



**Final recommended questions  
for the 2011 Census  
in England and Wales**

**Labour market, the National  
Statistics Socio-economic  
Classification and travel to work**

**August 2010**

## Table of Contents

<b>1. Summary</b> .....	<b>4</b>
<b>2. Introduction</b> .....	<b>10</b>
<b>3. Background and definitions</b> .....	<b>11</b>
3.1 Economic activity .....	11
3.2 National Statistics Socio-economic Classification (NS-SEC) .....	11
3.3 Filters in the questionnaire .....	13
<b>4. User requirements</b> .....	<b>14</b>
4.1 Consultation process .....	14
4.2 General uses of labour market information .....	14
4.3 Economic activity status .....	15
4.4 National Statistics Socio-economic Classification (NS-SEC) .....	15
4.5 Self-employed or employee and supervisor status.....	16
4.6 Occupation .....	16
4.7 Industry and name of employer .....	17
4.8 Workplace address and travel to work .....	18
4.9 Hours worked .....	18
<b>5. Methods of question testing</b> .....	<b>20</b>
5.1 Qualitative testing .....	20
5.2 Quantitative testing.....	20
5.2.1 Lambeth Postal Test.....	20
5.2.2 2007 Postal Test.....	21
5.2.3 2007 Census Test .....	21
5.2.4 2008 Postal Test.....	21
5.2.5 March 2009 Postal Test.....	21
5.2.6 July 2009 Postal Test .....	21
<b>6. Development of the questions</b> .....	<b>22</b>
6.1 Economic activity questions .....	22
6.1.1 Working status in previous week .....	22
6.1.2 Looking for work /available to work/waiting to start a job .....	26
6.1.3 Reasons for not working.....	28
6.1.4 Ever worked.....	30
6.2 Self-employed or employee.....	31
6.2.1 Final recommended questions on self-employed or employee .....	32
6.3 Supervisor status.....	33
6.3.1 Final recommended questions on supervisor status .....	34
6.4 Occupation .....	34
6.4.1 Job title .....	34
6.4.2 Job description .....	36
6.5 Industry.....	38
6.5.1 Final recommended questions on Industry.....	40
6.6 Name of employer .....	41
6.6.1 Final recommended questions on name of employer.....	43
6.7 Workplace address.....	43
6.7.1 Final recommended questions on workplace address .....	46
6.8 Travel to work .....	47
6.8.1 Final recommended questions on travel to work .....	48

6.9 Hours worked .....	49
6.9.1 Final recommended questions on hours worked .....	51
<b>7. Impact of changes since the 2001 Census on comparability .....</b>	<b>52</b>

# 1. Summary

This paper presents final recommendations for the suite of questions for the 2011 England and Wales Census relating to the labour market, the National Statistics Socio-economic Classification (NS-SEC) and travel to work. The topics covered by this area that will be included in the 2011 Census are:

- economic activity (six questions)
- self-employed or employee
- occupation (job title and job description)
- supervisor status
- industry
- name of employer
- workplace address
- travel to work
- hours worked

Question development for the 2011 Census began in 2005. An iterative and comprehensive process of user consultation, prioritisation of user requirements, and both qualitative and quantitative question testing has been carried out to inform the decisions on the questions to be included in the 2011 Census. This paper reports on evidence from cognitive question testing, a series of postal tests, the 2007 Census Test, and other strands of research.

ONS uses labour market statistics from the census to provide grossing populations for the samples in the Labour Force Survey (LFS), so correctly measuring the labour market characteristics of the entire population of England and Wales is of primary importance. Census data are used by local and regional authorities, central government departments, other public sector bodies, academics and research institutions. The data are used to understand local labour markets, employment and unemployment, and to develop policies in these areas, especially at local and regional levels.

In order to produce accurate and comparable statistics on employment, six questions are included in the census that allow people to be classified as employed, unemployed or economically inactive, according to standard definitions developed by the International Labour Organisation (ILO). This set of questions, collectively known as the economic activity questions, are largely unchanged since the 2001 Census, as they worked effectively and the standard definitions that have to be adhered to allow little room for flexibility with the question wording.

There is a user requirement for information on occupation, industry and employment status (determined from questions on self-employed or employee and supervisor status) in its own right. However, questions on these topics are also required to derive NS-SEC. There are three main methods for deriving NS-SEC that were considered for use in the 2011 Census; the full, reduced and simplified methods.

The full method, as used in 2001, produces the best results but requires the most detail in order to assign NS-SEC analytic classes. For the 2011 Census, there may be a slight loss of quality in the NS-SEC data as the reduced derivation method will be used. This is due to the exclusion of a poorly performing question on number of employees at the workplace. NS-SEC is an important census variable that provides

particularly useful information for small areas when analysed in combination with other census variables such as ethnic group.

The questions on occupation, industry, self-employed or employee, and supervisor status are mostly unchanged since the 2001 Census. However, some minor wording changes have been made for better understanding of the question and to therefore improve the quality of the data collected.

Information on workplace address and travel to work is used for transport planning and modelling, and to inform both national and local transport services and policies; for example, regarding transport accessibility and reduction in private car usage. These questions were included in the 2001 Census and are also largely unchanged as they performed well and the user requirements have not changed.

Information on hours worked is used to identify working patterns in local areas and target resources accordingly. Working long hours can be an indicator of poorer quality of life and deprivation. The question that has been recommended for the 2011 Census provides banded response categories as this has been shown to provide higher quality data than the free write-in response option used in the 2001 Census.

The final recommended questions for the 2011 Census for England and Wales are shown over the page. Question recommendations are subject to parliamentary approval which ONS expects to receive in 2010.

Figure 1.1- Economic activity questions

England and Wales (English language)

**26** Last week, were you:

➤ Tick all that apply

➤ Include any paid work, including casual or temporary work, even if only for one hour

working as an employee? ➔ Go to **32**

on a government sponsored training scheme? ➔ Go to **32**

self-employed or freelance? ➔ Go to **32**

working paid or unpaid for your own or your family's business? ➔ Go to **32**

away from work ill, on maternity leave, on holiday or temporarily laid off? ➔ Go to **32**

doing any other kind of paid work? ➔ Go to **32**

none of the above

**27** Were you actively looking for any kind of paid work during the last four weeks?

Yes  No

**28** If a job had been available last week, could you have started it within two weeks?

Yes  No

**29** Last week, were you waiting to start a job already obtained?

Yes  No

**30** Last week, were you:

➤ Tick all that apply

retired (whether receiving a pension or not)?

a student?

looking after home or family?

long-term sick or disabled?

other

**31** Have you ever worked?

Yes, write in the year that you last worked

➔ Go to **32**

No, have never worked ➔ Go to **43**

Wales (Welsh language)

**26** Yr wythnos ddiwethaf a oeddech:

➤ Tidwch bob blwch sy'n berthnasol

➤ Cynhwyswch unrhyw waith am dâl, gan gynnwys gwaith achlysurol neu dros dro, hyd yn oed os dim ond am awr y buoch yn gweithio

yn weithiwr cyflogedig? ➔ Ewch i **32**

ar gynllun hyfforddi a noddir gan y llywodraeth? ➔ Ewch i **32**

yn hunan-gyflogedig neu'n gweithio ar eich llwt eich hun? ➔ Ewch i **32**

yn gweithio am dâl neu'n ddi-dâl i'ch busnes eich hun neu'i fusnes eich teulu? ➔ Ewch i **32**

I ffwrdd o'ch gwaith yn sâl, ar gyfnod mamolaeth, ar eich gwyliau, neu wedi'ch cadw dros dro o'ch gwaith am na all eich cyflogwr gynnig gwaith ar hyn o bryd? ➔ Ewch i **32**

yn gwneud unrhyw fath arall o waith am dâl? ➔ Ewch i **32**

dim un o'r uchod

**27** A oeddech wrthi'n chwilio am unrhyw fath o waith am dâl yn ystod y pedair wythnos ddiwethaf?

Oeddwn  Nac oeddwn

**28** Petal swydd wedi bod ar gael yr wythnos ddiwethaf, a fydddech wedi gallu dechrau arni o fewn pythefnos?

Byddwn  Na fyddwn

**29** Yr wythnos ddiwethaf, a oeddech yn aros i ddechrau swydd yr oeddech eisoes wedi'i chael?

Oeddwn  Nac oeddwn

**30** Yr wythnos ddiwethaf, a oeddech:

➤ Tidwch bob blwch sy'n berthnasol

wedi ymddedol (p'un a oeddech yn cael penswn ai peidio)?

yn fyfyrwr?

yn gofalu am y cartref neu am y teulu?

yn sâl neu wedi bod yn anabl am gyfnod hir?

arall

**31** A ydych wedi gweithio erioed?

Ydw - nodwch y flwyddyn ddiwethaf i'ch weithio

➔ Ewch i **32**

Nac ydw, erioed wedi gweithio ➔ Ewch i **43**

Figure 1.2 – Self-employed or employee

England and Wales (English language)

**33** In your main job, are (were) you:

an employee?

self-employed or freelance without employees?

self-employed with employees?

Wales (Welsh language)

**33** Yn eich prif swydd, a ydych (oeddech):

yn weithiwr cyflogedig?

yn hunan-gyflogedig heb gyflogi gweithwyr eraill?

yn hunan-gyflogedig ac yn cyflogi gweithwyr eraill?

