Helping to shape tomorrow
The 2011 Census of Population and Housing in England and Wales

Presented to Parliament by the Minister to the Cabinet Office, by Command of Her Majesty

Laid before the National Assembly for Wales by the Minister for Finance and Public Service Delivery

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Preface

Rt Hon Liam Byrne, MP, Minister for the Cabinet Office and Chancellor of the Duchy of Lancaster

For over two hundred years, the country has relied on the Census to underpin national and local decision making.

Government, local authorities, the health service, the education and academic community, commercial business, professional organisations and the public at large all need reliable information on the number and characteristics of people and households if they are to conduct many of their activities effectively and plan for the future. This need is currently best met by conducting a census every ten years covering the whole of the population, and by updating the population estimates each year using the preceding census as a base.

This White Paper sets out the newly created independent UK Statistics Authority’s proposals for the 2011 Census in England and Wales, and is being published now because the UK Government and the Welsh Assembly Government believe that there should be sufficient time for public discussion of proposals that will affect every household and person in the country.

The design for the new Census builds upon on the experience gained by ONS from previous censuses generally and, in particular, from the lessons learned from the 2001 Census, and takes account of the several formal recommendations from the Treasury Select Committee, the Public Accounts Committee and the former Statistics Commission.
But most importantly the Census is dependent on the willing cooperation and participation of the general public on whose behalf the information that is collected is destined to serve. The 2011 Census is, therefore, very much counting on the population of England and Wales to help shape tomorrow.

[Signature]

MP, Minister for the Cabinet Office and Chancellor of the Duchy of Lancaster
Foreword
Sir Michael Scholar, Chair, UK Statistics Authority

The Census provides a once-in-a decade opportunity to get an accurate, comprehensive and consistent picture of the most valuable resource of England and Wales – its population – and a rich array of facts about it. The results are invaluable for both national and local policy formation, planning and the effective targeting of resources. The Census provides the only source of directly comparable statistics for both small areas and minority population groups, which are generally consistent across England and Wales and the rest of the United Kingdom. It is used as a reference base for many statistical series such as population estimates and projections and sample surveys.

The 2011 Census for England and Wales – the proposals for which are set out in this White Paper – will be the first since 1831 not carried out under the auspices of the Registrar General. With the Statistics and Registration Service Act 2007 having taken effect on 1 April 2008, the authority for conducting the decennial census now rests with the UK Statistics Authority, and, on its behalf, I am very pleased to submit the proposals to Parliament through the Minister responsible for the Office for National Statistics (ONS) matters.

The new Act has enabled a number of statistical developments to be utilised by ONS that have helped to shape the arrangements proposed for the 2011 Census. In particular, the greater facility to share data has enabled the development of an address register specifically for the purposes of managing the effective delivery of census questionnaires to every household and monitoring the movement of the forms in the field using a new form-tracking system. This will enable ONS to maintain a much tighter control of the field
operation than hitherto and to report progress to field managers in real time. This work is being taken forward against the backdrop of the Treasury Committee’s recommendations that the Government should consult with the UK Statistics Authority and others to remove any outstanding obstacles to the production of an address register, and ONS has successfully secured the agreement of all the main address list providers to an interim information sharing initiative. We hope that this agreement and the procedures we have developed will be both highly productive and effective. In addition, sharing information from, and with, local authorities will ensure that such an address list is fit for purpose and that user confidence in the coverage and accuracy of the resulting outputs will be enhanced.

The data sharing provisions contained in the Statistics and Registration Service Act will also allow greater use to be made of the rich array of statistical data produced from the Census. It is, however, important to stress that this must and will always be, subject to the strictest controls to ensure the confidentiality of personal information supplied, and that the information is used only for the purposes for which it is provided.

In planning the design for the 2011 Census and in seeking the means to improve coverage and quality, the National Statistician and officials in ONS have consulted widely with users and other stakeholders, and have developed working partnerships with local authorities, contracted suppliers and the devolved administrations - and continue to do so. Many of the recommendations that were made following extensive reviews of the 2001 Census by the House of Commons Treasury and Public Accounts Committees, the National Audit Office, the former Statistics Commission and other bodies such as the Local Government Association, as well as the outcomes of ONS’s own regular post-census evaluations, have each helped to shape the design of the 2011 Census. The result is that the Census design proposals set out in this White Paper are those that the UK Statistics Authority believes are the best and most cost-effective means of collecting the information that the country requires.

Modern times, however, also demand modern approaches, and whilst a traditional census remains currently the only practicable way of collecting the range of inter-related information required, it also needs to adapt its methodologies to reflect both up-to-date technologies and changing public attitudes. Consequently, a number of major changes are proposed in the design for 2011 compared with previous censuses.

- Census forms will be delivered to households by post in the majority of cases.
- There will be the facility to return the completed information online.
- As I have indicated, a central address register is being developed to facilitate improved form delivery and field management.
- The recruitment, training and payment of field staff will be outsourced to specialist service providers.
- New questions are proposed on: national identity; citizenship; second residence; language; civil partnership status; and (for non-UK born) date of entry into the UK and length of intended stay.
- All standard outputs will be publicly accessible online, and free of charge, from the National Statistics website.
The UK Statistics Authority hopes that these proposals will receive as wide an acceptance as possible and that, in particular, Parliament and the National Assembly for Wales will support, in due course, the secondary legislation necessary to enable the Census to be carried out. The Authority will be responsible to Parliament for the successful outcome of the Census and for submitting reports of the results. And it will be answerable to Parliament for any failings or shortcomings. It will be the role of the National Statistician, however, to ensure that the detailed arrangements for the conduct of the Census in the field and for the processing, protection and dissemination of the data fully meet the requirements and expectations of users and the public at large.

This White Paper covers the proposals for the Census in England and Wales only, since the Census is a devolved matter and is subject to separate legislative processes and arrangements in both Scotland and Northern Ireland. There, the Registrars General will present similar proposals to their respective legislatures. However, the production of harmonised UK Census statistics to meet the requirements of not only the European Union but also a wide range of domestic users remains of great importance, and to this end the National Statistician and the two Registrars General are co-signatories to an Agreement on the conduct of the 2011 Census in general and, in particular, on the production of consistent outputs. There has been, and continues to be, full discussion and consultation, between the three Census Offices on all aspects of the planning and execution of the 2011 Census.

The proposals set out in this White Paper refer only to the forthcoming 2011 Census. The document says nothing about the requirements for any future censuses. Nevertheless, the UK Statistics Authority is mindful of the views expressed by the Treasury Select Committee (TSC) and others that 2011 should be the last census to be carried out in its traditional format, and that consideration should be given to the greater use of administrative data sources from which to compile future demographic statistics. ONS will, in due course, review the value and effectiveness of the Census, compared with alternative sources, for producing the sort of statistical information that users require on a wide range of interdependent topics and for small areas and population sub-groups. Whether this can be provided, to the level of quality demanded, solely from administrative registers or sample surveys, or whether there should be a further Census in 2021 to meet such user requirements will, no doubt, be the focus of a future White Paper.

In the meantime, taking any Census is always a big challenge, but one which, for 2011, the UK Statistics Authority and the National Statistician will meet in the knowledge that all the necessary preparation is being done as thoroughly and professionally as possible, building on the experience and expertise of over 200 years of census taking in this country.

Michael Scholar
Chair of the UK Statistics Authority
Executive Summary

Introduction – decision on the 2011 Census (Chapter 1)

The Government has decided, in agreement with the UK Statistics Authority, that the next Census of Population should be taken in England and Wales on Sunday 27 March 2011. Censuses will also be taken on the same day in Scotland and Northern Ireland subject to separate legislative procedures in the Scottish Parliament and the Northern Ireland Assembly. The Census will be the twenty-first in a series carried out every 10 years in England and Wales since 1801, except in 1941.

Government, local authorities, the health service, the education and academic community, commercial business, professional organisations and the public at large all need reliable information on the number and characteristics of people and households if they are to conduct many of their activities effectively. This need is currently best met by conducting a census every ten years covering the whole of the population, and by updating the population estimates each year benchmarked on the preceding Census.

Taking account of the many comments, evaluations and recommendations arising from the 2001 Census, the design of the 2011 Census is based on a number of key strategic aims:

- to give the highest priority to getting the national and local population counts right
- to maximise overall response and minimise differences in response rates in specific areas and among particular population sub-groups
- to build effective partnerships with other organisations, particularly local authorities, in planning and executing the field operation
- to provide high quality, value-for-money, fit-for purpose statistics that meet user needs and which are as consistent, comparable and accessible across the UK as is possible
- to protect, and be seen to protect, confidential personal census information

Summary of the key 2011 Census design features (Chapter 1)

In summary, and subject to the approval of Parliament (and, where appropriate, Welsh Ministers):

- The 2011 Census will cover everyone usually resident in England and Wales on Census night, with a subset of information also collected from visitors present on Census night. Information will also be collected from residents in communal establishments and individuals or households with no usual or physical address
- Forms will primarily be delivered by post (to as many as 95 per cent of households). Field staff delivery will be focused in areas which are hard to enumerate
- The public will be able to return completed forms either by post, online, or by doorstep collection; help will be available to anyone who has difficulty in completing the Census form.
- There will be a slight increase in the number of questions compared with the 2001 Census, but the form has been re-designed to make it easier to complete.
- There will be some differences in the questions asked in England and Wales compared to the 2001 Census, (and some further differences compared with the Censuses in Scotland and in Northern Ireland).
- Each question included in the proposals meets a demonstrated need and is suitable for a self-completed form; previous censuses or tests have shown the questions to be generally acceptable to the public.
- Significant changes from 2001 in the questions proposed are:
  - questions on national identity and citizenship
  - additional response categories in the ethnicity question
  - questions on second residences
  - a question on language
  - the inclusion of civil partnership in the marital status question
  - questions on date of entry into the UK and of intended length of stay for in-migrants
- Stringent confidentiality and security procedures will protect the information gathered in the Census and will conform to the requirements of census confidentiality, Data Protection and Freedom of Information legislation.
- There will be publicity to convey to the public the purpose and value of the Census and to give assurances about the confidentiality with which information is treated.
- Initiatives have been put into place to maximise, and measure effectively, the quality of the information collected; in particular, Census coverage and quality surveys will be carried out to measure the number of people not counted by the Census and the quality of the responses given.
- The statistical outputs on the Census will be designed to meet user requirements, and dissemination will be to a pre-arranged timetable.

Costs (Chapter 1)

On the basis of present planning assumptions, the total cost of the 2011 Census in England and Wales over the period 2005-2016 is currently estimated to be £482 million. Provision of £450 million for the cost of the Census has been made up to the period 2011–12. Provision for later years will be subject to future spending reviews.

Consultations and tests (Chapter 2)

The content of the 2011 Census has been driven principally by the demands and requirements of users of census statistics, the evaluation of the 2001 Census, and the advice and guidance of organisations with experience of similar operations, determined.
by extensive consultation, through a structure of formal advisory committees, topic-related working groups and public meetings, and via media such as ONS consultation and information papers, and the Census website.

Government departments were consulted, both on a bilateral basis and collectively through the Heads of Professions of the Government Statistical Service and inter-Departmental Committees, to determine their needs and priorities for topics to be included. Local authorities, the health service, the academic community, the business sector and local communities were similarly consulted through long-standing Census Advisory Groups convened by the National Statistician. Topic experts and methodologists within ONS have also been consulted.

Additional consultation with local authorities has been managed through a Local Authority Liaison Programme which is being developed through a network of Census Regional Champions appointed from among the Regional Returning Officers for each of the nine Government Offices in England and the Returning Officer for Wales.

In Wales, representatives of ONS and the Welsh Assembly Government attended a meeting of each of the National Assembly Subject Committees during the period October 2006- March 2007 to discuss plans for the Census in Wales.

In addition, there have been formal public consultations supported by a number of national open meetings on particular issues.

The proposals for the Census also take account of the results of a programme of research and testing aimed at better understanding of the public’s comprehension and perception of census-related concepts, and of tests, both small and large-scale, of census question wording, questionnaire design and delivery methods. These have included a major Test carried out in five local authority areas in May 2007, and encompass a Rehearsal of the Census operation to be conducted in October 2009.

**The population base (Chapter 3)**

Each household will be given a 2011 Census questionnaire to complete, and the form will contain questions relating to each person usually resident in the household as well as to the household as a whole. Additionally, the form will provide space for the householder to record the number of visitors present at the address on Census night and certain basic demographic characteristics such as age, sex and usual address. However, if any such visitors are normally resident elsewhere in the United Kingdom, they will also be required to supply full information at their usual residence.

Students and boarding school pupils will be regarded as being resident at their term-time address irrespective of where they are present on Census day, thus making the Census consistent with the base for the mid-year population estimates.
All UK residents will be enumerated at the address where they are resident at the time of the Census; the return for a household will also include anyone normally resident there who happens to be away on Census night, whether elsewhere in the United Kingdom or abroad.

**The Census questions (Chapter 3)**

The topics proposed for the Census are those that have been shown to be most needed by the major users of census information and for which questions have been devised that can be expected to produce reliable and accurate data. In each case, no other comparable and accessible source of the information is available in combination with other items in the Census.

Consultation on the topic content for the 2011 Census has resulted in a much larger demand for questions than would be possible to accommodate on a Census form that households could reasonably be expected to complete, and consequently a number of difficult decisions have had to be made in assessing the different requirements for information and balancing the needs for change against continuity.

In assessing which topics should be included in the Census, ONS have had to consider a number of criteria. The criteria for evaluating the strength of user requirement for information were that:

- there should be a clearly demonstrated and significant need
- the information collected was of major national importance but that data was required for small population groups and/or at detailed geographical levels
- users’ requirements could not adequately be met by information from other sources
- there should be a requirement for multivariate analysis (that is the ability to cross-analyse one variable against other)
- there should be consideration of the ability for comparison with the 2001 Census wherever possible.

In addition there were other factors which ONS needed to take into consideration in assessing the priorities for topics. These were:

- that the inclusion of particular questions should be shown, in tests, to have had no significantly adverse effect on the Census as a whole, particularly the level of public response
- that practicable questions could be devised to collect data which are of sufficient quality to meet users’ requirements
- the constraints of size and design imposed by a self-completion questionnaire in respect of respondent burden and accuracy of response
- that the Census should not be used to collect data that would deliberately promote political or sectarian groups or sponsor particular causes
- legal constraints and/or demands imposed by domestic and European legislation
In summary, the UK Statistics Authority proposes that information on the following topics should be collected in the 2011 Census:

**At all properties occupied by households and for all unoccupied household accommodation:**
- Address, including the postcode.

**For households:**
- Number and names of all residents whether present or temporarily absent on Census night
- Tenure of accommodation
- Type of accommodation and whether or not it is self-contained
- Type of landlord (for households in rented accommodation)
- Number of rooms (and bedrooms*)
- Type of central heating*
- Number of cars and vans owned or available

**For residents in households**
- Name, sex, and date of birth
- Marital status (including civil partnership status*)
- Relationship to others within the household
- Student status
- Whether or not students live at enumerated address during term time
- Usual address one year ago
- Country of birth
- Citizenship (passports held)*
- Month and year of entry into the UK*
- Intended length of stay in the UK*
- National identity* and ethnic group
- Religion
- Language*
- Welsh language proficiency (in Wales only)
- General health
- Long-standing illness or disability
- Provision of unpaid personal care
- Educational and vocational qualifications
- Second residence*
- Economic activity in the week before the Census
- Time since last employment
- Employment status
Topics marked* are proposed for inclusion in the Census in England and Wales for the first time. A number of other topics have been considered but are not included in the proposals for the 2011 Census. ONS carefully evaluated all the suggestions submitted. Some topics were rejected at an early stage in planning but many were subjected to both small- and large-scale testing. The Welsh Assembly Government similarly prioritised the cases made to inform the topic content of the Census questionnaire in Wales.

**Data collection (Chapter 4)**

Experience has shown that it is increasingly difficult to make contact with households, and this has been a major influence in shaping data collection plans for the 2011 Census. These difficulties can be attributed to: an ageing population; growing numbers of one-person households; changing work patterns; increase in access security control systems; a less compliant society; growing numbers of migrants; and certain groups and communities within the population feeling increasingly disenfranchised.
The enumeration will be conducted in a way that is primarily designed to achieve completeness of coverage with an efficient use of resources while, at the same time, maintaining the public’s acceptance and confidence in the importance and security of the Census. Although many aspects of the Census will follow well-established and proven methodologies, ONS have introduced changes that will improve the efficiency of the census operation and will provide better help to the public. For example, the use of a postal service provider to facilitate the delivery as well as return of completed forms by post, will help overcome the difficulties of recruiting large numbers of temporary enumerators to deliver forms, and of accessing accommodation protected by security systems. Together with the option of making a return online, this will free-up field staff to be more flexibly deployed, wherever necessary, in order to improve coverage, particularly in metropolitan areas and other places where households are less compliant and/or need more assistance in completing a return.

Address Register

The pre-requisite for a successful post-out strategy is the availability of a comprehensive, high quality Address Register for all areas of England and Wales. In the absence of a single authoritative source of national address information, ONS is developing an address register that meets Census requirements in terms of quality and coverage, and which local authorities can be confident will effectively underpin Census enumeration and outputs. Full use will be made of the primary sources of address lists, namely the Royal Mail Postcode Address File, the Ordnance Survey MasterMap Address Layer 2, and the National Land and Property Gazetteer. ONS has successfully signed up all the address list providers to an information sharing agreement.

Address checks will be carried out in a sample of areas across England and Wales over a six-month period finishing some six months before the Census. This timeframe will ensure that the Address Register is as up-to-date as possible in time to enable the printing of address on to individualised census forms.

Field force

A labour force of some 30,000 temporary field staff will be employed to carry out the Census. There will be a hierarchical management structure to this field force, headed by some 100 or more Census Area Managers employed for about a year before the Census and for about four months beyond. Each will be responsible for the enumeration of an area of about 500,000. As in the 2001 Census, Welsh-speaking Managers will be appointed to oversee the enumeration in Wales.
Form delivery and collection

Post-out will be the means of form delivery in the majority of areas, but the decision on where a Census form will be delivered by field staff will be determined by a number of factors which include:

- confidence in the accuracy of the address list in any given area
- the proportion of known, or suspected, multi-occupied properties in the area
- concentrations of large households
- the prevalence of communal establishments

The option of two principal response routes will be available to enable the public to complete their census return:

- paper completion and post back, or
- completion (for the first time in the UK) using an online questionnaire.

Field staff will undertake follow-up visits at addresses from where ONS is confident that no response has been received.

Special enumeration procedures

The methodologies developed generally to enumerate households and communal establishments will not be successful for everyone, and it is accepted that additional procedures will have to be adopted for some special populations. These will include people with no settled place of residence, such as Gypsies, those travelling with fairs and persons sleeping rough. In addition there are other identifiable groups, dispersed throughout the population, who will require modified enumeration procedures. These include:

- those unable to understand the census questionnaire, such as non-English speakers (and those who are also non-Welsh speakers in Wales) and people with reading difficulties
- those likely to have difficulty completing or returning a standard paper questionnaire, including the visually impaired or physically disabled
- those able, but unwilling, to complete a questionnaire

Particular arrangements will be made to enable blind or partially sighted people and non-English speakers/non-Welsh speakers in Wales to make a census return.

In all cases, whether response to the Census is to be by postal return, online, or by doorstep collection, the statutory obligation to make a return will not be discharged until a completed form is received by the Census Office or local field staff. Persons refusing to comply with the statutory requirement to make a census return will be liable to prosecution and a fine. ONS will deploy specially trained field staff to follow-up cases where there has been a clear indication of a householder’s refusal to make a return.
Arrangements in Wales in respect of the Welsh Language Act (Chapter 4)

ONS will make arrangements to ensure that the requirements of the Welsh Language Act 1993 (as set out in the ONS’s Welsh Language Scheme) are met with respect to all aspects of the Census in Wales. In particular, there is a commitment to recruit members of the field force who are bilingual in English and Welsh, especially in areas with higher than average proportions of Welsh speakers, and both a Welsh and English language version of the Census questionnaire will be delivered to each household. Bilingual versions of all publicity and information material will also be available. As noted above, bilingual Census Managers will be appointed to oversee the enumeration in Wales.

Data quality and coverage (Chapter 4)

Quality is at the heart of planning the 2011 Census, and many of the innovations that were trialled in the 2007 Census Test were about improving the quality of census processes and, thus, the data. A Census, by its nature, is designed to cover the whole population, but errors inevitably arise. A good census design will recognise this and take account of them.

Non-response or under-enumeration is the most significant error. While the estimated overall undercoverage in the 2001 Census was small compared with national government surveys, it was significantly greater than in 1991. Of more significance was its variation across population sub-groups and different parts of the country.

In planning for the 2011 Census, the goals are to maximise the overall level of quality of data and to minimise the differences in quality between areas. ONS will develop a strategy for assuring the quality of the 2011 Census database before any release of output. The quality assurance process will compare the Census data against a wide range of sources both during the operation and prior to the release of the full dataset.

