Census Advisory & Working Groups



Advisory Group Paper (99)05

CENSUS ADVISORY GROUPS

An Update on the One Number Census and Census Coverage Survey

- 1. This paper gives a brief update on the One Number Census and the Census Coverage Survey. Also enclosed are a) ONC information papers issued to accompany the Census Output Roadshows and the ONC Workshops and b) a paper describing the operational strategy for the Census Coverage Survey.
- 2. This paper is issued to Advisory Group members for information only.

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April 1999

AN UPDATE ON THE ONE NUMBER CENSUS AND CENSUS COVERAGE SURVEY

ONC Methodology

The methodology proposed for achieving a ONC was presented to the ONC Steering Committee when it met in November 1998. The essential features of the methodology are:

- A Census Coverage Survey (CCS) comprising a re-enumeration of a sample of postcodes. The interviewer-based survey will collect data on a small number of key variables. The working assumption is that the sample size for the CCS in England and Wales will be 20,000 postcodes, approximately 300,000 households.
- The CCS data will be matched against individual census records to produce a combined census and CCS dataset.
- Estimates of the population will be produced by age and sex, for each area of a broad regional stratification of the UK. These regions are referred to 'Design Areas'; they are made up of groups of smaller Local Authority Districts (LADs).
- It will not be possible to directly estimate population totals for most LADs so standard synthetic estimation methods will be used to allocate the Design Area estimates to the LADs that constitute particular Design Areas.
- The final stage of the ONC process is to adjust the database via imputation.

It has been agreed to evaluate the proposed methodology as part of the April 1999 Census Rehearsal.

The Rehearsal CCS

The Rehearsal CCS is being carried out in all four of the Census Rehearsal areas. Eight hundred postcodes have been selected (approximately 18000 households). The field force of 280 interviewers and 16 managers are currently being recruited. Fieldwork will take place during 20th May – 13th June following Census Rehearsal day - 25 April 1999.

The attached paper The Strategy for the Census Coverage Survey in England and Wales provides more information on the CCS.

ONC Workshops

As part of the Census Output Roadshows the following ONC Workshops have been arranged:

Manchester 19th April, Cardiff 26th April, London 30th April, Glasgow 21st May

The Workshops will enable census users to find out more about the ONC and to put questions to the members of the ONC Project team.

Attached are copies of the documents that have been produced to accompany the Roadshows and Workshops:

- What is a One Number Census a one page description sent to all Census Roadshow participants
- 2001 Census: A Guide to the One Number Census a twenty-page description of the proposed methodology sent to ONC Workshop participants.

THE STRATEGY FOR THE CENSUS COVERAGE SURVEY IN ENGLAND AND WALES

Introduction

1. The purpose of this paper is to set out the main features of the Census Coverage Survey (CCS) for England and Wales as it is currently being planned, to inform all those with an interest in this project.

Aims the Survey

2. The main aim of the CCS is to collect the information required to estimate the coverage of the 2001 Census at Local Authority District level. The coverage will be estimated by comparing the information collected in the CCS with the Census returns from the Survey areas. The results will be used to calculate the adjustments required in the "One Number Census" (ONC) outputs.

Nature of the Survey

- 3. The Survey will take the form of an **independent intensive re-enumeration of a sample of postcodes**, and a **short doorstep interview** (as opposed to using a self-completion questionnaire) with all households that can be contacted in the sampled postcodes.
- 4. The **survey questionnaire** will be as compact and manageable in the field as possible. A matrix format will be used to enable the Interviewers to see the response spaces for as many members of the household as possible on one page. A double A4 spread will cover 3 people. The questionnaire will be designed for capture by scanning and recognition.
- 5. The Interviewers will check carefully who is in the household to ensure, as far as possible, that no residents are missed. They will ask probe questions (helped by a prompt card) about those groups likely to be under-reported, such as babies, students and young people, and the elderly. Interviewers will also enquire about visitors in the course of identifying all residents in a household, but information about visitors will not be recorded.
- 6. The interviews in the 1999 Rehearsal CCS will collect the address including the postcode, basic information about the house, and for each person name, relationship within household, date of birth, sex, marital status, whether a student and if so whether at term-time address, ethnic group, whether the person had a different address one year ago, and economic status. Information about ethnic group, migration and economic activities of students in full-time education will not be collected at their vacation address, and information about economic activities will not be collected from those under 16. The need for each item of information will be evaluated from the results of the 1999 Rehearsal and a decision will be made on what will be collected and captured in 2001.
- 7. The Survey will use pre-coded classifications compatible with those used in the

- Census. No write-in responses are required for the "Other" categories in the ethnic group question.
- 8. A card informing residents about the survey will be left at each address during the initial round of each area. In addition, Interviewers will have an official letter from ONS to give to residents seeking further reassurance of the official nature of the survey. Unlike the Census, the 2001 Survey will be voluntary. (In the 1999 Rehearsal both the Census Rehearsal itself test and the Rehearsal CCSSurvey will be voluntary).

