the median it has fallen slightly since the 2019 report. In addition, this occupation does not appear to be overly reliant on migrants, with proportions of both EEA and non-EEA employees below the UK average. Lastly, the general salary threshold is around £500 below the median salary for the occupation.

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<sup>281</sup> [https://onsdigital.github.io/dp-classification-tools/standard-occupational-classification/ONS\\_SOC\\_occupation\\_coding\\_tool.html](https://onsdigital.github.io/dp-classification-tools/standard-occupational-classification/ONS_SOC_occupation_coding_tool.html)



## SOC 2423: Management consultants and business analysts

Summary table: SOC 2423 Management consultants and business analysts																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	0.5%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	7%																		
Share of employees born outside the EEA (APS, 2017-19)	17%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	16%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£41,700																		
25th percentile full-time annual wage (ASHE, 2019)	£30,900																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£30,900																		
Minimum salary required with SOL points	£24,720																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	4%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-29.4%																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>6.8</td> </tr> <tr> <td>2013/14</td> <td>5.8</td> </tr> <tr> <td>2014/15</td> <td>6.5</td> </tr> <tr> <td>2015/16</td> <td>6.8</td> </tr> <tr> <td>2016/17</td> <td>5.2</td> </tr> <tr> <td>2017/18</td> <td>5.8</td> </tr> <tr> <td>2018/19</td> <td>3.5</td> </tr> <tr> <td>2019/20</td> <td>3.0</td> </tr> </tbody> </table>		Year	Ratio	2012/13	6.8	2013/14	5.8	2014/15	6.5	2015/16	6.8	2016/17	5.2	2017/18	5.8	2018/19	3.5	2019/20	3.0
Year	Ratio																		
2012/13	6.8																		
2013/14	5.8																		
2014/15	6.5																		
2015/16	6.8																		
2016/17	5.2																		
2017/18	5.8																		
2018/19	3.5																		
2019/20	3.0																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/95 RQF6+ occupations)	25																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

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Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

7.103 The CfE received responses from eight individual organisations and two representative organisations for management consultants and business analysts. Stakeholders cited a range of jobs that were difficult to fill because they require niche/specialist skills, others said some skills (technical) were scarce because they are emerging or new. Jobs that were cited in the CfE were: manager for client solutions, council development-associate, council development- managers, business analysts, emergency planning staff, data and analytics manager, product manager, CI business analyst and credit and risk analysts.

7.104 Stakeholders said there were difficulties in finding workers in the UK with fluent bilingual capabilities:

*“The main difficulty is finding the right candidate who have necessary skills to perform a job as per business requirement. We also face major challenges in filling roles that demand native level bilingual language capability”.*

CfE respondent, MAC SOL Commission, 2020

7.105 Whilst stakeholders reported difficulties in finding applicants with fluent language skills for jobs within this occupation, some of the evidence received was for SOC 7211-customer service operatives which is below RQF3-5 skill level and therefore not eligible for review.

7.106 Emergency planning staff was cited as a job that may be in shortage by an organisation from the energy sector. Stakeholders said shortages may occur because of a fall in supply of workers due to an ageing workforce. The reasons provided relate to the sector more broadly, and it seems unlikely that the job cited is relevant to the occupation under review.

7.107 Stakeholders said it was difficult to attract applicants for roles such as risk and credit analysts to meet the demands of businesses. Difficulties in finding suitably skilled/qualified applicants who have eligibility to work has led them to widen their pool of recruitment to candidates outside the UK who might require sponsorship to take the role.

7.108 Some of the strategies reported for overcoming recruitment difficulties were the use of agencies, investing in the development of internal career frameworks and offering an expanded package for relocation support.

## Recommendation

7.109 **We do not recommend adding SOC 2423 (management consultants and business analysts) to the SOL.** It is currently ranked highly in terms of RQF6+ shortage indicators, compared with other occupations (25<sup>th</sup> from 95 occupations). The

online job posts to employee ratio is higher than the median for all occupations. Despite this, we have not received new evidence from stakeholders and the evidence that has been received does not explain why being included on the SOL will help with such shortages. No evidence was received from stakeholders about the impact of COVID-19 on jobs.

## SOC 2452: Archivists and curators

Summary table: SOC 2452 Archivists and curators																			
<b>Employment</b>																			
Share of total UK employees (APS, 2017-19)	<0.1%																		
Share of employees born in the EEA (ex.UK & RoI) (APS, 2017-19)	4%																		
Share of employees born outside the EEA (APS, 2017-19)	6%																		
Share of employees continuously employed for 12 months or less (APS, 2017-19)	28%																		
<b>Wages</b>																			
Median full-time annual wage (ASHE, 2019)	£27,100																		
25th percentile full-time annual wage (ASHE, 2019)	£23,600																		
<b>Salary Threshold</b>																			
Minimum salary required without additional points	£25,600																		
Minimum salary required with SOL points	£20,480																		
<b>Impact of COVID-19</b>																			
Exposure to diseases	Low																		
Proximity to others	Medium																		
Share of employees furloughed (LFS, 2020)	38%																		
Percentage change in job postings (Burning Glass, Aug 2019 compared to Aug 2020)	-																		
<b>Vacancies</b>																			
<i>Number of Burning Glass job posts/number of employees relative to the median ratio for all occupations eligible for the Skilled Worker route (2012/13-2019/20)</i>																			
<p><b>BG posts/Employees relative to median occupation</b></p> <table border="1"> <caption>Data for BG posts/Employees relative to median occupation</caption> <thead> <tr> <th>Year</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>0.6</td> </tr> <tr> <td>2013/14</td> <td>0.65</td> </tr> <tr> <td>2014/15</td> <td>0.7</td> </tr> <tr> <td>2015/16</td> <td>0.7</td> </tr> <tr> <td>2016/17</td> <td>0.6</td> </tr> <tr> <td>2017/18</td> <td>0.5</td> </tr> <tr> <td>2018/19</td> <td>0.7</td> </tr> <tr> <td>2019/20</td> <td>0.8</td> </tr> </tbody> </table>		Year	Ratio	2012/13	0.6	2013/14	0.65	2014/15	0.7	2015/16	0.7	2016/17	0.6	2017/18	0.5	2018/19	0.7	2019/20	0.8
Year	Ratio																		
2012/13	0.6																		
2013/14	0.65																		
2014/15	0.7																		
2015/16	0.7																		
2016/17	0.6																		
2017/18	0.5																		
2018/19	0.7																		
2019/20	0.8																		
<b>Shortage indicator rank</b> (only including SOC's for which at least 5 indicators could be calculated)																			
Shortage indicator overall rank (/95 RQF6+ occupations)	94																		
<b>Recommendation</b>																			
Do not recommend adding occupation to the SOL																			

Shaded estimates are based on a small sample size, this may result in less precise estimates which are indicative only and should be interpreted with caution

Non-reported estimates are due to insufficient sample sizes or confidence intervals >20%

## Stakeholder evidence

- 7.110 We received evidence from one individual organisation and one representative organisation for archivists and curators. The responses to the CfE for this occupation suggest that there may be difficulties with finding workers with specialist skills. Stakeholders reported shortages of film and TV archivists because of a move to digital media that has led to a smaller pool of skills and a global competition for these skills. One stakeholder said:

*“Film and TV archivists and curators require highly specialised skills. These are becoming increasingly rare with the migration of film and TV to digital, meaning an ever-smaller pool of people can preserve and curate our national film heritage. The very small number of experts working in the field means there is global competition for their skillsets, and this competition will only increase as time goes by. Without these skills, we risk losing huge volumes of our moving image heritage”.*

CfE respondent, MAC SOL Commission, 2020

- 7.111 Another stakeholder reported concerns about the length of time it would take to fill roles for curators, cataloguers and conservators once the new immigration rules come into effect in January 2021 and the associated costs which will impact the organisations ability to deliver services. They said there was a need for curators in specialist languages and collections:

*“Curators, cataloguers and conservators are integral to delivering the library’s key purpose. Due to the specialist nature of the vast collection items we hold the roles cannot always be filled with UK nationals and often we find we are finding suitable candidates in the EU or EEA or outside. With the new points-based system being introduced in 2021 recruiting and filling these roles will become more difficult, costly and potentially lengthy to fill if we need to sponsor more candidates in order to fill vacancies. This will have a detrimental impact on the key deliverables of the organisation.”*

CfE respondent, MAC SOL Commission, 2020

## Recommendation

- 7.112 **We do not recommend adding SOC code 2453 (archivists and curators) to the SOL.** This occupation ranked low in the shortage indicators for RQF6+ occupations (94<sup>th</sup>) in the last review and that remains the case with updated data. The online job posts to employee ratio is lower than the median for all occupations.
- 7.113 No evidence was received from stakeholders about the impact of COVID-19 on jobs in this occupation. Most archivists and curators are employed within the creative arts

and entertainment sector (56 per cent)<sup>282</sup>, the ONS reported that of the businesses surveyed, this sector had the lowest proportion of businesses that are currently trading and have been for more than the last two weeks (63 per cent) from 27<sup>th</sup> July to 9<sup>th</sup> August. This sector had the highest proportion of workforce returning from a pause in trading in the last two weeks (12 per cent)<sup>283</sup>.

7.114 We do not recommend adding this occupation to the SOL because the evidence we received was primarily focused on how the new immigration system would make the recruitment of such workers more difficult across a number of dimensions than with freedom of movement. It is unlikely that being on the SOL would alleviate most of these added difficulties.

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<sup>282</sup> Annual Population Survey (APS), number of jobs (main and 2<sup>nd</sup>) by 4-digit occupation & country of birth (16+ population; 2016-18 average).

<sup>283</sup><https://www.ons.gov.uk/businessindustryandtrade/business/businessservices/bulletins/coronavirusandtheeconomicimpactsontheuk/27august2020>

## Chapter 8: Future of the SOL

### Summary

- The MAC have previously completed SOL reviews when commissioned to do so by government, but to ensure more timely and frequent reviews, we recommend that the MAC should conduct these to a regular timetable in future.
- To balance responsiveness to changes in the labour market, the burden on employers, and the availability of data, we recommend that reviews should take place on an annual basis. This is in line with common international practice.
- Reviews should be split into minor and major reviews, with major reviews taking place every third year and minor reviews in the intervening years.
- Minor reviews will be a lighter touch process, with less burden on employers and the MAC, and will mainly provide an opportunity to make new additions to the SOL, but also flag occupations that may no longer need to be on the SOL and will be considered in greater depth in future reviews.
- Major reviews will provide the chance to examine the entire SOL in more detail.
- We recommend the next SOL review is a minor one, to reflect the ongoing uncertainty in the labour market. We will also consider our methodology for the SOL ahead of the next major review.

- 8.1 The MAC's role in determining the SOL dates from the founding of the MAC in 2007 and the introduction of the Points-Based System. Prior to this, the SOL was managed by the Home Office, and compiled using information provided by a series of Sector Advisory Panels.
- 8.2 The MAC has reviewed the SOL on 11 previous occasions; three full reviews of the whole UK labour market, and eight partial reviews of specific aspects – see Annex F. There have also been two reviews of methodology.
- 8.3 In its early years, updated SOL lists were produced regularly. The MAC initially envisaged reviewing the SOL every other year, with the 'fallow' year used to do other work. Over time, SOL-related commissions from the Home Office became less frequent.
- 8.4 The reduced frequency of SOL commissions from the Home Office has contributed to the SOL becoming more reactive in nature, and recent SOL reviews and subsequent expansions have often been characterised by urgent labour market shortages in particular sectors.

8.5 In anticipation of the introduction of the new immigration system where identifying emerging changes in the labour market will be more important, the Home Secretary's commissioning letter for this 2020 review of the SOL<sup>284</sup> welcomed MAC advice on how to ensure that the SOL is kept up to date, to ensure responsiveness to the UK labour market.

## Considerations for future SOL structure

### Data availability

8.6 The MAC methodology for the SOL is comprised of three groups of criteria: skilled, shortage and sensible. We use both quantitative data and qualitative responses from employers to judge our three criteria.

8.7 There are five main data sources used throughout the quantitative analysis:

- Annual Survey of Hours and Earnings (ASHE) – ASHE provides information about the levels, distribution and make-up of earnings and paid hours worked for employees in all industries and occupations. The ASHE tables contain estimates of earnings for employees by sex and full-time or part-time status<sup>285</sup>.
- Annual Population Survey (APS) –the APS is a continuous household survey, covering the UK. The topics covered include employment and unemployment, as well as housing, ethnicity, religion, health and education. The purpose of the APS is to provide information on important demographic and socio-economic variables at local levels<sup>286</sup>.
- 3-Year APS – the 3-year APS is a pooled dataset designed to allow more robust analysis at lower level geographies, that is not always possible using the single year APS dataset, especially for certain topics whose achieved sample size is smaller<sup>287</sup>.
- Burning Glass – Burning Glass data provides a real-time measure of job adverts at the 4-digit occupation level.
- Employer Skills Survey (ESS) – ESS collects information on Apprenticeships, T-Levels, vacancies, recruitment, training, skill shortages, and future skill needs<sup>288</sup>.

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<sup>284</sup> See Annex A

<sup>285</sup><https://www.gov.uk/surveys/informationforbusinesses/businesssurveys/annualsurveyofhoursandearningsashe>

<sup>286</sup><https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/methodologies/annualpopulationsurveyapsqmi>

<sup>287</sup><https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/methodologies/labourforcesurveyuserguidance>

<sup>288</sup> <https://www.gov.uk/government/publications/2019-employer-skills-survey-ess19-information-for-participants>



8.8 These datasets are all released according to a set timetable, except for the Burning Glass data, which is a live data source. Most are issued on an annual basis, whilst the ESS data are released every two years.

<b>Table 8.1 Availability of SOL data sources</b>			
<b>Data</b>	<b>Regularity of release</b>	<b>Timing of releases</b>	<b>Data owner</b>
ASHE	Annually	October	ONS
APS	Annually	January	ONS
3-year APS	Annually	January	ONS
ESS	Biennially	Variable	DfE
Burning Glass	Live data	N/A	Burning Glass

8.9 Indicators within the ‘skilled’ and ‘shortage’ components of the SOL methodology, detailed further in Chapter 2, can only be updated with the release of new data. If the SOL were to be updated more frequently than annually, the skilled indicators would remain the same until the next annual data release, and only one of the nine shortage indicators would be updated.

8.10 The timing and frequency of new data releases will need to be factored into any changes to how the SOL is compiled in the future.