**Figure 1.3 – Occupation**

**England and Wales (English language)**

**34** What is (was) your full and specific job title?

- For example, PRIMARY SCHOOL TEACHER, CAR MECHANIC, DISTRICT NURSE, STRUCTURAL ENGINEER
- Do not state your grade or pay band

\_\_\_\_\_

\_\_\_\_\_

**35** Briefly describe what you do (did) in your main job.

\_\_\_\_\_

\_\_\_\_\_

**Wales (Welsh language)**

**34** Beth yw (oedd) teitl llawn a phenodol eich swydd?

- Er enghraifft, ATHRO YSGOL GYNRADD, MECANYDD CEIR, NYRS ARDAL, PEIRIANNYDD ADEILADU
- Peidiwch â nodi eich gradd na band eich cyflog

\_\_\_\_\_

\_\_\_\_\_

**35** Beth ydych (oeddech) chi'n ei wneud yn eich prif swydd?

\_\_\_\_\_

\_\_\_\_\_

**Figure 1.4 – Supervisor status**

**England and Wales (English language)**

**36** Do (did) you supervise any employees?

- Supervision involves overseeing the work of other employees on a day-to-day basis

Yes     No

**Wales (Welsh language)**

**36** A ydych (oeddech) yn goruchwyllo unrhyw weithwyr?

- Mae goruchwyllo'n golygu cadw golwg ar waith gweithwyr eraill o ddydd i ddydd

Ydw (oeddwn)     Nac ydw (nac oeddwn)

**Figure 1.5 – Industry**

**England and Wales (English language)**

**37** At your workplace, what is (was) the main activity of your employer or business?

- For example, PRIMARY EDUCATION, REPAIRING CARS, CONTRACT CATERING, COMPUTER SERVICING
- If you are (were) a civil servant, write GOVERNMENT
- If you are (were) a local government officer, write LOCAL GOVERNMENT and give the name of your department within the local authority

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Wales (Welsh language)**

**37** Yn eich gweithle, beth yw (oedd) prif weithgarwch eich cyflogwr neu'ch busnes?

- Er enghraifft, ADDYSG GYNRADD, TRWSIO CEIR, ARLWYO CYTUNDEBOL, TRIN CYFRIFIADURON
- Os ydych (oeddech) yn was sifil, nodwch LLYWODRAETH
- Os ydych (oeddech) yn swyddog llywodraeth leol, nodwch LLYWODRAETH LEOL, a nodwch enw eich adran yn yr awdurdod lleol

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Figure 1.6 – Name of employer**

**England and Wales (English language)**

**38** In your main job, what is (was) the name of the organisation you work (worked) for?

➤ If you are (were) self-employed in your own organisation, write in the business name

\_\_\_\_\_

\_\_\_\_\_

No organisation, for example, self-employed, freelance, or work (worked) for a private individual

**Wales (Welsh language)**

**38** Yn eich prif swydd, beth yw (oedd) enw'r sefydliad yr ydych (oeddech) yn gweithio iddo?

➤ Os ydych (oeddech) yn hunan-gyflogedig yn eich sefydliad eich hun, nodwch enw'r busnes

\_\_\_\_\_

\_\_\_\_\_

Dim sefydliad, er enghraifft yn hunan-gyflogedig, neu'n (arfer) gweithio i unigolyn preifat

**Figure 1.7 – Workplace address**

**England and Wales (English language)**

**40** In your main job, what is the address of your workplace?

➤ If you work at or from home, on an offshore installation, or have no fixed workplace, tick one of the boxes below

➤ If you report to a depot, write in the depot address

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Postcode \_\_\_\_\_

OR  Mainly work at or from home  
 Offshore installation  
 No fixed place

**Wales (Welsh language)**

**40** Yn eich prif swydd, beth yw cyfeiriad eich gweithle?

➤ Os ydych yn gweithio gartref neu o'r cartref, ar safle ar y môr, neu os nad oes gennych weithle penodol, ticiwch un o'r blychau isod

➤ Os ydych yn atebol i swyddog mewn depo, nodwch gyfeiriad y depo isod

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Cod post \_\_\_\_\_

NEU  Gweithio'n bennaf gartref neu o'r cartref  
 Gweithio ar safle ar y môr  
 Dim gweithle penodol

**Figure 1.8 – Travel to work**

**England and Wales (English language)**

**41** How do you usually travel to work?

➤ Tick one box only

➤ Tick the box for the longest part, by distance, of your usual journey to work

Work mainly at or from home

Underground, metro, light rail, tram

Train

Bus, minibus or coach

Taxi

Motorcycle, scooter or moped

Driving a car or van

Passenger in a car or van

Bicycle

On foot

Other

**Wales (Welsh language)**

**41** Sut ydych chi'n teithio i'r gwaith fel arfer?

➤ Ticiwch un blwch yn unig

➤ Ticiwch y blwch ar gyfer y rhan hiraf, o ran pellter, o'ch taith arferol i'r gwaith

Gweithio'n bennaf gartref neu o'r cartref

Trên tanddaearol, metro, tram neu reilffordd ysgafn

Trên

Bws neu fws mini

Tacsï

Beic modur, moped neu sgwter

Gyrru car neu fan

Teithiwr mewn car neu mewn fan

Beic

Cerdded

Arall

**Figure 1.19 – Hours worked**

**England and Wales (English language)**

**42** In your main job, how many hours a week (including paid and unpaid overtime) do you usually work?

15 or less

16 - 30

31 - 48

49 or more

**Wales (Welsh language)**

**42** Yn eich prif swydd, am sawl awr yr wythnos (gan gynnwys oriau ychwanegol am dâl neu heb dâl) y byddwch yn gweithio fel arfer?

15 neu lai

16 - 30

31 - 48

49 neu fwy

## 2. Introduction

The next census takes place on 27 March 2011. The topics to be included were announced in the 2011 Census White Paper, Helping to shape tomorrow, published in December 2008<sup>1</sup>. A paper explaining the development process for the questions recommended for inclusion in the 2011 Census, along with detailed recommendation papers for all topics, is available on ONS's website at <http://www.ons.gov.uk/census/2011-census/2011-census-questionnaire-content/question-and-content-recommendations-for-2011/index.html>.

This paper presents final recommendations for the suite of questions for the 2011 England and Wales Census relating to the labour market, the National Statistics Socio-economic Classification (NS-SEC) and travel to work. The topics covered by this area that will be included in the 2011 Census are:

- economic activity (six questions)
- self-employed or employee
- occupation (job title and job description)
- supervisor status
- industry
- name of employer
- workplace address
- travel to work
- hours worked

Question recommendations on these topics are subject to parliamentary approval which ONS expects to receive in 2010.

Question development for the 2011 Census began in 2005. An iterative and comprehensive process of user consultation, prioritisation of user requirements, and question testing has been carried out to inform the decisions on the questions. This paper reports on evidence from cognitive question testing, a series of postal tests, the 2007 Census Test, and other strands of research.

The questions for England and Wales have been developed through close collaboration with the Welsh Assembly and the census offices of Scotland and Northern Ireland. A key aim of this collaboration was to minimise differences between questionnaires across the UK, although it is recognised that differing circumstances will sometimes require different approaches. A paper outlining the differences between census questionnaires in the UK will be available on the ONS website during 2010.

This paper begins by describing the user requirements for information on labour market, NS-SEC and travel to work. It then describes the question testing and development process and presents the final recommended questions for England and Wales, including both the English and Welsh language versions. Finally, the paper considers any impact on comparability from changes to questions since the 2001 Census.

---

<sup>1</sup> This document is available on the ONS website at <http://www.ons.gov.uk/census/2011-census/2011-census-questionnaire-content/2011-census-white-paper--english.pdf>.

## 3. Background and definitions

### 3.1 Economic activity

The concept of employment is open to interpretation, and therefore the questions used for the census cannot simply ask whether the person is employed or unemployed.

In order to produce accurate and comparable statistics on employment the International Labour Organisation (ILO) has developed definitions for employment, unemployment and economic inactivity for people aged 16 or over. These definitions are used to develop questions for the census and surveys, and are the definitions used by Eurostat (the statistical office of the European Union).

The ILO definitions of unemployment, employment and economic inactivity are as follows:

**Unemployed** - A person is defined as unemployed if they are without a job; want a job; have actively sought work in the last four weeks and are available to start work in the next two weeks; or if they are out of work, have found a job and are waiting to start it in the next two weeks.

**Employed** – A person is defined as employed if they have carried out at least one hour's paid work in a week; are temporarily away from a job eg on holiday; are on a government sponsored training scheme; or are working unpaid for a family business.

**Economically inactive** – Anyone who is out of work but does not meet the criteria for unemployment is defined as economically inactive.

The questions that will be included in the 2011 Census to allow people to be classified according to their economic activity using the ILO definitions are:

- whether or not they were working in the week before census
- whether they were actively looking for work in the four weeks before census
- whether they were available to start a job within two weeks
- whether they were waiting to start a job already obtained
- reasons for not working
- whether they have ever worked

These questions are collectively referred to throughout the paper as the economic activity questions.

### 3.2 National Statistics Socio-economic Classification (NS-SEC)

The National Statistics Socio-economic Classification (NS-SEC) is a derived variable that is based on responses to a series of labour market questions, which have user requirements both collectively and individually. NS-SEC was devised in 2001 to measure employment relations and conditions of occupations, as a replacement for Social Class and Socio-economic Group.

Individuals are classified according to the following NS-SEC analytic classes:

1. higher managerial and professional occupations
  - 1.1. large employers and higher managerial occupations

- 1.2. higher managerial occupations
  2. lower managerial and professional occupations
  3. intermediate occupations
  4. small employers and own account workers
  5. lower supervisory and technical occupations
  6. semi-routine occupations
  7. routine occupations
  8. never worked and long term unemployed
- \*L15 Full-time students  
 \*L16 Occupations not stated or inadequately described  
 \* For complete coverage these categories are added as 'not stated'.

