

**CENSUS ADVISORY GROUP****AG (09) 01 DiAG - Disability****2011 Census Highlight Report****Summary**

ONS has prepared this Highlight Report on progress on a number of 2011 Census and other census-related issues not covered by agenda items. The paper covers:

- 1) 2009 Census Rehearsal update**
- 2) Security update**
- 3) 2011 Questionnaire Development update**
- 4) Address Register Development update**
- 5) Internet Data Capture update**
- 6) Reaching all Local Authorities**
- 7) Census Communication Campaign preparations**
- 8) Quality Assurance update**
- 9) Population Bases for the 2011 Census**
- 10) Statistical Disclosure Control update**

## 1) 2009 Census Rehearsal update

1. The England & Wales Census Rehearsal will comprise approximately 135,000 households in Anglesey (Ynys Mon), Lancaster and Newham. Rehearsal day is 11<sup>th</sup> October 2009 and preparations are well underway.
2. A field address checking exercise has taken place and the findings are currently being incorporated into the address register in preparation for printing of addressed questionnaires at the end of July this year.
3. The contract to provide integrated nationwide personnel services for the 2011 Census has been awarded to Capita Business Services. Capita will provide services to help recruit, train and pay the estimated 35,000 ONS staff needed to deliver the 2011 Census and rehearsal. Staff will be recruited from local communities across England and Wales to carry out Census field roles. Posts include Area Managers, local team coordinators and Census delivery and collection staff. Recruitment for the rehearsal will start in the rehearsal areas in May 2009. Nationwide recruitment for the 2011 Census will start in June 2010.
4. We continue to work with local authorities in the rehearsal areas, gathering support for recruitment of field staff and for local publicity. We are also collecting local information and details of community contacts from the 3 rehearsal authorities.
5. In order to provide accessible support, we are producing translation booklets in 30 languages as well as information in Braille, British Sign Language video clips and audio clips. All of these will be made readily available through community and local authority networks in rehearsal areas.
6. We are also progressing as planned on all the supporting systems for:
  - Receipting and scanning returned paper questionnaires;
  - Internet questionnaire completion
  - Web self-help and the contact centre;
  - An internal management information system to help us deploy the field force effectively.
7. A Rehearsal Evaluation Plan has been developed to help us to identify lessons learned from the rehearsal and incorporate them into the preparations for the 2011 Census.

## 2) Security update

1. Information Security is a fundamental component of the 2011 Census. ONS, and its predecessors, have a 200 year track record of maintaining census confidentiality. ONS' commitments to Information Security are detailed in the 2011 Census White Paper (available at <http://www.ons.gov.uk/census/2011-census/2011-census-project/legislation/index.html>) and further on the Census website (available at <http://www.ons.gov.uk/census/2011-census/2011-census-project/census-data-security-measures>).
  
2. To deliver successful security, 2011 Census needs to manage internal and external threats which could adversely affect the confidentiality, integrity and availability of 2011 census information. 2011 Census has undertaken the following activities to achieve this goal:
  - I. Clear definition of security requirements, which have then been reflected in the technical and procedural design for 2011 Census. This is supported by detailed security documentation which covers:

a) Physical security of census assets	f) Logging, monitoring and auditing of user actions
b) Application security	g) Ensuring availability of IT systems and infrastructure
c) Infrastructure security	h) People security issues – recruitment and awareness
d) User access to buildings, networks and IT applications	i) Testing of security including penetration testing
e) Use of websites connected to the Internet	

- II. Adherence to government security standards for people, processes and technology while delivering the census.
  
- III. Gaining security assurance across 2011 Census activities, to understand that the security which we have specified has been delivered through a range of security testing undertaken by ONS, our contractors and independent security experts.
  
- IV. Planning for decommissioning of 2011 Census data collection systems, destruction of questionnaires and archiving of data upon completion of the census; ensuring census data is appropriately accounted for and handled correctly.

3. The 2011 Census programme is following Government wide information risk management and data security standards. All census data is owned by ONS, remains in the UK and is processed only by ONS or UK/EU companies.
4. The recruitment process for all 2011 Census field force staff engaged on the 2011 Census programme meets relevant legislation and uses various personal screening techniques as required by HMG policy. All persons working on the 2011 Census including permanent ONS employees, the field force or contractors are required to sign confidentiality undertakings to ensure that they are aware of their confidentiality obligations and liability under the terms of the Statistics and Registration Service Act 2007.
5. The physical security of personal census information held in Census Offices, by field staff or by authorised agents is strictly enforced. Sites processing census data will have in place access control systems, CCTV, security guards, intruder alarms etc. ONS staff will confirm provision of these facilities with suppliers and independent physical security checks will also be undertaken to validate their implementation is effective.