### **Burden on employers**

8.11 Upon receiving a SOL commission, we hold a programme of extensive stakeholder engagement and run a Call for Evidence (CfE) to gather the views of employers across all sectors and occupations.

8.12 The stakeholder engagement process seeks views from employers across many sectors. For this 2020 review, the MAC attended and hosted 17 stakeholder events, with employer, or representative organisation, numbers ranging from 15-270 per event.

8.13 Following the stakeholder engagement, employers often submit responses to the CfE. For SOL reviews that cover all occupations for the Skilled Worker route, it is not unusual to receive upwards of 500 responses to the CfE.

8.14 Under the current ad hoc SOL commissioning process there is often limited time for employers to compile and submit their evidence as the overall timescales given to the MAC by the Home Office are frequently condensed. Employers view the CfE as an important opportunity to feed into the SOL methodology, so continue to provide

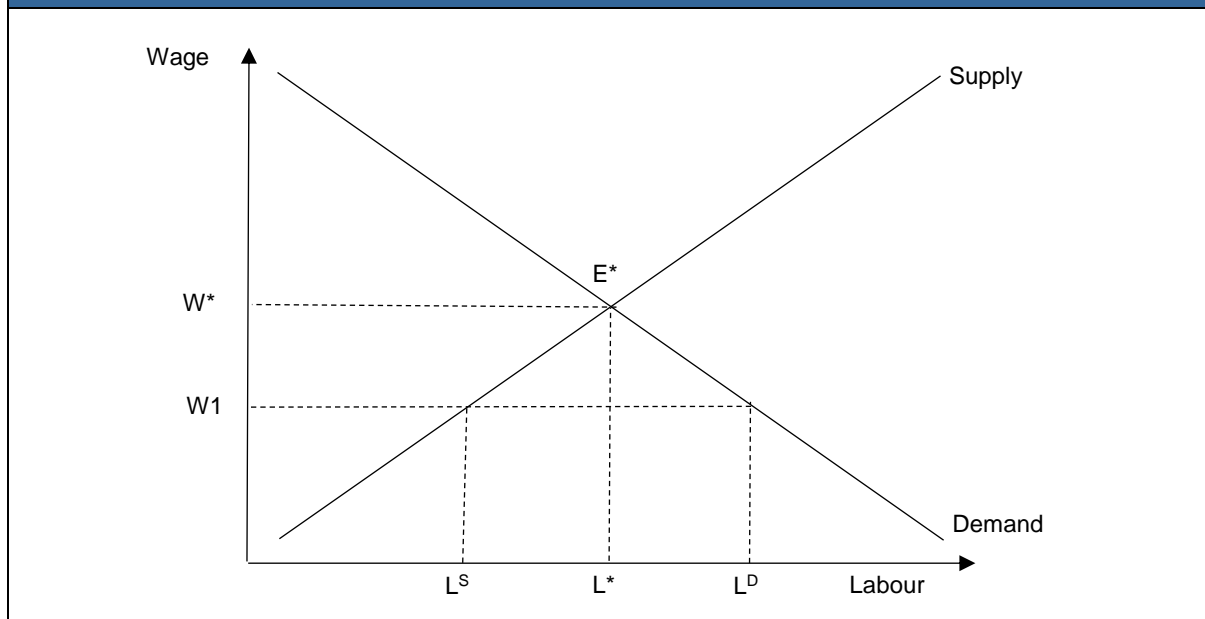
responses where possible, but some may not have the capacity to provide responses on short notice, or to consult as thoroughly as they would like.

- 8.15 Throughout the stakeholder engagement, employers have frequently emphasised that they would prefer the SOL to be updated on a set timetable to enable them to plan the resources they will need to provide responses in advance.
- 8.16 The responses received in the CfE are essential for reviewing the SOL and can provide insight into emerging shortages that are not yet reflected in the data. As such, it is important that the employers have adequate time to prepare responses and contribute to each review.
- 8.17 The future SOL structure must provide regular opportunities for employers to engage with the MAC but must not require employers to divert significant resources to facilitate this. There is an important balance between the burden on employers to provide critical evidence and ensuring the SOL is responsive to the changing labour market.

### **Responsiveness to labour market requirements**

- 8.18 The purpose of the SOL is to identify occupations that are experiencing shortage, and where immigration can sensibly help to fill vacancies. In turn, these occupations receive preferential treatment when recruiting through the Skilled Worker route.
- 8.19 Shortage in the supply and demand model for labour is the scenario in which the supply of labour ( $L^S$ ) falls below the demand for labour ( $L^D$ ) at the offered wage ( $W_1$ ), as shown in figure 8.1. Under this simple model, raising wages would achieve an equilibrium ( $E^*$ ), and all vacancies would be filled. In practice, this is a static view, and does not represent the true characteristics of shortage as represented in the SOL.

Figure 8.1: Model of labour demand and supply



- 8.20 In a growing economy with positive population growth, the labour demand curve is almost perpetually shifting outwards, which results in more dynamic, persistent shortages. This happens when demand for labour increases faster than supply can grow<sup>289290</sup>. Shortage may also be driven by supply side issues, in which there is simply not enough new supply of workers into an occupation to meet even static demand.
- 8.21 In both supply-driven and demand-driven shortage cases, raising wages may not be sufficient in the short run at attracting workers if the pool does not exist. There may need to be additional interventions to alleviate the shortage, for example, boosting the number of workers undertaking the necessary education, training and qualifications.
- 8.22 Occupations often remain on the SOL for many reviews if additional action is not taken to improve the issue of shortage in the occupation.
- 8.23 Shortages often appear gradually over time. They are typically noticed first by employers when their vacancies are not filled as quickly as previously. At this stage, it is generally unclear whether the shortage is persistent or temporary. When many employers of an occupation report similar experiences, and the shortage indicators provide evidence of a growing problem, with vacancies outweighing the available supply of workers, this often demonstrates evidence of a persistent shortage, and is the reason the MAC considers both sources of evidence.

<sup>289</sup> <https://academic.oup.com/qje/article-abstract/73/2/292/1900786?redirectedFrom=fulltext>

<sup>290</sup> <https://www.nber.org/chapters/c2662>

- 8.24 It is important that SOL reviews are regular and flexible so that it is responsive to the labour market and can capture changes to persistent shortages as they occur through data and through employer views, but this must be balanced with the availability of data and the burden on employers.

## International SOL comparisons

- 8.25 It is useful, when considering the future of the UK SOL, to examine the approach other countries take in developing similar lists aimed at reducing skill shortages that exist in their own labour markets. Although the countries examined in this section use mechanisms that broadly share the same objectives as the UK's SOL, there are key differences in how they go about compiling their equivalent lists in practice. The purpose of this section is to examine these differences and to see what lessons can be learned from international experience.