Occupation is fundamental to the derivation of NS-SEC. Standard Occupational Classification (SOC) 2010 will be used for the occupation coding of the 2011 Census.

Ideally five pieces of information are available when using the coding index of SOC:

- job title
- description of the job
- industry of the employer, or individual if self-employed
- details of training or educational qualifications needed for the job
- size of organisation (number of employees at the workplace).

There are three main methods for deriving NS-SEC that were considered for use in the 2011 Census; the full, reduced and simplified methods. The full method produces the best results, but requires the most detail in order to assign NS-SEC analytic classes and therefore gives more accurate results. Table 3.1 shows the information requirements for each derivation method.

**Table 3.1 – NS-SEC derivation methods and information requirements**

Question	NS-SEC derivation method		
	Full	Reduced	Simplified
Occupation (job title and job description)	✓	✓	✓
Qualifications (for occupation coding)	✓	✓	✓
Industry (for occupation coding)	✓	✓	✓
Self-employed or employee (for employment status)	✓	✓	✓
Supervisor status (for employment status)	✓	✓	
Number of employees at the workplace	✓		

The 2011 Census will collect information on occupation, qualifications, industry, self-employed or employee and supervisor status. However, the question on number of employees at the workplace did not work well in the 2001 Census and there was a relatively high non-response rate of 13.9 per cent. Testing since the 2001 Census has shown inconsistencies in how respondents interpreted this question. They either answered based on how many people worked for the entire organisation, the number

of people within the building that they work, or the number of people employed directly by their manager. Agency workers and self-employed people had particular difficulty with this question.

Research conducted by ONS revealed that excluding the question on number of employees at the workplace, and therefore deriving NS-SEC using the reduced method, would only result in a 1.8 per cent drop in the quality of the NS-SEC data. This compares to a 24 per cent reduction in data quality if the simplified method was used. For these reasons a decision was taken to exclude the question on number of employees at the workplace for the 2011 Census and derive NS-SEC using the reduced method.

### **3.3 Filters in the questionnaire**

Although there are a large number of labour market questions on the 2011 Census questionnaire, not every individual is required to answer all the questions. Filter questions are in place to ensure that people answer only what is necessary.

The labour market questions are only answered by people aged 16 and over. There is an age filter in place to route people aged 15 and under to the end of the questionnaire.

The questions below are only asked to people who were not working in the week before census:

- actively looking for work in the four weeks before census
- availability to start a job within two weeks
- waiting to start a job already obtained
- reasons for not working
- have you ever worked?

The questions required to derive NS-SEC, (ie occupation, self-employed or employee, industry, name of employer and supervisor status), need to be answered by all respondents aged 16 and over, even if they are not working in the week prior to the census. If people are not currently working they are asked to provide information on their last main job, so that NS-SEC can be calculated based on this information. A filter question is in place to ensure that the necessary information is collected.

The questions on workplace address, travel to work and hours worked only need to be answered by people who were working in the week prior to census so there is a filter before these questions to ensure that people who were not working are routed past these questions.

## 4. User requirements

### 4.1 Consultation process

The inclusion of questions in the census must be supported by a clear user requirement for the information. The user consultation process for the 2011 Census began in 2005, with a formal three month general topics consultation.

Topic experts from ONS's labour market division, the Classification and Harmonisation Unit (CHU) and the Centre for Regional and Local Statistics were chosen to act as 'topic leads' to advise on user requirements and conduct further consultations where necessary, to refine user requirements.

The requirements for information on travel to work were established through discussion at the Population Definitions Working Group (PDWG). This group was set up to provide clear definitional advice to ONS on population issues, particularly those relating to the 2011 Census. The PDWG consisted of mostly external stakeholders from central government, local authority and academic backgrounds, as well as staff from the Office for National Statistics (ONS) and Welsh Assembly Government (WAG). It was primarily an England and Wales group, led by a designated topic lead in ONS's Centre for Demography, with members of staff from the statistical offices in Scotland and Northern Ireland as correspondence members.

A consultation was carried out in January 2007 to refine the user requirements for information on occupation, industry and NS-SEC. It was sent to users who had previously expressed an interest in NS-SEC and also to members of the census advisory groups. Users were specifically asked to comment on the impact of the differing levels of drop in quality of NS-SEC associated with different derivation methods.

Consultation on economic activity was conducted via correspondence with key users and through discussion at meetings of the Central and Local Information Partnership (CLIP) sub-group.

The key user needs for information on all the labour market and travel to work topics are outlined in the following sections.

### 4.2 General uses of labour market information

ONS uses labour market statistics from the census to provide grossing populations for the samples in the Labour Force Survey (LFS), so correctly measuring the labour market characteristics of the entire population is of primary importance.

Census data for local areas are used by local and regional authorities, devolved administrations, central government departments, other public sector bodies, academics and research institutions. The data are used to understand local labour markets, employment and unemployment, and to develop policies in these areas, especially at local and regional levels.

The data are also used in the development of research to understand how employment and labour markets are linked to other policy areas covered by the census, such as health, ethnicity, migration and qualifications.

### **4.3 Economic activity status**

There is a strong requirement for information about economic activity status from across the user community. Information on economic activity has been collected in varying forms since the 1851 Census.

The information is required by central and local government, researchers, and other organisations to understand local labour markets and to develop and monitor policies at the local and regional levels. It is used to identify deprived areas, to allocate community and economic development funding and for housing and transport planning purposes.

Economic activity data are available from the LFS but the sample size is too small to provide reliable estimates for small areas. The smallest spatial unit for which data is available is local authority district level. The census is able to provide very small area data that when cross-tabulated against other variables such as ethnicity and long-term illness or disability, can identify local areas where barriers to employment exist and allows the targeting of employment policies to get people into work.

When collecting information on economic activity status it is essential that International Labour Organisation (ILO) standard definitions are used. There is a strong requirement to collect information on the economic activity of all respondents aged 16 and over and to make census outputs comparable with results from the LFS.

In addition to the applications of the economic activity status by external data users, census information is also vitally important to validate the information that ONS collects about the labour market using household surveys. After the 2001 Census, ONS compared estimates from the census with those from the LFS to better understand the reasons for the differences between the two sources.<sup>2</sup> The 2001 Census records were also matched with household survey returns that allowed ONS to look at (among other things) the extent of non-response bias in the Labour Force Survey, and how this impacts on estimates.

### **4.4 National Statistics Socio-economic Classification (NS-SEC)**

The 2007 consultation revealed that 83 per cent of respondents had a requirement to collect information to enable NS-SEC to be derived. The users of NS-SEC information are varied, and include local and regional authorities, devolved administrations, central government departments, other public sector bodies, academics and research institutions.

NS-SEC is frequently used to enable research and identify the impact of targeted policy initiatives on specific groups in society. The data are used to understand social patterns, local labour markets, employment and unemployment and to develop policies in these areas especially at local and regional levels. The data are also used in the development of research and policy to understand how social positions are linked to other policy areas covered by the census, such as health, ethnicity, migration, qualifications, education and transport.

NS-SEC information is used for the purposes of resource allocation at central and local government level. It is also used in policy development and monitoring, to improve service provision and inform various strategies such as economic

---

<sup>2</sup> [http://www.statistics.gov.uk/articles/labour\\_market\\_trends/LMT\\_Census.pdf](http://www.statistics.gov.uk/articles/labour_market_trends/LMT_Census.pdf)

development and community regeneration strategies. NS-SEC information is also used as a measure of deprivation, to measure inequalities, to understand social patterns and local labour markets and develop policies in these areas. There has also been a request for information on approximated social grade, derived from occupation and employment related information.

The consultation specifically asked users to consider whether the associated reduction in quality of NS-SEC using different derivation methods would be acceptable to them. Most organisations that responded to the consultation stated that deriving NS-SEC using the simplified method would have a serious effect on the usage of the data. One respondent commented that: "a 24 per cent reduction is totally unacceptable. The reduction in quality would be too great for small area analysis and would be likely to render the NS-SEC so unreliable as to be not worth the resources required to compile it" However, most respondents were satisfied with NS-SEC being derived using the reduced method, claiming this would not have a major impact on their use of census data. As mentioned in section 3.2 this is the method that has been chosen for the 2011 Census.

#### **4.5 Self-employed or employee and supervisor status**

Information on whether someone is self-employed (with or without employees) or an employee, and whether or not they supervise any employees, is required to create the composite variable: employment status. A person's employment status refers to being an employee or self-employed, and to their position in the seniority structure of the workplace (for example a foreman, supervisor, manager, or other employee). This variable is essential for the reduced derivation method of NS-SEC.

Employment status information is used for analysis of labour market trends, for transport planning, for employment forecasting, reviewing quality of jobs by industry, and to formulate policies on enterprise and entrepreneurship.

A question on self-employed/employee has been included in the census since 1851. As well as its use in deriving NS-SEC it also has some use in its own right, for example to analyse local labour markets and develop and monitor policies that encourage new businesses. There is little need for information on supervisor status other than its use in deriving NS-SEC.

#### **4.6 Occupation**

A question on occupation has been included since the first census in 1801.

Occupation information is collected by asking for job title and a brief description of the job. It is coded using the Standard Occupational Classification (SOC). As explained in section 3.2 occupation data are required for the derivation of NS-SEC.

The majority (81 per cent) of respondents to the consultation stated that they used occupation data from the 2001 Census, and 87 per cent replied that they will have a requirement for occupation data from the 2011 Census, as it is useful for analysis of small groups, small geographical areas, for labour market analysis, and for work on policy issues.

