INCLUSIVE IT: DISABILITY

A definitive series of evidence reports from BCS exploring equality and diversity within the IT workforce

A report by BCS, The Chartered Institute for IT

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Making IT good for society

Established in 1957, the British Computer Society (BCS) is the leading body for those working in IT. With a worldwide membership now of more than 68,000 members in over 100 countries, BCS is the qualifying body for Chartered IT Professionals (CITP).

BCS was incorporated by Royal Charter in 1984. Its objectives are to promote the study and practice of computing and to advance knowledge of, and education in, IT for the benefit of the public. BCS is also a registered charity.

CONTENTS

1   SUMMARY OF KEY FINDINGS

- Though accounting for 18% of the working age population, people with disabilities constituted only 12% of the total UK workforce in 2018.
- There were 128,000 IT specialists in the UK with disabilities in 2018– 9% of all IT specialists in the UK at that time.
- If representation were raided to the level seen for all workers this would equate to an extra 45,000 IT specialists in the workforce.
- Representation varies across the UK and during the 2014-18 period, it was noted that just 6% of IT specialists in London were disabled.
- Representation of people with disabilities also varies with IT role and in 2018, just 8% of IT Directors were disabled (Disability Discrimination Act definition).
- Over the 2016-18 period, approximately 16% of all unemployed IT specialists in the UK were with disabilities (5,000 in total) and the associated unemployment rate (5.1%) was more than double that for IT specialists as a whole.
- Representation of IT specialists with disabilities is lowest amongst the Energy/ Water, Construction and Banking/ Finance industries (7% in each case).
- The median hourly earnings of IT specialists with/without disabilities in 2018 was £20phr.
- In 2018, just over four in ten IT specialists with/without disabilities (43% and 42% respectively) stated that they were a manger/foreman or team leader.
- Though highly educated, disabled IT specialists were less likely to have a higher-level qualification than IT specialists that were not disabled (64% vs 68% respectively).
- IT specialists with disabilities are also less likely to hold a degree in an IT related discipline than others working in such occupations. (12% compared with 17% without disabilities).
- IT specialists with disabilities were more likely to receive job-related education/ training in 2018 (28% stating that education/training had been received in the previous 13 weeks compared with 23% of those without disabilities).
- Disabled IT specialists are notably more likely to gain work via an agency than those without disabilities (26% versus 18% stating that they had gained work in this way during the 2014-18 period).

2   BACKGROUND

Over the past three years, the British Computer Society, as part of its aim to make IT good for society, has been tracking and reporting upon levels of female representation within the IT labour market, highlighting areas of particular concern for the industry and supporting infrastructure and providing supporting evidence for those seeking to improve the gender balance within our industry.

In 2017, we expanded the reach of our analysis to cover other 'minority groups' – namely, the disabled, ethnic minorities and older workers, and following positive feedback/comment from the IT community, this year have elected to continue with this broader analysis of diversity in IT.
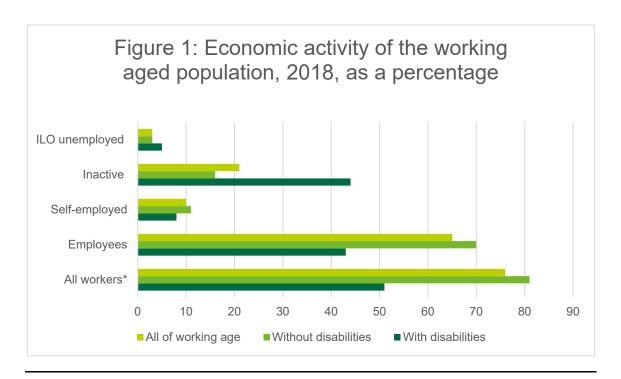
This input allows us for the first time to not only identify the key issues in question, but also potential/preferred resolution mechanisms as suggested by our membership base. In summary then, these reports aim to:

1.   Provide a definitive source of information concerning the levels of 'minority' representation amongst the IT professions.
2.   Identify and explore the extent to which the market is failing those from minority groups, as demonstrated by below-average levels of representation and compensation amongst these groups.

3   DIVERSITY IN CONTEXT, A LABOUR MARKET OVERVIEW

There were 7.5m people of working age in the UK with disabilities (as defined by the Equality Act 2010) in 2018 - i.e. 18% of the total working age population. Amongst those with disabilities, just 51% were in work (compared with 76% of individuals as a whole) and a slightly lower proportion (44%) were classed as 'inactive' (compared with just 21% of all people aged 16-64).