The output database itself will be fully adjusted using information collected from a post-enumeration Census Coverage Survey to be conducted immediately subsequent to the fieldwork for the Census itself. In addition, a small, separate Quality Survey will be undertaken after the Census to measure the accuracy of responses to individual questions.

Publicity (Chapter 4)

ONS will, in close co-operation with the Census Offices in Scotland and Northern Ireland and supported by a dedicated Contact Centre, arrange nationwide and local publicity to explain the purpose and value of the Census, to encourage householders to return completed forms and to ensure that they know when and how to do so, and to give assurances about confidentiality and data security.
Special assistance will be available to anyone who has difficulty in completing the Census questionnaire, particularly through language or infirmity. Field staff speaking both English and other languages and/or signers will be employed, where possible, supported by translations of a general information leaflet in 26 or more of the most prevalent foreign languages available via a dedicated Census Help website. Publicity for, and the enumeration of, the Census in Wales will be conducted bilingually.

Outsourcing (Chapter 4)

ONS is again contracting out a number of services as a major part of ensuring a value-for-money Census in 2011. External suppliers bring with them considerable technical experience and expertise which would otherwise be unavailable to Census takers. Furthermore, given the ten-year cycle for the Census and the relatively short processing timetable – requiring a large temporary workforce – it is not appropriate for ONS to recruit and train such personnel itself. It would require significant additional resource – and burden on the tax payer to manage these in-house.

The activities that are being outsourced cover:

- the recruitment, training and payment of field staff
- the delivery of forms and collection of completed returns via a postal service
- the capture and coding of census data in electronic format
- the design of questionnaire/form-tracking systems
- the translation, printing and distribution of non-questionnaire material
- the provision of online response facilities for form completion and a contact centre
- a publicity campaign

Data processing (Chapter 5)

The Government recognises that the investment of time and resources in a national census is only justified if the results are made accessible to users speedily and in a clear and usable form. As was also the aim in the 2001 Census, ONS intends that technological developments should be harnessed in the 2011 Census in order to improve the accuracy, timeliness, accessibility and user-friendliness of published output.

In particular, ONS is proposing to introduce two major innovations in the area of data capture and dissemination. Firstly, there will be the opportunity to submit censuses returns online via a secure Internet connection; and secondly there should be free public access to all standard national and local outputs in electronic media from National Statistics online.
The 2011 Census will be processed in three main phases. Input processing, which comprises two stages: the main data capture and coding stage, and the subsequent ‘downstream’ processing which encompasses a suite of systems to edit and adjust the data so that a fully consistent database can be prepared as the basis for output dissemination; and output processing which comprises the creation of statistically protected tables and other products from an outputs database, and the dissemination of these products to users.

Coverage assessment and adjustment (Chapter 5)

Ultimately, the success of the Census relies heavily on its accuracy and how well it can estimate the population and its characteristics. The Census will never count every single household and individual. A necessary process of coverage assessment and adjustment is undertaken to provide accurate national and sub national estimates of the population. In the 2001 Census, this process was called the One Number Census, which adjusted the results of the Census to take account of people who were missed. For 2011, a similar approach will be undertaken but with developments focusing on a number of areas to improve the methodology.

Output dissemination (Chapter 5)

In disseminating the results of the Census much emphasis will be put on responsiveness to users’ requirements on content, format and means of access, and on high standards in the production of statistics. Thus, ONS intends that outputs should be in such a form, and at varying levels of statistical and geographical detail, so to meet the changing requirements of users, subject to the overriding requirement to protect statistical confidentiality. The geographies for such outputs will be created essentially from the same building bricks as in the 2001 Census – the Output Areas.

Confidentiality (Chapter 6)

The importance of achieving maximum coverage in the Census necessitates that public participation should be mandatory. This, in turn puts an obligation on the UK Statistics Authority to ensure that the information, sometimes sensitive information, given in confidence by the public is treated with the strictest confidentiality.

The UK Statistics Authority recognises that the public need to be confident that their personal census records will be held securely. As in previous censuses, assurances will be given to the public that all the information provided will be treated in strictest confidence by the Census Office.
The information collected in the 2011 Census will be used solely for the production of statistics and research. Usage will comply fully with the Census Act, the Statistics and Registration Service Act and the requirements of data protection and freedom of information legislation. There are legal penalties for the unlawful disclosure of personal information collected in the census.

Privacy and human rights (Chapter 6)

The UK Statistics Authority is entirely satisfied that statutory authority to require information to be provided from each of the questions to be included in the 2011 Census is fully compliant with both the European Convention on Human Rights and the Human Rights Act 1998 in respect to the individual’s right to privacy.

The legislative process (Chapter 7)

The primary legislation that provides for the taking of a Census in England and Wales is the Census Act 1920 as amended by the Census (Amendment) Act 2000. More recently further amendments to the Act – in particular, transferring the authority to take the census from the Registrar General to the Statistics Board (UK Statistics Authority), and the Ministerial responsibility for the Census from HM Treasury to the Cabinet Office – have, from the 1 April 2008, been effected by the introduction of the Statistics and Registration Service Act 2007.

In accordance with section 1 of the Census Act, the Government will prepare a draft Order in Council in respect of the Census in England and Wales, in autumn 2009, for approval by both Houses of Parliament. Under the terms of the Act, the Order in Council will prescribe:

- the date on which the census is to be taken
- the persons by whom, and with respect to whom, the census returns are to be made
- the particulars to be stated in the returns

Following the approval of the Census Order, the Minister for the Cabinet Office will lay before Parliament (around mid February 2010) Census Regulations which will make detailed provision for the conduct of the Census in England and will contain specimens of the forms to be used. The Regulations require the approval by negative resolution of both Houses. At the same time the Welsh Minister will make separate Regulations covering the Census in Wales in the National Assembly for Wales under powers transferred to Welsh Ministers by virtue of the Transfer of Functions (No. 2) Order 2006.
Devolution of the Censuses in Scotland and Northern Ireland (Chapter 7)

Separate, devolved legislative arrangements will provide for the Censuses in Scotland and Northern Ireland. UK harmonisation will be achieved through close liaison and co-operation between the three Census Offices, and through an agreement between the National Statistician and the Registrars General to work together to achieve consistent and comparable Census outputs both to meet users’ requirements to fulfil the UK’s international obligations.
Introduction
1 Introduction

“The Census underpins the allocation of billions of pounds in funding for public services, and is the foundation of many economic and social statistics. These in turn influence policy across government and investment decisions in the commercial sector. And despite growth in new databases in recent years, the Census still offers a source of consistent small-area data that is better than any other. It gives us both a unique insight into the society in which we live and a social benchmark that will be of relevance for many decades to come. The Census is thus of fundamental importance to policy, good government, the economy and democracy.” David Rhind (Chairman of the former Statistics Commission)

The decision on the Census

1.1 The UK Government has decided, in agreement with the UK Statistics Authority, that, subject to appropriate legislative approval, a Census of Population and Housing should be taken in England and Wales on Sunday 27 March 2011. Censuses will also be taken on the same day in Scotland and Northern Ireland subject to separate legislative procedures in the Scottish Parliament and the Northern Ireland Assembly. The Census will be the twenty-first in a series carried out every 10 years in England and Wales since 1801, except in 1941. The last was carried out on 29 April 2001 and was reported on fully by the Registrar General.

The choice of the date

1.2 The choice of the date for the Census is central to much of the planning that surrounds the event, and directly affects the quality of the data collected. The date of the Census will be set in secondary legislation but needs to be determined well in advance so that all aspects of the Census can be planned accordingly. Although the Census does not have to take place on a specific day of the week, a Sunday has traditionally been chosen as the most likely time that people will be at home. The date must be chosen to maximise the number of households present and to ensure minimum interruptions to the delivery and collection of the questionnaires. In selecting the date a number of factors have had to be taken into consideration:

- maximising number of people present at their usual residence (by, for example, avoiding holiday periods)
- maximising the number of students present at their term-time address
- avoiding local elections (when the publicity messages may get confused)
- allowing sufficient hours of daylight for field work
- avoiding holiday periods in order to maximise recruitment/retention of field staff
- harmonisation across the UK
The role of the Census in meeting the need for information for national and local decision making

1.3 For over two hundred years, the country has relied on the Census to underpin national and local decision making. Some 200 countries world-wide now carry out a regular census under the auspices of the United Nations’ Census programme.

1.4 Government, local authorities, the health service, the education and academic community, commercial business, professional organisations and the public at large all need reliable information on the number and characteristics of people and households if they are to conduct many of their activities effectively. This need is currently best met by conducting a census every ten years covering the whole of the population, and by updating the population estimates each year benchmarked on the preceding Census.

Shaping Government policy

1.5 In particular, the UK Government and the Welsh Assembly Government need this kind of information to form policy, to plan services for specific groups of people and, especially, to distribute resources effectively to local and health authorities to enable them to direct resources to where they are needed. The information must be authoritative, accurate and comparable for all parts of the country. Currently, only a census can provide the range of such information on a uniform basis both about the country as a whole and about individual small areas and sub-groups of the population in relation to one another.

1.6 Basic information on the population size, age, sex and location are fundamental to many government policies including:

- ageing and pensions
- migration both into and out of the country, and internally
- long-term sustainability of Gross Domestic Product (GDP) growth and thus long-term sustainability of government revenues
- labour supply and, thus, inflationary pressures

1.7 Information on housing, household size and family make-up is key for:

- redressing inadequate accommodation and over-crowding
- local housing demand and planning

while other information collected as part of the census:

- provides a better understanding of pressures on transport systems and the planning of roads and public transport using information collected on travel to and from work, and on car ownership
enables the identification of areas of deprivation for targeting initiatives such as Neighbourhood Renewal and Sure Start
provides information on ethnicity, qualifications and labour market status, for instance, to identify the causes of deprivation and appropriate policy interventions
shows how many people work in different occupations and industries throughout the country, helping government and businesses to plan jobs and training policies and to make informed investment decisions

Benchmarking

1.8 The census provides the basis for deriving many social and economic indicators such as:

- population estimates
- employment and unemployment rates
- birth, death, mortality and fertility rates
- equalities monitoring, in particular, census information on age, sex, ethnicity, religion, and disability help to identify the extent and nature of disadvantage and to measure the success of equal opportunities policies
- grossing-up sample survey data, in particular, the Census underpins socio-economic surveys carried out by government and the private sector – as the survey results are grossed to census population counts. Without the Census such surveys would be less reliable or would need to be larger and more costly

1.9 Census benchmarks underpin democratic engagement. The Boundary Commission takes account of population change to reshape constituency boundaries. Furthermore, MEP representation is calculated using population figures.

Allocation of resources

1.10 The Department for Communities and Local Government (CLG) and the Department of Health (DH) allocate money to Local Authorities and Primary Care Trusts to ensure that access to services is based on relative need rather than the ability of a local area to fund those services. Between them CLG and DH currently allocate about £120bn a year to Local Authorities and Primary Care Trusts in England, largely based on a whole range of census-derived population estimates, projections and breakdowns. In Wales, Census-derived indicators are used in the direct allocation of around £1.7bn out of the £3.8bn available to councils in the Revenue Support Grant settlement. A further £4.6bn is allocated to health areas in Wales, though here the apportionment is only in part based on census figures.
Local investment and monitoring

1.11 The Census drives targeting of local services such as:

- local health, for which Census questions on illness are good predictors of demand on the NHS
- local education needs for which the Census informs where to site new schools
- local transport planning and traffic modelling
- local authority development plans to ensure that development happens at the right locations
- community support services, including home help and home care

Use by businesses

1.12 It is estimated that the value of census data to businesses alone counted over the 10-year cycle is in the region of £250 million.

Research

1.13 The Census is an excellent source of data for research purposes. The ONS Longitudinal Study (a 1 per cent sample based on census records linked together from the four Censuses since 1971 and combined with other sources such as cancer registrations, births and deaths) provides, for example, an unrivalled source for the examination of change over time. Such studies increase our understanding of social conditions and can shed light on the impact of past policies. One such example is the use of longitudinal data on mortality in different socio-economic groups linked to the Census for the purpose of pension planning. In conducting all such research ONS takes its confidentiality pledge to the public extremely seriously. Personal details are separated from census responses so that no identifiable information can be linked to the name and address of individuals. In addition, when data are published ONS takes great care to ensure that reports are anonymised so that no individual data can be identified.

Alternative data sources

1.14 In 2003 ONS undertook a strategic review in which it considered a number of alternative ways of collecting the type of information traditionally provided by a census. These alternative approaches to collecting census-type information were considered in consultation with users, the key message from which was that the Census was still regarded as the most authoritative source of information for a wide range of uses. It provides a snapshot of the country, with consistent and comparable information for small areas and sub-populations, and allows multivariate analyses that are not feasible using any other data source.
Accordingly, in the absence of any sufficiently comprehensive alternative sources of information, and in order to be assured of meeting the wide range of users’ needs for information, ONS concluded that plans for a Census in 2011 should be taken forward.

The role of the Office for National Statistics as an independent statistics agency

Since the last Census in England and Wales, the function of the Registrar General, who had had the statutory responsibility for conducting the Census since 1841, has been separated from the rest of the Office for National Statistics (ONS) by virtue of the Statistics and Registration Service Act 2007. The responsibility for carrying out the Census under the provisions of the Census Act 1920, however, remains within the Office for National Statistics (ONS) by virtue of the legal authority of the newly created independent Statistics Board (whose executive functions are carried out under the title of the UK Statistics Authority), and with Ministerial responsibility transferred from the Treasury to the Cabinet Office (and for some issues, to the Welsh Ministers – see paragraph 1.18). However, the scope and authority of the Census Act otherwise remains broadly unchanged (see Chapter 7) as a result of the 2007 Act, though the provisions particularly concerned with protecting confidentiality have been extended (see Chapter 6).

While the design and statistical integrity of the Census are, properly, matters for which sole responsibility should rest with the UK Statistics Authority and the National Statistician, approval of the form and the content of the Census is a matter for Parliament and the Welsh Ministers.

A formal role for the Welsh Assembly Government

The statutory responsibility for the administration and the conduct of the Census is not a matter that has been fully devolved in Wales, and thus, such responsibility rests with the UK Statistics Authority. However, as a result of the concerns and strength of feeling expressed by users and stakeholders in Wales at the time of the 2001 Census over the lack of a ‘Welsh’ tick box response category in the ethnic group question, and following the recommendation of the Treasury Select Committee in its report on the 2001 Census, the UK Government made a commitment to work with the Welsh Assembly Government to provide the means to give Welsh Ministers a more formal role in determining the conduct and content of the Census in Wales.

Information on the legislative process necessary for taking the Census in Wales is set out in Chapter 7. Where the arrangements for carrying out the Census in Wales are different from those in England these are noted in the relevant sections of this White Paper.
Separate consideration of the proposals for the Censuses in England and Wales, in Scotland and in Northern Ireland

1.20 In Scotland and in Northern Ireland, the Census is fully devolved. The arrangements described in this White Paper where they refer to the conduct of the Censuses in Scotland and Northern Ireland, whether in common with the approach taken in England and Wales or in its references to proposals particular to Scotland or Northern Ireland, will be subject to the consideration of the respective devolved administrations.

1.21 The UK Government and the UK Statistics Authority welcome the detailed planning and preparations already in progress for the conduct of the Censuses in Scotland and Northern Ireland. Not only do the proposals permit harmonisation of 2011 Census results across the United Kingdom, in line with user demand, but they also provide the basis for the Censuses to be carried out efficiently while remaining sensitive to different circumstances and user needs in Scotland and Northern Ireland. Continued close co-operation and joint working on the Census is also consonant with the aim of the concordat on statistics proposed between the United Kingdom administrations. The Government understands that the Registrars General for Scotland and Northern Ireland plan to proceed on a similar timetable to that in England and Wales.

International perspective and EU Regulations

1.22 The need for information is shared by the European Union (EU). The European Commission needs to be in possession of sufficiently reliable and comparable data on population and housing in order to fulfil the tasks assigned to it, notably by Articles 2 and 3 of the Treaty establishing the European Community\(^{10}\). To this end a Council and European Parliament Regulation\(^{11}\) requiring Member States to provide the Statistical Office of the European Communities (Eurostat) with census-derived statistical information, or equivalent data, relating to the reference year 2011 came into force in July 2008. Aggregated statistics, agreed by the National Statistical Institutes of Member States, and to be prescribed by a subsequent Commission Regulation, will be supplied to Eurostat for use by the European Commission in support of the European Parliament. Arrangements will be put in place to ensure that statistical disclosure controls are in place to protect the confidentiality of any statistical data to be made accessible to Eurostat under this obligation (see also Chapter 6).

1.23 The United Kingdom is playing a full part in discussions to ensure harmonisation of the statistics produced by the different EU Member States. The concepts and definitions to be adopted by the EU will adhere to the Conference of European Statisticians’ Recommendations for the 2010 Censuses of Population and Housing\(^{12}\), prepared by a joint Eurostat and UN Economic Commission for Europe Working Group, to which the UK made a significant contribution.
1.24 The UK will also comply, as far as possible, with any statistical requirements identified by the United Nations (UN). A set of principles and recommendations for the next round of censuses throughout the world has been adopted\(^\text{13}\), following a meeting of the UN Statistical Commission in New York in February 2008, and all countries have been asked to produce core outputs which will be incorporated into a UN demographic publication.

**Recommendations from the 2001 Census and the strategic aims for 2011**

1.25 The strategic aims for the 2011 Census have taken into account the lessons learned from the 2001 Census assessed through ONS’s own evaluations and changes in society expected between 2001 and 2011. ONS also took account of the recommendations made by external bodies, such as the Treasury Select Committee, the National Audit Office, the Statistics Commission, the Public Accounts Committee and the Local Government Association in their own independent reviews of the 2001 Census\(^\text{9,14-17}\). In summary, the key issues raised in these reviews covered the need to:

- agree earlier those contractual arrangements with external suppliers for aspects of the census operation that are to be outsourced, and ensure that all such suppliers are selected through rigorous procurement procedures and early enough so that systems are able to be fully tested before the Census
- develop a high quality and up-to-date address list to increase the efficiency of the delivery of Census forms
- develop robust field management and form-tracking systems to enable better central control of field processes and activities
- undertake more detailed and earlier engagement with stakeholders, particularly local authorities and to review consultation processes to ensure that the needs of the disabled community are taken into account
- review consultation processes to ensure that the views of people in Wales and the Welsh Assembly Government are better reflected in census planning
- review whether or not the coverage survey design is sufficient to identify under-enumeration in the hardest-to-count areas
- review the need to collect information on income
- review the cost-benefit trade-offs in aiming to produce more timely outputs that are consistent and harmonised across the UK
- review the mechanisms to protect statistical confidentiality without eroding the utility of the data

1.26 Taking account of the many comments and recommendations arising from the 2001 Census, the UK Statistics Authority’s proposals for the 2011 Census are based on a number of strategic aims:
• to give the highest priority to getting the national and local population counts right
• to build effective partnerships with other organisations, particularly local authorities, in planning and executing the field operation
• to provide high quality, value-for-money, fit-for-purpose statistics that meet user needs and which are as consistent, comparable and accessible across the UK as is possible
• to maximise overall response rates and minimise differences in response rates in specific areas and among particular population sub-groups
• to protect, and be seen to protect, confidential personal census information

Summary of the key 2011 Census design features

1.27 In summary it is proposed that:

• The 2011 Census will cover everyone usually resident in England and Wales on Census night, with a subset of information also collected from visitors present on Census night. Information will also be collected from residents in communal establishments and individuals or households with no usual or physical address
• Forms will primarily be delivered by post (to as many as 95 per cent of households). Field staff delivery will be focused in areas which are particularly hard to enumerate
• The public will be able to return completed forms either by post, online, or by doorstep collection; special arrangements will be made to collect forms from households who are otherwise unable to complete returns in these ways
• Help will be available to anyone who has difficulty in completing the Census form
• There will be a slight increase in the number of questions compared with the 2001 Census, but the form has been re-designed to make it easier to complete
• There will be some differences in the questions asked in England and Wales compared to the 2001 Census, (and some further differences compared with the Censuses in Scotland and in Northern Ireland)
• Significant changes from 2001 in the questions proposed are:
  – questions on national identity and citizenship
  – additional response categories in the ethnicity question
  – questions on second residences
  – a question on language
  – the inclusion of a civil partnership category in the marital status question
  – questions on date of entry into the UK for in-migrants and intention to stay
  – no inclusion of the questions on access to toilet and bath/shower
Details of these and of other changes to the topic content are set out in Chapter 3.

- Each question included in the proposals meets a demonstrated need and is suitable for a self-completed form; previous censuses or tests have shown the questions to be generally acceptable to the public, but the acceptability of all questions will be subject to further assessment during 2009.
- Stringent confidentiality and security procedures will protect the information gathered in the Census and will conform to the requirements of Census Confidentiality, Data Protection and Freedom of Information legislation as well as to the provisions of the new Statistics and Registration Service Act 2007 (see Chapter 6 for more detail).
- The Census relies on public co-operation, and to help achieve this there will be publicity to convey to the public the purpose and value of the Census and to give assurances about the confidentiality with which information is treated.
- Initiatives have been put into place to maximise, and measure effectively, the quality of the information collected; in particular, Census coverage and quality surveys will be carried out to measure the number of people not counted by the Census and the quality of the responses given.
- The statistical outputs from the Census will be designed to meet user requirements, and dissemination will be to a pre-arranged timetable.