### **3) 2011 Questionnaire Development update**

1. Members should note that paper AG (09) 02 summarises further questionnaire development and has been circulated for information.
2. Advisory Group members are asked in particular to note for information that a programme of additional development and testing of a small number of questions is taking place. The White Paper 'Helping to shape tomorrow' published proposals for the Census and facilitated public and parliamentary debate and scrutiny of those proposals.
3. As a result of this scrutiny and debate, ONS has further considered concerns raised during the period since the White Paper was published, and has identified a small number of issues for further investigation and evidence gathering.
4. Additional development and testing of the questions about student addresses, religion and citizenship is taking place. Further testing of the ethnic group question is also being considered. More details are given in paper AG(09) 02.
5. This further question testing will be completed in summer to allow final decisions to be made on these outstanding issues before the Census Order is laid before Parliament in autumn 2009.

## 4) Address Register Development update

### Background:

1. The National Census Address Development Project consists of 3 distinct phases:
  - The **Pilot** phase, which involved address matching of 24 local authorities and selected field checking exercises (July 08 through to December 08).
  - The **Rehearsal** phase, which involves 3 local authorities and a complete field checking exercise (March 09 through to May 09).
  - The **National** address matching and checking phase across all of England and Wales (May 09 through to September 10).

### Progress:

2. Good progress has been made: the Pilot and Rehearsal address matching phases have been both completed; procurement of the national infrastructure and initial matching of the national address register have been delivered; the Rehearsal field-checking of around 100,000 address was finished on schedule (April 09).
3. Data sharing agreements are now in place with the key suppliers - Royal Mail and the Local Government Information House. A similar agreement with Ordnance Survey is expected to be in place shortly. The existence of these agreements and the flexibility and support of the suppliers during the pilot have been key in the good progress made to date.
4. Findings from the Pilot are now being used in refining plans for construction and validation of the Address Register. The Register will be built through comparison of the National Land and Property Gazetteer and Postcode Address File, and by matching with other datasets including Valuation Office Agency sourced data. Work is currently underway to finalise the address resolution process and the project is on schedule to share address anomalies with suppliers in June 2009. Supplier resolution will be supported by checking of remaining anomalies by Local Authorities, followed by targeted fieldwork by ONS staff. ONS fieldwork is currently being planned for 30% of the country – although this remains open to review in light of ongoing research. The careful management of changes and updates in the different registers, particularly in the last few months before 2011 Census, will be critical in ensuring an effective register.
5. We are aware that detailed plans for the Address Register are of general interest to many stakeholders and of particular interest to LAs which will be taking part in the address validation process. Liaison with LAs will be via the newly formed Local Land and Property Gazetteer (LLPG) Regional Chair Working Group and through a series of workshops to be held during the next few months – dates to be announced shortly.
6. A full report on findings of the Pilot and on plans for construction and validation of the Address Register is planned for publication in the summer.

## **5) Internet Data Capture update**

1. Work is progressing well with the development of the Internet Data Capture service for 2009 Census Rehearsal.
2. The application is being developed under contract by a consortium of specialist companies.
3. The 'Look and Feel' i.e. page layouts; branding; check boxes etc., was agreed and subjected to usability testing. A diverse group of 24 members of the public were involved. The analysis of results has led to a few improvements, and the next round of testing takes place in June. This will involve 48 individuals. Accessibility testing has also taken place to ensure that we are meeting the required standards for use by diversity groups who require such facilities as screen readers, large text etc.
4. A prototype of the application on CD with the near final design has been provided to ONS, so that further in-house trials and presentations can be undertaken.
5. The hardware configuration has been designed, which will provide more than adequate capacity for Rehearsal volumes. Further assessment will need to take place to ensure that the roll out for 2011 will be sufficiently resilient to handle the high peak loading we are anticipating. Our current estimate - to be continually reviewed is that 25% of households will respond via the internet.
6. Confidentiality considerations are well advanced and penetration tests will be undertaken prior to Rehearsal to ensure that the service meets our stringent security demands.

## 6) Reaching all Local Authorities

1. During the last quarter of 2008 a network of Census Regional Champions was established. The geography of the network follows the Government Office regional structure and comprises 10 senior representatives of local authorities.
2. These Census Regional Champions (CRCs) act as ambassadors for the 2011 Census among their peers, providing a communication channel with all local authority chief executives.
3. This communication channel was used in January 2009 to commence direct contact with all local authorities in preparation for 2011. A joint letter from CRCs and the Census Director introduced the role of the CRCs, explained the importance of the census to local authority funding, the vital role of an accurate address register and finally asked all local authorities to nominate a Census Liaison Manager (CLM) at an executive level and an Assistant Census Liaison Manager (ACLM) at working level.
4. Over 60% of local authorities to date have responded positively and nominated staff to fill these roles. A number of visits to local authorities have also taken place in the early months of 2009 to clarify the roles and answer any queries raised by authorities.
5. Each CRC is hosting a regional meeting in Spring 2009 for all authorities within the area. Feedback from the events held to date has been positive, providing the opportunity for LAs to hear from ONS and from rehearsal and test authorities about how they can contribute to a successful 2011 Census in their area. The CRCs also encourage the LAs to ask questions, raise issues and provide suggestions.
6. Forums have been set up on the IDeA Community of Practice website <http://www.communities.idea.gov.uk> in order to communicate with our various local authority audiences and to encourage questions and debate.