Sample Design

- 9. The sample size for the 2001 CCS has been agreed to be 20,000 postcodes, equivalent to approximately 300,000 households.
- 10. A two-stage sampling procedure will be used: firstly the 1991 Census EDs will be stratified by a "hard to count" index based on 1991 outputs, and a sample of EDs drawn, and secondly, 5 postcodes will be sampled from each ED. CCS headquarters staff will divide the sample of postcodes up into Interviewer workloads. The precise aspects of the design for the 2001 CCS could be adjusted somewhat in the light of the results from the Rehearsal in 1999 but the broad approach will remain the same.
- 11. The EDs are contained within will be put into **design groups**, this is the level at which CCS sample has been designed to give acceptable accuracy in the estimates of the population for estimating the coverage [D.N Can we use some better words here it reads oddly]. It is expected that there will be around 100 design groups in England and Wales for 2001.
- 12. To ensure independence,, Census field staff will not know which areas have been selected for the CCS and so will not be able to give special attention to these areas in the Census.

The CCS Field Staff

Field Managers

- 13. The key level of CCS field manager will be the Team Manager. The Team Managers will allocate the interviewer-workloads prepared by CCS headquarters staff to the Interviewers in their area. They will monitor progress and workloads during the fieldwork, and if necessary change the allocation to balance workloads and ensure high and even coverage. They will visit each Interviewer in the field early in the fieldwork period to observe performance and provide guidance. They will also convene two Interviewers' meetings during the fieldwork, designed to maintain commitment and enhance performance. It is planned to employ around 260 Team Managers for the CCS in 2001.
- 14. One in every six or so Team Managers will be a Co-ordinating Team Manager, and will have the additional duties of keeping in touch with the other Managers in the area and co-ordinating any mutual help that may be required, and channelling management information back to CCS headquarters. All Team Mangers will be trained in these additional co-ordination duties so any one could be selected to step up to the co-ordinating role if required.
- 15. For the 1999 Rehearsal the Co-ordinating team Managers and Team managers were all

- recruited at the same time. One options that will be considered for 2001, given the larger scale of the operation, is to recruit the Co-ordinating Team Managers earlier and involve them in helping Survey headquarters staff recruit and train the Team Managers.
- 16. To give resilience, Stand-by Team Managers will be appointed in each part of the country and trained with the Team Managers so that they are ready to step in to make good any losses. They may also be appointed as Interviewers; this is desirable both to give them experience of the survey in case they should be called in to manage, and for the survey to benefit from their Interviewing skills.
- 17. The possibility of COs or ACOs carrying out the duties of the Team Managers has been considered but this is not practicable because the duties would clash. Also, it is important to have a fresh and independent management team for the Survey.
- 18. The **Census CAMs will handle any media interest in the CCS**, in a reactive way. Any publicity for the CCS will, in general, be low key. The message will be that we are checking on how well we carried out the Census, not on individual members of the public. Apart from this duty, the CAMs will not be involved in the CCS operations.

Interviewers

- 19. It is expected that **around 3,600 CCS Interviewers will be needed**. The exact number will be decided in the light of the 1999 Rehearsal.
- 20. In addition, to provide resilience, **Stand-by Interviewers** will be appointed and trained together with the Interviewers so they are ready to step in to cover any losses. It is expected that around 360 (10%) Stand-bys will be needed.
- 21. It is expected that a some of the Interviewers will have been Enumerators in the 2001 Census. This is because the same type of person is likely to be attracted to, and suitable for, both the Census and the CCS. However, to capitalise on people who may be prepared to interview but not to enumerate, some people will be recruited just to be Interviewers. Those Interviewers who have been Enumerators will be assigned to a different area for the CCS.

Pay and Recruitment

- 22. For the 1999 Rehearsal the hourly rate of pay for Team Managers and Census Officers will be the same, and the hourly rate for Interviewers and Enumerators will be the same. The differences in the duties will affect the type of person recruited in each case, and will be reflected in the hours allowed for doing the various jobs. In the 1999 Rehearsal there will be a Co-ordinating Team Manager in Leeds and Lincoln and they will each be paid an additional allowance. Pay rates for 2001 will be reviewed after the 1999 Rehearsal. [D.N We should avoid talking about hourly rates in public documents with the interviewers we talk about lump sums probably best to avoid the subject altogether MC or JD can quote the lump sums if asked]
- 23. It has been decided to advertise directly for CCS field staff in order to ensure that the most suitable people see the advertisements. The traditional Census methods of advertising will also be used, and in addition advertising in survey journals and via the academic network will be considered.