**Cost and financial control**

1.28 On the basis of present planning assumptions, the total cost of the 2011 Census in England and Wales over the eleven year period 2005–2016 is currently estimated to be £482 million. The breakdown for this period is:

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</thead>
<tbody>
<tr>
<td>England and Wales</td>
<td>12.0</td>
<td>11.3</td>
<td>40.6</td>
<td>48.7</td>
<td>152.4</td>
<td>184.7</td>
<td>32.0</td>
<td>481.7</td>
</tr>
</tbody>
</table>

1.29 Provision of £450 million for the cost of the Census has been made up to the period 2011–12. Provision for later years will be subject to future spending reviews and will cover the final stages of data and output processing, dissemination and a number of subsequent output services and releases.
1.30 Costs of the Census operation will be closely controlled and monitored. The largest elements of the total cost are the field operation – the delivery and collection of the questionnaires – and the processing of the data. In a drive to improve the cost effectiveness of the operation, the Census Offices are taking forward the outsourcing of these and some other aspects of the 2011 Census, building on the 2001 experience (see paragraphs 4.74–4.81). Altogether around 55 per cent of the planned costs of the Census have been identified for possible private sector involvement.
Consultations and census tests
2 Consultations and census tests

“A Census is a complex and costly undertaking and one that is only undertaken when it has been clearly shown that there is a need for it. Planning the Census is inevitably a long process, requiring many phases and it is vital that consultation takes place with a wide range of users of census data to determine their needs for data.” 2001 Census General Report for England and Wales

Consultation process

2.1 The design and content of the 2011 Census has been shaped by three principal determinants:

- the demands and requirements of users of census statistics
- the evaluation of the 2001 Census
- the advice and guidance of international census agencies and organisations with experience of similar operations

These have been determined by extensive consultation, through international liaison, formal advisory committees, topic-related working groups and ad hoc public meetings, via media such as ONS consultation and information papers, and the Census website. There have been – and continue to be – many full and detailed responses from stakeholders, users and members of the public which have been key in developing the proposed Census design.

2.2 Government departments were consulted, both on a bilateral basis and collectively through the Heads of Professions of the Government Statistical Service and inter-Departmental Committees, to determine their needs and priorities for topics to be included. Local authorities, the health service, the academic community, the business sector and local communities were similarly consulted through long-standing Census Advisory Groups convened by the National Statistician. Topic experts and methodologists within ONS have also been consulted.

2.3 The Census Advisory Groups, comprising representatives of each of the main user communities and ONS officials, usually meet twice a year but receive information and consultation as and when relevant. In addition to those Groups established before the 2001 Census (covering the interests of central government departments, local authorities, the health service, the academic community, and business and professional associations, two new Advisory Groups were convened for the 2011 Census in response to the recommendation of the Treasury Select Committee’s report on the 2001 Census in order to provide forums to hear
the view of users and wider stakeholders in Wales and the Third Sector bodies representing the interests of local communities, minority population groups, the disabled and faith organisations.

2.4 The Groups provide a forum for discussion on a wide number of aspects of the Census covering:

- the population base
- topic content
- definitions and classifications
- test and rehearsal plans and outcomes
- data collection methodology
- quality assurance plans
- community liaison
- outputs, including geography and dissemination media
- statistical methodologies and disclosure control
- evaluations

2.5 Advisory Groups form a key component of user consultation for the Census and will continue to meet, either in their current or – in some cases – revised format, up to and after Census day.

2.6 Additional consultation with local authorities was initially managed through a specially formed Local Authority Liaison Steering Group, which played a particular role in steering the partnership working arrangements between ONS and local authorities in developing the field operation with the overall aim of improving response. Census planners have, in particular, heeded the lessons learned from the 2001 Census in those areas that proved to be especially difficult to enumerate.

2.7 Engagement with local authorities at the more senior level has been conducted initially through the Society of Local Authorities Chief Executives (SOLACE), who established a Census Sub Group of their Electoral Matters Panel in 2006 in order to facilitate the engagement with local government at the policy decision making level, and is now being developed through a network of Census Regional Champions appointed from among the Regional Returning Officers for each of the nine Government Offices in England and the Returning Officer for Wales.

2.8 In Wales, liaison with local authorities is facilitated through the Welsh Local Government Association, SOLACE Wales and the Local Government Data Unit. Engagement at working level takes place through the Welsh Statistical Liaison Committee and other forums. Furthermore, in Wales, representatives of ONS and the Welsh Assembly Government attended a meeting of each of the National Assembly Subject Committees during the period October 2006 – March 2007 to discuss plans for the Census in Wales (see also paragraph 7.11). In particular these covered:
the arrangements for transferring the power to make Census Regulations from the Chancellor of the Exchequer to the National Assembly (and which was subsequently transferred to Welsh Ministers by virtue of the Government of Wales Act 2006 (see paragraphs 7.8–7.10))

• the differences in the content of the Census questionnaire in Wales, such as the inclusion of a Welsh identity tick box and a question on Welsh language (see paragraphs 3.57 and 3.65 respectively)

• the special arrangements for carrying out the Census in Wales, such as the provision of census questionnaires in both Welsh and English language versions and bilingual publicity material (see also paragraph 4.43)

2.9 In addition, there have been formal public consultations, supported by a number of national roadshows and open meetings, on particular issues, and ONS has welcomed views and submissions on the Census from any source with or without invitation. Box 1 summarises the main consultations carried out to date.

**Box 1  Consultations on the 2011 Census in England and Wales**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>October 2003</td>
<td>Joint Advisory Groups workshop</td>
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<tr>
<td>November 2003</td>
<td>ONS/RSS Conference ‘Census 2001 and Beyond: Learning from the past – building for the future’.</td>
</tr>
<tr>
<td>May 2005</td>
<td>ONS’s Initial view on content published.</td>
</tr>
<tr>
<td>March 2006</td>
<td>Assessment of initial user requirements on content published.</td>
</tr>
<tr>
<td>October 2006</td>
<td>Information Paper on Development of a questionnaire for the 2007 Test published.</td>
</tr>
<tr>
<td>November 2006 – Feb 2007</td>
<td>Consultation on Small Area geographies.</td>
</tr>
<tr>
<td>Dec 2006 – March 2007</td>
<td>Consultation on ethnicity, identity, religion and language.</td>
</tr>
<tr>
<td>March 2007</td>
<td>Updated view on content – open meetings in Cardiff, London and Sheffield.</td>
</tr>
<tr>
<td>October 2007</td>
<td>Responses to consultation on ethnicity, identity, religion and language published.</td>
</tr>
<tr>
<td>February – May 2008</td>
<td>Online consultation on users’ output needs.</td>
</tr>
<tr>
<td>November 2008</td>
<td>Outputs consultation public Roadshow.</td>
</tr>
</tbody>
</table>
2.10 ONS has carefully considered all views expressed to date in preparing the proposals set out in this White Paper.

Wider stakeholder engagement

2.11 In addition to the well-established mechanisms for consulting users of census statistics, ONS has developed strategies for engaging a wider range of stakeholders to enable a better understanding of the broader perspective of views on the conduct of the Census. In particular, ONS is striving to encourage dialogue with Parliament and the National Assembly for Wales through the forums of Select Committees, National Assembly for Wales Committees, All-Party Parliamentary Groups, and with individual MPs/Assembly Members as and when the opportunities arise, to ensure a more general understanding of, and cross-party support for, the aims and objectives, and importance, of the 2011 Census, so that the whole operation commands widespread support.

2.12 Closer liaison with community groups and other bodies will aim to ensure that the Census meets not only the statistical needs of users, but that disability and other equality issues are properly addressed in order that the Census is fully compliant with the obligations put on ONS arising from equality legislation. Specific issues are referred to in more detail in Chapters 3 and 4.

Census tests

2.13 The UK Statistics Authority's proposals also take account of the results of a programme of research and testing aimed at better understanding of the public's comprehension and perception of census-related concepts, and of tests, both small and large-scale, of census question wording, questionnaire design and delivery methods.

2.14 Early planning, testing and evaluation are essential processes for the success of the 2011 Census. The purpose of conducting voluntary tests prior to a census is to assess the wide range of different aspects to the census operation, from public acceptability of the questions and the operational procedures to the various stages of data processing. The changing needs of census users, and developments in technology, lead to innovations in the census operation that must be thoroughly tested before they are adopted, allowing time to make changes and then to re-test where necessary. In particular, the 2011 Census aims to adopt:

- a new questionnaire design
- new delivery and collection methods
- stronger partnerships with local authorities and communities
- new outsourced technologies and operational targeting methodologies including address checking and postal delivery
- more flexible deployment of follow-up resources
2.15 A major Census Test took place in England and Wales on 13 May 2007. Its main aims were to:

- evaluate the effect on response of (i) the inclusion of a question on income, and (ii) the use of post-out to deliver questionnaires
- assess the feasibility of some major innovations in operational procedures, such as the development of an address register and the outsourcing of field staff recruitment, training and payment
- assess the performances of alternative suppliers as part of the procurement of a number of contracted services

2.16 The 2007 Test was a large-scale test in five local authority areas selected to reflect a range of field conditions. The five local authorities (four in England and – for the first time in a major Census Test – one in Wales) (see Figure 1) represented a range of area types according to the ONS area classification:

- Liverpool (Services and Cities)
- Camden (London Centre)
- Bath and North East Somerset (Prospering UK)
- Stoke-on-Trent (Mining and Manufacturing)
- Carmarthenshire (Coastal and Countryside)

2.17 The selected areas were chosen, adopting a number of criteria, to provide a varied cross-section of the population – containing a mix of students, the elderly, ethnic communities – and types of housing that would be covered in a full census.

2.18 Overall response to the voluntary Test was 48 per cent and ranged from 35 per cent in Camden to 66 per cent in Carmarthenshire. Response was lower than in the equivalent 1997 Test prior to the 2001 Census, reflecting not only the trend in pre-census tests over the past 30 years for declining public participation but also the fact that the areas chosen were biased towards those that are particularly hard to enumerate and where response was, therefore, expected to be lower than average. Nevertheless, this was sufficiently high for valid statistical evaluations to be made. A summary evaluation of the Test was completed in spring 2008 and as a result of its findings, several of the procedures followed in the 2001 Census were significantly revised. Key changes included:

- delivery of the majority of census forms by post
- outsourcing the recruitment, training and payment of the enumeration field force
- reliance on a field management system to track form movement and monitor local area response rates
Figure 1  England and Wales: The 2007 Census Test and 2009 Rehearsal; Local and Unitary Authorities

2007 Test
1  Liverpool
2  Stoke-on-Trent
3  Bath and North East Somerset
4  Carmarthenshire
5  Camden

2009 Rehearsal
6  Isle of Anglesey
7  Lancaster
8  Newham
2.19 In addition to the major Test in 2007, smaller-scale tests and research have been carried out over the period 2005–2008. These have ranged from establishing public acceptability of questions and terminology (conducted primarily through focus groups and cognitive research) to assessing the feasibility of innovative field activities and the effectiveness and coverage of existing address lists (conducted through postal surveys and field tests).

2.20 These tests were voluntary and the Government is most grateful for the co-operation given by members of the public in responding to them. A similar programme of testing has also been carried out in Scotland and Northern Ireland by the respective Census Offices there 21,22.

Census Rehearsal

2.21 A Rehearsal for the Census in England and Wales will take place on 11 October 2009, with the aim of ensuring that all the procedures for delivery and collection of the census forms will be effective. The Rehearsal is currently planned to cover some 135,000 households in areas chosen to simulate actual census-type conditions by including a cross-section of the population and types of housing, for example, areas with high levels of multi-occupancy, particular rapid growth and population movement, student accommodation, hotels and holiday accommodation, hospitals and other large communal establishments, and various ethnic minority communities. The Rehearsal areas will include 61,000 households in Lancaster (the whole LA), 40,000 in Newham (approximately 40 per cent of the borough) and the whole of the Isle of Anglesey (Ynys Môn)(covering some 34,000 households) (see Figure 1).

2.22 The aim will be to minimise the risk of failure in 2011 of the Census field operations and supporting systems, particularly of new and innovative procedures and systems, by proving:

- online response to the questionnaire
- an address register for use in form delivery and form tracking
- the key field support systems
- data capture and coding
- the communication of key messages to the public and stakeholders
- those elements of the Census design that are specific to Wales

2.23 There will also be complementary rehearsals of the Census operation in Scotland and Northern Ireland in 2009.
Population and topics to be covered by the Census
3 Population and topics to be covered by the Census

“There is an unyielding tension in the collection of census data between change and continuity. As social realities change, this must be reflected in the questions asked and the definitions used, otherwise the census becomes fossilised and loses its relevance. On the other hand, one of the main uses of the census is to make comparisons over time – to record shifts in the population, changes in the occupational structure, changes in housing.” Angela Dale, Cathie Marsh Centre for Census and Survey Research, University of Manchester

The population base

3.1 Traditionally each decennial census covers all the people in England and Wales, and this is again proposed for the 2011 Census. Prior to the 2001 Census the enumeration base was those persons who were present at an address on Census night, and counts of residents were estimated by transferring visitors back to the area of their usual residence. But following consultation prior to the 2001 Census, users had expressed a strong preference for the Census to count persons at their place of residence whether or not they were actually present there on Census night and this change was thus made. A decision was also made at that time not to count visitors in order to reduce the burden on the public.

3.2 There was some evidence, however, that this failure to attempt to capture visitors and the resulting lack of clarity as to where visitors should be recorded were two of the factors that lead to the undercoverage in the 2001 Census. Consequently, although ONS proposes again to enumerate persons where they are usually resident, information on visitors present in households on Census night – including overseas visitors – will also be collected (see paragraphs 3.95–3.96) and separate counts produced.

3.3 Each household will be given a 2011 Census questionnaire to complete, containing questions relating to each person usually resident in the household as well as to the household as a whole. Additionally, there will be space for the householder to record the number of visitors present at the address on Census night and certain basic demographic characteristics such as age, sex and usual address. However, if any such visitors are normally resident elsewhere in the United Kingdom, they will also be required to supply full information at their usual residence.
3.4 As before, students and boarding schoolchildren will be regarded as being resident at their term-time address irrespective of where they are present on Census day, thus making the Census consistent with the base for the mid-year population estimates.

3.5 People resident in some types of communal establishments, such as hotels and hospitals, will be given individual forms for completion. Separate arrangements will be made for the enumeration of other types of establishment such as prisons and military camps (see paragraphs 4.36–4.38).

3.6 Thus all UK residents will be enumerated at the address where they are usually resident at the time of the Census; the return for a household will also include anyone normally resident there who happens to be away on Census night, whether elsewhere in the United Kingdom or abroad. Visitors will be allocated to their place of usual residence. The resulting counts of the number of people usually resident in an area will form the basis of the population figures used in calculating central government revenue support allocations to local government and health authorities. Because of the importance of making these figures as accurate as possible, people in households where no one was present on Census night will be required to complete a Census form on their return to their usual residence, if this is within six months of Census night. Absent households that do not complete a census return within this period are likely to be imputed as part of the coverage assessment process (see paragraph 5.16).

Revised definition of a ‘household’

3.7 For the 2011 Census, ONS is adopting a revised definition of what constitutes a household, with the aim of improving response rates, particularly at addresses with multi-occupancy.

3.8 In the 2001 Census (and the previous census), enumerators were instructed to deliver a census form to each individual household being defined as: either one person living alone or a group of people (not necessarily related) living at the same address with common housekeeping. For this purpose ‘common housekeeping’ was defined as: sharing at least one meal a day or sharing a living room or sitting room. However, difficulties were encountered by householders in interpreting the definition of a ‘household’, and with the proposed move to a predominantly post-out methodology with its concomitant loss of door-step contact, it was felt that, for the 2011 Census, a more intuitive definition of household was required. In particular, it was felt that the term ‘common housekeeping’ was becoming increasingly outmoded and misunderstood. Further consultation with users, and a research and testing programme with the public, was undertaken in order to devise a more readily understood concept that both reflected social change and modern living conditions, particularly within the circumstances of multi-occupied dwellings and yet was consistent with the harmonised definition that
was recommended for use in government surveys. The following definition was adopted in the 2007 Census Test:

“A household is: one person living alone; or a group of people (not necessarily related) living at the same address, who share cooking facilities and share a living room, sitting room, dining room or kitchen.”

3.9 Although this definition does not provide consistency with the 2001 Census, it performed well; cognitive research and post-test evaluation showed that respondents did not have difficulty in understanding it and that no problems were encountered. Furthermore, the new definition is entirely consistent with the current Conference of European Statisticians’ Recommendations for the 2010 Censuses of Population and Housing. However, in order to avoid lingering ambiguities in determining what elements of living accommodation are shared, a further revised definition is being adopted in the 2011 Census:

“A household is: one person living alone; or a group of people (not necessarily related) living at the same address and sharing cooking facilities and who also share a living room or sitting room or dining area.”

Requirements for topics

3.10 The topics proposed for the Census are those that have been shown to be most needed by the major users of census information and for which questions have been devised that can be expected to produce reliable and accurate data. In each case, no other comparable and accessible source of the information is available in combination with other items in the Census.

3.11 An initial view on the content of the 2011 Census was published in May 2005 with the aim of promoting discussion and to encourage the development of strong cases for topics to be included in the 2011 Census. The consultation resulted in a much larger demand for questions than would be possible to accommodate on a Census form that households could reasonably be expected to complete. Users initially indicated a need for all the topics covered in the 2001 Census and a range of additional topics covering national identity, income, language, nature of disability, second residences, year of entry into the UK and sexual identity. Subsequently cases were made for further topics such as, number of bedrooms and intention to stay in the UK. In coming to a final selection of questions some difficult decisions have had to be made in assessing the different requirements for information and balancing the needs for change against continuity. A number of criteria formed the basis of the evaluation of the strength of the case made by users for each topic.

Criteria to meet user need

3.12 Topics must meet a significant and clearly demonstrated user need. Users’ needs could be justified in terms of, for example, significant resource allocation,
improved service provision, policy development or policy monitoring. It is essential, therefore, that every question asked has a specific purpose, and that the data collected are of major national importance. Unless a robust case has been made for gathering particular information, a topic has not been included.

3.13 The Census is particularly appropriate for topics about which users require *detailed information for small geographic areas and/or information about small population sub-groups* that cannot be sufficiently identified through other means, such as administrative records. Information required for broad geographic areas only (such as at the local authority or regional level) may be better obtained by other means (for example, sample surveys) depending on the detail of the cross-classification required. Equally, if the need is restricted to information about a few specific small areas, other methods of data collection might be more appropriate.

3.14 A key benefit of census data is the *ability to analyse particular variables against one another*. A requirement to undertake such multivariate analysis will strengthen the case for inclusion of a topic in the Census. The topics proposed in this White Paper are mutually supporting; that is, each one will provide information that will make others more useful. This is a particularly valuable aspect of a Census, where information on a range of topics is collected simultaneously for the whole population to form a single source from which important inter-relationships between two or more topics can be analysed. Answers from the individual people forming households and families can thus be combined to provide valuable information on the number and characteristics of households and families of different types – such as, for example, the number of single-parent families where the parent is employed and the children are under school age.

3.15 And finally, *statistical comparison with previous censuses* is an important aspect of census analysis. Wherever possible, close attention has been given to comparability with content of the 2001 Census questionnaire.

**Criteria for ONS to consider**

3.16 In addition there were other factors which ONS needed to take into consideration in evaluating what information can be collected from the Census and assessing the priorities for topics:

- the inclusion of particular questions should be shown, in tests, to have had no significantly adverse effect on the Census as a whole, particularly the level of public response
- it is also essential that practicable questions can be devised to collect data which are of sufficient and measurable statistical quality to meet users’ requirements for information

3.17 Moreover, the Census is a compulsory exercise carried out on a self-enumeration basis and each householder is therefore required to complete all relevant questions on the questionnaire (with the exception of any question relating to religion –
This imposes constraints on the types of data that can be collected if high quality and accurate outputs are to be produced. Therefore the Census should not, in general:

- ask sensitive or potentially intrusive questions that would result in an unacceptable level of non-response
- ask questions that require a lengthy explanation or instruction to ensure an accurate answer (since research has shown that people often do not read such instructions) or
- seek information not readily known or that people are unlikely to remember accurately and which, as a consequence, is likely to be unreliable

3.18 Consideration has also been given as to whether or not data are available from other sources. Similar or surrogate data may, for example, be collected by another government department or organisation, or there may have been surveys already conducted, or planned to be conducted, by ONS, or the data may be available from administrative records. The National Statistics Code of Practice Protocol on Managing Respondent Load states that “National Statistics will, where appropriate, be derived from information supplied for the administration of government business and public services”25. The 2011 Census should, therefore, generally only seek to collect information for which there is no other viable source.