Central government departments use occupation data to provide an understanding of the workforce and the type of skills available; to compare ethnic and religious populations; to compile mortality statistics by occupation; and for analysis of small

groups in society. This information is particularly useful for local economic development, monitoring labour market trends and contributing to the assessment of interventions (such as schemes to increase the number of skilled jobs for local residents).

Occupation is used with other labour market information to understand economic performance and analyse local labour markets, to inform local development frameworks, and for economic and community development strategies. It also influences both central and local government resource allocation, Public Service Agreement (PSA) targets for regional competitiveness, and can inform equality and diversity strategies.

Other uses of occupation data are as a measure of deprivation and to aid service provision such as skills and training to areas of need. It is also required to monitor and help forecast future occupational structures and hence skill and training needs.

#### **4.7 Industry and name of employer**

A question on industry has been asked since the 1911 Census. Industry is determined by reference to the main activity of a respondent's employer (or own business if self-employed). It is coded using the UK Standard Industrial Classification of Economic Activities (UKSIC). UKSIC 2007 will be used for the 2011 Census.

83 per cent of respondents to the consultation stated that they used industry information from the 2001 Census in its own right, and 79 per cent stated that they will still have a requirement for industry information from the 2011 Census.

Industry information is needed in the coding of certain occupations. Without this information there will be an effect on the quality of occupation coding and a follow-on effect on the quality of the NS-SEC. It is estimated that if information on industry is not used in the coding of occupation, the accuracy of the NS-SEC derivation is reduced by 6.3 per cent.

Industry information is required to understand economic performance and analyse local labour markets as well as to identify and monitor disadvantaged areas and concentrations of employees in low paid industries. It is also used in monitoring regional spatial strategies, reporting on government Public Service Agreement (PSA) targets on regional competitiveness and monitoring strategies for local and economic development.

The industry question allows researchers to identify any associations between the characteristics of individuals and industry; for example to highlight the concentration of groups of people in industries associated with low-paid employment. This information would inform social inclusion efforts.

Knowledge of trends in employment by industry assists planners in developing or revising employment land policies. For instance, there may be increased demand for land for retail and office uses but decreasing demand for traditional industries. In combination with information about occupation, this information is particularly useful for economic development and regeneration, monitoring labour market trends and contributing to the assessment of intervention strategies.

#### **4.8 Workplace address and travel to work**

A question on workplace address has been included in the census since 1901, and a question on travel to work since 1971.

The workplace address question provides a basis for estimating the daytime population in local areas and the services they might use such as transport, food outlets, refuse collection, etc. Together with information on travel to work, this information helps local authorities to assess likely travel patterns and times of respondents, which can in turn inform the requirements on public transport, with a view to reducing reliance on private transport.

The workplace address question is also included for resource allocation purposes. For example, there has been debate about the population for which individual Primary Care Trusts have to provide health care; whether it should only be provided for local residents or for all those who are employed in the area. Additionally, there have been suggestions from the Department of Health and others supporting the provision of healthcare for people closer to their place of work, for example, for commuters at walk-in centres at railway stations. Having an indication of the population at different times of the day will help to develop this policy.

Collecting information on travel to work informs both national and local transport services and policies, for example, regarding transport accessibility and reduction in private car usage. It is also used for transport planning and modelling. For example, local authorities can assess the need for public transport in their area, eg new bus routes or changes to existing bus routes.

For the first time, the inclusion of a question on second addresses in the 2011 Census will allow better informed origin-destination analyses that take into account the mode of travel to work from a second address, rather than a primary address. This information was not available in the 2001 Census.

There was some user demand to collect information on study place address and travel to place of study. However, due to space constraints on the questionnaire this information could only be collected by combining it with the questions on workplace address and travel to work. Although this approach has successfully been carried out by other statistical organisations, eg in the 2001 Census in Scotland, users in England and Wales, including the Department for Transport (DfT) have expressed concerns that this approach would cause confusion, lessen the utility of both measures, and reduce comparability with the 2001 Census. DfT has also noted that travel to school only represents around 3 per cent of total journey distance whereas travel to work makes up around 18 per cent, highlighting the importance of travel to work over travel to study. Additional issues are that working students may not be clear about which address to include and so many working students could be lost from the travel to work data. Also, the cost of coding would be increased as more addresses would be captured. There are considered to be sufficient alternative sources for travel to study and study place address data, such as schools census data.

#### **4.9 Hours worked**

Information on hours worked is used to identify working patterns in local areas and target resources accordingly. Information on people working long hours is an indicator of deprivation and can inform neighbourhood renewal strategies. Number of hours worked can also be a quality of life indicator, for example to see whether lower-

skilled people are more likely to work longer hours and therefore have a lower quality of life.

The hours worked question is useful to gain an understanding, at a local level, of likely travel patterns and times, which can inform the requirements on public transport with a view to reducing reliance on private transport.

Knowledge about peoples' working patterns is important to the understanding of economic performance and appropriate policy response. This information also provides evidence for the working time directive.<sup>3</sup>

---

<sup>3</sup>The European Working Time Directive is a directive from the Council of Europe to protect the health and safety of workers in the European Union. It lays down minimum requirements in relation to working hours, rest periods, annual leave and working arrangements for night workers.

## 5. Methods of question testing

This section gives an overview of the research and question testing that was completed in the development of content for the 2011 Census. The relevant findings from these tests are discussed in the following section on the development of the labour market and travel to work questions.

### 5.1 Qualitative testing

The Data Collection Methodology (DCM) branch of ONS was commissioned to carry out a programme of cognitive question testing on census questions in English and in Welsh. The English language testing began in February 2005, and the Welsh language testing began in October 2007. The aim of this testing was to develop questions that are designed to collect accurate and meaningful information that meets user requirements, to minimise the burden on respondents, and to conform as closely as possible to best practice of questionnaire design.

The qualitative testing was split into four main phases:

1. **Pre-testing for the 2007 Census Test** (February 2005 to April 2006)
2. **Whole Questionnaire Testing for the 2007 Census Test** (June to August 2006)
3. **Testing for the 2009 Census Rehearsal**
  - Wave 1 (November 2006 to January 2007)
  - Wave 2 (April to May 2007)
  - Wave 3 (July to September 2007)
  - Wave 4 (October to November 2007)
  - Wave 5 (January to March 2008)
  - Wave 6 (April to July 2008)
  - Welsh language testing, Wave 1 (October to November 2007)
  - Welsh language testing, Wave 2 (June to July 2008)
4. **Testing for the 2011 Census**
  - Wave 7 (March to April 2009)
  - Whole Questionnaire Testing—English language (June to July 2009)
  - Whole Questionnaire Testing—Welsh language (June to July 2009)

### 5.2 Quantitative testing

ONS has also conducted quantitative question testing at various intervals since 2006 using a variety of methodologies.

#### 5.2.1 Lambeth Postal Test

During June and July 2006, a test of postal enumeration procedures was carried out in the London Borough of Lambeth. Although this was designed to test aspects of the census field operation, it also allowed the opportunity to analyse and evaluate the performance of the questions. A response rate of 25 per cent was obtained and the data was keyed for 366 households and 787 individual respondents.

### **5.2.2 2007 Postal Test**

The ONS Questionnaire Design and Content team ran a postal test of 10,400 households across England in April 2007. Although the main objective of this test was aimed at testing issues related to questionnaire length, it also provided valuable information on the acceptability and understanding of definitions and questions.

### **5.2.3 2007 Census Test**

A large-scale census test, covering 100,000 households, was carried out across England and Wales in May 2007. The questionnaire that was used for the test was 24 pages long and included four pages of individual questions per person for five respondents. This allowed the opportunity to test new and updated questions.

The questionnaire included the economic activity status questions. The remainder of the labour market questions which were largely unchanged from 2001 and were performing well were omitted to create space for new questions that required testing, such as the income question.

Please refer to the 2007 Census Test report for greater detail, available on the ONS website at <http://www.ons.gov.uk/census/2011-census/2011-census-project/2007-test/2007-test-questionnaire-evaluation.pdf>.

### **5.2.4 2008 Postal Test**

In July 2008 two postal surveys were carried out, each with a sample of 10,200 households, one across England, and the other in Northampton. The main purpose was to test any impact on response rates of including a question on intended length of stay in the UK. However, the test also allowed valuable analysis to be conducted on the performance of the questions developed for the 2009 Rehearsal.

### **5.2.5 March 2009 Postal Test**

In March 2009 a postal test was conducted with the primary aim of assisting the development of questions relating to the student population. Around 20,000 questionnaires were sent to three separate sample areas: 10,000 were sent to a random sample of households in England, 5,000 were sent to Durham city and 5,000 were sent to an area of central Norwich. The latter two areas were chosen because they are known to have a high concentration of students, along with a number of other characteristics desirable for testing.

### **5.2.6 July 2009 Postal Test**

In July 2009 a postal test was conducted with the primary aim of testing the questions relating to ethnicity and identity. 27,000 questionnaires were sent to areas selected for characteristics that were desirable for the purposes of the test.

## 6. Development of the questions

This section provides a detailed description of how the labour market, NS-SEC and travel to work questions evolved from the beginning of testing through to the final recommended version of the question. It uses relevant evidence gathered from the strands of testing described in the preceding section of the paper.

Overall, these questions performed well in the 2001 Census, and in the interest of maintaining comparability with previous census results and standardised international measures, the degree of change was minimised. However, slight modifications were made in cases where testing showed that aiding respondents will help to collect the highest possible quality of responses. This is particularly true for questions where write-in responses are coded to a standard classification system, such as occupation title and industry. Refining the question to encourage respondents to provide additional detail will enable more accurate coding of the responses.