"THERE WERE 7.5M PEOPLE OF WORKING AGE AND WITH DISABILITIES IN THE UK IN 2018"

Figure 1: Economic activity of the working aged population, 2018, as a percentage

Source: Analysis of ONS Quarterly Labour Force Survey by BCS

Though accounting for 18% of the population, people with disabilities constituted only 12% of the total UK workforce in 2018 (12% of workers that were employees, 13% of those that were self-employed and 26% of those in other working arrangements) and their level of representation within the workforce has changed little over the course of the past five years as illustrated within the chart overleaf.
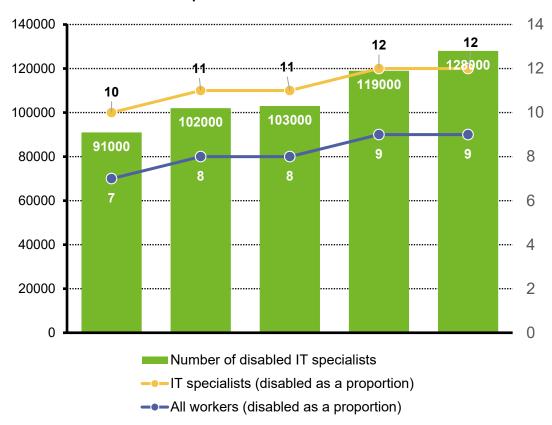
4   DISABILITY AND IT EMPLOYMENT

4.1 Overview

There were 128,000 IT specialists in the UK with disabilities in 2018 representing 9% of all IT specialists working in the UK at that time. As such, representation in IT is low, and given that representation of people with disabilities in the workforce stood at 12% in 2018 there was effectively a shortfall of some 45,000 people within the IT professions.

"THERE ARE 45,000 LESS IT SPECIALISTS WITH DISABILITIES THAN WOULD BE EXPECTED"

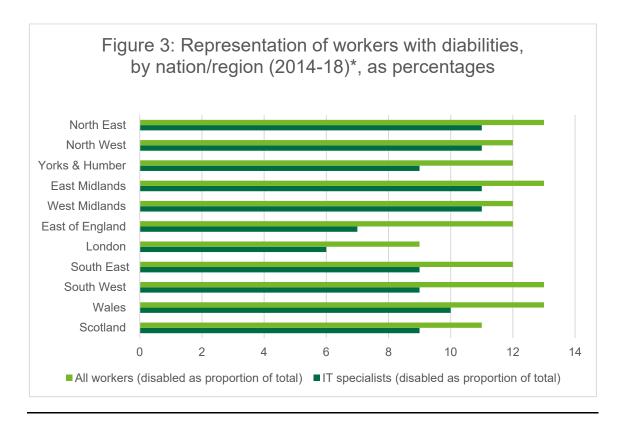## Figure 1: Trends in workforce representation, 2014-18

4.2 Representation across the U

Amongst IT specialists, representation of people with disabilities varies across the UK from just 6% in London to 11% in the North East, North West the East Midlands and the West Midlands (during the 2014-18 period).

"REPRESENTATION OF PEOPLE WITH DISABILITIES IN IT JOBS IS LOWEST IN LONDON"

Representation was lower for IT specialists than workers in other occupations in all of the UK nations and regions, and the shortfall between IT/all workers ranged from just 1 percentage points in the East/West Midlands - to 5 percentage points in the East/ South West of England.

Figure 3: Representation of workers with diabilities, by nation/region (2014-18)*, as percentages

Source: Analysis of ONS Quarterly Labour Force Survey by BCS
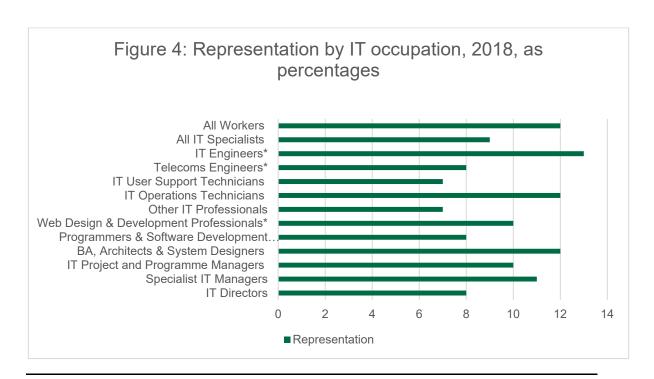
* Figures for Northern Ireland supressed

