

2011 CENSUS OUTPUTS USER CONSULTATION STRATEGY

Introduction

- 1 The vast investment of time and resources in a Census can only be justified if the results are made accessible and if the outputs produced meet user needs.
- 2 This strategy document describes the approach that will be taken to engage and consult with users to understand their output requirements from the 2011 Census, to enable the planning, design, production, and dissemination of appropriate user-focused products and services.

Action

- 3 **Census Advisory Groups are invited to comment on the proposed strategy at the meeting and to suggest other means by which the ONS might engage with users.**

Scope of the strategy

- 4 The Registrars General's Statement of Agreement on the Conduct of the 2011 Census (available at http://www.statistics/about/census/census2011/2011census_prog.asp) includes the aim to achieve harmonisation of outputs:

“The final product should be consistent, coherent and accessible statistics for the UK and for each component country, a joint database (and/or a common data schema) being a desirable way of facilitating that outcome, with a common approach taken to output specifications, quality, data format and timing of releases.”

- 5 Although the strategy set out in this paper describes user research and consultation plans for England and Wales, in order to further the above aim it is planned to work collaboratively as far as possible with the Census Offices in Scotland and Northern Ireland to understand user requirements across the UK and to aim to co-ordinate user consultation timetables.

Development of the strategy

- 6 The strategy described has been developed drawing on:
 - user consultation experience with 2001 Census products and services;
 - user consultation experience within other ONS divisions, in particular Neighbourhood Statistics and Communications Division;

- user consultation models used by other National Statistics Institutes, in particular Statistics New Zealand; and
- National Statistics guidance for better user consultation across the ONS.

7 Collaborative working and knowledge-sharing both within ONS and across the Census Offices will be on-going throughout user consultation on 2011 Census output. Internal working groups have been established to facilitate this approach.

Evaluation of 2001 Census products and services

8 ONS Census Division have undertaken an evaluation of 2001 Census products and services in England and Wales and joint-UK outputs, based on both ONS and external user reviews and feedback.

9 A summary of the review findings, lessons learned and implications for the planning of 2011 products and services is attached at Annex A for Advisory Group members to comment. This review will be used as the starting point in the user consultation process on 2011 Census products and services.

Identification of user communities

10 A comprehensive understanding of the census users and their requirements is essential for the development of user-focused products and services.

11 Census user communities are diverse and vary considerably in the amount and complexity of their output requirements and in terms of their technical expertise. Users of census data include;

- Central government;
- EU/International bodies;
- Local government;
- Health service administrators;
- Commercial organisations and businesses;
- Academic and education community;
- Charities and the voluntary sector;
- The Media; and
- The general public

12 Improved identification and segmentation of census audiences is considered key to a comprehensive understanding of user needs. Direct communication with those accessing and using census data (end users) is also considered essential for the design of products and services to meet their needs.

13 ONS Census Customer Services has accumulated a very good knowledge of previous census users from the different sectors and their use of census outputs but knowledge of the current market for census information is arguably less good than in the past. Ironically, making standard output from the 2001 Census so freely accessible and so widening access and use of the output has made the monitoring of such use and the users

of census data less easy, particularly among those not necessarily affiliated to known user communities, such as community or voluntary groups.

- 14 Research will be undertaken to investigate if ONS's current understanding of the census user community is comprehensive, utilising findings from the Mori pop-up survey on the NS and NeSS website. We will also interview those intermediaries likely to be contacted by community/voluntary/education groups and members of the general public for information, such as libraries and the LA Research Officers. Direct links with end users in known user groups will also be re-established through targeted communication and consultation with users on the Census Customer Services customer database.

Communication and Consultation with users

- 15 Consultation is only one element of communication with users. An NS paper *User consultation: Proposals for better consultation across ONS* (October 2005 recommended that there should be interaction with users at all levels and stages of the statistical process and led to the setting up of the RSS Statistics User Forum.
- 16 Users should be confident that they can communicate their needs and views to ONS and, conversely, ONS must be confident that its communication channels mean that census updates, planned consultations and output results are reaching all users.
- 17 A number of different strategies will therefore be employed to identify user requirements for:
- statistical products (standard tables, flexible tables, microdata samples);
 - metadata (including quality reporting); and
 - dissemination methods and media.

2011 Census Output User Champion

- 18 A member of the 2011 Census team will be designated 'the user champion', who will act as a focal point for user communications about Census outputs.
- 19 This person would act as the voice of Census output users within the ONS and the public face of Census outputs by:
- Channelling user enquiries and comments to the correct people within the ONS;
 - Attending all Census user meetings where possible;
 - Liaising with the Census Communication team to provide a united approach to communications with users; and
 - Understanding the different user communities and their requirements

'User persona' research

- 20 A sample of 50 users will be drawn from the Census Customer Services user database, covering the following sectors.
- Local authorities
 - Central government

- Value added resellers
- Commercial
- Academics
- Education/schools

Interviews will be held with these users in their workplace, using a combination of directed discussions and observation. This will provide an understanding of their requirements based on how they actually access and use census products in their work situation.