## 7) Census Communication Campaign preparations

1. A number of specialist communication agencies have recently been appointed to support the development of the 2011 Census communication campaign to the general public. These specialist communication agencies will provide a range of services including:
  - Advertising, design and media buying
  - Communication with diverse ethnic audiences
  - Market research
  - PR and on line communication
2. Work is now beginning with these agencies to develop an integrated communication campaign, building on the 2011 Census brand developed during 2008. The rehearsal provides the opportunity to test a number of the elements of the campaign within limited geographical areas.



## **8) Quality Assurance update**

- 1 A first draft of the 2011 Census Data Quality Assurance Strategy has been approved and is ready for publication. The Strategy describes in detail the proposed approach to data item validation ('Topic QA'), the validation of Census population estimates ('Demographic QA') and outlines proposals for contingency analysis, including administrative data linkage. Further planning and prioritisation of QA activities is required ahead of implementation.
- 2 The Strategy for data quality assurance in the 2009 Rehearsal is being finalised. The emphasis is on system testing, of the Data Quality Monitoring System and data acceptance procedures. The Rehearsal will also provide an opportunity to test and evaluate usage of Census data at the early stages of processing to inform field activities. A subset of the quality checks described in the Data Quality Assurance Strategy will provide an opportunity to prepare, test and evaluate data comparators and validation techniques. Liaison with Local Authorities in Rehearsal areas on issues such as the availability of local administrative data sources for data validation began in April 2009.
- 3 Work has begun on assessing the quality and utility of data sources for QA purposes. An associated paper is being presented to a meeting of the Royal Statistical Society on June 1.
- 4 A policy on the use of demographic indicators to inform data QA is in development, in collaboration with the ONS Centre for Demography.
- 5 Proposals for data linkage are being developed, including strategies for using newly-acquired record-level administrative sources. This will include methodological investigations to inform the creation of aggregate-level comparators and linkage to fill information gaps following Census enumeration.

## 9) Population Bases for the 2011 Census

1. After reviewing the 2001 Census and a series of discussions between Census and demography staff across all three UK statistical offices, it has been agreed that the main output base for the 2011 Census should be *Usual Residents*, and that usual residents should be defined as those people who
  - a) have been, or intend to be, a resident of the UK for a period of 12 months or more; and
  - b) are not outside the UK for a period of 12 months or more.
2. This will make the national level estimates directly comparable with the Mid Year Population Estimates (MYEs) for the first time, and also allow closer comparability with population estimates from other countries.
3. However, some respondents with more than one residence will continue to be included at their family home, as in the 2001 Census, to enable the production of accurate family statistics. This will mean that the sub-national population estimates will not be directly comparable with the MYEs, where everyone is, in theory, counted at the address where they spend the majority of the time. In England and Wales, information will be collected on *Second Residences*, which may enable a Census estimate of the *Majority of time* population to be produced.
4. Although the main output base has been agreed, this is not the same population base that will be used for enumeration. Therefore, to produce the main outputs database, additional processing will be required.
5. In England, Wales and Northern Ireland, information on *Intended length of stay* will be used to remove the short-term UK residents. In Scotland, where a full Census return will be collected from everyone residing or intending to reside in the UK for a period of six months or more, the '12 month or more' population will need to be modelled, and GROS are currently investigating the best way to achieve this.
6. In England and Wales, a range of outputs on non-standard population bases may be produced, depending on user requirements. ONS and NISRA will also be able to produce detailed outputs for the short-term migrant population for the first time.
7. The 2011 Census will provide a wider range of outputs than ever before, and the standard outputs will be more directly comparable with other UK and international population estimates.

## **10) Statistical Disclosure Control (SDC) update**

1. ONS continues to work towards the recommendation of an SDC strategy for tabular outputs, harmonised across UK Census Offices.
2. Previously, in July 2007 a review of a wide range of SDC methods had been undertaken, assessing them against a set of qualitative criteria in line with the policy statements made by the Registrars General. This resulted in the following three SDC methods being short-listed for further evaluation to assess risk and utility quantitatively:
  - Record swapping
  - Over-imputation
  - Invariant ABS Cell Perturbation Method (IACP, based on the method developed by the Australian Bureau of Statistics)
3. Though work has been delayed by some errors in the microdata, we now intend to present the evaluation report to the UK Census Design & Methodology Advisory Committee peer review sub-group and UK SDC Working Group members in June, and report to UK Census Committee in July. A period of user consultation and communication will follow before final sign off.
4. Initial meetings have also taken place on the SDC methods that might be used to protect microdata samples. The methods employed will largely depend on the methods chosen for tabular outputs.

**ONS**  
**2011 Census Stakeholder Management and Communications Branch**  
**May 2009**