- 24. The Team Managers will be recruited directly by HQ staff in order to exert maximum control over quality. Some external assistance from people with survey or recruitment experience to help with this task, which could be provided by suitably-qualified Co-ordinating Team Managers or external consultants. For the 1999 Rehearsal recruitment started immediately after the Christmas break, but in 2001 an earlier start may be necessary.
- 25. The newly recruited **Team Managers will be trained in their recruitment duties** and will then recruit their Interviewers. Separate applications will be made for a job as an Enumerator and as an Interviewer, and applicants will be interviewed by the Census Officer and the Team Manager, respectively. The interviews will be held independently in most areas because to organise joint interviews would not be practicable as a general policy. The reasons for making the jobs entirely separate are because the pool of potential staff may be somewhat different, and because it would not be practicable to select the Interviewers from the Enumerators based on their performance on the Census and even if it were, applicants will want to know as soon as possible for what work they have been accepted.

Training

- 26. **Training the field staff is a key aspect of the CCS**. ONS' Social Survey Division and Human Resources Development Division have already been involved along with the CCS team in planning and delivering the training to field staff for the 1998 Test CCS, and will contribute to the training for the Rehearsal in 1999. Due to the size of the Survey in 2001, it is unlikely that SSD and HRD will be able to provide all of the assistance required and the best way of bringing in extra resources is being considered.
- 27. The Team Managers will be trained by CCS HQ staff supplemented by survey specialists in order to exert tight control over quality. Training will be in two parts; the first part will cover the background to the Survey and their recruitment duties, and the second part will cover interviewing techniques and how to train the Interviewers
- 28. The current expectation is that people will be able to apply to be both an Enumerator in the Census and an Interviewer in the CCS. On this assumption Interviewer training must take place simultaneously throughout the country immediately after the Enumerators have completed their Census follow-up collection duties. All of the Team Managers will have to run their course simultaneously so some 200 courses will be held in parallel. Consequently it will not be possible for professional survey and CCS staff to be directly involved in this training. However, even if no Interviewers worked on the Census as Enumerators, their period of training would be brief, in order to ensure that it will be fresh in their minds when they begin their duties.
- 29. Interviewer training will begin with a self-study pack on the basics, and continue with two four-hour training sessions. Time will be allowed in the programme for consolidation and practice at home between the two sessions so that all Interviewers are well prepared before they begin the fieldwork.

Timing and Processing

30. The survey will be carried out as soon as practicable after the Census in order to minimise the effect of migration and the problems of respondents in recalling the position on Census Day. The earliest possible start date is not less than three weeks after Census Day as the Survey cannot go into the field until the Census follow-up has

finished.

- 31. The **length of the fieldwork** will be around 3½ weeks, to allow for people being away for up to three weeks during the fieldwork period and yet still to be contactable.
- 32. The data from the Survey will be captured by similar means to the Census data that is by the contractor appointed to provide scanning and recognition processing for the Census.

Earlier Testing

- 33. A Pilot CCS using four Interviewers was carried out in selected postcodes in Brent in conjunction with the 1997 Census Test. This established the general feasibility of an intensive re-enumeration, and pointed out some options to be researched by means of a further test.
- 34. Following on from the Brent Pilot, a **Test Census Coverage Survey** was carried out in parts of Southampton in October 1998 using 24 Interviewers plus two reserves managed by two 'Team Supervisors'. There was good co-operation from the public with few refusals, and an encouraging contact rate. Interviews were achieved at over 85% of addresses.
- 35. The forms used in the field during the test CCS in Southampton were found to be cumbersome to handle on the doorstep. Accordingly improved designs were tested in fresh areas of Southampton during a weekend in November. These were found to be satisfactory and were adopted for the 1999 Rehearsal.
- 36. In all of these preparatory tests the field staff were trained directly by headquarters staff. The Rehearsal Census Coverage Survey in 1999 will as far as is possible use the methods and procedures proposed for 2001. It will enable us to evaluate the effects of scaling up the size of the Survey.
- 37. The **Rehearsal CCS will cover 818 postcodes**, equivalent to around 18,000 households, and have a field force of 16 Team Managers and around 250 Interviewers. This is considerably larger in proportion to the size of the Census Rehearsal than the Survey in 2001 will be in relation to the Census, in order to provide a test of methods and procedures on a sufficiently large scale.
- 38. In the light of this research the ONC project will confirm the sample size required for the full survey after the 2001 Census. Also, the final details of all the field methods and procedures will be decided.
- 39. Based on the experience gained in the Southampton Test, and in ONS' Social Survey Division, more specific instructions will be given to the Interviewers about their calling strategy in order to maximise their chances of making contact with every household. Interviewers will be instructed to call at least 3 times each week, including at the weekend, and to try different times of the day and different days of the week throughout the fieldwork. It is expected that some Interviewers will call more frequently than this. In addition, they will be asked to take into account any local knowledge they may have.

[D.N There is nothing here on the fieldwork itself – calling strategies etc. This is the point we need to get across about maximising our chance of finding those we missed in the Census]

John Dixie CCS Project Manager 16 April 1999