The paper does not discuss the filter questions that remind the respondent to answer for their main job, to filter those who did and did not have a job in the last week or the age filter question. These have changed only slightly from their 2001 Census equivalents and do not directly collect any information from respondents.

### 6.1 Economic activity questions

#### 6.1.1 Working status in previous week

**Figure 6.1 – 2001 Census**

**18** Last week, were you doing any work:

- as an employee, or on a Government sponsored training scheme,
- as self-employed/freelance, or in your own/family business?

◆ ✓ 'Yes' if away from work ill, on maternity leave, on holiday or temporarily laid off.

◆ ✓ 'Yes' for any paid work, including casual or temporary work, even if only for one hour.

◆ ✓ 'Yes' if you worked, paid or unpaid, in your own/family business.

Yes ► Go to **24**

No ► Go to **19**

The non-response rate to this question in the 2001 Census was 2.1 per cent. In pre-testing for the 2007 Census Test, the 2001 Census question was tested with respondents. In addition, a redesigned question was also tested, with the original notes separated into individual response options with routing arrows. This change was considered to mirror the approach used in the Labour Force Survey.

The question was redesigned several times, using findings from the rounds of cognitive testing to continually refine and improve it. Testing of the 2001 Census question also continued to gather more evidence about respondents' perceptions of, and answers to, the original question compared to the redesigned version. Overall, it was found that the redesigned question was preferred by respondents and collected the desired information accurately. It was also found that respondents were more likely to read the information when it was presented as a list of tick-boxes rather than as instructions in text. Respondents said that the redesigned question was easy and clear, and that the routing arrows were easy to follow.

The 2001 Census question was effective at dividing respondents into those working in the preceding week or not, but did not provide any detail about what type of work the person was doing. The revised structure of the 2011 Census question, with more specific response categories, will generate a greater wealth of information about respondents' work situations.

A new category was added to the list to cover any other type of paid work, worded as 'doing any other kind of paid work'. This acts as a 'catch-all' to capture anything not explicitly covered by the preceding tick-boxes and will ensure that all respondents in any kind of paid work are included in something other than the 'none of the above' option.

The question was then quantitatively tested in the Lambeth Postal Test. A small minority (4.2 per cent) of respondents left this question blank, although many went on to answer some of the following labour market questions.

There was evidence that some respondents wanted to be able to report that they were retired in this question and then not have to answer all of the other labour market questions. For example, it was observed that a respondent had ticked 'none of the above', but then wrote 'retired' along the routing arrow. At least a fifth of respondents to the Lambeth Postal Test did not follow the routing correctly. These were mostly economically active respondents who missed the routing instruction and continued to the remaining questions in error.

Similarly, in the 2007 Census Test, it was found that there was a 27.3 per cent error rate for this question with the routing instructions; in that people who ticked one of the response categories with a routing to skip ahead went on to answer the looking for work question in error. While these routing errors are a useful indicator of how well respondents understand how to answer the questionnaire, they are not as important as question non-response rates.

In the 2008 Postal Test, the question was found to work well with a relatively low non-response rate of 3.9 per cent. The majority of people either ticked 'working as an employee', at 42.8 per cent, or 'none of the above', at 42.4 per cent.

This question was then tested in six waves of qualitative testing for the 2009 Census Rehearsal.

**Figure 6.2 – Testing for the 2009 Census Rehearsal, Wave 1**

**20** Last week were you:

- ◆ Tick all boxes that apply.
- ◆ Include any paid work, including casual or temporary work, even if only for one hour.
- working as an employee? → Go to **25**
- on a Government sponsored training scheme? → Go to **25**
- self-employed or freelance? → Go to **25**
- working paid or unpaid for your own or your family's business? → Go to **25**
- away from work ill, on maternity leave, on holiday or temporarily laid off? → Go to **25**
- doing any other kind of paid work? → Go to **25**
- none of the above

The only issue observed during Wave 1 was that respondents often missed the routing instructions and proceeded to answer the subsequent labour market

questions. They tended to become confused as the questions did not correspond with their previous answer.

The English language Wave 3 question was tested in Welsh for the first wave of Welsh language testing. As found for the English language testing, some respondents missed routing instructions and continued to complete the subsequent questions regarding looking for work. However, these respondents realised that the questions were not relevant, and so crossed out their responses and then routed correctly to the employment questions.

An issue arose concerning the translation of 'temporarily laid-off'. An unemployed respondent understood the Welsh translation of this term ('yn ddi-waith dros dro') to mean 'temporarily unemployed'. This respondent ticked the option containing this term, which meant that they were then routed away from the relevant 'looking for work' questions.

In subsequent rounds of testing, the routing arrows were redesigned and fewer participants missed the directions if they ticked a box to indicate they were economically active. It was found that respondents did tick multiple boxes where applicable, as instructed. A few respondents with different circumstances were unsure which box to tick, but were able to select an appropriate response.

This question was then tested in Wave 7 and Whole Questionnaire Testing for the 2011 Census in the English language, and Whole Questionnaire Testing for the 2011 Census in the Welsh language. No further issues arose in this testing.

The question performed well in quantitative testing with a non response rate of 3.9 per cent in both the 2008 Postal Test and March 2009 Postal Test.

### 6.1.1.1 Final recommended questions on working status in the previous week

The questions below are recommended for the 2011 Census subject to approval by Parliament through the legislative process.

**Figure 6.3 Final question for England and Wales (English language)**

**26** Last week, were you:

- Tick all that apply
- Include any paid work, including casual or temporary work, even if only for one hour
- working as an employee? ➔ Goto **32**
- on a government sponsored training scheme? ➔ Goto **32**
- self-employed or freelance? ➔ Goto **32**
- working paid or unpaid for your own or your family's business? ➔ Goto **32**
- away from work ill, on maternity leave, on holiday or temporarily laid off? ➔ Goto **32**
- doing any other kind of paid work? ➔ Goto **32**
- none of the above

**Figure 6.4 Final question for Wales (Welsh language)**

**26** Yr wythnos ddiwethaf a oeddech:

- Ticiwch bob blwch sy'n berthnasol
- Cynhwyswch unrhyw waith am dâl, gan gynnwys gwaith achlysurol neu dros dro, hyd yn oed os dim ond am awr y buoch yn gweithio
- yn weithiwr cyflogedig? ➔ Ewch i **32**
- ar gynllun hyfforddi a noddir gan y llywodraeth? ➔ Ewch i **32**
- yn hunan-gyflogedig neu'n gweithio ar eich liwt eich hun? ➔ Ewch i **32**
- yn gweithio am dâl neu'n ddi-dâl i'ch busnes eich hun neu i fusnes eich teulu? ➔ Ewch i **32**
- i ffwrdd o'ch gwaith yn sâl, ar gyfnod mamolaeth, ar eich gwyliau, neu wedi'ch cadw dros dro o'ch gwaith am na all eich cyflogwr gynnig gwaith ar hyn o bryd? ➔ Ewch i **32**
- yn gwneud unrhyw fath arall o waith am dâl? ➔ Ewch i **32**
- dim un o'r uchod

## 6.1.2 Looking for work /available to work/waiting to start a job

**Figure 6.5 – 2001 Census**

**19** Were you actively looking for any kind of paid work during the last 4 weeks?

Yes       No

**20** If a job had been available last week, could you have started it within 2 weeks?

Yes       No

**21** Last week, were you waiting to start a job already obtained?

Yes       No

These questions were not expected to change significantly as they were designed to collect information according to the ILO definitions.

In early waves of testing the question on availability to start work was modified as some people had questioned what was meant by the question 'could you have started it?'. This was a finding that also emerged from the 2001 Census quality survey<sup>4</sup> where it was found that some respondents said they could have started work but they would not have wanted to. Several versions of the question were tested to see if they improved respondents' understanding of the concept, such as asking if they were 'willing and able' to start a job. However, it was decided to retain the existing wording as the understanding of the questions was similar and maintaining consistency with the Labour Force Survey was a key requirement.

For Wave 3 the question wording on waiting to start a job was amended from 'obtained' to the more plain English term 'got'.

**Figure 6.6 – Pre-testing for the 2007 Census Test, Wave 3**

Last week, were you waiting to start a job you had already got?

Yes

No

Replacement of the word 'obtained' with the word 'got' resulted in some confusion as the word 'got' was sometimes interpreted as meaning that someone was already working. Respondents felt that the word 'obtained' was clearer, so the question reverted to its original wording.

<sup>4</sup> 'Census 2001 Quality Report for England and Wales' is available on the National Statistics website at: <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=14212>

No further changes were made to these questions and at the end of the testing period, the only changes to these questions since the 2001 Census was to change numbers to words in line with consistent treatment of numbers throughout the questionnaire.

Generally no issues arose with these questions in cognitive testing. In the postal tests the questions performed consistently but with fairly high levels of item non-response, particularly for the questions on availability to start work and waiting to start a job. For example in the March 2009 Postal Test the non-response rates were 9 per cent and 8.1 per cent respectively, and even higher at 11.7 per cent and 11.4 per cent in the 2008 Postal Test. Further analysis of these non-responses shows that much of this can be attributed to people of state pension age (males aged 65 and over and females aged 60 and over).

It is possible that respondents in the older age groups do not believe the employment questions apply to them or they consider the answers to be obvious. This is something that has been demonstrated in other tests as well. However, these questions are designed to meet ILO definitions of economic activity/inactivity and need to be asked to all those who were not working in the previous week, without an upper age limit as was the case in the 2001 Census. This change will also make the question consistent with the Labour Force Survey.

### 6.1.2.1 Final recommended questions on looking for work /available to work/waiting to start a job

The questions below are recommended for the 2011 Census subject to approval by Parliament through the legislative process.