5   NATURE OF EMPLOYMENT

5.1 Occupation

Representation of people with disabilities in 2018 varied with IT role, from just 7% of IT User Support technicians and 'other' IT professionals – to 13% of IT Engineers (2014-2018 average figure). The proportion of IT Directors with disabilities in 2018 was just 8% - again, below the average for all IT specialists, and for all workers during the year.

"ONLY 8% OF IT DIRECTORS HAVE DISABILITIES"

Figure 4: Representation by IT occupation, 2018, as percentages

Source: Analysis of ONS Quarterly Labour Force Survey by BCS

* 3 year average figure (2014-18 inclusive)

5.2 Permanency of employment

Only 3% of IT specialists in the UK were working on a non-permanent basis during 2018 – half the proportion recorded amongst the workforce as a whole. The proportion of IT specialists with disabilities was marginally higher at 4%, though again this was less that reported by all UK workers with disabilities in general (6% again).

Though a detailed analysis of the reasons why IT specialists were in non-permanent employment in 2018 is not possible due to limitations of the data source, it does not appear (based on data for 2014-18), that disabled IT specialists were notably more likely to be working on a temporary basis due to their being unable to find a permanent job.

5.3 Disability and unemployment

Over the 2016-18 period, there are estimated to have been around 5,000 unemployed IT specialists in the UK with disabilities – 16% of all unemployed IT specialists in the UK at that time.

"THE UNEMPLOYMENT RATE FOR IT SPECIALISTS WITH DISABILITIES BETWEEN 2016-18 WAS 5.1%"

Moreover, at 5.1%, the unemployment rate[i] for IT specialists with disabilities (on average over the three-year period) was noted as being more than double the rate associated with IT specialists as a whole (2.2%) as well as being above the rate for the workforce as a whole (4.9%).
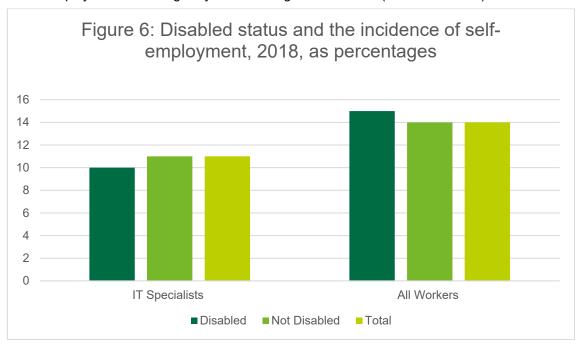
6 EMPLOYMENT CHARACTERISTICS

6.1 5.1   Self-employment

Over the past five years, the number of people in the UK working on a self-employed basis has risen dramatically, and in 2018 it is estimated that 14% of all UK workers and 11% of IT specialists were self-employed.

"ONE IN TEN DISABLED IT SPECIALISTS ARE SELF-EMPLOYED"

As shown in the chart below, the incidence of self-employment was similar for those with/without disabilities within the wider workforce, though amongst IT specialists the proportion in self-employment was marginally lower amongst the disabled (i.e. 10% vs 11%).

Figure 6: Disabled status and the incidence of self-employment, 2018, as percentages

Source: Analysis of ONS Quarterly Labour Force Survey by BCS

6.2 Employees and size of the workplace

IT specialists working as employees are, understandably, more likely than others to be employed within larger workplaces[ii] (i.e. as micro/small sites may be less likely to have an in-house function) and whilst just 28% of UK employees as a whole were working in large workplaces during 2018 (those with 250 or more staff), a figure of 42% was recorded for IT

specialist employees. The figure was still higher amongst disabled IT specialists however of which 48% were employed in workplaces with 250 or more staff.

Figure 7: DISEA (disabled) status and distribution of employees by size of workplace, 2018, as percentages

Source: Analysis of ONS Quarterly Labour Force Survey by BCS

6.3 5.2   Industry of employment

At 39%, the proportion of disabled IT specialists working in IT businesses during 2018 was six percentage points lower than that for IT specialists without disabilities – 45% of which were working in IT firms during this period.