## Frequency of Review

- 8.26 Countries that operate shortage occupation lists usually tend to review and update these lists on a regular basis to ensure that they reflect current labour market needs and provide stakeholders with ample opportunities to provide input on the content of these lists. In contrast in the UK the SOL has historically been updated in a largely ad hoc fashion in response to government commissions.
- 8.27 Australia and New Zealand both maintain three separate occupation lists to address different kinds of labour shortages (such as regional, short and long-term shortages) all of which are reviewed on a yearly basis, although the occupations targeted, as well as the depth of the reviews, are different in each country. The relevant departments in each country make recommendations each year regarding changes to make to these lists, which include removing occupations, adding occupations, as well as moving occupations between lists<sup>291</sup>. In addition to Australia and New Zealand, Malaysia and Austria also review their equivalent shortage occupation lists on an annual basis<sup>292</sup>.
- 8.28 Ireland currently uses a Critical Skills Occupation List to identify occupations which are likely to be in shortage and in need of migrant workers as well as an Ineligible Occupations List to identify occupations which have sufficient domestic workers to fill vacancies and are therefore not in shortage. Both lists are reviewed on a bi-annual

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<sup>291</sup> <https://www.immigration.govt.nz/about-us/policy-and-law/how-the-immigration-system-operates/skill-shortage-lists> , <https://www.employment.gov.au/skilled-migration-occupation-lists-frequently-asked-questions>

<sup>292</sup> <http://documents1.worldbank.org/curated/en/877271568138256963/pdf/Monitoring-Occupational-Shortages-Lessons-from-Malaysias-Critical-Occupations-List.pdf>, <https://www.migration.gv.at/en/faq/>

basis to examine labour market conditions at occupation level and adjust access to the Irish labour market for non-EEA nationals based on available evidence<sup>293</sup>.

- 8.29 In 2015 the EU Commission, through the European Migration Network (EMN), took stock of the shortage occupations lists among EU member states<sup>294</sup>. They found that most countries with a shortage occupation list updated them once or twice a year<sup>295</sup>, with Spain updating their list every three months.
- 8.30 In this context the UK appears to be amongst a minority of countries who irregularly update their lists – the 2015 EMN study also found that the Netherlands did not have a fixed periodicity and that France had not reviewed its SOL since its introduction in 2008. Overall international experience suggests that annual scheduled reviews are both possible and quite common. A regularly scheduled review will also help provide greater predictability to employers and stakeholders who wish to engage with the MAC on questions regarding the SOL.

### Stakeholder engagement Process

- 8.31 It is common for countries which develop shortage occupation lists to engage with stakeholders to supplement their top down, quantitative analysis with evidence from employers and representative groups to provide context to skill shortages. The UK is not unique in this regard, but the methods of stakeholder engagement and how they fit into the review process varies across countries.
- 8.32 For each iteration of the SOL, the MAC has undertaken extensive stakeholder engagement alongside its quantitative analysis. This has included consultation with employers and representative groups in order to gather insight regarding shortages in the labour market. In recent years an online questionnaire has also been implemented to gather responses for the CfE, to enable us to carry out a more detailed analysis of stakeholder evidence.
- 8.33 Australia uses a two-stage method of stakeholder engagement, where submissions are invited from stakeholders early in the review process to provide evidence as to the labour needs of employers<sup>296</sup>. This is followed by the publication of a Traffic Light

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<sup>293</sup> <https://www.esri.ie/system/files?file=media/file-uploads/2015-11/RS49.pdf>

<sup>294</sup> [https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/networks/european\\_migration\\_network/reports/docs/emn-studies/emn\\_labour\\_shortages\\_synthesis\\_final.pdf](https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/networks/european_migration_network/reports/docs/emn-studies/emn_labour_shortages_synthesis_final.pdf)

<sup>295</sup> Austria, Belgium, Croatia, Hungary and Malta were found to update annually with Ireland, Greece, Lithuania and Slovakia updating twice a year.

<sup>296</sup> A guide for stakeholders wishing to make submissions at this stage is provided [https://docs.employment.gov.au/system/files/doc/other/smol-submission-guidelines\\_1\\_updated\\_4\\_june\\_2018.pdf](https://docs.employment.gov.au/system/files/doc/other/smol-submission-guidelines_1_updated_4_june_2018.pdf)

Bulletin<sup>297</sup> which outlines the initial results from labour market analysis, stakeholder consultation and views from across government. The purpose of the Traffic Light Bulletin is to identify which occupations have been flagged for a change in status on one of the lists, following which a second stage of stakeholder engagement begins with the opening of an online submission process where stakeholders can provide comments on the proposed changes to the list<sup>298</sup>.

- 8.34 New Zealand uses a similar two-stage process with stakeholders first asked to nominate occupations to be added, removed, or moved between lists. These nominations are reviewed, and occupations are selected for further consideration. For each selected occupation a Preliminary Indicator Evidence Report<sup>299</sup> is published which collates relevant statistical information about the occupation and offers a preliminary view of the shortage status of that occupation. Following this, submissions on these occupations, providing evidence about the nature and extent of shortages, are invited. Groups who successfully nominated an occupation in the first stage are required to make a submission in the second stage.
- 8.35 These two-stage processes have the advantage that, by the second stage, the scope of the review has been significantly narrowed and focused onto occupations which are likely candidates for change. This presumably makes sifting through and assimilating stakeholder evidence more manageable and helps set expectations for employers. With 247 occupations set to be eligible for the Skilled Worker route, and therefore eligible for the SOL, having a mechanism to focus reviews onto a narrower subset of occupations – at least some of the time – could be beneficial in the UK context.
- 8.36 Examining other countries approaches to stakeholder engagement emphasises the importance of maximising input from stakeholders whilst minimising the burden stakeholders experience when providing evidence. It is worth considering if modifying the stakeholder engagement process may be prudent in the SOL's future.

## Use of Forecasted Indicators

- 8.37 It is common practice internationally to examine a wide variety of indicators in order to assess whether an occupation is in shortage or not. One of the key ways that the UK differs from several other countries is that its shortage indicators are backward looking and do not incorporate forecasted measures of labour demand or supply. That is not to say that the MAC has made no use of forecasted measures as stakeholders are free to provide such information through their submission to the CfE.

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<sup>297</sup>[https://docs.employment.gov.au/system/files/doc/other/smol\\_traffic\\_light\\_bulletin\\_december\\_2019\\_0.pdf](https://docs.employment.gov.au/system/files/doc/other/smol_traffic_light_bulletin_december_2019_0.pdf)

<sup>298</sup> <https://www.employment.gov.au/consultation-skilled-migration-occupation-lists>

<sup>299</sup> For examples see <https://www.immigration.govt.nz/documents/skill-shortage-lists>

- 8.38 The use of forward looking indicators is by no means uniform across countries: Malaysia is similar to the UK in that it does not make use of any forecast indicators in its own top down analysis, although it does make use of stakeholder evidence akin to the UK, which often contains stakeholders own forecasts of how supply and demand for certain skilled workers may change in the future. Austria also does not make use of any forecast measures in their methodology and has historically relied, to a significant extent, on a single contemporaneous measure of labour market tightness, the applicant-to-vacancy ratio, when making decisions about which occupations to list as in shortage.<sup>300</sup>
- 8.39 Conversely, New Zealand is an example of a country with a set of statistical indicators which take account of both backward-looking statistics and forecasts of future labour market conditions. Like the UK, New Zealand examines indicators such as previous vacancy and employment growth, but it also considers forward looking indicators such as forecasts of employment and net replacement demand<sup>301</sup>. Similarly, the Department for Jobs and Small Business in Australia considers projected employment growth as a primary factor (which are described as being robust, statistically reliable and available for most occupations) among its 11 national-level data sources in its labour market analysis for the shortage occupation lists<sup>302</sup>.
- 8.40 Ireland also makes use of forecasts in the production of the National Skills Bulletin: a key publication which is used in the compilation of the Irish Critical Skills Occupation List. To estimate expansion demand (future growth in demand) sectoral forecasts are produced by the Skills and Labour Market Research Unit (SLMRU), which are then translated into occupational forecasts for the National Skills Bulletin<sup>303</sup>. This forecasting methodology is based on extrapolating forward historical occupational and sectoral shares.
- 8.41 It is clear from examining international practice that some countries do use forward looking indicators of labour market conditions when developing shortage lists. What is less clear is how influential these forecasts are in determining the final composition of lists or how successful the incorporation of forecasts has been in helping anticipate future shortages.