3.19 ONS itself currently produces an extensive range of information from economic censuses and surveys, administrative sources and a comprehensive programme of population and household surveys. Whilst ONS surveys are not able to collect the detailed information that can be obtained from the Census for small population sub-groups or small areas, there are general benefits associated with interviewers collecting the data rather than the self-enumeration methodology used in the Census (for example, the ability to probe into more detail and to resolve uncertainties). Surveys may also hold an advantage over the Census in terms of timeliness of outputs.

3.20 The burden on the respondent is something which has to be considered when designing a Census questionnaire. Therefore, the length of, and the available space on, the form has to be limited, and the design and size of a question is an important factor in deciding whether or not particular information can be collected by the Census. Although, the 2011 Census questionnaire is a page-per-person longer than the 2001 form, evidence from tests suggests that this increase is not expected to affect response unduly.

3.21 In addition to these factors, the Census should be seen to be an exercise carried out purely for statistical purposes. Therefore, the Census should not be used to collect data that will deliberately promote political or sectarian groups, or sponsor particular causes.
3.22 Finally, ONS has considered the legal and statutory requirements. The Census Act 1920 (as amended by the Census (Amendment) Act 2000) restricts, to some degree, what information can be collected from the Census. ONS has also had to consider the potential requirements arising from the European Union’s recently adopted Regulation on censuses of population and housing and current international guidelines relating to census content, which are made to facilitate international comparisons of statistical outputs. Recommendations made by the United Nations, the UN Economic Commission for Europe, and Eurostat have been taken into account in shaping the content of the 2011 Census questionnaire.

**Selected topics**

3.23 In summary, the UK Statistics Authority proposes that information on the following topics should be collected in the 2011 Census:

At all properties occupied by households and for all unoccupied household accommodation:

- Address, including the postcode.

**For households:**

- Number and names of all residents whether present or temporarily absent on Census night
- Name, usual address, sex and age of any visitor present on Census night
- Tenure of accommodation
- Type of accommodation and whether or not it is self-contained
- Type of landlord (for households in rented accommodation)
- Number of rooms (and bedrooms*)
- Type of central heating*
- Number of cars and vans owned or available

**For residents in households**

- Name, sex, and date of birth
- Marital status (including civil partnership status*)
- Relationship to others within the household
- Student status
- Whether or not students live at enumerated address during term time
- Usual address one year ago
- Country of birth
- Citizenship (passports held)*
- Month and year of entry into the UK* and intended length of stay* (for non-UK born)
- National identity* and ethnic group
• Religion
• Language*
• Welsh language proficiency (in Wales only)
• General health
• Long-standing illness or disability
• Provision of unpaid personal care
• Educational and vocational qualifications
• Second residence*
• Economic activity in the week before the Census
• Time since last employment
• Employment status
• Supervisor status
• Hours worked
• Job title and description of occupation
• Name of employer and nature of employer’s business at place of work (industry)
• Workplace address
• Means of travel to work

For visitors in households
• Name, sex, and date of birth
• Usual address (or country of usual residence if a non-UK resident)

For residents in communal establishments
• As for residents in household except for the relationship to others within the household
• Status within the establishment

For communal establishments
• Type of establishment (including age group and population catered for, and management responsibility)

3.24 Some of these topics (those marked*) are proposed for inclusion in the Census in England and Wales for the first time. All other topics were included, in one form or other, in the 2001 Census. The format of the question on ethnic group in England and Wales is more detailed than the question asked in 2001 to reflect changing needs and the dynamic profile of the ethnic minority population.

3.25 Questions on all the topics listed in paragraph 3.23 will be included in the Census Rehearsal in 2009. The questions that are being proposed are described in the following paragraphs. Subsequently, the questions to be included in the Census itself will be set out in subordinate legislation (the Census Order) to be laid before Parliament towards the end of 2009 (see paragraphs 7.3–7.4).
Questions to be asked at all addresses

Address and postcode

3.26 The first field activity of the Census, to be undertaken some six to nine months before the Census forms are issued, will be to carry out a check of all addresses within particular designated areas in order to ensure that ONS has a comprehensive and up-to-date address list, which it can use as the basis of form delivery either by post or by enumerator delivery. (A post-out methodology, together with the development of an Address Register, are innovations for the Census in England and Wales, and are described more fully in paragraphs 4.10–4.15). The full postal address including postcode will then be automatically printed onto each census questionnaire making it unique to that household (or communal establishment). The householder (or manager of the establishment) will be asked to check that the address information is correct and to amend it if it is not.

3.27 As well as facilitating delivery of the Census questionnaire, the address helps ensure the correct handling of the form by the field staff, and allows a check to be made on the receipt of those forms that are returned by mail. Strict confidentiality procedures (see Chapter 6) will ensure that information on names and addresses will not be used to reveal to anyone outside the Census organisation any information on identifiable individuals or households other than for the purposes of the Census. Details of those addresses not included on the initial address list to be used by ONS, but identified during the course of the address check may, however, be used to update other national address lists used more generally. This would only be done where there was no risk to the disclosure of personal census information (see paragraph 4.19).

3.28 The postcode of each address will enable Output Areas used for the presentation of census statistics (see paragraphs 5.36–5.39), to be defined in terms of postcodes and, in aggregated form, to be used in conjunction with other data organised on a postcode basis. A typical postcode covers only a small number of addresses, and the choice of areas which could be built from postcodes is, consequently, wide. However, in order to preserve the confidentiality of 2011 Census data for individual people and households, statistics – other than simple headcounts – will be released only for sufficiently large aggregates of postcodes, as was the case in 2001 (see also paragraph 6.5).

3.29 The person responsible for completing each census questionnaire will enter the name of each household resident to be included on the form. This helps to ensure that the enumeration is complete and enables any queries to be directed to the right people if it is necessary to check for any missing information.
Questions to be asked of each household

3.30 Some questions will be asked about each household as a whole. Information on the number of households is used in the planning, funding and management of services supplied to households generally. In addition, a wider range of census statistics about people and information on households and housing will aid decisions on rural development and on urban and inner city policies, particularly in the development of brown field sites. Statistics derived from the Census will also help define areas with problems of deprivation and enable policies and resources to be directed to areas with special needs.

3.31 Where accommodation is unoccupied on Census night and no form is returned, a few basic facts about the property will be recorded by field staff and used to complement the information collected from occupied accommodation. Households which are entirely absent from their usual address on Census night will be required to complete a census form on their return, if this is within six months of Census night.

Questions about housing

3.32 The Census will provide information about the accommodation occupied by each household. It will also provide a count of dwellings, including vacant dwellings, and of dwellings shared by two or more households. This will show the way in which the housing stock is being used and will provide a firm basis for assessing current and future requirements as the number and type of households change. No other data source gives such comprehensive information on housing stock at both national and local level.

3.33 At the local area level, the Census is the only source of nationally comparable information on housing, and this is used widely in calculations of grant entitlements to local authorities. Measures of inadequate housing and overcrowding are used in deciding on levels of housing investment and in targeting programmes which address social and economic needs in urban and rural areas. The following questions will be asked.

Type of accommodation and self-contained accommodation

3.34 Questions on the type of accommodation occupied by the household and whether or not that accommodation is self-contained will be used to identify separate dwellings and the characteristics of the accommodation in dwellings shared by two or more households. Households accommodated in caravans and other temporary structures will be identified. Central government, local authorities and other users have confirmed the ongoing importance of collecting this data to facilitate analysis of changes in housing supply and demand, to understand
variations in multi-occupancy and to identify deprived areas. The availability of such information provides a sound basis for comparing household and dwelling counts and establishing the distribution of vacant dwellings in small areas.

**Tenure of accommodation and type of landlord**

3.35 Questions on the **tenure of accommodation** and **type of landlord** (where the accommodation is rented) will show how much of the housing stock in each area is in owner-occupation and whether or not it is subject to purchase by mortgage, or is local authority housing, privately let, provided by housing associations, or held by other types of tenure. The information will help central and local government to assess changes in housing demand, to allocate resources and to review and develop housing plans and policies, and will be used by the housing industry in analysing the housing market and assessing possible mismatches between housing supply and demand.

**Number of rooms and bedrooms**

3.36 A question on the **number of rooms** within the accommodation will help show, together with the number and characteristics of people in each household, the degree to which accommodation may be overcrowded or under-utilised. Shortage of space is seen as a fundamental indicator of housing deprivation and as such constitutes an integral part of the Indices of Deprivation. Furthermore, living in overcrowded conditions is associated with adverse personal, social and health effects. For example, shortage of space is seen as detrimental to children’s development. An additional question – new for the 2011 Census – identifying the **number of bedrooms** is proposed.

**Type central heating**

3.37 The previous long-standing census question on whether or not households have exclusive use of either a bath/shower or toilet amenities, or both, is no longer regarded as providing a sufficiently discriminative indicator in the allocation of resources for housing development and regeneration. Consequently, this question has been dropped from the 2011 Census. A question on the **type of central heating** will, however, continue to provide a useful indicator of basic housing standards, and the information will be used by central government, local authorities and other users to facilitate work on fuel poverty and deprivation. These long standing requirements have been reinforced by new and emerging needs for better information on renewable energy and energy efficiency.
Household transport

3.38 A question, included in the Census since 1971, will ask how many cars or vans are owned or available for use by the household. The information is widely used to support work on transport policy and planning, and will, in particular, help to identify areas where private transport makes the most demand on road space, and to assess the demand for public transport and the need for new or improved roads to better manage traffic congestion. The statistics will also be used in making projections of future levels of car ownership, studies of road use and appraisals of the need for future investment in public transport. The information is widely used, for example, by local authorities in putting together local strategic and transport plans.

Questions to be asked of residents in households

3.39 About a half of the questions addressed to residents in households will apply to everyone; the questions relating to qualifications, economic activity, occupation and industry will not be asked of children aged under 16.

Basic population characteristics

3.40 The primary purpose of the Census is to give an accurate and authoritative count of the number of people in England and Wales and to show where they usually live, and so provide a new and up-to-date benchmark for annual mid-year population estimates for local areas. It is widely accepted that population estimates are central to every national system of official statistics; they are used in statistical formulae that allocate the vast sums of public money to the devolved administrations and to local government and the health service noted in paragraphs 1.10–1.11. As the Treasury Committee has commented, “… it is therefore a matter of social responsibility to ensure that the population statistics are calculated accurately”26.

3.41 In the years between censuses, the annual population estimates are updated (from the previous census base) by using data from registrations of births and deaths, and estimates of migration based on sources such as patient registrations with doctors and information from the International Passenger Survey and other surveys. Without the periodic corrective effect of a census count these estimates, particularly at the local area level, would become progressively less reliable.

3.42 Long-term policies need to take account of future populations. Population estimates revised in the light of the Census will be the basis for making projections of the number of people and households in future years, and will be used to assess likely demand for goods and services in both the public and private sectors.

3.43 The classification of the population by sex, age and marital status provides a basis for actuarial tables, which allow trends in life expectancy to be monitored
and which are used for a variety of purposes such as planning provisions for state pensions and life assurance. Analyses of persons in households by combinations of age, sex, marital status and relationship will give information on different types of household, such as those comprising lone-parent families or two persons of pensionable age, and will enable statistics to be produced on separate family units. The following questions will be asked.

**Sex, date of birth and marital status**

3.44 Apart from serving the essential needs for national and local population statistics described above, information on sex, age (determined by date of birth) and marital status is key for estimating the demand for local authority services, such as facilities for the young and elderly. The data are fundamental to the major statistical series, allowing age- and sex-specific rates for morbidity, mortality, fertility, marriage and divorce to be calculated. They will be used to cross-analyse all other census variables by sex, age and marital status, for example to estimate the numbers and ages of those married women who are employed in particular occupations or industries.

3.45 Following the Civil Partnership Act 2004, the traditional question on marital status has been expanded to include response categories for civil partnership status.

**Relationship in household**

3.46 In households of two or more people, a question will ask about the relationship between each person in the household. This information will provide statistics of households analysed by family composition, and will be used by, for example, authorities and organisations providing services to families who need to know how many families there are and what changes in family size have been taking place over time. Applications include planning accommodation and services for the elderly and assessment of the potential demand for housing from young families and multi-family households. Combination of the information from this question with that on sex will provide statistics on the number of same-sex couple households.

**Migration**

3.47 A question, included in the Census since 1961 will ask the usual address of each person one year before the Census. Where this is different from the current usual address, statistics will be compiled to give the numbers and characteristics of people and households who have moved from one area to another. The number of moves by type of person and household between areas and regions of the country will also be derived. The figures will show arrivals from outside the
United Kingdom, but not those leaving, in the year before Census. Additional questions new to the Census in 2011 will ask month and year of entry to the UK and intended length of stay in the UK (the latter subject to further testing and development) for all those persons born outside UK as a means of better establishing residency status.

3.48 This information is particularly important since migration accounts for much of the growth or decline of the population of areas between Censuses. The information collected in the Census will allow inferences to be made about the level and pattern of migration in other years. It is most important, for this purpose, that there is a complete count, and a better understanding, of the number of people and households moving in the year prior to the Census, particularly short-term migrants – the estimation of which was a focus of particular concern to the Treasury Committee in its recent report on counting the population\(^6\). The Census is the only current source of reliable migration data for small areas, and analysis of migrants by their demographic characteristics and type of move provides more information on this important group of people, for planning purposes, than is available from any other source.

3.49 Information from the traditional question on country of birth will provide information on people resident in the United Kingdom born in England, Wales, Scotland or Northern Ireland or elsewhere. Together with a new question to identify citizenship, the information will provide estimates of the numbers and circumstances of (sometimes small) immigrant communities from various countries, who may have particular needs, in order to support resource allocation and policy development.

Second residence

3.50 One of a number of key components that ONS is developing to improve coverage in the Census and to better understand the reasons for undercoverage is to build more ways of assessing residency into the content of the Census by introducing further questions on residence arrangements, particularly multiple residence. (The other main components are: seeking to improve the definition of a household (see paragraphs 3.7–3.9), counting visitors (paragraph 3.95); and the development of the Census Coverage Survey – paragraphs 4.63–4.65). To that end, the UK Statistics Authority proposes that the 2011 Census should include new questions asking about second residence and the reasons for staying at such an address.

3.51 Critical to the understanding of coverage will be a better measure of those dynamics of societal change that affect the previously well-established concept of usual residence, particularly the increasing tendency towards: weekly commuting; children of divorced or separated parents having more than one home; second homes; and global living patterns. Together with the information on usual address, responses to these new questions will enable ONS to better allocate the
population to the appropriate area of usual residence determined by the living patterns of households, and will help reconcile the census counts with the mid-year population estimates. The information will be particularly useful, for housing and transport planning, to local authorities who will want to know the numbers of people who stay within their area and use local services during the week but who have a usual residence elsewhere.

Cultural characteristics

Ethnic group and national identity

3.52 A question on ethnic group was first included in a Census in England and Wales in 1991. The information has enabled national and local government and health authorities to allocate resources and plan programmes taking account of the special needs of ethnic minority groups. In particular, response to the question has provided baseline figures against which the Government can monitor possible racial disadvantage within minority groups. The question worked well then and also in 2001 (despite some significant concerns in Wales about the lack of recognition of ‘Welsh’ as a separate ethnic group) when it was revised both to meet users’ requirements for additional information about people of mixed origin and sub-groups within the ‘White’ population (particularly the ‘Irish’) and to be as acceptable as possible to respondents. The classification of ethnic groups used in the Census is now widely regarded as a standard for inter-censal surveys and ethnic monitoring.

3.53 The UK Statistics Authority proposes to include a question again in the 2011 Census to meet a wide range of uses of ethnicity data:

- to enable organisations to meet their statutory obligations under race relation and equal opportunities legislation (where other sources of data do not adequately provide accurate data for small, geographically dispersed ethnic minority populations)
- in the formulae for grant allocation by Central and Local Government
- to inform policy development and monitoring
- to provide public bodies with a better understanding of the communities they serve and hence inform service provision

3.54 The categories identified have been developed from the frame of the 2001 Census question to meet changing user requirements, but the question continues to adopt that mix of geographic origin and colour characteristics that testing in the 1980s and 1990s had shown to be publicly most acceptable and from which the most useable statistics could be obtained. Whilst ethnicity is clearly a dynamic characteristic when considered nationally – and the Census must seek to reflect this – an equally important criterion is the ability to compare the results from one Census to another – and to that end the question must retain a degree of stability over time.
### 3.55
However, in order to make provision for those people, regardless of their broad ethnic group, to indicate their identity as being British, English or Welsh (or Scottish or Northern Irish, etc), a new additional and separate component to the question will ask about **national identity**.

### 3.56
The form and content of the ethnicity and national identity questions have resulted from extensive consultation with users and other key stakeholders – in particular as part of a formal consultation exercise on census topics generally in 2005, and a further consultation focused on ethnicity, identity, language and religion issues from November 2006 to March 2007, including a round of public meetings (see Chapter 2). This consultation aimed to determine not only requirements for information but also changing public attitudes towards the acceptability of the question among particular ethnic minority communities. The form of the proposed questions was also reviewed as part of an Equality Impact Assessment of the 2011 Census.

### 3.57
The form of the ethnicity and national identity questions that the UK Statistics Authority proposes in both England and Wales is shown at Figure 2. New response categories for ‘Gypsy or Irish Traveller’ and ‘Arab’ have been introduced into the ethnicity question. (For the questions in Wales the categories/tick boxes for ‘English’ and ‘Welsh’ will be transposed.)

### 3.58
Though, as in the 2001 Census, different forms of the question are being proposed in Scotland and in Northern Ireland (to reflect different information requirements there), the variants will, nevertheless, allow statistics to be produced which will be broadly comparable both throughout the UK and with statistics from the 2001 Census.

### Religion

### 3.59
A question on **religion** was included in the Census in England and Wales for the first time in 2001 following the Census (Amendment) Act 2000. Responses to the question helped provide information which supplemented the output from the ethnicity question by identifying ethnic minority sub-groups, particularly those originating from the Indian sub-continent, in terms of their religion. Information is used to improve understanding of local populations and markets for service planning and to promote legal obligations under equality legislation and to prevent discrimination.

### 3.60
**Religion** will be one of a suite of questions that will allow individual respondents to indicate their identity in the way they consider most appropriate. The UK Statistics Authority proposes no change to the basic format of the question for the 2011 Census, which will enable persons to record themselves as having no religion. As was the case in 2001, in accordance with the provisions of the Census Act, the question will – unlike all other questions in the Census – be voluntary. The proposed questions in England and Wales are shown at Figure 3.
Figure 2 The proposed 2011 Census questions on ethnicity and identity

(a) Ethnicity question in England

(b) Ethnicity question in Wales

(c) National Identity question in England

(d) National Identity question in Wales
3.61 Consultation with users has suggested that the form of the 2001 question would not meet all their requirements. In particular the case was argued that:

(a) the Christian and Muslim categories were too broad
(b) there was a need for information on additional religions and specific non-religious beliefs
(c) the concept of ‘religious practice’ should be distinguished from ‘affiliation/identity’

3.62 In relation to points (a) and (b) space constraints have meant that ONS would be unable to provide additional tick boxes for other religions or to further break down existing categories. ONS did explore whether the question could be reworded to reflect the wording used in the Equalities Act and tested the question: What is your religion or belief? However cognitive testing indicated that respondents were, not surprisingly, putting more emphasis on religious belief when interpreting the question than was the case with the 2001 question thereby compromising comparability with 2001 data without any real improvement to data collected.

3.63 In response to (c), ONS acknowledges that the proposed question does not measure religious practice, and that for some user needs (particularly for service planning) a measure of practice may be useful. However, it does not believe that a single religion question can be changed in such a way that would capture this information suitably and in a way that would justify losing comparability with 2001. Instead, ONS believes the existing question will meet other user needs (for understanding populations, monitoring inequalities, etc) and that an adapted question to be asked in social surveys would be the best way to capture information relating to practice.

3.64 As with ethnicity and national identity, the formats of the religion questions proposed in Scotland and Northern Ireland are different – reflecting local requirements and populations – but are sufficiently comparable for the purposes of providing broad UK statistics.
Language

3.65 A question on Welsh language will be asked in Wales – as has been done in one form or other since the 1891 Census. Responses will provide information that will be used to measure the change in Welsh language proficiency to inform policy development and monitoring. The information is also used to inform local resource allocation. (Similar questions with respect to the use of Gaelic and Irish language will be asked in Scotland and Northern Ireland respectively).

3.66 However, the UK Statistics Authority proposes to introduce new questions in the 2011 Census on language which will enquire, throughout England and Wales, into main language used and ability in speaking English. The question on main language will enable respondents to record their main language (including sign languages) if this is not English (or Welsh in Wales) (see Figure 4). Responses will provide an indication of areas and communities where foreign language service provision is necessary, and to better understand the diversity of the population and in particular the impact of English (or Welsh) language ability on employment and other social inclusion indicators.