**Figure 6.7 Final questions for England and Wales (English language)**

**27** Were you actively looking for any kind of paid work during the last four weeks?

Yes       No

**28** If a job had been available last week, could you have started it within two weeks?

Yes       No

**29** Last week, were you waiting to start a job already obtained?

Yes       No

**Figure 6.8 Final questions for Wales (Welsh language)**

**27** A oeddech wrthi'n chwilio am unrhyw fath o waith am dâl yn ystod y pedair wythnos ddiwethaf?

Oeddwn       Nac oeddwn

**28** Petai swydd wedi bod ar gael yr wythnos ddiwethaf, a fydddech wedi gallu dechrau arni o fewn pythefnos?

Byddwn       Na fyddwn

**29** Yr wythnos ddiwethaf, a oeddech yn aros i ddechrau swydd yr oeddech eisoes wedi'i chael?

Oeddwn       Nac oeddwn

### 6.1.3 Reasons for not working

**Figure 6.9 – 2001 Census**

**22** Last week, were you any of the following?

♦ *✓ all the boxes that apply.*

- Retired
- Student
- Looking after home/family
- Permanently sick/disabled
- None of the above

For the first wave of pre-testing for the 2007 Census Test, this question was combined with the working status in the previous week question. However, due to respondent confusion with the routing instructions, especially for those who could tick more than one category, the questions were returned to two separate questions.

Throughout early waves of testing it was found that the term 'retired' was interpreted in different ways, and some respondents queried whether they had to be in receipt of a pension to be classified as retired. This was especially the case for those respondents who retired before pension age. To clarify this option for respondents, the category was amended to read 'retired (whether receiving a pension or not)?'

For Wave 3 the question wording was shortened to remove unnecessary text and the response option 'permanently sick or disabled?' was replaced with 'long-term sick or disabled' to bring it in line with the Labour Force Survey.

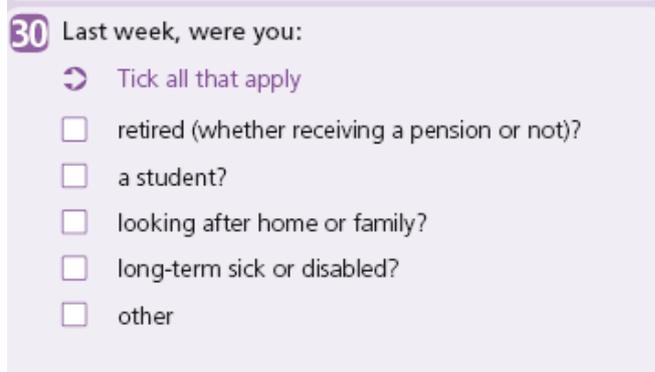
The question was then tested in six waves of testing for the 2009 Census Rehearsal, Wave 7 and Whole Questionnaire Testing for the 2011 Census, plus three waves of Welsh language testing. No issues arose during these waves of testing.

The question has performed reasonably well in quantitative testing. In the 2008 Postal Test the non-response rate was 5.7 per cent and in the March 2009 Postal Test it was 3.1 per cent.

#### 6.1.3.1 Final recommended questions on reasons for not working

The questions below are recommended for the 2011 Census subject to approval by Parliament through the legislative process.

##### Figure 6.10 Final questions for England and Wales (English language)

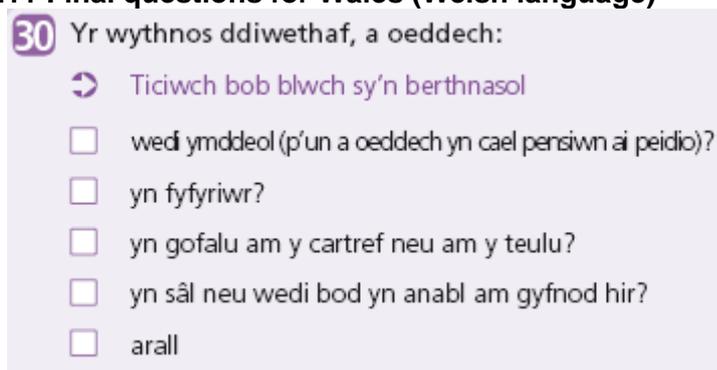


30 Last week, were you:

➔ Tick all that apply

- retired (whether receiving a pension or not)?
- a student?
- looking after home or family?
- long-term sick or disabled?
- other

##### Figure 6.11 Final questions for Wales (Welsh language)



30 Yr wythnos ddiwethaf, a oeddech:

➔ Ticiwch bob blwch sy'n berthnasol

- wedi ymddeol (p'un a oeddech yn cael pensiwn ai peidio)?
- yn fyfyrwr?
- yn gofalu am y cartref neu am y teulu?
- yn sâl neu wedi bod yn anabl am gyfnod hir?
- arall

## 6.1.4 Ever worked

Figure 6.12 – 2001 Census

**23** Have you ever worked?

Yes, *please write in the year you last worked*

No, have never worked

▶ Go to **24**

▶ Go to **36**

The 2001 Census question was tested in the first wave of pre-testing for the 2007 Census Test, and no concerns were raised. In early stages of testing, the feasibility of asking for the month as well as the year last worked was tested, in order to gather more information about the long-term unemployed.

When trying to remember the month and year that they had last worked, respondents were split into two groups. Those who found it easy to answer had either retired from work recently, or could associate the month that they last worked with another significant event, such as a birthday. All those who found the question difficult to answer had not worked for the past 20 years or more. These respondents said they could give an approximate answer for the year they last worked but were anxious as to whether this would be acceptable.

Those respondents who answered 'Yes' to this question made more routing errors than those who answered 'No'. This was sometimes due to respondents forgetting which question to 'go to' once they had turned the page.

Given the difficulty that some respondents had in reporting the month and year they last worked, and the fact that there is no specific user requirement to collect 'month last worked', it was recommended that the question reverted back to the original wording.

This question was then used in the testing for the 2009 Census Rehearsal, and in Wave 7 and Whole Questionnaire Testing for the 2011 Census. The question was also tested in three waves of Welsh language testing. The question remained the same, aside from minor design changes. Generally, respondents who were not in paid employment were able to remember the year that they last worked. As found in previous waves of testing, respondents sometimes referred to a memorable event such as a birthday when thinking of their answer.

In quantitative tests the question performed well with non-response rates of 5 per cent in the 2008 Postal Test and 2.1 per cent in the March 2009 Postal Test.

#### 6.1.4.1 Final recommended questions on ever worked

The questions below are recommended for the 2011 Census subject to approval by Parliament through the legislative process.

**Figure 6.13 Final question for England and Wales (English language)**

**31** Have you ever worked?

Yes, write in the year that you last worked

→ Go to **32**

No, have never worked → Go to **43**

**Figure 6.14 Final question for Wales (Welsh language)**

**31** A ydych wedi gweithio erioed?

Ydw - nodwch y flwyddyn ddiwethaf ichi weithio

→ Ewch i **32**

Nac ydw, erioed wedi gweithio → Ewch i **43**

**Figure 6.15 – 2001 Census**

**25** Do (did) you work as an employee or are (were) you self-employed?

Employee

Self-employed with employees

Self-employed/freelance without employees

The non-response rate for the 2001 question was 6.5 per cent.

In early stages of testing, using the 2001 Census question, it was found that this question was well understood and accurately answered by all respondents. However, for Wave 3 of pre-testing prior to the 2007 Census Test, the question was re-worded slightly to remind respondents to answer only for their main job. The response options were also re-ordered so that the options were presented in the expected order of frequency, that is, for those self-employed without employees ahead of those with employees in the list.

**Figure 6.16 – Pre-testing for 2007 Census Test, Wave 3**

**27** In your main job, are (were) you:

- an employee?
- self-employed or freelance without employees?
- self-employed with employees?

Respondents answered this question easily and stated that they had found the question to be straightforward and clear. However, some respondents occasionally felt that none of the options applied to them, or they misunderstood the terms 'employer' and 'employee'.

The question was then tested in six waves of testing for the 2009 Census Rehearsal, in the format shown below.

**Figure 6.17 – Testing for the 2009 Census Rehearsal**

**31** In your main job, are (were) you:

- an employee?
- self-employed or freelance without employees?
- self-employed with employees?

No issues arose during this testing; most respondents were able to understand and provide an accurate definition of an 'employee' and 'main job'. This question was then tested in Wave 7 and Whole Questionnaire Testing for the 2011 Census, and again, there was no evidence of any problems. Likewise, the question was also tested in three waves of Welsh language testing, and no new concerns were raised.

The question performed reasonably well in quantitative tests, with non-response rates of 2.8 per cent in the March 2008 Postal Test and 5.1 per cent in the March 2009 Postal Test.

### 6.2.1 Final recommended questions on self-employed or employee

The questions below are recommended for the 2011 Census subject to approval by Parliament through the legislative process.

**Figure 6.18 Final question for England and Wales (English language)**

**33** In your main job, are (were) you:

- an employee?
- self-employed or freelance without employees?
- self-employed with employees?

**Figure 6.19 Final question for Wales (Welsh language)**

**33** Yn eich prif swydd, a ydych (oeddech):

- yn weithiwr cyflogedig?
- yn hunan-gyflogedig heb gyflogi gweithwyr eraill?
- yn hunan-gyflogedig ac yn cyflogi gweithwyr eraill?

## 6.3 Supervisor status

**Figure 6.20 – 2001 Census**

**29** Do (did) you supervise any other employees?

◆ A supervisor or foreman is responsible for overseeing the work of other employees on a day-to-day basis.