After IT, the next largest employer of IT specialists (disabled/otherwise) were Banking/Finance (21% of disabled IT specialists/ IT specialists as a whole) and the public sector (17% and 13% respectively).

"AROUND TWO IN FIVE DISABLED IT SPECIALISTS WORK WITHIN THE IT INDUSTRY"

To obtain a fuller picture of the levels of disabled representation amongst IT specialists within different industries however it is necessary to undertake an analysis over a longer time period to

ensure reliability of the estimates produced – in this case the five-year period 2014-2018 (inclusive).

Results from this analysis show that whilst the Banking/Finance industry accounts for a relatively large proportion of disabled IT specialist employment, the associated level of representation within this sector is, along with Construction and Energy and Water, was the lowest of all major industry groups for which data are available (i.e. 7% in each case during the 2014-18 period).
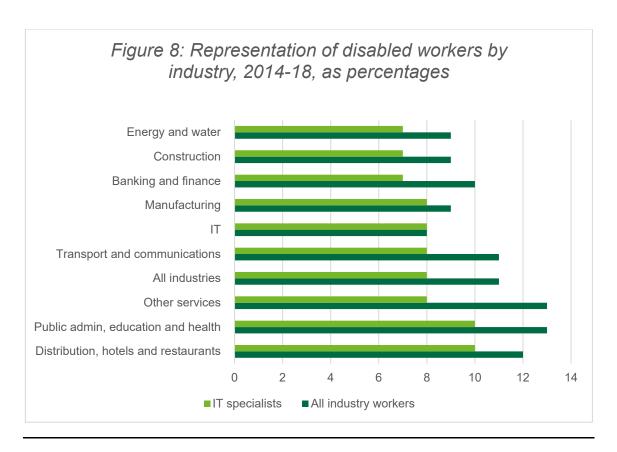
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Figure 8: Representation of disabled workers by industry, 2014-18, as percentages

Industry	IT specialists	All industry workers
Energy and water	7	9
Construction	7	9
Banking and finance	7	10
Manufacturing	8	9
IT	8	8
Transport and communications	8	11
All industries	8	11
Other services	8	13
Public admin, education and health	10	13
Distribution, hotels and restaurants	10	12

Source: Analysis of ONS Quarterly Labour Force Survey by BCS

"ENERGY/ WATER, CONSTRUCTION AND BANKING/ FINANCE HAVE THE LOWEST LEVELS OF REPRESENTATION FOR DISABLED IT SPECIALISTS"
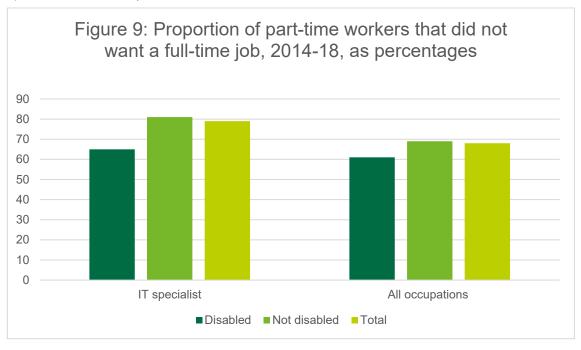
7 WORKING HOURS AND BENEFITS

7.1 Full-time and part-time working

IT specialists in the UK are much less likely to work part-time than other workers, and in 2018, just 5% were working part-time hours compared with 25% of workers as a whole.

Disabled IT specialists were more likely be working in part-time positions (8%), though again, the incidence of part-time working for those working in IT is less than one third that recorded amongst disabled workers more generally (34% of which worked part-time during 2018).

"DISABLED IT SPECIALISTS MUCH LESS LIKELY TO WORK PART-TIME THAN OTHER DISABLED WORKERS"

Whilst the relative incidence of part-time working is low for disabled IT specialists and IT specialists as a whole, it would appear that, for the majority at least, this is out of choice albeit a slightly less common choice for those with disabilities (65% of which stated that they worked part-time as they did not want a full-time job over the 2014-18 period compared with 79% of IT specialists as a whole).
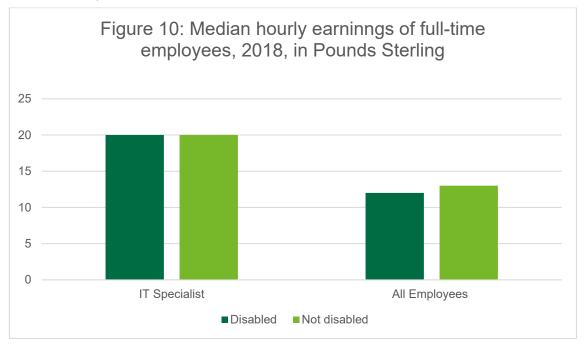