Figure 4 The proposed 2011 Census questions on language

(a) England

(b) Wales

Health

Long-standing health problem or disability

3.67 A question, a form of which was included for the first time in the 1991 Census and repeated in 2001, will ask whether or not a person has any long-standing health problem or disability that causes difficulties in doing day-to-day activities. Problems which arise from old age will be included. The information will be used as a measure of the need for health and personal social services at national and health/local authority level, and around particular local facilities, either existing or planned. In line with the requirements arising from the Disability Discrimination Act 1995, the 2011 question will cover both disability and illness. A question inquiring into the nature of specific disabilities was also considered.
but is not being proposed as it has not been possible to devise a self-completion question that can provide sufficiently accurate data to meet user requirements.

3.68 The question will enable the Census to provide information on the circumstances in which the long-term sick and disabled live – for example, whether they live alone or in unsuitable accommodation. It will also provide analysis by age, which will be important as the number of elderly people increases. The information will be of value both to the public and private sectors in providing services to sick and disabled people.

**General health**

3.69 In addition to the question on long-standing health problems, the UK Statistics Authority proposes to include a **general health** question, which will ask the respondents to assess their own health over the preceding 12 months on a five-point scale ranging from ‘Very good’ to ‘Very bad’ expanding the three-response categories from the 2001 Census question. This information has been demonstrated in surveys to have a good predictive power for health policy and provision of services, particularly for the elderly. Its inclusion in the Census in 2001 for the first time enabled such information to be applied at the local area level.

**Provision of care**

3.70 The Government continues to recognise the increasing amount of **unpaid personal help** given to people with ill health, and welcomes the UK Statistics Authority’s proposal to include the topic again. This will help to improve the understanding of variations in the need for care and the pressure on social services in an attempt to target resources more effectively.

3.71 The 2001 Census information on carers has helped to identify key policy issues affecting carers and resulted in the development of policy initiatives in relation to better support for carers from health professionals, delivery of health care, assessment of progress towards better population health, and reduction of health inequalities. The data is also used to develop and monitor policies to promote equality of opportunity, to analyse the possible burden that could be placed on social care services if unpaid carers were not available, and to identify number of people with caring responsibilities who are not in contact with a carers support network.

3.72 Furthermore it is accepted that carers generally have poorer health and lead less healthy lifestyles and often require support services from the local authority. Census information on carers is used alongside other measures of health to identify local health inequalities. Carers also often experience isolation because of their caring responsibilities and are identified as a group at risk of social exclusion in the ODPM report *Breaking the Cycle*\(^{28}\). Carers are thus a priority group for
targeting resources aimed at reducing social exclusion, and Census carer data enable appropriate plans to be put in place.

3.73 The question will record whether or not the person provides unpaid personal help for a friend or relative with a long-term health problem or disability, and the time spent each week providing such care.

Qualifications

3.74 The information from a question on educational and vocational qualifications will be used to assess educational achievement and labour market participation across the population, looking at demographic groups at a local and regional level and the particular barriers faced. This will help users to understand and respond to equality and diversity issues, in order to widen participation and fair access. Information on intermediate and higher level qualifications is used in the derivation of the National Statistics Socio-economic Classification (NS-SEC) and, in particular assists the understanding of social patterns and local labour markets. Information on those people with no or low levels of qualification are used in deriving indices of deprivation which are used across central government and by public and voluntary sector organisations as the primary basis for identifying deprived areas for funding allocations and applications.

3.75 Information will be sought on the level of qualifications achieved with the primary intention of deriving the highest qualification and recognising any differences in qualifications in England and Wales. The UK Statistics Authority does not propose to retain the separate 2001 question on whether people have professional qualifications such as teaching, medical, nursing and/or dental qualifications, although there will be a category for ‘professional qualifications’ to be recorded. Consultation with users suggested that there is less of a requirement for this information compared with other Census topics proposed.

Employment and the labour force

3.76 The Census is a primary source of information about the socio-economic characteristics of the population and is the most comprehensive source at the local level. It provides statistics about the ages and occupations of workers in different industries. These statistics can be presented both by place of residence and, for those in work, by place of work. The Census also provides information about other, economically inactive, groups such as full-time students, people looking after the home and family, and the retired.

3.77 The Census is also the most comprehensive source of labour market information about sub-groups of the population, for which sample sizes at the local area level in the Labour Force Survey are too small to provide reliable estimates. For
example, the Census provides detailed statistics for small areas on employment and unemployment among different ethnic and socio-economic groups.

3.78 The Census further provides statistics on the pool of labour and the potential reserves of labour in all areas. Particular applications include projections of the future labour force, use by local authorities in drawing up their structure plans, and use by private sector employers wishing to locate operations in areas where there is suitable labour.

3.79 The majority of questions refer to a person’s main employment in the week before the Census or, for those not currently employed, to their most recent job, if any. The questions refer only to those people aged 16 or over, and cover:

**Economic activity in the week before the Census**

3.80 A number of questions will be asked in order to determine whether or not the person was in employment (including paid or unpaid or work in own/family business) or was:

- retired
- a student
- looking after the family or home
- long-term sick or disabled
- looking for work
- available for work
- waiting to start a job

3.81 These categories will provide the basic classification for analysis of economic activity designed to be as consistent as possible with definitions recommended by the International Labour Organisation\(^{29}\) and the Conference of European Statisticians\(^{12}\).

**Time since employment**

3.82 The question, new to the Census in 2001 asking, for those persons who stated that they were not working in the week before the census, the year in which they last worked, will be included again. This will help determine local differences in the periods of unemployment experienced and the extent of long-term unemployment. Use of the information includes assessing and monitoring disadvantage and exclusion, planning education and training, resource allocation, labour market analysis, and in studies of mortality and morbidity.

3.83 If a person has never worked, no further questions on employment will be asked. For those persons in paid work, or who have previously worked, further questions will cover:
Occupation of current main job, or last main job

3.84 Asking people their full job title and the main things done in their job will provide detailed and important information about the very wide range of work both nationally and locally. A revision to the current (2000) Standard Occupational Classification (SOC) is being prepared and it is intended that this will be applied in the coding of the 2011 Census data.

3.85 The statistics will be used in analyses of the labour forces of various industries and occupations, in studies of occupational mortality, and will provide the basis for the classification of people and households according to the National Statistics Socio-economic Classification (NS-SEC).

3.86 Two further separate questions will enhance the information collected on main occupation. A question on employment status will ask if the person works, or worked, as an employee or as self-employed with, or without, employees. A second question, on supervisor status, will ask if the person has or had any supervisory responsibilities in their job. Responses to these questions will help in assigning the person more accurately to the NS-SEC.

Industry of employment

3.87 This will primarily be determined by asking people the nature of the business of the organisation that employs them. The information will be used, for example, in labour market analyses and in the production of regional accounts and economic indicators. Additional information on industry may be obtained for those people currently working from the name and address of their employer (see also paragraph 3.92). Industry will be coded to the current version (SIC 2007) of the Standard Industrial Classification (SIC). No further revision is planned before the next Census.

Hours worked

3.88 A question on the number of hours usually worked in the person’s main job will distinguish those in full- and part-time work. The information will help to provide a better understanding of changes in working patterns, and how these apply to particular occupations and industries. The Department for Communities and Local Government will use the information to improve understanding of employment terms and conditions as applied in practice, particularly in relation to the children and young person’s agenda. At a local government level, information on people working long hours is an indicator of deprivation and can inform neighbourhood renewal strategies. Use of the information will also be made in labour market studies, in rural policy and regeneration, and in the derivation of area and socio-economic classifications. This information will also provide evidence for the working time directive.
Workplace and journey to work

3.89 From the information from the questions on employment and workplace the Census will be able to show where people who live in any area work, and vice versa. This information is the basis for measuring commuting patterns and assessing the balance of housing and jobs. The Census also adds to the value and usefulness of many routine employment statistics which are generally based on area of workplace, by providing analysis by area of residence.

3.90 Census statistics on where employed people live and work are used by Government departments in defining ‘Travel to Work Areas’. These areas represent approximations of self-contained labour markets and are the smallest for which unemployment rates are published. The Government uses unemployment information for small areas, such as wards, in identifying areas within the major cities to which additional resources should be directed. The following questions will be asked:

Address of place of work

3.91 Responses to a question on address of place of work will show the destination of individual journeys to work in relation to the usual address (which will normally be the origin of the journey) and will provide information on the numbers travelling to work from particular origins to particular destinations. Together with information from the question on means of transport to work (paragraph 3.93), the data will help to identify commuter routes that are subject to higher loads of public and private transport.

3.92 Additionally, the name of the organisation at which a person is currently working will be requested. This information is used solely as a further aid to the accurate coding of the type of industry (see paragraph 3.87 above) by reference to the Inter-Departmental Business Register (IDBR) – a list of large employers already classified by type of industry. Responses to the question will not be used to produce information on named individual employers.

Main means used for journey to work

3.93 This will show the mode of transport normally used for the longest part, by distance, of the journey to work. The detailed analyses of specific commuting flows by the main means of travel will be used in the planning for public transport provision and of facilities for private transport.

3.94 Consideration has been given to extending this question to cover journey to place of study for students and schoolchildren as had been done in the 2001 Census in Scotland (and where it will also be included in 2011). However, user demand
in England and Wales is less strong and there are concerns that the introduction of this extra dimension affects the quality of responses on journey to workplace. Consequently, the UK Statistics Authority does not propose to extend the question in England and Wales.

Questions to be asked of visitors

3.95 As noted in Chapter 2, whereas the 2001 Census did not seek to collect information of persons who were present on Census night at an address where they were not usually resident, the 2011 Census will include such ‘visitors’ on the household form. However, only limited information will be collected since visitors who are resident elsewhere in the UK will also be required to supply full information on the Census form at their usual address.

3.96 The information to be collected about visitors will be:

- **name** and **usual address** (or **country of residence** if a non-UK resident)
- **sex**
- **date of birth**

The Household form will have space for information on up to three visitors together with a count of the total number of visitors. This information will enable more accurate counts of visitors and usual residents to be made at the local area level. Linking counts of visitors to those of residents at their usual address will provide additional information on which estimates of census undercount, and/or overcount, can be made.

Arrangements for communal establishments

3.97 The Census will enumerate all people resident on Census night in communal establishments such as hospitals, nursing and residential homes, educational establishments and hotels, etc. (Residency in such establishments will be determined on the basis of a length of stay of six months or more.) Full particulars will be required of residents in such establishments, and statistics on these residents, separately identifying resident staff, will be prepared for each type of establishment. Such communal accommodation is becoming increasingly widely dispersed in small units, which are difficult to cover in sample surveys. The Census provides a comprehensive and authoritative count of the population living in these establishments that is not available from other sources.

3.98 Information will not be collected relating to the person’s accommodation (although data about the **type of communal establishment** will be collected separately from the manager or other person in charge of the establishment). Nor will information on relationship to any other person within the establishment be collected.
3.99 Special arrangements will be made to enumerate residents in prison service establishments and asylum refuges, on ships in ports and on military camps, and other population sub-groups not resident in private households, such as persons sleeping rough.

3.100 Information will not be collected on visitors present in a communal establishment on Census night. If resident elsewhere in the United Kingdom, such visitors – as for visitors to households – will be required to provide full information on the census form to be completed at their usual address. No information will be collected on any visitor who is a non-UK resident and who is staying in the communal establishment for a period of less than three months.

**Topics considered but not included in the proposals for the 2011 Census**

3.101 The UK Statistics Authority considers that each topic included in the proposals for the 2011 Census satisfies the criteria set out in Section 1. In addition to the questions on income and sexual identity (see paragraphs 3.104–3.117) several other topics were considered but are not proposed for inclusion, because:

(a) the case for them was not considered strong enough to displace one or more of the proposed topics, or
(b) tests had showed that the quality of the information obtained from a census question would not be fit for purpose, or
(c) the questions would place too great a burden on the public, or
(d) a combination of these reasons

3.102 The topics which have been considered but are not included in the proposals are listed in Box 2.

3.103 ONS carefully evaluated all the suggestions submitted. Some topics were rejected at an early stage in planning but many were subjected to both small- and large-scale testing. The Welsh Assembly Government similarly prioritised the cases made to inform the topic content of the Census questionnaire in Wales. The UK Statistics Authority is grateful to all those who made suggestions and regrets that it has not proved possible to include more of them.

**The case for and against including a question on income**

3.104 Consultations with users prior to the 2001 Census indicated a widespread requirement to have information on level of individual gross income available from the Census. Income was widely seen as a more discriminating variable than occupation or housing condition for the purposes of identifying areas of affluence
Box 2  Topics considered but not included in the proposals for the 2011 Census

– access to a garden or yard
– access to bank account
– access to bath/shower
– accommodation on more than one floor level
– address five years before the Census
– age of dwelling
– asylum or immigration status
– commuting address
– Cornish language and identity
– country of previous usual residence
– duration of residence at current address
– duration of residence in UK
– educational attainment
– email address
– fertility
– frequency of use of Welsh language in Wales
– furnished accommodation
– income
– Internet access
– lifestyle
– means of travel to, and location of, place of education
– National Insurance number
– nature of long-term illness or disability
– number of current jobs
– number of miles travelled per year
– occupation group and industry using a closed (tick box) question approach
– parents’ country of birth
– pet ownership
– place of birth
– presence of smoke alarms
– proficiency in foreign languages
– qualification or training required for occupation
– receipt of unpaid personal care
– sexual identity
– Sikh and Kashmiri ethnicity
– size of workplace
– taught languages
– term-time address of former students one year before Census
– type of disability
– type of tenancy agreement
– use of childcare facilities
– use of renewable energy resources
– use of wheelchair
– value of the home
– voluntary work
– state of repair of accommodation
or deprivation and in economic and social research. All main user communities made a strong case for a question on income in their business cases for census topics. In particular, central and local government users expressed a requirement for the information to be used to support a range of activities including resource allocation, policy development and review, the derivation of deprivation indicators, and in the assessment of inequalities and social exclusion.

3.105 However, at that time the Government felt that the strength of the requirement for census information about income had to be balanced against the possible public disquiet about the acceptability of such a question in a compulsory Census, the doubts about the reliability of the information collected, and the availability of possible alternative sources of the information.

3.106 The Government took into account evidence from:

(a) small-scale testing of various versions of an income question, that respondents tend not to answer questions on income with accuracy
(b) the 1997 Census Test and 1999 Census Rehearsal, which suggested that a question on income would adversely affect the response to the Census as a whole

3.107 Consequently, the Government, while recognising the widespread need for information on income, took the view at that time that the risk to the conduct of the Census as a whole of including such a question was too great, and undertook research into whether or not needs could be met by alternative sources of data. However, in its review of the 2001 Census, the Treasury Select Committee noted that “It is clear that a question on income would have been found useful by many users of Census data” and recommended that: “……ONS should consult further on whether a question on income should be included in any future Census ……”

3.108 ONS has done so, and has reported that the user requirements for an income question that have emerged since the 2001 Census, and particularly during the 2005 and 2007 consultation programme, though equally as strong as they were prior to the 2001 Census, are relatively less than those expressed for other topics competing for space of the 2011 Census questionnaire. Nevertheless a question on income was included in the 2007 Census Test (see Section 2) with the aim of assessing whether or not there was significant evidence of continued public disquiet about the inclusion of such a question in the Census which would be likely to affect response.

3.109 The design of the Test allowed for the effect that the inclusion of a question on income would have on the response rates to be assessed. Half of the 100,000 households covered in the Test received a census questionnaire which included an income question, and a form without the income was sent to the other half. The difference in response rates was, overall, 2.7 percentage points (50.6 per cent for forms with the question compared with 53.3 per cent for forms without).
This difference was similar to that experienced in the pre-2001 Census tests and was statistically significant, particularly so when account is taken of the fact that the Test was voluntary and that responses were thus from households likely to be more compliant. Moreover, an analysis of the returned completed income questionnaires indicated that a further 9 per cent of responders elected not to answer the income question.

3.110 In balancing the user demand for information on income against this evidence of the public’s reluctance to answer the question, together with the evaluation of a number of other criteria aimed at assessing the public’s understanding of the question, as well as the potential availability of information from alternative sources, the UK Statistics Authority have come to the conclusion that the case for including the question in the 2011 Census is insufficient to outweigh the risk of reduced response.

Collecting information on sexual identity

3.111 Consultation with users, particularly during the 2005 programme, indicated a strong requirement for the Census to seek to collect information on sexual identity in order to provide a benchmark against which equality monitoring policies could be better assessed. While the UK Statistics Authority has recognised the potential value of such information, it must also take account of particular concerns about individual privacy and confidentiality within the household environment in the context of a compulsory Census, the quality of the resulting data, and the effect that such a question could have on the overall response to the Census.

3.112 In a small-scale postal survey carried out by the General Register Office (GROS) in Scotland in 2006, which included a question on sexual orientation, of the 31 per cent of households that responded one in seven did not provide useful data on sexual orientation — either because they elected to tick the ‘prefer not to answer’ box or declined to complete the question at all. This far outweighed the percentage of respondents who declared a non-heterosexual orientation, and GROS concluded from this that the results would call into question the accuracy of any data gathered by such a question in the Census and hence the utility of the data collected in this way. Furthermore, the terminology and concepts used to attempt to distinguish different sexual behaviour tend to confuse many respondents leading to additional inaccuracies in the responses.

3.113 In the light of this, and of other international research into the viability of including such a question in a population census, the Government supports the view of the Statistics Authority that a compulsory census is not a suitable means to collect sexual identity information for the first time and that a question on sexual identity should not be included in the 2011 Census.

3.114 However, in recognition of the particular importance of collecting information on this topic for equality monitoring purposes, ONS has initiated a project which is
seeking to develop a question on sexual identity which will be both acceptable and ensure that high quality data is collected, and which can be used in national surveys.

3.115 The main advantage of collecting this data in a household survey is the superior quality of the estimates produced. In a survey environment, information will be supplied by the person to whom it pertains and will not be shared by other householders. Privacy and confidentiality were the key concerns expressed in the focus groups by both the lesbian, gay and bisexual (LGB) and heterosexual groups.

3.116 If, as planned, the question is asked from 2009 onwards in a large household survey such as the IHS (Integrated Household Survey), estimates would be available about three years earlier than 2011 Census counts. Survey estimates can be updated annually, enabling regular monitoring of the size, distribution and changing social-demographic profile of the LGB population.

3.117 A paper that provides further background information and summarises the reasons why ONS felt that a question should not be asked in the 2011 Census is available on the National Statistics website37.
Collecting the information
4 Collecting the information

“One of the most important requirements of a successful census is to ensure that the coverage is complete and accurate and that the data are safely and speedily transferred from schedules to computer. The enormity of the undertaking, and the importance attached to producing outputs to a tight deadline within a fixed budget mean that, as far as possible, procedures must be tried and tested. There is little margin for error in such an undertaking and no scope for taking risks.” Angela Dale, Cathie Marsh Centre for Census and Survey Research, University of Manchester

Introduction

4.1 The data collection operation – always the public face of the census – covers a wide range of activities in addition to delivering the questionnaires and collecting the completed returns. These include field force recruitment, legal, financial and technological issues, and contractual arrangements with suppliers. For the 2001 Census, more focus was given to the data collection activities, compared with previous censuses, since it had to count a population that was undergoing greater societal change. This strategic approach is again being followed for the 2011 Census.

4.2 Experience has shown that it is increasingly difficult to make contact with households, especially (but not exclusively) in inner cities. This has been a major influence in shaping data collection plans for the 2011 Census. These difficulties can be attributed to: an ageing population, growing numbers of one-person households; changing work patterns; increase in access security control systems; growing numbers of migrant populations, particularly from relatively new origins such as Eastern Europe; and certain groups and communities within the population feeling increasingly disconnected with society. Ensuring that every household gets a Census form and is motivated to fill it in is, therefore, more than ever a key driver in the strategy and planning for data collection. To this end an effective publicity strategy is vital to the success of the Census. Such publicity arrangements are described at paragraphs 4.67–4.73.

4.3 The enumeration will be conducted in a way that is primarily designed to achieve completeness of coverage with an efficient use of resources while, at the same time, maintaining the public’s acceptance and confidence in the importance and security of the Census. Although many aspects of the Census will follow well-established and proven methodologies, ONS has introduced changes to improve the efficiency of the census operation and provide better help to the public. For example, the use of a postal service provider for the delivery and return of forms
will help overcome the difficulties of recruiting large numbers of temporary enumerators to deliver forms to every address, and of accessing accommodation protected by security systems. Together with the option of making a return online, this will free-up field staff to be more flexibly deployed wherever necessary. There will be continuous monitoring of the progress of the enumeration in the field so that extra assistance can be quickly re-directed to wherever necessary.

**Operational objectives**

4.4 A number of key objectives of the data collection operation underpin the broad strategic aims of the Census set out in Section 1; these are to:

- develop an effective enumeration methodology that targets resources and procedures to maximise response
- track delivery and receipt of forms to target non-response
- encourage a high level of online response (which has the potential to reduce costs in other areas)
- overcome the problems associated with the recruitment, retention and payment of a large field force
- manage public participation and co-operation through informative publicity
- work with local authorities and others in planning and executing the enumeration, in particular to make best use of their knowledge of local addresses and residence arrangements and ways of contacting hard-to-count groups

**Temporary field staff**

4.5 A labour force of around 30,000 temporary field staff will be employed to carry out the 2011 Census. There will be a hierarchical management structure to this field force similar to that in 2001, headed by 100 or more Census Area Managers employed for a period of nine months before and after the Census. Each will be responsible for the enumeration of an area of about 500,000 people (fewer in less densely populated areas). They will have the responsibility of managing local team managers to be known as Census Coordinators – who will, in turn, supervise local teams of Address Checkers, Census Distributors, Census Collectors and Special Enumerators. A small team of Regional Managers will be appointed to co-ordinate operations at a higher strategic level, including Welsh-speaking Managers in Wales.