Yes       No

The non-response rate to the 2001 Census question was 6.8 per cent. The quality survey showed that some respondents had difficulties with understanding how many people need to be supervised and whether the supervision was in their job specification as perceived by themselves and others.

For the development of the 2011 Census question it was not possible to address these specific issues with the question design. The space available for the question means that it is not possible to include detailed explanations and instructions but there will be help available online - and through the contact centre - in 2011 that should help to address some of the issues.

Early cognitive testing using the 2001 question found that respondents consistently understood the terms 'supervisor' and 'foreman' to be someone who had responsibility for other members of staff and generally thought that the terms used were appropriate.

The word 'other' was removed from the question for Wave 3 because it was identified as being unnecessary.

**Figure 6.21 – Pre-testing for the 2007 Census Test, Wave 3**

**30** Do (did) you supervise any employees?

◆ A supervisor or foreman is responsible for overseeing the work of other employees on a day-to-day basis.

Yes

No

The question and its guidance note referred to slightly different things; the question itself referred to the concept of 'supervision' whereas the note referred to specific job titles associated with 'supervision'. As such, the note was brought in line with the question and amended so that no specific job title was mentioned. The instruction read 'supervision involves overseeing the work of other employees on a day-to-day basis.'

The question remained the same throughout the testing for the 2009 Census Rehearsal, Wave 7 and Whole Questionnaire Testing for the 2011 Census. No issues arose during this testing. The question was also tested in three waves of Welsh language testing, and no Welsh-specific issues were reported. In quantitative tests, the question performed well with non-response rates of 3.4 per cent in the 2008 Postal Test and 3.8 per cent in the March 2009 Postal Test.

The fact that only minor changes were made to this question between the 2001 and 2011 Censuses is not unexpected, given that user requirements had not changed, the question was found to have performed adequately in the 2001 Census, and it is part of the set of standard questions that are used to derive NS-SEC.



It was found that respondents' responses to the presence of examples ranged from finding them helpful, to those who felt that the specific nature of the examples over-complicated the question.

Changes were made to both the question and notes for Wave 3 of pre-testing for the 2007 Census Test. The question itself was amended slightly with the inclusion of the word 'specific'. The intention of including this word was to try to highlight to respondents the importance of writing down a specific job title rather than a general job title.

The instructions were also amended. A smaller number of examples were used to reduce space requirements, and the example 'Hovercraft Engineer' was replaced by 'Structural Engineer'. The instruction for civil servants and local government officers was also amended to a general statement of 'Do not state grade or pay band.'

**Figure 6.25 – Pre-testing for the 2007 Census Test, Wave 3**

28 What is (was) your full and specific job title?

- ◆ For example, PRIMARY SCHOOL TEACHER, DISTRICT NURSE, STRUCTURAL ENGINEER, CAR MECHANIC.
- ◆ Do not state your grade or pay band.

Two rows of 12 empty boxes for writing the answer.

Respondents tended to find the question easy to answer and had no problems thinking about and writing in their answer. It was also found that respondents found the instructions helpful. The word 'specific' was retained within the question because testing suggested that respondents took notice of it when formulating their answer.

The occupation title examples that were selected were chosen, in part, to reflect some of the known cases where respondents had struggled with the appropriate level of detail required. For example, for coding purposes it is preferable to know the level of teaching, and not just the word 'teacher'.

**Figure 6.26 – Testing for the 2009 Census Rehearsal, Wave 2**

30 What is (was) your full and specific job title?

- ◆ For example, PRIMARY SCHOOL TEACHER, CAR MECHANIC, DISTRICT NURSE, STRUCTURAL ENGINEER.
- ◆ Do not state your grade or pay band.

Two rows of 12 empty boxes for writing the answer.

Some respondents found that there was not enough space to write in their full job title. These respondents continued writing outside boxes, under boxes or abbreviated their job title in order to fit it in. An additional row of boxes was considered, however, space restrictions meant this change could not be retained in the final version.

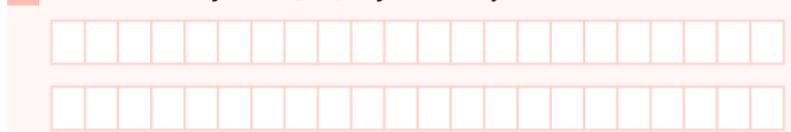
The question was then tested in Waves 4, 5 and 6 for the 2009 Census Rehearsal, Wave 7 and Whole Questionnaire Testing for the 2011 Census, and three waves of Welsh language testing. No further issues arose during testing.

The question non-response rates were reasonable in quantitative tests, at 4.2 per cent in the 2008 Postal Test and 6.2 per cent in the March 2009 Postal Test.

## 6.4.2 Job description

**Figure 6.27 – 2001 Census**

**28** Describe what you do (did) in your *main* job.

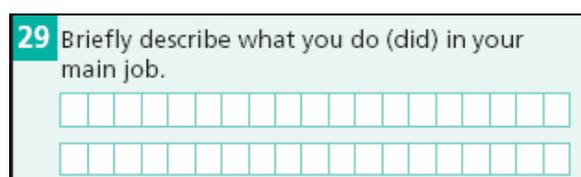


The form consists of two horizontal rows of 15 small rectangular boxes each, intended for writing a job description.

This question has changed only slightly between the 2001 and 2011 Censuses. The main concern that arose during testing was the difficulty for some respondents to condense their job-related tasks into the space provided. Others, with self-explanatory job titles such as Primary School Teacher and Hospital Doctor, queried the necessity of this question.

The word 'briefly' was added to the beginning of the question in an attempt to reassure respondents that they need only write in a few key words associated with the work that they do. This slight modification performed well in testing and was adopted in all subsequent waves of testing.

**Figure 6.28 – Pre-testing for the 2007 Census Test, Wave 2**



The form contains the question: "29 Briefly describe what you do (did) in your main job." Below the question are two horizontal rows of 15 small rectangular boxes each for writing an answer.

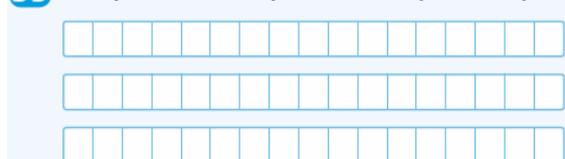
When asked what they understood this question to be asking, respondents explained that it was asking them to write down some key words about what they do (or did) in their main job.

The same question was then tested in Wave 3. In this wave of testing, some respondents noted that their job title and job description were essentially the same, and felt the questions were repetitive. As found previously, some respondents felt that the space provided was inadequate, and these respondents occasionally wrote outside of the boxes.

Similar issues arose in Waves 3 and 4, so for Wave 5, the number of boxes was increased to 34, and in Wave 6, an extra line was added, taking the number of boxes to 51.

**Figure 6.29 – Testing for the 2009 Census Rehearsal, Wave 6**

**35** Briefly describe what you do (did) in your main job.



The form contains three horizontal rows of 15 small rectangular boxes each, intended for writing a job description.

No issues arose during Wave 6 as the majority of respondents were able to understand and provide an accurate description of their job role. The additional line of boxes helped respondents answer the question in more detail. The question was then tested in Wave 7 and Whole Questionnaire Testing for the 2011 Census, and no

further issues arose. The question was also tested in three waves of Welsh language testing, where no additional issues arose. However, due to space constraints, the additional line of boxes was removed in the final question version recommended for the 2011 Census.

In quantitative tests the question non-response rates were variable, at 5.1 per cent in the 2008 Postal Test and 8.6 per cent in the March 2009 Postal Test.

### 6.4.3 Final recommended questions on occupation

The questions below are recommended for the 2011 Census subject to approval by Parliament through the legislative process.

#### Figure 6.30 Final questions for England and Wales (English language)

**34** What is (was) your full and specific job title?  
 ➤ For example, PRIMARY SCHOOL TEACHER, CAR MECHANIC, DISTRICT NURSE, STRUCTURAL ENGINEER  
 ➤ Do not state your grade or pay band

**35** Briefly describe what you do (did) in your main job.

#### Figure 6.31 Final questions for Wales (Welsh language)

**34** Beth yw (oedd) teitl llawn a phenodol eich swydd?  
 ➤ Er enghraifft, ATHRO YSGOL GYNRADD, MECANYDD CEIR, NYRS ARDAL, PEIRIANNYDD ADEILADU  
 ➤ Peidiwch â nodi eich gradd na band eich cyflog

**35** Beth ydych (oeddech) chi'n ei wneud yn eich prif swydd?

















### 6.7.1 Final recommended questions on workplace address

The questions below are recommended for the 2011 Census subject to approval by Parliament through the legislative process.

**Figure 6.46 Final questions for England and Wales (English language)**

**40** In your main job, what is the address of your workplace?

➤ If you work at or from home, on an offshore installation, or have no fixed workplace, tick one of the boxes below

➤ If you report to a depot, write in the depot address

Postcode

OR

Mainly work at or from home  
 Offshore installation  
 No fixed place

**Figure 6.47 Final question for Wales (Welsh language)**

**40** Yn eich prif swydd, beth yw cyfeiriad eich gweithle?

➤ Os ydych yn gweithio gartref neu o'r cartref, ar safle ar y môr, neu os nad oes gennych weithle penodol, ticiwch un o'r blychau isod

➤ Os ydych yn atebol i swyddog mewn depo, nodwch gyfeiriad y depo isod

Cod post

NEU

Gweithio'n bennaf gartref neu o'r cartref  
 Gweithio ar safle ar y môr  
 Dim gweithle penodol

## 6.8 Travel to work

**Figure 6.48 – 2001 Census**

**34** How do you usually travel to work?

- ◆ ✓ *one box only.*
- ◆ ✓ *the box for the longest part, by distance, of your usual journey to work.*

- Work mainly at or from home
- Underground, metro, light rail, tram
- Train
- Bus, minibus or coach
- Motor cycle, scooter or moped
- Driving a car or van
- Passenger in a car or van
- Taxi
- Bicycle
- On foot
- Other

The non-response rate to the 2001 Census question was 6.3 per cent. Some of the difficulties experienced by respondents as identified through the quality survey were people who had difficulty answering the question because they used different modes of travel on different days, and people selecting more than one category when only one tick is requested.