Figure 9: Proportion of part-time workers that did not want a full-time job, 2014-18, as percentages

Source: Analysis of ONS Quarterly Labour Force Survey by BCS

7.2 Remuneration

In 2018, the median hourly earnings for IT specialists working in the UK (as full-time employees) was £20 per hour – an amount 55% higher than that recorded for the workforce as a whole (£13 per hour).

"DISABLED IT SPECIALISTS EARNED THE SAME AS THAN THOSE WITHOUT DISABILITIES IN 2018"

The differential between the earnings of disabled IT specialists vs disabled workers was even higher (69%) though the median hourly rate for both disabled/non-disabled IT specialists in 2018 was £20 per hour.

Figure 10: Median hourly earninngs of full-time employees, 2018, in Pounds Sterling

SOURCE: ANALYSIS OF ONS QUARTERLY LABOUR FORCE SURVEY BY BCS

7.3 6.3   Responsibility

Using Managerial/supervisory status as a proxy for the likelihood that individuals are given responsibility within their work, it would appear that during 2018, IT specialists with disabilities

(and that were employees) had a similar likelihood of holding responsible positions as those without disabilities (i.e. 43% stating that they were a manger/foreman or team leader compared with 42% of IT specialists without disabilities).

"OVER FOUR IN TEN IT SPECIALISTS WITH DISABILITIES ARE MANAGERS/FOREMEN/TEAM LEADERS"

In both cases the likelihood of individuals holding positions of responsibility was higher than others in the workforce and as a whole just 31% of workers with disabilities and 36% of those without stated that they were a manager/foreman/team leader.
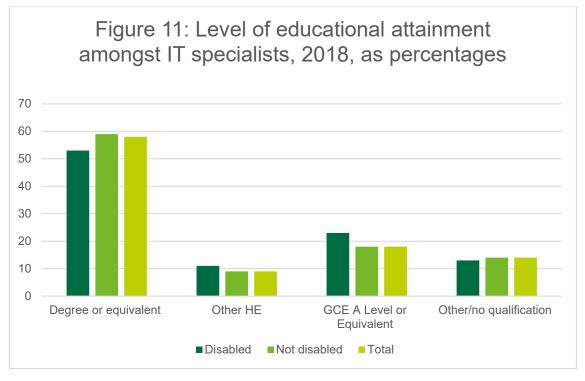
8   SKILLS

8.1 Qualifications held

IT specialists are more highly qualified than other UK workers, and in 2018, 68% held some form of higher-level qualification compared with 45% of all workers at that time.

"IT SPECIALISTS WITH/WITHOUT DISABILITIES MORE HIGHLY QUALIFIED THAN WORKERS AS A WHOLE"

Overall, disabled IT specialists were also found to be more highly qualified than other workers with disabilities (64% and 39% respectively having HE level qualifications), though the proportion with higher level qualifications was below that recorded amongst IT specialists that were not disabled (68%).

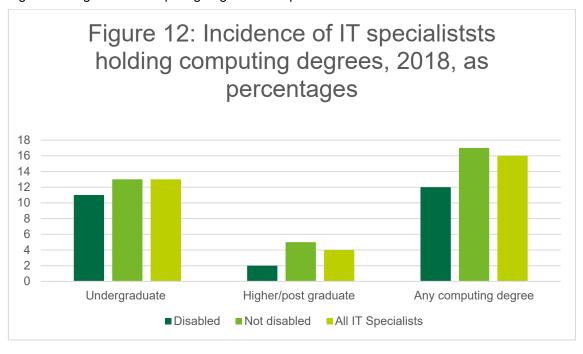Figure 11: Level of educational attainment amongst IT specialists, 2018, as percentages

Source: Analysis of ONS Quarterly Labour Force Survey by BCS

IT specialists with disabilities are also less likely to hold a degree in an IT related discipline than others working in such occupations.