4.6 The reduction in field staff from around 70,000 in 2001 has been achieved mainly by moving to a primarily post-out methodology for form delivery (see paragraphs 4.10 and 4.20–4.21). Savings from adopting this approach will allow better targeted resources to be put into the follow-up phase.
Recruitment, training and payment of field force

4.7 The strategy for the recruitment, training and payment of the 2011 Census field force will be somewhat different to that followed in 2001 and previous censuses. The early outsourcing of these services to a contractor with particular expertise in field operations is in response to the concerns set out in the National Audit Office’s report to the Public Accounts Committee on *Outsourcing the 2001 Census*. Such services are clearly a non-core activity for ONS and cannot be provided internally, to this scale, without a significant additional investment.

4.8 ONS worked successfully with a contracted supplier to deliver the provision of field staff recruitment, training and payment in the 2007 Census Test, with the result that it has decided to outsource these services for the 2011 Census. Though responsibility for field recruitment will rest with the supplier, ONS intends that the staff appointed for the field operation should to some degree reflect the profile of the communities within which they will be working, and have appropriate policies in place for this. Not only is this a necessary stance in terms of ensuring equal opportunities but it will also enable field staff to engage more effectively with the local communities they are enumerating, encourage participation, and understand the support required. This includes, for example, ensuring that sufficient numbers of Welsh-speaking field staff are recruited in different parts of Wales to ensure that the Census is conducted effectively there (see also paragraph 4.43).

4.9 The statutory obligation for persons employed on the Census to adhere to strict confidentiality undertakings will apply equally to any temporary field staff recruited by the contracted supplier as they would to the permanent staff of the UK Statistics Authority (see paragraphs 6.15–6.18).

Post-out and the development of an Address Register

4.10 Following the successful trialling of post-out as a delivery mechanism for Census forms in the 2007 Census Test, a decision was made by the National Statistician, now endorsed by the UK Statistics Authority, to adopt this methodology as the prime means of form delivery for the 2011 Census (see paragraphs 4.20–4.21). The rationale for adopting this strategy is that even with hand delivery in the 2001 Census, enumerators failed to make doorstep contact with households at more than a third of addresses and resorted to delivering the form through the letter box. The use of an established postal service provider to perform this activity is seen as an opportunity to direct field resources to those areas where a more focused approach to follow-up activities is necessary in order to improve response rates. ONS expect to post out Census forms to as many as 95 per cent of households.

4.11 Consequently, and following the recommendations of the Treasury Select Committee in its report on the 2001 Census, ONS will procure contracts for post-out and post-back services for the Census. The procurement exercise for this service started in April.
4.12 Clearly the pre-requisite for a successful post-out strategy is the availability of a comprehensive, high quality address register for all areas of England and Wales. In the absence of a single authoritative source of national address information, ONS is developing an address register that meets Census requirements in terms of quality and coverage, and which local authorities can be confident will effectively underpin Census enumeration and outputs. Full use will be made of the primary sources of address lists, namely the Royal Mail Postcode Address File (PAF), the Ordnance Survey MasterMap Address Layer 2 (AL2), and the National Land and Property Gazetteer (NLPG), which is administered by the local authority community through the Information Development Agency (IDeA).

4.13 The resulting register, which ONS would want to be quality assured and endorsed by local authorities, will contain a list of addresses linked to higher level geographic areas for management, reporting and output purposes. This will require associating every address with an accurate positional reference, both for planning field operations including the printing of forms and production of outputs.

4.14 ONS carried out an early assessment of fitness of two of the sources of address information (NLPG and OSAL2) for the purpose of the Census over the period 2006–07, which included comparing the performance of the two datasets against the Census requirements in the areas covered by the 2007 Census Test (paragraph 2.16). The key recommendations and conclusions of the evaluation based on the data supplied were that:

- coverage and classification accuracy of the electronic versions of both registers in the Test areas were short of meeting the 2011 Census requirements
- neither product could have been used to support the enumeration activities without further remedial field work by ONS
- coverage of multi-occupied addresses was particularly deficient and that further work on identifying sub-premises would be needed
- even an alternative solution to implement a ‘composite’ of the two address registers, taking the best elements of both, was unlikely to fully identify all addresses

4.15 Further research, described in the Report of the evaluation\(^{38}\), is currently underway to assess improvements which are being made by both suppliers. ONS is also examining other aspects of address registers, for example, the coverage of communal establishments and alternative private residence types, and the identification of areas of change in short periods of time before the Census.

**Address checking**

4.16 It is proposed that pre-addressed forms with a unique identifier and barcode would be posted out to most households using the Census Address Register referred to above. Printing and despatch will be recorded on an innovative form-tracking system.
4.17 Currently it is planned that Address checks would be carried out by Address Checkers in about 30 per cent of areas where there is the greatest uncertainty about the quality of address lists. The check would be carried out over a six-month period finishing some six months before the Census to ensure that the Address Register and local attributes are as up-to-date as possible yet in time to enable the printing of individualised questionnaires. The check prior to the 2007 Census Test, for example, revealed that an additional 9,000 or more households within the sampled areas that were not on the Register at that time. These tended to be at multi-occupied addresses where houses had been converted into flats. However, the relatively short time frame for the Test check – just six weeks – meant that many other addresses were also missed. Extending the check to over six months in the 2011 Census will ensure many more such household addresses are identified beforehand. The areas will be checked on the basis of the rate of population change, the extent of multi-occupation and the degree of inconsistency between the NLPG, PAF and OSAL2.

4.18 A pilot exercise was conducted in July – September 2008 in 24 local authorities in England and Wales to test and refine the process.

4.19 To ensure that this extra effort in preparation for the Census achieves a permanent improvement in existing address lists, it is intended that information on updates to the Register – arising, for example, from new housing development and any changes of status of existing addresses – will be shared with those organisations managing the NLPG, PAF and OSAL2 where such information does not disclose any personal census information (see also the references to confidentiality assurances given in Chapter 6). To this end, ONS has successfully signed up all the main address list providers to an interim information sharing agreement.

**Form delivery**

4.20 Post-out will be the means of form delivery to the majority of households. Whether a Census form is posted or hand-delivered by field staff will be determined by a number of factors that were assessed from evidence gathered during the 2007 Test. These include:

- confidence in the accuracy of the address list in any given area
- the proportion of known, or suspected, multi-occupied properties in the area
- concentrations of large households

**Postal delivery**

4.21 Delivery is planned to start on Monday 14 March, thirteen days before Census Day, and is scheduled to last a maximum of one working week. This will give a week before Census Day as contingency to resolve any issues. It will also enable time to receive feedback on addresses missed and any undelivered questionnaires, which can be investigated by local field staff before Census Day if necessary.
Hand delivery

4.22 In the 5 per cent or so of areas where hand delivery will take place, this will be timed to occur in the period 15–7 days before Census Day leaving a six-day contingency for resolving any local delivery problems. Generally, up to three attempts to make contact and deliver the Census questionnaire packs will be made at each household address, after which field staff will put the pack through the letterbox if no contact is achieved. Any apparently vacant properties will be recorded.

Contact Centre

4.23 Nationwide and local publicity, supported by a dedicated UK-based Contact Centre, will initially focus on addressing the lack of face-to-face contact in the delivery phase, giving a clear message about what the public should expect and when, and what to do if it does not happen. In particular, the Contact Centre will take details from householders who have not received a Census form, updating address list information and the form-tracking system in the process. (See paragraphs 4.67–4.73 about publicity more generally.)

Collection of completed questionnaires

4.24 The option of two principal response routes will be available to enable the public to complete their Census questionnaire:

- paper completion and post back, or
- online completion (for the first time in the UK).

Householders unable to make a return in these ways may, instead, request a doorstep collection. Arrangements for the collection of completed returns from communal establishments are described in paragraphs 4.36–4.38.

4.25 It is not proposed to have any areas specifically designated for doorstep collection (as will be the case for hand-delivery). Field staff at the follow-up stage will seek to collect Census forms but this will only be at addresses from which a form has not been returned.

4.26 Special assistance will be available to anyone who has difficulty in completing the Census questionnaire, particularly through language or infirmity. Field staff speaking both English and other languages and/or signers will be employed, where possible.

Post-back response

4.27 Households will, in all cases, be provided with a pre-addressed, pre-paid envelope for the return of their completed form within a required time period (to be
prescribed by secondary legislation – see Chapter 7). Any adult member of a household who does not wish other people in the household to see his or her answers to the census questions may ask for a separate (Individual) questionnaire and an envelope in which to seal it for return by mail. In these circumstances, the householder will be required to enter on the main household questionnaire only the name and relationship in the household of anyone making a separate return.

4.28 In households with more than six residents, or more than three visitors present on Census night, additional (Continuation) forms will be provided, on request, to enable a return for any such additional persons to be made.

**Internet (online) completion**

4.29 It is estimated from international census experience that up to 25 per cent of households will respond online, equating to, potentially, over 5 million responses altogether in England and Wales. ONS will therefore offer the option of making a census return online. However, the actual take up of this channel is uncertain and the capacity planning for the response system must allow for flexibility. Such a facility will afford the possibility of both encouraging response among particular sub-groups of the population who may otherwise be hard to reach, and of achieving some data processing cost savings if overall response levels are sufficiently high. Furthermore, such an option meets the Government’s aim of seeking to increase the provision of public services online, and will provide ONS with an opportunity to assess the efficacy of collecting information in such a way for any future censuses and other statistical surveys.

4.30 The online questionnaire will have the same question set as the paper form and will allow for any number of household members and visitors. Individual returns will also be possible for use by households who choose to complete the household questionnaire on paper but may wish to use the Internet to include additional household members who cannot be accommodated on the paper form, or to allow an individual household member to make a return online separately from the rest of the household’s return.

4.31 All households will receive a paper questionnaire whether or not they choose to make their return online. There will be no facility to enable a householder to pre-register an intention to do so as the risk of failure to make a return is considered to be too high. Instead, a unique reference on each paper questionnaire will form the basic security code for accessing and completing an online return. The address may also be checked at the start of the completion process to confirm identification. The form-tracking system will be updated whenever an online questionnaire has been submitted and a completion code given to the respondent.
Follow-up

Non-response follow-up

4.32 In cases where a completed questionnaire is not returned, a member of field staff will call to offer any assistance where necessary and to collect the questionnaire. In such circumstances, a household may return their completed questionnaire in a sealed envelope if they do not want it to be seen by the field officer. Field staff will carry out such follow-up at all addresses from which ONS is confident that no response has been received via any channel. This activity will start 10 days after Census Day.

4.33 The form-tracking system will be updated either when a completed return is received by post, or when an online return is confirmed. The system will then provide the lists of addresses to be followed-up which local field managers will allocate to field staff, distributing the workloads so as to achieve the best response.

4.34 If no contact is made at follow-up, a card will be left explaining why the Census Collector has visited and giving an indication of call back date/time. Subsequent visits will be made at different times of day or day of week in order to improve the chance of contact.

Follow-up of blank or incomplete responses

4.35 Blank or incomplete responses will be identified during the data capture operation (described in Chapter 5) and followed-up while field operation is still ongoing.

Communal establishments

4.36 There will be a number of different methods of enumerating communal establishments (CEs) depending on their size and the varying levels of difficulty involved in making contact and ensuring that residents complete their returns. The enumeration will generally be carried out by Special Enumerators.

4.37 Pre-delivery liaison will be carried out by Census Area Managers and will involve contact with local authority and other head offices/agencies to inform them of the Census and initiate contact with the management of each CE. This action will identify an appropriate local official for future contact and will confirm details of establishment type, size and any special support needed.

4.38 Generally in CEs an Individual questionnaire will be issued to each resident, with return either by post-back or hand collection.
Special enumeration procedures

4.39 The strategies developed to enumerate households and communal establishments will not be successful for everyone, and it is recognised that additional procedures will have to be adopted for some special populations. These will include people with no settled place of residence, such as Gypsies, those travelling with fairs and persons sleeping rough. Further analysis and changing social conditions may yet identify new populations beyond the traditional groups, such as asylum seekers and refugees for whom special enumeration strategies will be necessary.

4.40 In addition there are other identifiable groups, dispersed throughout the population, who will require modified enumeration procedures. These include, but are not limited to:

- those unable to understand the census questionnaire, such as non-English speakers (and those in Wales who are also non-Welsh speakers) and people with reading difficulties
- those likely to have difficulty completing or returning a standard paper questionnaire, including the visually impaired or physically disabled
- those able, but unwilling, to complete a questionnaire

4.41 Continued research and consultation with representative organisations through the Local Authority and Community Liaison Programmes (see paragraphs 4.45–4.53) will inform development of the most effective strategies to target and accommodate these groups, with the aim of ensuring that no community or individual is disenfranchised. In response to the recommendations in the Treasury Select Committee’s report on the 2001 Census9 particular arrangements will be made to enable blind or partially sighted people and non-English speakers/non-Welsh speakers in Wales to make a census return. This includes the provision, on request, of a copy of the Census questions and the accompanying explanatory material in:

- Braille, large print and audio/visual formats
- 26 or more foreign language versions.

4.42 The facility for Census returns to be made online will also enable translations of the questionnaire to be accessible to persons whose first language may not be English and/or who may be visually impaired. Special assistance will be available to anyone who has difficulty in completing the Census questionnaire, particularly through language or infirmity. Field staff speaking both English and other languages and/or signers will be employed, where possible. (Further details are set out in paragraphs 4.67–4.73 on publicity arrangements.)
Arrangements in Wales in respect of the Welsh Language Act

4.43 As noted in paragraph 1.18, the UK Statistics Authority is responsible for carrying out the Census in Wales. ONS will make arrangements to ensure that the requirements of the Welsh Language Act 1993 (as set out in the ONS’s revised Welsh Language Scheme39) are met with respect to the enumeration and public interface in Wales. In particular, both Welsh and English language versions of the census form will be delivered to each household, and bilingual versions of all publicity and information material will also be available. There is a commitment to recruit members of the field force who are bilingual in English and Welsh (as noted in paragraph 4.8) especially in areas with higher than average proportions of Welsh speakers. Bilingual Census Managers will be appointed to oversee the enumeration in Wales.

4.44 Details on the legislative arrangements for conducting the Census in Wales are set out in Chapter 7.

Local and community liaison

4.45 One of the biggest challenges to overcome in the 2011 Census will be reaching population groups that are traditionally undercounted – the so-called ‘hard to count’. Research into the types of people missed in the 2001 Census and changing demographic profiles has helped to inform the type of initiatives needed. The Local Authority and Community Liaison Programmes are key components of this research. The 2011 Census is building on the valuable experience gained and the lessons learned from the 2001 Census by placing emphasis on more collaboration with local authorities and with the many agencies and community organisations involved.

Local authority liaison

4.46 The best partners in working with ONS to maximise coverage are local authorities, whose need for reliable local information provides a strong incentive to assist in identifying and reaching local hard-to-count populations. By positively engaging local authorities in the development and quality assurance of address lists, for example, and actively encouraging them to promote the benefits of the Census in their areas, ONS is seeking to improve coverage. Such initiatives aim to cover not only the known disadvantaged groups, such as the disabled, ethnic minorities and very elderly, but will allow ONS to target resource at areas known to have the characteristics associated with poor coverage.

4.47 ONS wish to benefit from local authority resources and knowledge of their local areas to improve the enumeration process, and local authorities in turn will benefit from better census results. The most efficient way for Census field staff to make use of existing local networks has been explored with local authorities in preparing
for both the 2007 Census Test and the Census rehearsal in 2009. Agreed areas for partnership working, include:

- identifying hard-to-count populations through local and community intelligence
- developing and endorsing up-to-date address lists
- assisting in field staff recruitment
- providing logistical support, such as local office accommodation
- promotion and publicity
- evaluation

4.48 It is important for ONS to receive local authority buy-in to the 2011 Census enumeration strategy, especially so at the Chief Executive level, so that potential for disagreement and lack of confidence in the quality of final results can be minimised. ONS will encourage local authorities to appoint formal census liaison managers to act as census champions within the authority and to work with senior field managers.

4.49 Liaison with local authorities is also being undertaken through various lead bodies such as the Local Government Association (LGA), Welsh Local Government Association (WLGA), Local Government Data Unit-Wales, Society of Local Authority Chief Executives (SOLACE), the Improvement and Development Agency (IDeA), and the Electoral Leadership Forum (ELF) through which ‘Census Regional Champions’ representing the regional lead Chief Executives have been appointed to encourage local authorities to work with ONS to deliver a successful census.

4.50 A Local Authority Liaison Steering Group with representatives from ONS, local authorities and the LGA was convened in September 2005 to oversee the development of this work.

**Community liaison**

4.51 The innovative 2001 Census Community Liaison Programme has been further developed to establish contact with relevant community groups and agencies. In response to the recommendations of the Treasury Select Committee’s report on the 2001 Census this Programme was initiated much earlier in the planning cycle (in 2006). Specific objectives of the 2011 Programme are to:

- encourage participation in the Census by publicising the Census and underline its use and value
- help provide a potential source of field staff
- provide help and guidance to local communities and individual members of the public

4.52 Additionally, the Programme will seek to help provide field staff with intelligence, guidance and support at the local area level.
4.53 The Census Diversity Advisory Group (one of two new Advisory Groups formed as part of the consultation arrangements for the 2011 Census – see paragraph 2.3) also provides valuable advice and guidance on liaising with local communities and key organisations such as the Equality and Human Rights Commission, Age Concern, the Inter-Faith Network, the Royal National Institute for the Blind, the National Centre for Languages and others. In addition, ONS has established bilateral links with these and other related organisations and umbrella groups representing minority populations and special interest groups.

**Enforcing the legal requirement to complete a census form**

4.54 The value of the Census compared with any other statistical data source is that it should aim to cover the entire population without exception, and thus the UK Statistics Authority believes that it is necessary, in order to emphasise the importance of obtaining a response from all households, to continue to adopt a clear policy of prosecuting offenders.

4.55 In all cases, whether response to the Census is to be by postal return, online, or by doorstep collection, the statutory obligation to make a return will not be discharged until a completed questionnaire is received by the Census Office or local field staff. The statutory requirement to make a return rests at all times with the householder (or joint householder). Persons refusing to comply with the statutory requirement to make a census return will be liable to prosecution and a fine, the maximum level of which is currently £1,000.

4.56 In its report on the 2001 Census the Treasury Select Committee noted the relatively low number of cases referred for prosecution, and questioned what message this sent regarding the seriousness with which ONS regarded the offence. Information available from the 2011 Census form-tracking system will enable ONS to monitor every questionnaire, and will provide more robust evidence of the failure to make a return than at the 2001 Census, when particular difficulties with local postal services and a major outbreak of foot and mouth disease at the time severely affected the ability of ONS to track form movement.

4.57 Where householders may claim, either legitimately or otherwise, that a completed questionnaire has already been posted back, ONS will be better able to verify this at once and to issue replacement forms where necessary if there is no record of such a return having been made. Refusal to complete a form in these circumstances will attract the same penalty.

4.58 Reflecting the particularly onerous character of the duty previously imposed on enumeration field staff in conducting formal interviews under caution as required by the Police and Criminal Evidence Act (PACE) Code of Practice, ONS will deploy specially trained staff to follow-up cases where there has been a clear indication
of a householder’s refusal to make a return. In this way evidence may be gathered that is sufficiently robust to satisfy the courts whenever prosecution action is taken.

**Coverage and data quality**

4.59 Quality is at the heart of planning the 2011 Census, and many of the innovations that were trialled in the 2007 Census Test were about improving the quality of census processes and, thus, the data. A Census, by its nature, is designed to cover the whole population, but errors inevitably arise. A good census design will recognise this and take account of them. For example, the Address Register – no matter how up to date - may fail to record all residential accommodation in an area at the time of the Census; field staff may fail to identify all households within a multi-occupied dwelling; not all members of a recorded household may be included; non-response bias occurs when people do not complete a census form or do not answer all the questions; and there may also be system or processing errors.

4.60 The improvements which are being introduced for the 2011 Census have been designed to minimise these errors; for example:

- the creation of an up-to-date Address Register agreed with stakeholders, together with a form-tracking system functioning in real time, will provide a reference to ensure that questionnaires are delivered to, and returns collected from, all residential addresses and that monitoring of return rates can be done in real time
- the re-design of the Census questionnaire and the facility to return it online will make it easier for respondents to complete the form and for ONS to process the data
- the focusing of field resources in areas of lower response is aimed at improving the overall coverage

4.61 Non-response or under-enumeration is the most significant error. While the estimated overall undercoverage in the 2001 Census (6 per cent in Great Britain) was small compared with national government surveys, it was greater than in 1991 (4 per cent), reflecting an international pattern of increasing non-response in the Census. But of more significance was its variation across population subgroups and different parts of the country.