The travel to work question was not tested during pre-testing for the 2007 Census Test, or as part of the Lambeth Postal Test. It was first included in Wave 2 of testing prior to the 2009 Census Rehearsal, identical to the 2001 Census question except for some minor design differences. No issues arose in this first round of testing the question, and no changes were made for Wave 3. Respondents who used more than one mode of transport to travel to work read the instructions and answered appropriately.

The order of the response options was changed slightly for Wave 4. The 'taxi' option was moved so that it preceded the 'passenger in a car or van' option. This change was made in order to ensure that respondents who travel to work by taxi saw this option before the 'passenger in a car or van' option.

The question remained unchanged in all subsequent rounds of testing, and it continued to perform well.

The non-response rates to this question in recent tests have been low, at 3.5 per cent in the 2008 Postal Test and 4 per cent in the March 2009 test. Incidence of people multi-ticking this question in error has also been low.

## 6.8.1 Final recommended questions on travel to work

The questions below are recommended for the 2011 Census subject to approval by Parliament through the legislative process.

**Figure 6.49 Final question for England and Wales (English language)**

**41** How do you usually travel to work?

➤ Tick one box only

➤ Tick the box for the longest part, by distance, of your usual journey to work

Work mainly at or from home

Underground, metro, light rail, tram

Train

Bus, minibus or coach

Taxi

Motorcycle, scooter or moped

Driving a car or van

Passenger in a car or van

Bicycle

On foot

Other

**Figure 6.50 Final question for Wales (Welsh language)**

**41** Sut ydych chi'n teithio i'r gwaith fel arfer?

➤ Ticiwch un blwch yn unig

➤ Ticiwch y blwch ar gyfer y rhan hiraf, o ran pellter, o'ch taith arferol i'r gwaith

Gweithio'n bennaf gartref neu o'r cartref

Trên tanddaearol, metro, tram neu reilffordd ysgafn

Trên

Bws neu fws mini

Tacsî

Beic modur, moped neu sgwter

Gyrru car neu fan

Teithiwr mewn car neu mewn fan

Beic

Cerdded

Arall

## 6.9 Hours worked

**Figure 6.51 – 2001 Census**

**35** How many hours a week do you usually work in your *main* job?

- ◆ Answer to nearest whole hour.
- ◆ Give average for last four weeks.

Number of hours worked a week

The 2001 Census quality report showed that the 2001 question on hours worked did not perform very well and the non-response rate was fairly high at 8 per cent. Difficulties were experienced when the number of hours worked varied considerably, and when respondents were unsure whether to put down their contractual hours or the hours that they actually worked.

Comparison of results from the 2001 Census and the Labour Force Survey around the same time showed that differences between the hours worked measures were greatest at the extreme ends of the scale (less than six hours and more than 48 hours per week).

The shortfall in people working less than six hours per week may be because of census respondents omitting casual or part-time employment. The shortfall in the 'over 48 hours per week working' category may be due to census respondents omitting overtime, which was not explicitly mentioned in the question's instructions.

During Waves 1 and 2 of the pre-testing for the 2007 Census Test, the 2001 question was tested and similar issues were identified to those found in the quality survey. For example, respondents considered different things when thinking about the number of hours they work in a week. Some answers were given based on contractual hours, others thought about hours actually worked including only paid overtime, and some considered hours actually worked including both paid and unpaid overtime. Respondents tended to make a 'best guess' for their answer.

The concern over respondents' inconsistent interpretation of the question led to a proposal to investigate the possibility of asking whether respondents work full-time or part-time instead.

For Wave 3, three different versions of the question were tested with respondents. The first asked whether the respondent works full-time or part-time, but did not provide a definition of these terms. The second also asked whether the respondent worked full-time or part-time, but also included a definition of these terms (see Figure 6.52 below). The third was the original 2001 Census question which had been tested in Waves 1 and 2 (Figure 6.51).

**Figure 6.52 – Pre-testing for the 2007 Census Test, Wave 3, Version 2 (with definition of terms full-time and part-time)**

**36** In your main job, do you work:

- full-time (more than 30 hours per week)
- part-time (30 hours or less per week)

Specifying the hours considered full-time and part-time was found to be helpful for respondents, removing uncertainty over the exact definition in this context.

The question was not tested in the 2007 Census Test but was reintroduced to the questionnaire for Wave 5 of testing for the 2009 Census Rehearsal.

### Figure 6.53 – Testing for the 2009 Census Rehearsal, Wave 5

40 In your main job, do you work:

full-time (more than 30 hours per week)?

part-time (30 hours or less per week)?

It was found that the question performed well, and respondents were able to provide an appropriate answer. Consultation with data users indicated that this version would satisfy the main requirements for this information.

However, during discussions around achieving UK harmonisation, a decision was taken to amend the question to ask how many hours a week the respondent usually works, with a list of banded hours worked categories. Although this did not result in complete harmonisation of the question wording it would allow closer harmonisation of outputs. The amended question was then tested in Wave 6.

### Figure 6.54 – Testing for the 2009 Census Rehearsal, Wave 6

42 In your main job, how many hours a week do you usually work?

15 or less

16 - 30

31 - 47

48 or more

Respondents were able to answer the question accurately. Respondents explained that even if their hours varied they could average it out, and it was most often still within the same response option. Asking for how many hours were usually worked, which is a standard definition that was also done in the 2001 Census question, is preferable to asking for the actual hours in a specific reference period, which may vary from the usual hours worked at the time of the census.

The question appeared to work well in the 2008 Postal Test, with a relatively low non-response rate of 3.6 per cent. The majority of respondents, 57.2 per cent, ticked the '31-47' hour category and only 0.1 per cent provided an invalid multi-ticked response. The non response rate in the 2009 Postal Test was also fairly low at 4 per cent.

This question was tested for the first time in Welsh in Wave 2 of Welsh language testing. The equivalent Wave 6 English language question was asked. As found for the English language testing, respondents answered for the hours they actually worked. Respondents noted that the hours they are contracted to work, and the hours they actually worked, often fell into the same response category.

In Wave 7, the question was changed to include the guidance '(including paid and unpaid overtime)', to help respondents decide what type of working hours to include, and to be consistent with internationally agreed standards for measuring working time and with definitions used in the Labour Force Survey. Also, the 2001 Census may have underestimated hours worked at the upper end of the distribution because overtime hours were under-reported by respondents who were unsure whether to include them.

All respondents understood what the question was asking and could answer easily and correctly. Some respondents did not work overtime so they answered for their contracted hours. Those who did work overtime included it, both paid and unpaid. Most respondents' answers would not have changed if they had not included overtime, as the response categories were quite large.

In late stages of testing, the upper most response category was amended to 49 hours or more, instead of 48, to align with 2001 Census output categories and make inter-censal comparisons easier.

### 6.9.1 Final recommended questions on hours worked

The questions below are recommended for the 2011 Census subject to approval by Parliament through the legislative process.

#### Figure 6.55 Final question for England and Wales (English language)

**42** In your main job, how many hours a week (including paid and unpaid overtime) do you usually work?

- 15 or less
- 16 - 30
- 31 - 48
- 49 or more

#### Figure 6.56 Final question for Wales (Welsh language)

**42** Yn eich prif swydd, am sawl awr yr wythnos (gan gynnwys oriau ychwanegol am dâl neu heb dâl) y byddwch yn gweithio fel arfer?

- 15 neu lai
- 16 - 30
- 31 - 48
- 49 neu fwy

## 7. Impact of changes since the 2001 Census on comparability

In the 2001 Census, filters applied in the questionnaire meant that the suite of labour market and travel questions were only asked to those people aged 16 to 74. For the 2011 Census, the upper age limit has been removed so that everyone aged 16 and over is asked to complete the questions. This makes the census more comparable with the Labour Force Survey (LFS). In order to produce data that is comparable with the 2001 Census, people aged 74 and over will need to be excluded from analysis.

The economic activity questions have largely remained unchanged since the 2001 Census because the standard ILO definitions that need to be adhered to allow little room for flexibility with the question wording. The main change in these questions is to the structure of the question on whether or not people were working in the week prior to the census, which has changed from a yes / no response in the 2001 Census to one with a series of seven tick-box options for the 2011 Census. The tick-boxes cover all the categories that were in the instructions in the 2001 Census so should not affect comparability, but allows previously unavailable detail.

The questions on occupation, industry, self-employed or employee, supervisor status, workplace address, and travel to work are also mostly unchanged since the 2001 Census. However, some minor wording changes have been made to result in better understanding of the question and therefore improve the quality of the data collected. The NS-SEC data produced from the 2011 Census should be comparable with 2001 data, although as noted in section 3.2, it may be of a slightly lower quality due to the different derivation method being used.

The hours worked question has changed from a free write-in question to a banded question. This will result in some loss of detail from a write-in response, but the bandings chosen in the question match the 2001 output categories so data should be comparable. The added instruction about paid and unpaid overtime may cause people to report more hours than with the 2001 question, but it allows consistency with the LFS and international standards and should provide more consistent, higher quality data.