## Use of Shortage Analysis Across Government

- 8.42 An in-depth analysis of labour market shortages is important for more than just informing migration policy: training, education and employment policy makers all rely

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<sup>300</sup> Only occupations where there are at most 1.5 registered job seekers per vacancy, or up to 1.8 under certain conditions, may be considered for the Austrian shortage occupation list.

[https://www.zsi.at/object/project/3589/attach/0\\_EMN\\_LabourShortages2015\\_AT\\_EMN\\_NCP\\_en.pdf](https://www.zsi.at/object/project/3589/attach/0_EMN_LabourShortages2015_AT_EMN_NCP_en.pdf)

<sup>301</sup> [https://read.oecd-ilibrary.org/social-issues-migration-health/recruiting-immigrant-workers-new-zealand-2014\\_9789264215658-en#page147](https://read.oecd-ilibrary.org/social-issues-migration-health/recruiting-immigrant-workers-new-zealand-2014_9789264215658-en#page147)

<sup>302</sup> <https://www.oecd.org/australia/getting-skills-right-australia-9789264303539-en.htm>

<sup>303</sup> <https://www.esri.ie/system/files?file=media/file-uploads/2015-11/RS49.pdf>

on accurate labour market shortage analysis for their own purposes. The recommendations made in the MACs reviews of the SOL are made with immigration policy in mind and are not part of a wider effort to help inform other labour market policies. This exclusive focus on immigration policy contrasts with several international examples where shortage occupation lists build on existing efforts to establish skills needs to help inform wider economic and labour market policies.

- 8.43 In Australia, the Department for Education, Skill and Employment carries out research regarding skill shortages, the results of which are “*considered in a range of education, training, employment and migration policies and programmes*”<sup>304</sup>. A prime example of this research is the Survey of Employers who have Recently Advertised (SERA). The SERA is used to gather both qualitative and quantitative information from employers regarding experiences recruiting skilled workers. It is conducted on a bi-annual basis and provides an additional, ongoing source of analysis which provides insight into a variety of policy areas beyond just migration.
- 8.44 Ireland is another example of a country that undertakes shortage analysis for reasons beyond migration policy. As discussed previously, the National Skills Bulletin is produced annually and provides an overview of the Irish labour market at occupational level by observing a wide variety of demand and supply indicators. Its primary purpose is to inform policy in the areas of employment, education, training and immigration, and career guidance, and also forms the key source used by the Department of Business, Enterprise and Innovation to review the Critical Skills Occupation List and Ineligible Occupations List respectively.<sup>305</sup>
- 8.45 Malaysia’s use of shortage analysis is the most encompassing of the countries we have examined: unlike the countries previously discussed, its Critical Occupations List is not used for the purpose of recruiting migrants in shortage occupations. It is mainly focused on improving education, human capital development and upskilling opportunities for domestic workers in order to alleviate shortages in its labour market, and to inform migration policy in a more general manner<sup>306</sup>. However, in the most recent Critical Occupations Report, it highlighted that in the future it may also be used to target admissions to migrant workers in shortage occupations akin to the UK SOL<sup>307</sup>.
- 8.46 While we are sure government departments and other public bodies do engage in workforce and labour market analysis to help inform their various policy responses, we are not aware of any regular unified attempt to establish the UK’s skill and labour needs with the aim of coordinating skills and labour market policies across government.

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<sup>304</sup> [https://docs.employment.gov.au/system/files/doc/other/ss\\_methodology\\_0.pdf](https://docs.employment.gov.au/system/files/doc/other/ss_methodology_0.pdf)

<sup>305</sup> <https://www.esri.ie/system/files?file=media/file-uploads/2015-11/RS49.pdf>

<sup>306</sup> [https://www.talentcorp.com.my/clients/TalentCorp\\_2016\\_7A6571AE-D9D0-4175-B35D-99EC514F2D24/contentms/img/TalentCorp\\_CriticalOccupationsList\\_TechReport\\_2019-2020\\_Final.pdf](https://www.talentcorp.com.my/clients/TalentCorp_2016_7A6571AE-D9D0-4175-B35D-99EC514F2D24/contentms/img/TalentCorp_CriticalOccupationsList_TechReport_2019-2020_Final.pdf)

<sup>307</sup> Ibid



In the international examples highlighted there appears to be more of a joined-up approach between identifying skill gaps and occupational shortages and responses which go beyond just migration policy.

## Conclusions

- 8.47 There are several lessons the MAC and UK Government can take from international examples. We have identified a few key areas having looked at a particular set of countries. This should by no means be taken as a comprehensive review of international best practice. In summary more regular reviews, the use of reviews with a narrower focus, the possible use of forward-looking indicators and a more joined up approach between identifying shortages and developing a policy response that goes beyond migration are areas for further consideration.

## Recommendations for future SOL

- 8.48 Based on the discussion of key considerations and findings from reviewing the models used for international SOLs, we set out our recommendations for future SOL reviews.

**Recommendation: The SOL should be reviewed on a regular timetable instead of an ad hoc commission basis.**

- 8.49 The MAC have considered whether this review should be done every six months. A key disadvantage of six-monthly reviews is that the ASHE and APS data are published annually and the Employer Skills Survey every two years. This would require greater reliance on employer evidence and increases the burden on employers to provide regular quality evidence. This frequency would also require additional resourcing within the MAC secretariat and would limit the ability of the MAC to do other work.

- 8.50 Annual reviews will provide significantly greater responsiveness to emerging shortages than previously, where reviews have historically taken place approximately every two years.

**Recommendation: Balancing data availability with the desire to have more regular reviews, we recommend that SOL reviews should be done on an annual basis.**

- 8.51 Reviews of the SOL should be published in line with the Home Office timeline for Autumn changes to the immigration rules.

## Structure of reviews

- 8.52 As highlighted in paragraph 8.22, historically SOL occupations do not change significantly between iterations of the list, though we know that emerging shortages can appear fairly quickly. As such, we do not view it as necessary to complete a full

review of all occupations on an annual basis. The reviews will instead be split into two categories – minor reviews and major reviews.

## **Minor reviews**

- 8.53 Minor reviews would take place annually, and would fulfil two main purposes:
- To provide an opportunity to submit new evidence that may provide a compelling case to be included on the SOL.
  - To flag occupations that may no longer need to be on the SOL.
- 8.54 To ensure that minor reviews also achieve the aim of being responsive to labour market requirements, they should be used as an opportunity to identify occupations where there has been a change in circumstance, without reviewing all occupations.
- 8.55 Employers will be invited to submit new evidence demonstrating shortage in their occupation and may be placed on the SOL if this evidence is deemed sufficiently compelling. We will focus only on new evidence provided by stakeholders in these reviews, using a staged triage process.
- 8.56 Minor reviews can also be used for the MAC to provide ‘notice’ to an occupation that may no longer appear to be in shortage. In this case, employers in this occupation would be required to submit compelling evidence to demonstrate their place on the SOL at the next review, otherwise they may be removed.