- 21 The potential census output requirements of public and community/voluntary groups will be explored via a small number of focus groups
- 22 Findings will be analysed for common themes in order to reveal clusters of needs, uses and expertise both within and across sectors. These clusters will form the basis for the development of user personas.

“Personas are a precise descriptive model of the user, what he/she wishes to accomplish and why” (Cooper and Reimann, 2003). This makes them powerful design tools.

- 23 It is intended that 2011 Census products and services will be designed specifically for the personas that have been developed so that they can be targeted to specific audiences.

Consultation on output requirements

- 24 The topics to be included in the 2011 Census will be finalised in the spring of 2008 and will be announced in the Census White Paper in October 2008. A further outputs consultation, (similar to the 2011 Census topic consultation that ran from April to August 2005 to give ONS’ views and invite responses) is planned for shortly after this time.
- 25 Results from this consultation will expand ONS’s understanding of user output product requirements gained in the persona research phase.
- 26 Census users will be asked to make a case for specific outputs from each topic including why they need it and the level of detail required. The responses will be evaluated and ranked according the strength of user requirement.

Data distributors workshops

- 27 The potential for a more joined-up dissemination model for 2011 Census output will be explored with external data distributors.
- 28 As a first step in improving understanding of current dissemination methods for census data and how they meet the needs of different user groups, ONS intends to hold a one-day workshop with different data distributors, to include representatives from the Census Offices, Local Authorities, Academic and Commercial sector etc in January 2007. ONS is viewing the workshop as part of the process of gathering user requirements from a provider’s angle.

Census News

- 29 *Census News* on the NS website will continue to provide a means of communicating information to Census users. Alerts to each issue are sent to some 5,900 identified users, making this a valuable and instantaneous means of communication. *Census News* will also be used to alert known users to planned and active consultation.

Roadshows

- 30 Roadshows will be planned to take place at key points in the consultation process, in a variety of regional locations across England and Wales. These will follow a similar format to the census topic roadshows that took place in 2005. They will be used as a means of communicating and consulting on various aspects of 2011 Census development including outputs. These will be open to all census users and widely publicised.
- 31 It is also intended that there will be an evaluation roadshow following release of standard 2011 Census outputs in 2013.

User Groups

- 32 Established expert user groups such as the Census Advisory Groups (CAGs) (which cover government departments, local authorities, academics, health service, business and community groups), the RSS Statistics User Forum, meetings of the Association of Census Distributors (ACD) and Market Research Society's Census Geodemographics Group (CGG) will all continue to be important channels for engagement with users on output plans. The SARs User Group will play a similar role with regard to understanding user requirements for Census microdata samples.

2011 Census Output User Council

- 33 A Census Output User Council will be established, meeting biannually, to provide strategic guidance and feedback about output plans and developments. It will replace the Output Working Group that existed for the 2001 Census. It will play a similar role to the former Output Working Group, but aims to include broader representation from a cross-section of user communities. Membership will include representatives with statistical expertise and previous census experience.

SARs Project Board

- 34 The SARS project board will be a continuation of the 2001 board. It will meet biannually to provide strategic guidance and feedback about SARs output plans and developments, and discuss issues raised at the SARs User Group. Membership will include representatives from ONS, GROS, NISRA and the Centre for Census and Survey Research (CCSR)

Progress to date

- 35 Work to agree a UK wide Statistical Disclosure Control (SDC) policy for 2011 Census outputs is nearing completion and a paper presenting the agreed policy position will be made public in January 2007. A two year programme of research evaluating SDC

methods that conform to this policy will follow. Users will be updated and consulted on the methodology as the work progresses.

- 36 Consultation on coverage assessment and adjustment is commencing in the Autumn 2006 with a paper presented to Census Advisory Groups (2011 Census UK Census Coverage Assessment and Adjustment Strategy – Advisory Group paper 06 16).
- 37 User consultation on Census output geographies is timetabled to commence later this month (November 2006). Details of this consultation will be presented in a paper to CAGs this Autumn (Advisory Group paper 06 14).

Meeting user requirements

- 38 Clearly, it will not be possible to meet all the user requirements that emerge from the consultation process. Resource constraints, technical feasibility and disclosure control considerations will all be factors that may limit what can be achieved.
- 39 User requirements will therefore be prioritised in terms of the strength of the requirement and assessed according to their costs and benefits.
- 40 Consideration will also be given to which output products, services and functionality should be provided by ONS and which could be provided by external Census data distributors.
- 41 Final proposals will be fed back to users for consultation via the forums described above.