4.62 The goals for 2011 are to maximise the overall level of quality of data and to minimise the differences in quality between areas. ONS aims to develop a strategy for assuring the quality of the 2011 Census database before any release of output (see paragraphs 5.18–5.20).
Census Coverage and Quality Surveys

4.63 The Census Coverage Survey (CCS) will be the key source of information on the extent and distribution of the census undercount. The CCS will be a separate sample survey currently planned to be carried out over a three to four-week period starting six weeks after the Census itself, and will take the form of a short interview to check on the coverage of households and people within households, and to collect basic demographic characteristics (such as age, sex, marital status, ethnic group and economic activity). The information obtained from the survey will be used, in conjunction with the Census data itself, to help produce a consistent set of census-based counts, which will form the new base for the series of annual mid-year population estimates for local and health authorities.

4.64 Similar post-enumeration surveys for previous Censuses have been carried out on a voluntary basis. In an attempt to improve response rates for 2011, ONS is investigating the feasibility of conducting the Census Coverage Survey on a compulsory basis under existing Census legislation.

4.65 This approach will develop and improve the methodology adopted for the 2001 Census that was widely welcomed by users\(^{15,17}\). ONS will consult and inform users on the methodological approaches to be adopted, and will assess and report on the quality of the data produced.

4.66 A small, separate Quality Survey will be undertaken after the Census to measure the accuracy of responses to individual questions.

Publicity

4.67 While every household and each resident in a communal establishment in England and Wales is obliged by law to make a Census return, it would be impossible to carry out a Census without the co-operation of the public. ONS will, in close co-operation with the Census Offices in Scotland and Northern Ireland, arrange publicity to explain the purpose and value of the Census, to encourage householders to return completed forms and to ensure that they know when and how to do so, to give assurances about confidentiality and data security, and to deal with other particular matters of public concern as and when they may arise. Reminders about the legal requirement to complete the Census will be promoted.

4.68 A Census brand with the slogan ‘Help tomorrow take shape’ (Figure 5) has been developed to be the identifiable face of the Census to the general public, and will be adopted at every appropriate opportunity. A bilingual version will be used in Wales. The brand will be used to promote awareness of the 2009 Rehearsal in the selected areas.
4.69 ONS will also continue its programme of providing information about the Census to the media and to users of the statistical results through regular information and consultation papers, by convening nationwide roadshows, by participating in conferences, seminars and workshops, through its own regular online news alert service Census News, and through direct contacts. The Welsh Assembly Government also provides updates on census developments in Wales through a bi-monthly Census Newsletter.

4.70 The basis of good public relations will be to make sure that field staff are briefed and trained to be as helpful as possible where they are required to deliver census forms and collect completed returns, and that there is informative liaison with local community groups. The prime objectives of a phased national and local publicity campaign will be to:

- **educate** – by increasing the awareness and understanding about the 2011 Census among the general public, in key geographic areas and in hard-to-count groups
- **enlist** – by publicising and supporting the recruitment of field staff from public and key community groups, and informing the public, particularly in hard-to-count areas and among hard-to-count groups that they will be required to participate
- **engage** – by publicising and supporting the delivery, completion and return of Census forms from the general public and hard-to-count groups, and giving clear assurances about confidentiality and security
- **enforce** – by ensuring that as many people as possible, from all population groups are aware of the legal obligations to complete and return their Census questionnaires
- **explain** the results and promote the value of the 2011 Census
4.71 Such publicity will be sought through a paid-for campaign, employing a contracted agency, and through the co-operation of those stakeholders with particular vested interests in seeing a successful Census, such as local authorities.

4.72 An explanatory leaflet will be delivered with each census form, and publicity will increase as Census Day approaches. The Contact Centre, providing a telephone help-line with foreign language interpreters, will be available to answer queries from the public while the Census is being taken. In addition, a Census Help website will be provided during the Rehearsal and Census operational periods.

4.73 As noted at paragraph 4.43, the questionnaire for Wales will be available for completion in either English or Welsh, with translations as well as other help and supporting information available bilingually via the Census Help facility. Translations of the census questions into 26 or more foreign languages will also be available online to assist respondents whose first language is not English or Welsh. Languages in which such translations will be available are likely to include those shown in Box 3. These were the languages adopted in the 2001 Census, but translations in other languages are also likely to be required in 2011.

Box 3 Languages into which the 2011 Census questions and supporting material are likely to be translated

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<tr>
<th>Albanian/Kosovan</th>
<th>Gujarati</th>
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Outsourcing parts of the Census operation

4.74 As noted elsewhere in this White Paper, ONS is outsourcing some of its 2011 Census activities and processes to external suppliers. This is not a new strategy; the Census has traditionally engaged the services of persons or agents, not part of the permanent staff of ONS, to undertake parts of the census operation.

4.75 For the 2001 Census, for example, the following areas of work were contracted out for the first time:

- the administration of the field staff payment
- the management of a call centre to run a Census helpline
• the collection of completed census forms via a postal service
• the capture and coding of census data in electronic format
• the production of the archival records

4.76 In its report to the Public Accounts Committee\textsuperscript{14}, the National Audit Office (NAO) noted that outsourcing helped ONS to introduce some important innovations to deliver the 2001 Census. The value of ONS doing so again is that external suppliers bring with them considerable technical experience and expertise which would otherwise be unavailable to Census takers, and allows ONS to focus on its main task of carrying out the census rather than developing in-house procedures and skills that are not part of its core competencies. Furthermore, the 10-year cycle for the Census, the short processing timetable and extensive data systems required mean that outsourcing provides efficiencies and value for money.

4.77 However, the NAO's report on the 2001 Census\textsuperscript{14} also noted a number of deficiencies in the management of the procurement process and made a number of recommendations on the arrangements for procuring services for future census operations.

4.78 As a result, ONS is again contracting out a number of services as a major part of ensuring a value-for-money Census in 2011, but has completed the procurement phase of the operation at a much earlier stage in the planning programme than was the case last time. The process to select a supplier for the major part of the data processing operation began in September 2005, and following an extensive evaluation of candidates, two companies – Lockheed Martin UK and T-Systems Ltd – were short-listed in September 2006, and both worked together with ONS to deliver different components of the 2007 Census Test. Following refinement of the 2011 Census requirements and further evaluation, a single supplier – Lockheed Martin UK – was selected and the decision announced on 28 August 2008. (See paragraph 6.17–6.18 for implications for census confidentiality arising from the appointment of the contractor.)

4.79 Other providers have been appointed after similar procurement exercises to carry out additional and complementary services. In addition to all the services that were outsourced in the 2001 Census, the several procurements cover:

• the recruitment and training of field staff
• the delivery of forms via the postal service
• questionnaire/form-tracking systems
• the translation, printing and distribution of non-questionnaire material
• the provision of online response facilities for form completion and public self-help
4.80 Noting the NAO’s concerns, ONS have, for 2011 imposed much tighter contract management, training and budgetary controls of the procurement processes than was the case for the 2001 Census, and these have also been subjected to rigorous external scrutiny through the Office of Government Commerce’s Gateway Review procedures.

4.81 Other contracts will be awarded in due course, to cover activities such as managing the publicity and advertising campaigns.
Processing the data and publishing the results of the Census
5 Processing the data and publishing the results of the Census

“One of the most basic decisions in a census operation, and indeed a key decision about the quality of census results, is the trade-off between timeliness and accuracy. This is particularly important in designing the output strategy, in that the decision affects not only the dissemination team but all the preceding stakeholders in the census programme. In general, it can be expected that the faster a process is undertaken the greater the level of inaccuracy in the results of that process. It is also a general rule that users of census data will expect a high level of accuracy in the information provided by an official census agency. The census agency will have to manage this trade-off”. United Nations Department of Economic and Social Affairs

Introduction

5.1 The UK Statistics Authority recognises that the investment of time and resources in a national census is only justified if the results are made accessible to users speedily and in a clear and usable form. As was also the aim in the 2001 Census, ONS intends that technological developments should be harnessed in the 2011 Census in order to improve the accuracy, timeliness, accessibility and user-friendliness of published output.

5.2 In particular, the Statistics Authority is proposing to introduce two major innovations in the area of data capture and dissemination:

- the opportunity for online completion of Census questionnaires via a secure Internet connection
- free public access to all standard national and local outputs in electronic media from National Statistics online

Data processing

5.3 As with previous censuses, the 2011 Census will be processed in three main phases. Input processing comprises two stages: the main data capture and coding stage, and the subsequent ‘downstream’ processing, which encompasses the edit and imputation stage conducted in parallel with coverage assessment.
and adjustment and statistical disclosure processes. Then output processing will comprise the creation of statistical tables and other products from an outputs database, and the dissemination of these products to users.

5.4 The vast amount of information to be processed once the completed Census forms have been returned – estimated to have been around 2 billion output tabulation cells in 2001 – and the short time available to do it, has traditionally demanded the employment of a large number of temporary clerical staff, and a computer processing system that has been fully tested to avoid errors, breakdowns and delays. Prior to 2001, Census forms had always been processed in-house, but following the 1997 Census Test it was decided that better value for money could be obtained from contracting-out the main scanning, data capture and coding services for the 2001 Census. A similar outsourcing approach is being adopted for the processing of the 2011 Census data (see paragraph 4.74).

Data capture operations

5.5 Respondents who wish to complete their Census questionnaire online, will be able to do so via a dedicated 2011 Census website. The online questionnaire will resemble the paper based questionnaire in question ordering and wording, but will include routeing dependent on the responses to specific questions and, possibly, some online validation of specific fields.

Scanning and data capture

5.6 Completed questionnaires will be scanned and the data captured and coded. Validation and edit rules will be applied to all fields captured. All data from all response routes will be captured and amalgamated into one data stream before text responses are passed to the coding system.

5.7 Text responses to questions such as those relating to occupation and industry will be coded by a combination of automatic and computer-assisted manual coding. The automatic coding system will be supported by classifications and indexes provided by ONS, with an interactive coding system for operators to access this information and other reference material.

5.8 Census HQ staff will have access to captured and coded data during the processing operation for progress monitoring and data quality analysis. When capture and coding are complete, data will be delivered to ONS in batches of local authorities.

5.9 When all the data and images have been received at ONS, and the electronic archive has been created, paper questionnaires will be destroyed in line with Government security guidelines, whilst both maintaining the particular
requirement for security of census information and meeting recycling policies. All systems and storage media will be securely erased in accordance with Government security standards.

‘Downstream’ processing

5.10 The data, once captured and coded, will require careful checking and modification before credible and reliable outputs that meet users’ needs can be produced. Modification is required to complete any missing responses on the census questionnaire; to correct data captured erroneously during the data capture operations phase; and to prepare the data for dissemination to users. The suite of systems developed to clean and adjust the data so that a fully consistent database of census records can be prepared as the basis for output dissemination is collectively known as ‘downstream processing’ (since they are carried out ‘downstream’ of the main data capture and coding operations). These processes will be carried out within ONS and will begin on delivery of data from the supplier after the data capture and data coding processes described above.

Data load

5.11 The load process will take the data files from the processing contractor and carry out a series of validation and quality checks when loading the data onto the ONS databases. The validation and quality checks will ensure that the structural integrity of the data meets expectations and that no systematic error has been introduced during the data capture and coding stage. Additionally, the checks will confirm whether the minimum information exists for the response to be considered a true response and not a response incorrectly created during data capture.

Edit and imputation

5.12 Edit and imputation is the process that corrects inconsistent or partially completed responses. Such responses are edited according to pre-set rules if the answer is incompatible with the rest of the responses on the census form. For example, a person recorded as being aged under 16 should not be answering questions relating to economic activity.

5.13 For partially complete responses, or for forms where a number of questions have not been completed, a response will be generated which is consistent with other answers on the questionnaire based on responses to the same question by people living in adjoining properties or similar households. This edit and imputation process ensures that the results of the Census are complete and consistent. This adopts the standard statistical process that was used in the 2001 Census and is used more widely across other ONS outputs, albeit on a smaller scale.
5.14 Complete and consistent results mean that statistical tables will have no gaps arising from ‘not known’ or ‘not stated’ responses (other than for those relating to the voluntary question on religion) and that users will not then have to make their own estimates for missing values. The ONS is in a better position than is the user to correct for incomplete or invalid responses, or to estimate accurately values for derived variables that were based on more than one item (such as the National Statistics Socio-economic Classification NS-SEC).

**Coverage assessment and adjustment**

5.15 Ultimately, the success of the Census relies heavily on its accuracy and how well it can estimate the population and its characteristics. The Census will never count every single household and individual. A necessary process of coverage assessment and adjustment is undertaken to provide accurate national and sub national estimates of the population. In the 2001 Census, this process was called the One Number Census, which adjusted the results of the Census to take account of people who were missed. For 2011, a similar approach will be undertaken but with developments focusing on a number of areas to improve the method.

5.16 The strategy is relatively straightforward. A focused post-enumeration survey (the Census Coverage Survey (CCS)) will be employed to measure under-enumeration by undertaking a separate enumeration of a sample of areas (see paragraphs 4.63–4.65). The results of the CCS will then be matched, at the individual level, to the corresponding 2011 Census data, identifying the number and characteristics of those missed in the Census. The combined Census and CCS information, along with statistical models, will be used to produce an estimate of the numbers of people missed by the Census. The people and households estimated to have been missed will then be added to the database using similar techniques and processes to the edit and imputation stage described at paragraphs 5.12–5.14 above.

5.17 Although a similar approach will be taken in 2011, there are added dimensions that were not present in 2001. In particular, the intention to collect information on visitors and second residences, in order to improve understanding of changing patterns of usual residency, will tend to complicate coverage assessment. For example, through matching visitors to Census and CCS records, additional information may be available to help identify residents who were recorded neither in the Census nor in the CCS. Furthermore, matching information from administrative sources to the Census so as to better inform the assessment of coverage (and quality) is being considered. Matching the Census database to itself, particularly where people give details of second addresses, is also being considered to assess over-count. The practicability of matching and the levels of accuracy achievable by this are still being assessed. These will inform the final design of the Coverage Survey and adjustment process.
Quality assurance

5.18 Quality assurance processes will be in place to carry out checks and, where necessary, to make corrections designed to improve the quality of Census data and to ensure that the overall totals are plausible. The concept of quality can be described as ‘fitness for purpose’ in terms of user needs. As noted by the UN Department for Economic and Social Affairs, the strategy for improving quality is always a balance between the improvement gained and the time and resource required.

5.19 Quality assuring the results of the 2011 Census will be done throughout the process to ensure:

- that changes made within each of the processes are robust and do not introduce systematic error
- that the national and sub-national (in particular, local authority) estimates are plausible when compared with data from administrative sources and demographic comparators

A Quality Report will be produced to accompany and support the release of the main statistical outputs.

5.20 After the 2001 Census, work on the mid-year population estimates identified the need for further adjustments to the estimates in a small number of areas. The difficulty was that these issues were not resolved until 2004. For the 2011 Census, ONS recognises that it will be important to build in improvements that will prevent these problems occurring or, if they do, resolve them more speedily, including taking account of other sources and local knowledge as appropriate. This involves working with key stakeholders (in particular, local authorities) in advance of the Census – an engagement that is already well under way.

Output production

5.21 Once the results have been quality assured, not only in terms of national and subnational population estimates but also for consistency across characteristics, the database will be ready for output processing. Simply described, output processing consists of a number of steps to create a final output database that is used to produce results for disseminating to users through a variety of channels – paper reports, web, and electronic media. Within this, there are two key processes that must be undertaken.

Application of statistical disclosure control methodology

5.22 Statistical disclosure control (SDC) involves a series of measures that support the 2011 Census confidentiality commitments (set out in more detail in Chapter 6) that no statistics are produced that allow the identification of an individual
(or any information about an individual) with a high degree of confidence. The applications can either be to pre-tabular data when it is carried out as part of the downstream process, or post-tabular data when it becomes part of output processing (see paragraphs 6.5–6.9).

**Disseminating the results**

5.23 In disseminating the results of the Census much emphasis will be put on responsiveness to users’ requirements on content, format and means of access, and on high standards in the production of statistics. The UK Statistics Authority thus proposes that outputs should be in such a form as to meet the changing requirements of users, but anticipates that there is likely to be a requirement for national, regional and local authority summaries, and for reports on key findings on particular topics. Also, the UK Statistics Authority proposes that outputs should be made available in a range of media to provide for ease of access to the user and the general public alike.

5.24 There are two ways of making the results of a census available under current legislation. Firstly, section 4 of the Census Act 1920 requires that: printed reports on the census in England and Wales are to be laid before Parliament and published; and that statistical abstracts may be provided to users on request, and for a charge, from ONS. Secondly, section 20 of the Statistics and Registration Service Act 2007 provides for the UK Statistics Authority (Statistics Board) to produce and publish statistics relating to any matters relating to the United Kingdom or any part of it.

5.25 Official reports of the Census in Wales will be laid before Parliament and presented also to the National Assembly for Wales. The Registrars General for Scotland and Northern Ireland are similarly required to present the results from the 2011 Census in reports to their respective legislatures. While there is no statutory requirement to present such reports for Great Britain or the UK as a whole, the National Statistician intends that results for Great Britain and the UK should be made available, where the data collected permits, as a priority once the processing of the data has been completed. Indeed, the National Statistician will have the responsibility to fulfil the UK’s obligations to provide results of the Census to the European Union and the United Nations Statistical Commission. There is thus a vital need for co-ordination and consistency in the presentation of outputs from the Censuses in Scotland and Northern Ireland (where the policy responsibilities are devolved to the Scottish Parliament and the Northern Ireland Assembly).

5.26 In the light of the concerns of users that the 2001 Census outputs were insufficiently co-ordinated across the three Census Offices to allow for the production of fully comparable UK statistics, the Treasury Select Committee recommended that there should be a more harmonised approach across the UK for the 2011 Census to ensure consistency in outputs. Accordingly, in recognition of the importance of providing consistent outputs across the UK, the National
Statistician and the Registrars General for Scotland and Northern Ireland are co-signatories to an Agreement\(^4\) on the conduct of the 2011 Census in general and, in particular on the production of harmonised statistics with specific attention being given to common questions, population bases, definitions, disclosure control methodologies and output formats.

5.27 As currently envisaged, the 2011 Census results would be available, at all levels of output geography, online from the National Statistics website. There is, however, likely to be a continued demand for hard copy publications of tabulations, supplemented by outputs in CD/DVD formats, to meet users’ particular needs and the requirements of Parliament.

5.28 The main national and local results will be released, to a pre-announced timetable, as speedily as possible over a short period of time once processing is completed and the total population of the country has been determined. Concurrent release for all areas in England and Wales would ensure that comprehensive results are promptly available for use in the systems for financing local government and the health service, and would also provide users with the ability to compare immediately any part of the country or sector of the population with any other.

5.29 The UK Government will fulfil its requirement under the European Parliament and Council Regulation on Population and Housing Censuses\(^1\) to provide the European Union with statistical results from the 2011 Census for the UK (or from alternative data sources) in the form of a set of pre-specified statistical cross-tabulations by the end of March 2014.

5.30 To meet specialist user requirements, ONS will develop simple, cost-effective and rapid systems and procedures for users to request non-standard statistical abstracts. The service for such bespoke or commissioned output will become available as soon as the main results are released. Where such outputs do not provide sufficient detail necessary for particular statistical research purposes, access to more detailed levels of data will be possible within strictly controlled laboratory conditions, and where the bona fides of researchers meet the criteria set out in the Statistics and Registration Service Act 2007.

5.31 Similarly, a service for making available microdata, such as samples of anonymised records (SARs) of people and households, will be made available to approved researchers so that they may carry out their own analyses that are not possible using aggregate data. Such access will be subject to the overriding need to ensure complete confidentiality of personal data. The availability of such samples was a major, and successful, innovation of the 1991 Census, and these were extended in 2001.

5.32 The UK Statistics Authority proposes to extend the ONS Longitudinal Study by adding data from the 2011 Census for England and Wales to those records already included from the 1971-2001 Censuses. The Longitudinal Study (a database of
linked census and vital event data for a one per cent sample of the population of England and Wales\(^4\)) is covered by the same rigorous confidentiality conditions as the Census itself, and the database is held securely within the ONS, with access strictly controlled and subject to the provisions of the Statistics and Registration Service Act 2007.

5.33 Metadata, in the form of definitions, classifications and quality indicators will also be produced for use with the statistical outputs. These will include, in particular, confidence intervals and other quality measures and information from post-census coverage and quality surveys such as local coverage rates, item non-response, and imputation rates.

5.34 Statistics from the Census to be provided to the Statistical Office of the European Union (Eurostat) under the provisions of the EU’s Census Regulation\(^1\) could be made accessible through a proposed European Census Hub. By this means data would be held securely within ONS and released to Eurostat and/or Member States on request to an agreed level of statistical and geographical breakdown. Such data would be subject to the same strict confidentiality and statistical disclosure control measures that will apply to domestic requests for information. The development of such a system is also being considered for the purpose of disseminating Census outputs domestically.