## **Major reviews**

- 8.57 A major review would take place less frequently, replacing the minor review every three years. At each major review, all occupations would be effectively removed and reconsidered. This may mean that some occupations may only be placed on the SOL at a minor review one year before needing to provide evidence again for the major review. In these cases, it would be expected that the occupations will still have substantial evidence to support their place on the SOL.
- 8.58 If the Government changed the scope of the SOL, for example raising or lowering the RQF range it applied to, we would expect that would normally trigger a major review.

## **Stakeholder engagement and Call for Evidence**

- 8.59 The minor and major review process is designed in a way that reduces the burden on employers, whilst maintaining responsiveness to labour market requirements. To ensure that employers can prepare responses for the SOL engagement process, this will be held on a regular timetable.

- 8.60 For minor reviews, we will ensure that all employers can engage with the MAC. But, to avoid placing unnecessary burden on employers, evidence will be sought only where it can demonstrate a change in circumstances. It would be stipulated that employers and representative organisations should only submit evidence not submitted before which may demonstrate a change in circumstances.
- 8.61 Similar to Australia and New Zealand this would comprise a multi-stage process where submissions were triaged to consider the evidence of new information on the occupation, reviewed fully where appropriate and then finally agreed by the MAC. Information gathered through stakeholder engagement may form part of the full review stage.
- 8.62 This ensures employers have regular opportunities to be added onto the SOL, and protects employers who may be removed from the SOL. Employers would have at least one year until the next review to either prepare new evidence demonstrating that they should still be included on the SOL, or to prepare for any administrative or other changes they may need to make once they are removed from the SOL.
- 8.63 In major reviews, all occupations will be required to justify their place on the SOL. As such, evidence will not be subject to a triaging system as in the minor review and the CfE will be held with a broader remit.

## Methodology

- 8.64 The MAC will undertake a full review of the SOL methodology ahead of the next major review.
- 8.65 New Zealand, Australia and Ireland make use of forward-looking indicators in their SOL methodologies. The current UK SOL methodology welcomes forward-looking evidence from employers but does not include forward-looking quantitative indicators. It is unclear how accurately such indicators forecast labour market shortages, so inclusion of these would require regular evaluation. Given the current levels of uncertainty in the labour market, we do not believe including forward looking indicators would be optimal at present, but we will revisit this as part of the next methodology review.
- 8.66 The co-ordination of shortage measures with labour market and skills policies is commonplace in other countries, but not currently utilised in the UK. As discussed in paragraph 8.21, additional interventions may be required to boost supply in the long run in order to alleviate shortages. Future inclusion of forward-looking indicators in the SOL methodology may facilitate greater opportunities to link across government and consider how the policy response to shortage can be expanded beyond migration into education and training. We would encourage the Home Office to work with other government departments to explore this.

8.67 In the interim, the only change to the methodology will be a change to the sensible criteria questions. These are outlined in Chapter 2 on the SOL methodology.

### The next SOL review

8.68 When planning the timing of the next SOL review, there are three factors to consider: the longer-term impacts of COVID-19, the introduction of the new Standard Occupational Classification groupings (SOC 2020) and the introduction of the new immigration system in 2021.

8.69 It is expected that COVID-19 will continue to have significant impacts on the labour market for a considerable time. Many occupations that have previously been on the SOL may no longer experience shortage, whilst other occupations may newly experience shortage. To avoid penalising occupations, the MAC’s view is that there should not be another major review of the SOL until the labour market begins to return to its long-term trend.

8.70 All data sources used throughout the SOL methodology utilise SOC codes to identify occupations. The change to SOC 2020 affects this categorisation of occupations. This has implications for the way in which job titles are grouped, and may lead to some changes in the SOL.

8.71 Data sources containing the new SOC 2020 classification will be released at different times. We believe that the shift to SOC 2020 in the SOL should take place when most of the data includes the new classification.

**Table 8.3 Issue date of SOC 2020 classifications**

<b>Data source</b>	<b>First release to include SOC 2020</b>
ASHE	October 2021
APS	January 2021
3-year APS	January 2024
Burning Glass	Late 2020
ESS	Late 2021

8.72 Evaluation of the changes to the immigration system and the changes to the role of the SOL, as set out in Chapter 1, are essential for understanding how effective the new system is at reducing shortages. The MAC recommends that the new system should be in place for at least one year before a major review of the SOL is undertaken.

**Recommendation: The next SOL review should be a minor review completed in 2021 using existing SOC 2010 codes, as SOC 2020 will not yet be captured in the datasets.**

- 8.73 Minor reviews provide an opportunity for occupations to be added onto the SOL, but do not allow for occupations to be removed without prior notice. Completing a minor review in 2021 ensures that occupations are not penalised as a result of temporary changes resulting from COVID-19, or the early stages of the new immigration system.

**Recommendation: Following the 2021 SOL minor review, the MAC should review the definition of skill levels for SOC 2020 codes.**

- 8.74 We would expect the review of SOC 2020 to involve analysis of relevant data and consultation with employers focused on the RQF3 level, where occupations may become eligible, or ineligible, for the Skilled Worker route. The findings and our recommendations following the SOC 2020 engagement will then be published ahead of the next major SOL review.

**Recommendation: the next major SOL review should take place in 2022 using the agreed SOC 2020 classifications.**

- 8.75 This enables enough time for evaluation of the new immigration system to take place, and for the labour market to (hopefully) recover following COVID-19.
- 8.76 The regular pattern of major reviews occurring every three years, with minor reviews each year in between, would commence following the 2022 major review.

## Chapter 9: Conclusions and Recommendations

### UK-wide SOL Recommendations

- 9.1 We recommend the following UK-wide Shortage Occupation List, to be implemented as soon as possible.
- 9.2 We have carried out a full review of RQF3-5 occupations and reviewed RQF6+ occupations where substantial new evidence was provided compared to our 2019 SOL report. Table 9.1 sets out our recommendations for the UK-wide SOL.

<b>Table 9.1: Proposed UK-wide Shortage Occupation List</b>	
<b>Standard Occupational Classification (SOC) code and description</b>	<b>Job titles included on the United Kingdom Shortage Occupation List and further criteria</b>
<b>1181 Health services and public health managers and directors</b>	All jobs in this occupation code
<b>1242 Residential, day and domiciliary care managers and proprietors</b>	All jobs in this occupation code
<b>2112 Biological scientists and biochemists</b>	All jobs in this occupation code
<b>2113 Physical scientists</b>	<p>Only the following jobs in this occupation code:</p> <p>The following jobs in the construction-related ground engineering industry:</p> <ul style="list-style-type: none"> <li>• engineering geologist</li> <li>• hydrogeologist</li> <li>• geophysicist</li> </ul> <p>The following jobs in the oil and gas industry:</p> <ul style="list-style-type: none"> <li>• geophysicist</li> <li>• geoscientist</li> <li>• geologist</li> <li>• geochemist technical services manager in the decommissioning and waste areas of the nuclear industry</li> <li>senior resource geologist and staff geologist in the mining sector</li> </ul>
<b>2114 Social and Humanities' Scientists</b>	<p>Only the following jobs in this occupation code:</p> <ul style="list-style-type: none"> <li>• Archaeologists</li> </ul>
<b>2121 Civil engineers</b>	All jobs in this occupation code