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2011 Census Outputs

November 2006

High level output consultation timetable

Nov 06	<ul style="list-style-type: none"> • Consultation on proposed geography for Census outputs • Consultation on Coverage Assessment and Adjustment commences
2007	<p>January:</p> <ul style="list-style-type: none"> • UK SDC Policy Position Statement <p>Summer:</p> <ul style="list-style-type: none"> • 2011 Census Output User Council (COUC) set up • SARs Project Board set up • Geography Policy for Census Outputs Sign-off <p>Autumn:</p> <ul style="list-style-type: none"> • Update and Consultation on UK SDC methodological research • Proposed approach to Output Funding • User Quality Assurance of Personas
2008	<ul style="list-style-type: none"> • Consultation on proposed UK SDC Methodology • Consultation on Coverage Assessment and Adjustment • Finalised Output Funding Model • Update and consultation on dissemination model development • Report on high level user output requirements • Report on high level microdata sample requirements • Commencing consultation on detailed user requirements for outputs
2009	<ul style="list-style-type: none"> • Update on UK SDC methodology for tabular output • Report on detailed user requirements for tabular output (derived variables, cross tabulations) • Report of ONS view of outputs to be produced and dissemination model
2010 - 2011	<ul style="list-style-type: none"> • Finalisation of tabular outputs to be produced and dissemination model • Microdata sample specification • SDC system development and testing • Dissemination systems development and testing
2012	<ul style="list-style-type: none"> • First outputs

References:

Cooper, A & Reimann, R (2003). *About Face 2.0: The Essentials of Interaction Design*. Wiley Publishing Inc, Indianapolis.

Appendix A: An Evaluation of 2001 Census Products and Services: A User Perspective and Lessons Learned for 2011 Summary

The 2001 Census output followed a pre-announced timetable, with national and local results being issued concurrently so that comparisons between any part of the country, or sections of the population, could be made immediately. The output for all topics is based on 100% of responses.

Super TABLE and Comma Separated Variable (CSV) files were generally free of charge, on both CD and DVD. CDs also accompanied the majority of printed reports.

As the Census is a devolved function there are some differences between the questions and outputs between the Census Office. The main differences between the outputs from the three Census Offices were as follows:

- GRO(S) data was disseminated through Scotland's Census Results OnLine (SCROL), ONS data through Neighbourhood Statistics website (NeSS) and National Statistics (NS) online, NISRA data through Northern Ireland Census Access (NICA) and Northern Ireland Neighbourhood Information Service (NINIS).
- GRO(S) also provided users with Tables in SuperCUBE format.
- GRO(S) chose not to apply small cell adjustment to the standard small area statistics for Scotland.
- Different variables in SARs products.
- Only England and Wales released Special License Household SARs.
- Scottish Output Area (OA) boundaries were cut to high mean watermark, English/Welsh were not.
- There was a gap of approximately 6 months between the release of CAS tables for Scotland and that for England and Wales, and Northern Ireland.
- For reasons of utility, the age bandings in Census Area Statistics (CAS) were different for NISRA and rest of UK.

Statistical Disclosure Control:

There were last minute changes to the SDC methodology applied to 2001 tabular output. Reassessment of the level of protection against disclosure afforded by the chosen statistical disclosure control (SDC) method for tabular output, record swapping, in addition to concerns of the perception of disclosure risk by the public, resulted in ONS/NISRA applying an additional small cell adjustment scheme (SCA) to standard small area statistics tables. Scotland did not apply SCA generally, but did apply it to the Workplace tables. Different SDC methods, therefore, were applied across the U.K.

What went well:

- Pre-planned output and pre-release of data to trusted users.
- Implementation of One Number Census to improve results
- Customer Support
- Census Access and HMSO's Click-Use licensing
- 100% coding of all questions and answers
- Agreement to code Social Grade as an output
- Distribution mechanisms for results (CDs, DVDs, NS website)

- Formatting for desktop GIS use
- Neighbourhood Statistics/ NOMIS
- CSV
- SARs and new in-house CAMS facility
- Purpose designed Output Areas
- New SOAs
- User Consultation process (in particular Roadshows)

What went less well:

- Delays to published timetables which could have been avoided with better planning
- Delays to commissioned tables
- Data Errors - Quality Assurance procedures needed improvement and lack of checking statistics for users
- Version Control – final specifications were not final and there appeared to be little or no version control
- Errors in Social Grade data – algorithm not tested by ONS in time and CGG not allowed to test it prior to census data release
- Beta-testing – users would have appreciated more opportunities for Beta-testing
- One Number Census was not delivered as total derived were not consistent and the census was an undercount
- Bulk delivery – ONS did not identify the need for bulk delivery until late in planning and SuperTABLE had limitations.
- National Statistics website – a ‘barrier’ to Census data
- SARs – SDC and lack of geographic identifiers, delays, users not involved early enough, funding, initially no owner in ONS
- CAMS – travel and limited time restrictive, problems with performance of servers at ONS
- Lack of flexibility in table specification
- Treatment of Students in tables - hard to separate for analysis
- Inconsistencies between UK Census Offices e.g. output format, metadata, SDC, question wording, OA boundaries, timing of outputs, dissemination website
- Lack of continuity from 1991 – outputs being designed by a new team in ONS
- No Income data
- Metadata – too complex and not well organised
- National tables required
- OA boundary data problematic – complex bowties and slithers
- Ordnance Survey agreement for OA boundaries
- Postcode geography inconsistent with Gridlink geography and divided communities
- Late change in SDC policy
- Small Cell Adjustment – no national totals, inconsistencies between tables, inaccurate results, effect on Origin-Destination tables

Lessons Learned for 2011:

1. Implementation of something like **One Number Census** to improve results. The balance between timeliness and data accuracy will be a central consideration.
2. **Customer Support** and helpline – learn from excellent service provided in 2001
3. **Census Access** and **HMSO's Click-Use licensing** – key aim for 2011 is that all standard outputs will be free to users at point of delivery
4. **100% coding** of all questions and answers
5. **Distribution mechanisms** for results (CDs, DVDs, NS website)
6. Formatting for **desktop GIS use**
7. **Neighbourhood Statistics/ NOMIS** – exploration of potential for more internally “joined-up” approach for dissemination of 2011 outputs
8. User requirement for **bulk delivery** - provision of data in CSV and other formats as required. Users will be consulted on their 2011 output format and dissemination requirements earlier than was the case for the 2001 outputs.
9. Provision of **SARs and CAMS** – inclusion of SARs in the ONS output plans from the beginning, better links with SARs users, explicit communication of rules, advances in technology, and policy especially in relation to SDC provision of CAMS test data
10. **Output Areas** - a formal consultation will be completed this Autumn to examine user views of OA and SOA geographies.
11. **Ordnance Survey Agreement** - aiming to have reselling terms and conditions established in advance of Census 2011. ONS and OS have recently agreed to establish a joint working group.
12. **User Consultation** process (in particular Roadshows) – learning from the excellent consultation process in 2001 and investigation of new methods of communicating with users
13. **Delays** – trying to ensure delays do not occur by early planning. The outputs timetable will be considered in the context of SDC, output geographies, coverage and QA. Data users will be consulted on their timeliness requirements for data release
14. Improve **QA procedures** by planning these in advance and increasing resources allocated to this. Investigate how this could be automated
15. Investigate the provision of **checking statistics** to users
16. **Version control** – error log and fast track for bulk users
17. Making **final specifications** final as far as possible
18. Better **collaboration** with users e.g. Social Grade
19. **Beta testing** – aiming to give expert users prior access to tables for beta testing and quality assurance
20. **NS website** – the NS website is currently being tested and redesigned for 2011
21. Investigate **flexible table generation** / Improve **commissioned table** output
22. **Students** – consider carefully the treatment of students in tables
23. **Consistency across UK** – the three Registrars General have agreed in principle to aim for consistent UK Census statistics
24. Investigate a **common dissemination portal** for all 3 offices
25. **Continuity** – evaluations of 2001 process and learning from the 2001 if they are still in the office
26. **Metadata** - simplified and better organised. Metadata requirements will be explored alongside other output requirements for 2011.

27. **Income** data – the impact of the income question on response will be tested in the 2007 test
28. All UK offices are aiming for one standard **Statistical Disclosure Control** methodology for 2011. Disclosure risk assessment will be carried out much earlier than in 2001.
29. **Small Cell Adjustment** – 2001 SDC methods are currently being reviewed and alternative methodologies evaluated in terms of the risk/utility continuum. Different SDC methodologies may be appropriate for different outputs, for example the provision of access to data subject to lower levels of SDC through on site labs and special licensing will be considered.
30. Earlier consultation with users on **SDC methodology**. It is recognised that ONS could have made users explicitly aware that the disclosure procedures were under a further review.
31. Impact analysis of **late changes** to policy will also be conducted in the event that these occur before the Census.
32. Care should be taken not to make **UK tables** too detailed so that for the smallest regions they only offer limited utility.
33. However it should be noted that things may have **changed over time** and so things that worked well in 2001 may not work as well in 2011.