5.35 Whatever the form of output supplied, the greatest care will be exercised to avoid the inadvertent disclosure of information about identifiable individuals through the statistical results of the Census. To ensure the protection of statistical confidentiality, various disclosure control measures will be applied (see paragraphs 5.22 and 6.5–6.9).

**Planning output geography**

5.36 ONS will aim to meet users’ requirements for statistical results to be made available, at varying levels of detail, for a number of geographies, subject to the overriding requirement to protect statistical confidentiality. Such geographies will be created essentially from the same building bricks as in the 2001 Census – Output Areas.

5.37 Output Areas (OAs) are the smallest area for which Census statistics are produced and were first created for the 2001 Census. Super Output Areas (SOAs) are larger areas constructed from groupings of OAs and have been extensively used for the publication of Neighbourhood Statistics and for a range of key statistics from 2001 Census. ONS carried out a wide consultation between November 2006 and February 2007 in order to gain users’ views on the value of OAs and SOAs as the core output geographies for the 2011 Census. Response to the consultation was extremely positive and revealed a great deal of support for the key principles of stability and continuity with outputs from 2001 that had been suggested.
5.38 Following this review of user requirements for an output geography ONS announced in October 2007 that the OAs for which 2011 Census outputs will be presented would be largely unchanged providing a degree of geographical stability to enable closer comparability with 2001 Census outputs. Where there are areas with significant local population change or housing development, it may be necessary to create revised boundaries – primarily by splitting or merging existing OAs – to ensure that the key criteria of size and homogeneity are followed. However, ONS does not anticipate changing more than 5 per cent of current OA boundaries in order to meet these requirements. Where there are such major changes to local populations there will also be a similar need to split or merge a small number of SOAs. However, all revisions will be organised so that users will be able to compare data between 2001 and 2011 Census geographies, with revised OAs nesting into a stable hierarchy of Lower and Middle SOAs.

5.39 Administrative geographies – regions, counties, local and unitary authorities, wards and civil parishes/communities in Wales – and areas built from them, such as Parliamentary constituencies, and Urban and Rural Areas, will relate to boundaries in existence at the time of the Census. Where boundaries subsequently change ONS will consider providing outputs for the newly-defined areas, though these may necessarily be on the basis of a best fit of whole OAs in order to protect statistical confidentiality.
Confidentiality, privacy and computer security
6 Confidențiality, privacy and computer security

“The Census collects information from each person and household in the country. In its uses it is not concerned with facts about individuals as such. Its purpose is to provide statistics about the community, and groups within the community, as a whole. The public, therefore, has a right to expect, and needs to be assured, that personal information provided in confidence will be respected”. United Nations Economic Commission for Europe

Confidentiality principles

6.1 The importance of achieving maximum coverage in the Census necessitates that public participation should be mandatory. This, in turn puts an obligation on the Government to ensure that the information, sometimes sensitive information, given in confidence by the public is treated with the strictest confidentiality. The statutory requirement to provide personal census information is prescribed by the provisions of the Census Act 1920 and in the Order and Regulations made under the Act. In return, the Act – now strengthened by the confidentiality provisions of the Statistics and Registration Service Act 2007 – also imposes strict requirements on behalf the UK Statistics Authority (Statistics Board) (and, consequently, on ONS) to protect the confidentiality of any such information collected.

6.2 The UK Statistics Authority recognises that the public need to be confident that their personal census records will be held securely. As in previous censuses, assurances will be given to the public that all the information provided will be treated in strictest confidence by the Census Office. There is a well-established reputation of maintaining census confidentiality which ONS intends to uphold.

6.3 The information collected in the 2011 Census will be used solely for the production of statistics and statistical research. Usage will comply fully with the Census Act, the Statistics and Registration Service Act and the requirements of data protection and freedom of information legislation. There are legal penalties for the unlawful disclosure of personal information collected in the census.

6.4 ONS will ensure that Government-wide standards relating to information risk management and data security are met. The following principles will govern the treatment of the information given in the Census returns:
(i) Only persons under the management and/or control of the UK Statistics Authority including those agents acting, or providing services, on its behalf for the purpose of the Census, and researchers approved under the provisions of the Statistics and Registration Service Act 2007, will have access to personal census information.

(ii) In most cases one questionnaire will cover all members of the household and information will be returned by post; but people will, if they wish, be able to give personal information on a separate form, or via a secure online facility, in a way that will not reveal it to others in their household or establishment, or to the Enumerator.

(iii) All members of the Census organisation and outside agents providing services to the UK Statistics Authority will be given strict instructions, and will be required to sign undertakings in the form of declarations, to ensure their awareness of their statutory confidentiality obligations. They will be liable to prosecution for any breaches of the law.

(iv) The physical security of personal Census information held in the Census Office, by field staff or by authorised agents will be strictly enforced. All sites processing Census data will have continuous security arrangements in place including access control, CCTV, security guards, intruder alarms and ONS staff to monitor suppliers, and independent checks, by an accredited UK security organisation, of both physical and electronic security will be carried out.

(v) All relevant UK Government Security requirements as applicable as they apply to a RESTRICTED rated project/system will be adhered to in all areas to ensure the overall security of the IT systems and the associated processes and procedures. Such measures taken will conform entirely to specific mandatory requirements in the procedures for the handling of personal data within Government.

(vi) The computer systems handling Census data will have strict safeguards to prevent unauthorised access.

(vii) There will be systemic modification of the data in the preparation of the results of the Census in order to preserve statistical confidentiality (see paragraphs 6.5–6.6).

(viii) The security and confidentiality arrangements covering the collection and processing of census forms will be subject to an independent review (see paragraph 6.20).

**Statistical confidentiality**

6.5 Precautions will be taken so that published tabulations and abstracts of statistical data are in line with both the Statistics and Registration Service Act 2007 and the National Statistics Code of Practice. Special precautions may apply particularly to statistical outputs for small areas. Measures to ensure disclosure control (that
is, to prevent the release of statistical information that identifies characteristics about an individual person or household) will include some, or all, of the following procedures:

- restricting the number of output categories into which a variable may be classified, such as aggregated age groups
- where the number of people or households in an area falls below a minimum threshold, the statistical output – except for basic headcounts – will be amalgamated with that for a sufficiently large enough neighbouring area, and/or
- modifying some of the data before the statistics are released through one or more of a variety of means such as record swapping, over-imputation and some form of cell perturbation

6.6 The National Statistician, together with the Registrars General for Scotland and Northern Ireland have published a joint agreement to adopt a common statistical disclosure control policy as part of the move towards seeking harmonised statistical outputs from the 2011 Census across the UK. The policy position is based on the principle for protecting confidentiality set out in the National Statistics Code of Practice, which includes the guarantee that “no statistics will be produced that are likely to identify an individual unless specifically agreed with them”.

6.7 The key strength of the Census is its completeness of coverage and its ability to generate statistics about very small areas and groups of people (as is necessary to ensure that public policies take account of the needs of local communities when formulating policy). Particular care must therefore be taken to balance, on the one hand, the need to ensure complete statistical confidentiality against avoidance, on the other, of damaging the utility of the data. Taking account of the recommendation of the Treasury Select Committee to review the mechanism to protect statistical confidentiality (see paragraph 1.25) the National Statistician and the Registrars General have taken steps to ensure that no statistics will be produced that allow the identification of an individual (or information about an individual) with a high degree of confidence.

6.8 In a Census context, where thousands of cross-tabulations are generated from one database, the protection of statistical confidentiality can be best addressed by introducing uncertainty about the true value of small cells. In order to meet the agreed interpretation of the Code of Practice, the three UK Census Offices have agreed that small counts could be included in publicly disseminated Census data provided that:

- uncertainty as to whether or not the small cell is a true value has been systematically created
- creating that uncertainty does not significantly damage the data
6.9 The exact threshold of uncertainty required has not yet been decided. The National Statistician and the Registrars General will make this judgement, in consultation with users and other experts including the Information Commissioner, at a later stage within the context of results from research into the balance of protection afforded, and damage caused, by various disclosure control methodologies. The research into this is expected to be complete towards the end of 2008 and, following further consultation with users, a UK statistical disclosure control strategy for tabular outputs will be finalised by summer 2009.

Linked surveys, the Longitudinal Study and data protection

6.10 The handling of information collected in the 2011 Census will conform entirely to the principles of fair processing of personal data and sensitive personal data demanded by the Data Protection Act 1998. This will include not only the collection and processing of data for the purposes of the Census itself, but also for other possible statistical use of the data, such as part of the ONS programmes of work to improve population and migration statistics and to develop an Integrated Population Statistics System and, as a base for creating linked samples for subsequent follow-up on topics that cannot be included in the Census itself. Any intention to use 2011 Census information for any such follow-up surveys will be announced to Parliament before the Census and made clear to the public in accordance with the National Statistics Code of Practice.

6.11 The processing of data in order to extend the ONS Longitudinal Study to include 2011 Census samples (see paragraph 5.32) will also adhere to the Data Protection principles of fair processing.

Data access and data sharing

6.12 The Statistics and Registration Service Act 2007 (SRSA) gives discretionary powers to the UK Statistics Authority (Statistics Board) to allow wider access to census information provided that any such disclosure:

- is permitted under other legislation
- is required to fulfil a European Community obligation
- is necessary for the purposes of enabling or assisting the Board to exercise any of its functions
- is to persons providing services to the Board, if the Board considers it necessary or appropriate to do so for the purposes of the provision of those services
- has already lawfully been made available to the public
- is made in pursuance or an order of any court or for the purposes of a criminal investigation or proceedings
- is made in the interest of national security
- is made with the consent of the person to whom it relates, or
- is made to an approved researcher
For the purposes of the last of these the Act requires the UK Statistics Authority to have approved researchers sign a declaration that they understand the confidentiality obligations put on them before granting access to such personal information. Such access to Census information will only be within a secure environment.

Where any information has been provided to the UK Statistics Authority through the exercise of its powers under the Act to extend data sharing, it will only use that information for the purposes for which it was provided. The UK Statistics Authority will not, for example, provide personal census data to other Government departments such as the Home Office, whose Minister has made it clear to the Westminster Parliament that such census data will not be sought for the purposes of the proposed identity card scheme. Under the provisions of the SRSA, however, the UK Statistics Authority will be in a position to make wider use of address information collected as part of the pre-2011 Census address check (see paragraph 4.19) provided that there is a clearly stated intention to use the information for this purpose before it is collected.

**Field staff security**

Temporary census staff will be expected to have the skills to deal with the public and to be able to handle the information that they collect with complete confidentiality. Staff either employed directly by, or providing services to, the UK Statistics Authority for the purposes of the Census are, as a condition of service, bound by the confidentiality provisions of the Statistics and Registration Service Act 2007 (which has superseded those of the Census Act 1920).

It is especially important to guard against inadvertent disclosure of personal information, and all staff will be warned against this and alerted to the penalties for doing so as part of their training. They will be required to sign a statutory undertaking that they will not, without lawful authority, divulge or make use of any information acquired in the course of their duties, and will be liable on conviction under the terms of the Statistics and Registration Service Act 2007 to imprisonment or a fine, or both, for any contravention.

The UK Statistics Authority is satisfied that ONS has fully addressed concerns about the security and confidentiality of Census data arising from the involvement of Lockheed Martin UK.

In essence this confirms that neither Lockheed Martin UK nor any Lockheed Martin employee will have access to personal Census data. All Census data is owned by ONS and will be processed in the UK. Lockheed Martin UK will be acting as the prime contractor and will develop the systems to be used to handle and process the Census data, but access to the data itself will be restricted only to a consortium of subcontractors who are based in the UK and either UK or EU.
owned and will be protected to the standards required by the Data Protection Act 1998. Safeguarding data confidentiality and security carried the highest priority in defining all the legal and contractual arrangements for the 2011 Census.

6.19 The UK Statistics Authority thus believes that the contractual structure proposed by Lockheed Martin UK will provide the strongest reassurance to the public about the confidentiality of Census records. Lockheed Martin UK supported the 2001 UK Census and has extensive international census experience. Most recently they worked with Statistics Canada in helping to deliver successfully the 2006 Canadian Census. The UK Statistics Authority is thus satisfied that the arrangements being made in connection with the involvement of Lockheed Martin UK in the 2011 Census will thus impose no risk to census security.

Reviews of confidentiality and computer security

6.20 ONS has in place an Information Systems Security Policy suitably stringent to protect data up to and including the RESTRICTED category. In line with this policy, further detailed security measures specifically designed for the Census will be drawn up and implemented for the processing of data and its transmission (both in paper and electronic media) for the 2009 Census Rehearsal and the 2011 Census. Furthermore, as has become the practice prior to previous censuses, the security and confidentiality arrangements covering the collection and processing of census forms will be subject to an independent review, or reviews, and ONS will inform Parliament of the outcome of such reviews before the Census.

Privacy and the Human Rights Act

6.21 The UK Statistics Authority is satisfied that statutory authority to require information to be provided on each of the questions proposed for the 2011 Census is fully compliant with both the European Convention on Human Rights and the Human Rights Act 1998 in respect to the individual’s right to privacy.

6.22 ONS will work with the Office of the Information Commissioner to carry out a Privacy Impact Assessment on the 2011 Census prior to the secondary legislation necessary to carry out the Census (see Chapter 7) to confirm this view.

UK Government’s policy on public access to personal census records

6.23 The Government has given careful consideration to many requests from genealogists and others, particularly since the application of the Freedom of Information Act (FOI) in 2005, to reduce the period of closure for personal census records to allow public access to more recent returns for the purpose of
researching family histories. The period of closure in England and Wales had, until January 2005, been statutorily set at 100 years (specified by the Lord Chancellor’s Instrument no. 12 (1966)) under the terms of the Public Records Act 1958.

6.24 While the Government recognises both the sociological and commercial value of historical census records, it considers that the strict confidentiality assurances given about present and future censuses would be seriously compromised if it were seen to be departing from the assurances given about censuses in the past. Public confidence in the security and confidentiality of the information given in the census is paramount. Accordingly, the Government intends to maintain the policy of keeping the England and Wales census returns confidential for 100 years in line with the statutory provisions that exist in Scotland.

6.25 Records from the 1911 Census will not become open generally to the public or available online from The National Archives (TNA) until January 2012. However, following a decision by the Information Commissioner in 2007, specific information from the 1911 returns can be made available from TNA under the provisions of the FOI Act. This decision applies only to the 1911 Census. For all subsequent Censuses conducted under the authority of the Census Act 1920, the Government intends that the census records shall remain closed for 100 years and protected from release to the public for the whole of that period. Accordingly, records from the 1921 Census are not scheduled to be opened to the public until January 2022.
The legislative process
7 The legislative process

“No gentleman who has sat in this House can be insensible of the utility of the law proposed. For seldom a session passes but something happens in which it would be of singular advantage to the public, and a great satisfaction to ourselves, to have upon our table such authentic accounts as are proposed in this Bill laid before Parliament.”

Mr Thomas Potter, MP for St Germans, proposing the 1753 Census Bill

Primary Census legislation

7.1 The primary legislation that provides for the taking of a Census in England and Wales is the Census Act 1920 as amended by the Census (Amendment) Act 2000. More recently further amendments to the Act – in particular, transferring the authority to take the census from the Registrar General to the UK Statistics Authority (Statistics Board), and the Ministerial responsibility for the Census from HM Treasury to the Cabinet Office – have, from the 1 April 2008, been effected by the introduction of the Statistics and Registration Service Act 2007.

7.2 The Schedule to the Census Act 1920 authorises the inclusion, in the Census, of the following matters in respect of which particulars may be required:

(1) Names, sex, age
(2) Occupation, profession, trade or employment
(3) Nationality, birthplace, race, language
(4) Place of abode and character of dwelling
(5) Condition as to marriage or civil partnership, relation to head of family, issue born in marriage
(5A) Religion [for which there is no liability for failure to supply information, making any question, in effect, voluntary]
(6) Any other matters with respect to which it is desirable to obtain statistical information with a view to ascertaining the social or civil condition of the population

Secondary legislation

Census Order for England and Wales

7.3 The Government will prepare a draft Order in Council in respect of the Census in England and Wales, in autumn 2009, for approval by both Houses of Parliament in accordance with section 1 the Census Act. Under the terms of the Act, the Order in Council will prescribe:
• the date on which the census is to be taken
• the persons by whom, and with respect to whom, the census returns are to be made
• the particulars to be stated in the returns

7.4 The draft Order is required to be approved by negative resolution of both Houses of Parliament, except for any particulars to be included in the Census under the provision of paragraph (6) of the Schedule (see paragraph 7.2 above), which must be approved through the affirmative resolution procedure. For the 2011 Census this will apply to those questions set out in paragraph 3.23 relating to:

• second residence
• student status and term time address
• general health and long-term illness/disability
• usual address one year before the census if different from that at census day
• intended length of stay
• provision on unpaid care
• educational and vocational qualifications
• economic activity in the week before the census
• means of travel to work
• number of cars/vans available to the household
• tenure of accommodation and type of landlord if rented
• visitor status
• status of person within a communal establishment
• type of communal establishment

Separate Regulations for the Census in England and in Wales

7.5 Following the approval of the Census Order, the Minister for the Cabinet Office will lay before Parliament (around mid February 2010) Census Regulations which will make detailed provision for the conduct of the Census in England and will contain specimens of the questionnaires to be used. The Regulations are subject to the negative resolution procedure of both Houses.

7.6 At the same time, and as a consequence of the transfer of some census functions to the Welsh Ministers (see paragraph 7.8–7.10 below), separate Regulations covering the Census in Wales will be made in the National Assembly for Wales.

7.7 The Regulations principally cover the field activities such as:

• the appointment of field staff
• the geography of the census – the division of the country into areas for enumeration and the checking of addresses
• the arrangements for the delivery of the census forms to households and communal establishments
the collection of completed returns either by post or doorstep collection or via alternative means
the duties of field staff and, specifically, the details of any particulars to be collected by them
any information relating to special arrangements for the enumeration of particular populations such as persons sleeping rough
follow-up and non-compliance procedures
the management of field materials and documentation
security and confidentiality procedures

Arrangements for the Census in Wales

The transfer of functions

7.8 Following discussions between ONS and the Welsh Assembly Government over the period 2003-2005 on the issues arising from the lack of a specific tick box to record Welsh as an ethnic group in the 2001 Census, the then Financial Secretary to the Treasury and the Registrar General for England and Wales agreed that the National Assembly for Wales should have a more formal role in agreeing the scope of the format, content and conduct of future censuses in Wales. Furthermore, the Treasury Select Committee’s report on their enquiry into 2001 Census\(^9\) noted at paragraph 27 that:

“ONS’s preparations for the 2001 Census did not reveal the latent concerns in Wales over how Welsh identity was to be recorded on the Census form. We recommend, in the light of this, that ONS look further at the way in which they rehearse any future Census, to ensure the most accurate picture possible is obtained of both how the Census is likely to be received and proceed. We endorse the proposal that the National Assembly for Wales have a more formal role in agreeing future Census forms for Wales.”

7.9 After discussion and taking legal advice it was subsequently agreed in June 2006 that there should be a devolution of secondary legislative powers, and that the vehicle to transfer the powers should be a Transfer of Functions Order under the Government of Wales Act 1998. The scope of such secondary legislation would be to:

- transfer the power to make Census Regulations (required under section 3 of the Census Act) from the then Chancellor to the National Assembly for Wales
- to provide the Assembly with the right to be consulted on the content of the Census Order.

7.10 The power to make Regulations for Wales was accordingly transferred from the Chancellor of the Exchequer to the National Assembly for Wales in December 2006 by means of a Transfer of Function Order (TFO)\(^{48}\) and subsequently, through the Government of Wales Act 2006, to the Welsh Ministers.
Consultation with the Welsh Assembly Government

7.11 Prior, and subsequent, to the transfer of functions to the National Assembly for Wales, ONS and Welsh Assembly Government officials met with each of the several National Assembly for Wales subject Committees over the period October 2006–March 2007 to explain the plans for the Census in Wales and to seek to identify those issues and topics of particular concern in Wales. The UK Statistics Authority has taken particular note of the views expressed by Assembly Members in proposing the questions to be included and the arrangements for conducting the Census in Wales as set out in this White Paper.

Devolution of the Census in Scotland and Northern Ireland

7.12 Under the terms of the Census Act 1920, the Registrar General for Scotland has the authority for taking the Census in Scotland. Since devolution, the Scottish Parliament is entirely responsible for approving separate subordinate legislation relating to, and the funding of, the specific arrangements for the Census in Scotland.

7.13 The Registrar General for Northern Ireland is similarly responsible, under the provisions of the Census Act (Northern Ireland) 1969 (as amended by the Census (Confidentiality) (NI) Order 1991 and the Law Reform (Miscellaneous Provisions) (NI) Order 2005) for making arrangements for taking the Census in Northern Ireland, where the necessary subordinate legislation is to be approved by the Northern Ireland Assembly.

7.14 UK harmonisation will be achieved through close liaison and co-operation between the three Census Offices, and through the agreement between the National Statistician and the Registrars General to work together to achieve consistent and comparable Census outputs both to meet users’ requirements to fulfil the UK’s international obligations.
References