<b>2122 Mechanical engineers</b>	All jobs in this occupation code
<b>2123 Electrical engineers</b>	All jobs in this occupation code
<b>2124 Electronics engineers</b>	All jobs in this occupation code
<b>2126 Design and development engineers</b>	All jobs in this occupation code
<b>2127 Production and process engineers</b>	All jobs in this occupation code
<b>2129 Engineering professionals n.e.c.</b>	All jobs in this occupation code
<b>2135 IT business analysts, architects and systems designers</b>	All jobs in this occupation code
<b>2136 Programmers and software development professionals</b>	All jobs in this occupation code
<b>2137 Web design and development professionals</b>	All jobs in this occupation code
<b>2139 Information technology and telecommunications professionals n.e.c.</b>	Only the following jobs in this occupation code: <ul style="list-style-type: none"> <li>• Cyber security specialist</li> </ul>
<b>2211 Medical practitioners</b>	All jobs in this occupation code
<b>2212 Psychologists</b>	All jobs in this occupation code
<b>2213 Pharmacists</b>	All jobs in this occupation code
<b>2216 Veterinarians</b>	All jobs in this occupation code
<b>2217 Medical radiographers</b>	All jobs in this occupation code
<b>2221 Physiotherapists</b>	All jobs in this occupation code
<b>2222 Occupational therapists</b>	All jobs in this occupation code
<b>2223 Speech and language therapists</b>	All jobs in this occupation code
<b>2231 Nurses</b>	All jobs in this occupation code
<b>2314 Secondary education teaching professionals</b>	Secondary education teachers in the subjects of maths, physics, science (where an element of physics will be taught), computer science and Modern foreign language teachers
<b>2425 Actuaries, economists and statisticians</b>	Only the following jobs in this occupation code: <ul style="list-style-type: none"> <li>• Bio-informatician and informatician</li> </ul>
<b>2431 Architects</b>	All jobs in this occupation code
<b>2442 Social workers</b>	All jobs in this occupation code
<b>2461 Quality control and planning engineers</b>	All jobs in this occupation code
<b>3111 Laboratory Technicians</b>	All jobs in this occupation code
<b>3131 IT operations technicians</b>	All jobs in this occupation code
<b>3213 Paramedics</b>	All jobs in this occupation code
<b>3411 Artists</b>	All jobs in this occupation code

<b>3412 Authors, writers and translators</b>	Only the following jobs in this occupation code: <ul style="list-style-type: none"> <li>• Interpreters</li> </ul>
<b>3414 Dancers and choreographers</b>	Only the following jobs in this occupation code: <ul style="list-style-type: none"> <li>• Skilled classical ballet dancers who meet the standard required by internationally recognised United Kingdom ballet companies. The company must be endorsed as being internationally recognised by a United Kingdom industry body such as the Arts Councils (of England, Scotland and/or Wales)</li> <li>• Skilled contemporary dancers who meet the standard required by internationally recognised United Kingdom contemporary dance companies. The company must be endorsed as being internationally recognised by a United Kingdom industry body such as the Arts Councils (of England, Scotland and/or Wales)</li> </ul>
<b>3415 Musicians</b>	Only the following jobs in this occupation code: <ul style="list-style-type: none"> <li>• skilled orchestral musicians who are leaders, principals, sub-principals or numbered string positions, and who meet the standard required by internationally recognised UK orchestras. The orchestra must be endorsed as being internationally recognised by the Association of British Orchestras</li> </ul>
<b>3416 Arts officers, producers and directors</b>	All jobs in this occupation code
<b>3421 Graphic designers</b>	All jobs in this occupation code
<b>3539 Business and related associate professionals n.e.c.</b>	Only the following jobs in this occupation code: <ul style="list-style-type: none"> <li>• Data analyst</li> <li>• Business system analyst</li> </ul>
<b>3565 Inspectors of standards and regulations</b>	Only the following jobs in this occupation code: <ul style="list-style-type: none"> <li>• Meat Hygiene Inspectors, also known as Official Auxiliaries</li> </ul>
<b>5112 Bricklayers and masons</b>	All jobs in this occupation code
<b>5119 Agricultural and fishing trades n.e.c.</b>	Only those jobs in the fishing industry
<b>5212 Moulders, core makers &amp; die casters</b>	All jobs in this occupation code
<b>5215 Welding trades</b>	All jobs in this occupation code
<b>5223 Metal working production and maintenance fitters</b>	All jobs in this occupation code
<b>5231 Vehicle technicians, mechanics and electricians</b>	All jobs in this occupation code
<b>5241 Electricians and electrical fitters</b>	All jobs in this occupation code



<b>5249 Electrical &amp; electronic trades n.e.c.</b>	Only the following jobs in this occupation code: <ul style="list-style-type: none"> <li>• Fire alarm technicians</li> <li>• Electronics hardware design engineers</li> </ul>
<b>5431 Butchers</b>	All jobs in this occupation code
<b>6131 Veterinary nurses</b>	All jobs in this occupation code
<b>6141 Nursing auxiliaries and assistants</b>	All jobs in this occupation code
<b>6144 Houseparents and residential wardens</b>	All jobs in this occupation code
<b>6146 Senior care workers</b>	All jobs in this occupation code
<b>9119 Fishing and other elementary agricultural occupations n.e.c.</b>	Only the following jobs in this occupation code: <ul style="list-style-type: none"> <li>• Deckhands on large fishing vessels (9 metres and above) with at least three years full time experience using their skills</li> </ul>

## Scotland only SOL Recommendations

9.3 We recommend the following additional **Scotland-only Shortage Occupation List**.<sup>308</sup>

<b>Table 9.2: Proposed Scotland-only Shortage Occupation List</b>	
<b>Standard Occupational Classification (SOC) code and description</b>	<b>Job titles included on the Scotland-only Shortage Occupation List and further criteria</b>
<b>2111 Chemical scientists</b>	Only the following jobs in this occupation code: <ul style="list-style-type: none"> <li>• Chemical scientists within the nuclear industry</li> </ul>
<b>2314 Secondary education teaching professionals</b>	Only the following jobs in this occupation code: <ul style="list-style-type: none"> <li>• Gaelic Teachers</li> </ul>
<b>2315 Primary and nursery education teaching professionals</b>	Only the following jobs in this occupation code: <ul style="list-style-type: none"> <li>• Gaelic-medium teachers</li> </ul>
<b>3234 Housing officers</b>	All jobs in this occupation code
<b>6121 Nursery nurses and assistants</b>	All jobs in this occupation code
<b>6122 Childminders and related occupations</b>	All jobs in this occupation code

<sup>308</sup> All UK-wide occupations listed in Table 7.1 also apply to Scotland-only, Wales-only and Northern Ireland-only list, however the roles listed in Table 7.2, 7.3 and 7.4 are in addition for each devolved nation.

## Wales Only SOL Recommendations

- 9.4 We recommend the following additional **Wales-only Shortage Occupation List**.

Table 9.3: Proposed Wales-only Shortage Occupation List	
Standard Occupational Classification (SOC) code and description	Job titles included on the Wales-only Shortage Occupation List and further criteria
<b>2219 Health professionals n.e.c.</b>	All jobs in this occupation code

## Northern Ireland Only SOL Recommendations

- 9.5 We recommend the following additional **Northern Ireland-only Shortage Occupation List**.