"DISABLED IT SPECIALISTS LESS LIKELY TO HAVE AN IT DEGREE"

In 2018, approximately 12% of disabled IT specialists were thought to have either a higher/undergraduate computing degree in compared with 17% of those without disabilities.

Figure 12: Incidence of IT specialiststs holding computing degrees, 2018, as percentages

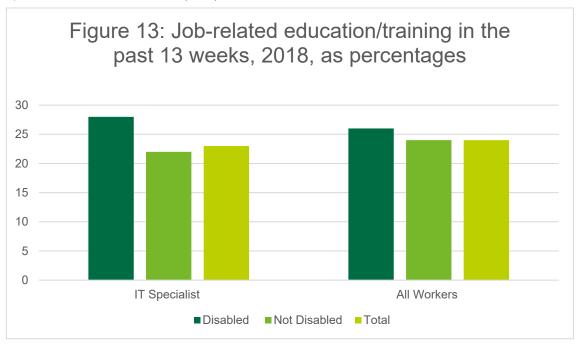Source: BCS analysis of ONS Quarterly Labour Force Survey data

8.2 Skills development

Despite the arguably high skill/knowledge requirements associated with their work, IT specialists as a whole in the UK are marginally less likely than other workers to receive job-related education and training. During 2018, 23% of IT specialists as a whole stated that they had received some form of job-related education/ training in the previous 13 weeks, compared with 24% of all workers.

"IT SPECIALISTS WITH DISABILITIES MORE LIKELY TO

RECEIVE JOB-RELATED EDUCATION / TRAINING IN 2018"

For disabled IT specialists however the proportion receiving education/ training was notably higher (28%) – both when compared with disabled workers as a whole (26%) and with other IT specialists without disabilities (22%).

Figure 13: Job-related education/training in the past 13 weeks, 2018, as percentages

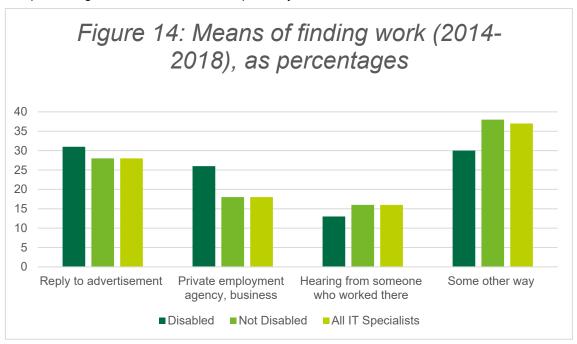Source: BCS analysis of ONS Quarterly Labour Force Survey data

8.3 Skills sourcing

As with other UK employees, the most common identifiable means of IT specialists[iii] securing a job (where stated) during the 2014-18 period (to compensate for the small number of responses to these questions in the LFS) was by 'replying to an advertisement' (28% of those that had been with their employer for less than 1 year stating they had secured work in this manner), and this was true for IT specialists with/without disabilities although the proportion of disabled IT specialists finding work in this way was slightly higher at 31% (compared with 28% for those without disabilities).

"DISABLED IT SPECIALISTS NOTABLY MORE LIKELY TO

OBTAIN EMPLOYMENT THROUGH RECRUITMENT AGENCIES"

The next most common means of IT Specialists securing a job was via a private recruitment agency followed by contacts already working with the employer and this was true again for IT specialist employees with/without disabilities. Amongst those with disabilities, the proportion using recruitment agencies was notably higher than amongst other IT specialists however with comparison figures of 26% and 18% respectively.

Figure 14: Means of finding work (2014-2018), as percentages

Source: BCS analysis of ONS Quarterly Labour Force Surve

DATA NOTES

i This report contains statistical data from ONS which is Crown Copyright. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data, and research datasets employed may not exactly reproduce National Statistics aggregates.

Annual figures presented are derived from the ONS Labour Force Survey (LFS) and have been produced by averaging results for the four quarters of any given year/years. Further details of the LFS can be obtained direct from the ONS website:

https://www.ons.gov.uk/surveys/informationforhouseholdsandindividuals/householdandindividualsurveys/labourforcesurveylfs

ii For this report a generic age filter has been applied (16-64 inclusive) for all analysis presented unless specifically stated otherwise.

iii In cases where estimates span multiple years, this amalgamation has been undertaken to overcome issues of small sample sizes which otherwise render estimates unreliable and/or potentially disclosive.