Table 9.4: Proposed Northern Ireland-only Shortage Occupation List	
Standard Occupational Classification (SOC) code and description	Job titles included on the Northern Ireland-only Shortage Occupation List and further criteria
<b>3234 Housing officers</b>	All jobs in this occupation code
<b>5112 Horticultural workers</b>	All jobs in this occupation code
<b>5432 Bakers and flour confectioners</b>	All jobs in this occupation code
<b>5433 Fishmongers and poultry dressers</b>	All jobs in this occupation code

- 9.6 Our last full review of the SOL estimated that our recommendations made in 2019, would place jobs that account for about 2.5m workers, around nine per cent of total employment, on the SOL. Including our recommendations from this report, the SOL would cover approximately 14 per cent of total UK employment, or 21 per cent of eligible RQF3+ employment.
- 9.7 Of the RQF3-5 occupations now eligible, 16 per cent have been placed on the SOL, compared with 27 per cent of RQF6+ occupations. This is in line with expectation given that occupations with longer training requirements are typically harder to fill in the short term.
- 9.8 The main effect of an occupation being on the SOL under the points-based Skilled Worker route, is that the salary threshold will be lowered by 20 per cent to a lower bound of £20,480. Occupations in which the pay is set by national pay scales will not benefit from this reduced salary threshold. With the exclusion of these occupations, the occupations

which benefit from the SOL discount account for around 9 per cent of total UK employment.

## The role of the SOL in the future immigration system

- 9.9 Since the last review of the SOL by the MAC<sup>309</sup>, the Home Office have released a policy statement<sup>310</sup> that detailed the points value that will be given for an occupation being included on the SOL in the future immigration system.
- 9.10 Also, since the last review of the SOL, it is important to acknowledge that life has changed quite dramatically with the global pandemic, COVID-19. Many organisations were unable to provide as much feedback as they would have wanted to due to their focus being taken away by coping with the pandemic. The MAC appreciate that organisations have been unable to provide as clear a picture on future work as they would normally have done. Therefore, it is to be expected that the SOL presented now will need to be updated soon to reflect changes that will happen when we are hopefully in a recovery phase from the pandemic.
- 9.11 In Chapter 1 (The role of the Shortage Occupation List in immigration policy), the future system was reviewed in detail. As stated there and on previous occasions, the MAC's stated position has been that we do not think a salary threshold reduction is an appropriate way to use the SOL for most higher paid occupations as there should be upward pressure on wages in jobs in shortage. For occupations where the occupation specific salary threshold binds, we have concern that reductions below the 25<sup>th</sup> percentile may reduce pressure on wages. However, there is more of a case for reductions in salary thresholds where the general threshold binds, as a lower salary threshold will mean it is possible for employers to recruit at a more 'normal' wage within that occupation.
- 9.12 Under the points-based Skilled Worker route, due to come into effect on the 1<sup>st</sup> of January 2021, the main effect of a job being on the SOL will be to lower the salary threshold faced by 20 per cent to a lower bound of £20,480 (except for some, largely public sector occupations that follow pay scales). The role of the MAC in this case is to provide evidence that identifies which occupations face such shortages and where we view it as sensible to use migration to fill these shortages.
- 9.13 We would want the Home Office to evaluate the effect of this policy choice both on the migration system itself and the wider labour market. This should be specifically be done

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[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/80633/1/28\\_05\\_2019\\_Full\\_Review\\_SOL\\_Final\\_Report\\_1159.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/80633/1/28_05_2019_Full_Review_SOL_Final_Report_1159.pdf)

<sup>310</sup> <https://www.gov.uk/government/publications/the-uks-points-based-immigration-system-policy-statement/the-uks-points-based-immigration-system-policy-statement>

in relation to those occupations whose salary threshold will be below the 25<sup>th</sup> percentile for earnings in that occupation as a result of being on the SOL.

- 9.14 The other benefits of being on the SOL are lower visa fees and the removal of the requirement to meet a higher salary threshold for settlement. It is not currently clear whether under the future points-based system these benefits will be retained. However, on the assumption they are, the relaxing of the settlement salary threshold is the more material. The MAC believe that if changes are made, evaluation will be important to ensure that the system enables the future workings of the labour market.

## Summary of the future of the SOL recommendations

- 9.15 In our previous review of the SOL, several stakeholders expressed concerns about the frequency with which the SOL is updated. These concerns were raised again in our consultations for this review and in Chapter 8 recommendations were made regarding a future timetable of SOL reviews.
- 9.16 This is the first SOL that includes devolved nation specific occupations for each nation. However, as is clear, we are not recommending a lot of variation between the devolved nation SOLs to the UK-wide SOL.
- 9.17 There was significant stakeholder feedback and engagement regarding roles that are below RQF3. These roles cannot be included in the recommendations for the SOL as they fall out of scope of the PBS Skilled Worker route. However, based on detailed evidence from stakeholders on the level of training required, we have recommended redefining two very specific job titles as RQF3.

**Recommendation: we recommend classifying ‘vent chick sexers’ and ‘deckhands on large fishing vessels (9 metres and above)’ as RQF3 and therefore to be eligible for the Skilled Worker route.**

- 9.18 The reduced frequency of SOL commissions (before the review in May 2019, the previous full review was in February 2013) has contributed to the SOL becoming more reactive in nature. Most of the recent SOL reviews, partial in nature, have often been characterised by urgent labour market shortages, in nursing (March 2016) and teaching (January 2017).
- 9.19 In Chapter 8 (Future of the SOL), a full discussion was provided regarding what the future of the SOL reviews may look like, including what would be included in both ‘major’ and ‘minor’ reviews.
- 9.20 It is important that SOL reviews are regular and flexible so that it is responsive to the labour market and can capture changes to shortages as they occur through data and

through employer views, but this must be balanced with the availability of data and the burden on employers.

9.21 Thus, on balance, the MAC recommend that the SOL should be updated on an annual basis. The recommendation made was that the next review would be a minor review to be published in 2021 to allow for any changes to be incorporated into the Autumn rules changes, with a major review being published one year later.

9.22 To summarise our recommendations:

**Recommendation: The SOL should be reviewed on a regular timetable instead of an ad hoc commission basis.**

**Recommendation: Balancing the data availability with the desire to have more regular reviews, we recommend that SOL reviews should be done on an annual basis.**

**Recommendation: The next SOL review should be a minor review completed in 2021 using existing SOC 2010 codes, as SOC 2020 will not yet be captured in the datasets.**

**Recommendation: Following the 2021 SOL minor review, the MAC should review the definition of skill levels for SOC 2020 codes.**

**Recommendation: The next major SOL review should take place in 2022 using the agreed SOC 2020 classifications.**

## Corrections

The following corrections have been made to this report on xx October 2020

Location in Document	Error	Reason for change
Various	Basic formatting errors, e.g. lack of full-stop, incorrect spacing	
Page 17	Amended “recommended four new occupations for Scotland” to “recommended three new occupations for Scotland”	Only three occupations have been recommended for addition to the Scotland-only SOL.
Chapter 6D	Addition to SOC 3539 has been amended from “business analysts” to “business system analysts”	Business system analyst is the correct term, as defined by the ONS and mentioned earlier in the chapter.
Chapter 9	The line referring “chemical engineers within the nuclear industry” for SOC 2127 has been removed from the Scotland-only SOL	The entirety of SOC 2127 has been added to the UK-wide SOL. There is no intention for Scotland to have a more restrictive SOL for Scotland, so this error has been removed.

Migration Advisory Committee report

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