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ONE NUMBER CENSUS STEERING COMMITTEE

Census Coverage Survey - management, resources and costs

1. The attached paper considers the implications of the recommendations in Steering Committee paper 97/10 'Design of the Census Coverage Survey', in terms of likely costs and how it might be managed.
2. **The Steering Committee are asked to note and endorse:**
 - a) **the importance of the survey to the One Number Census;**
 - b) **that the survey should be managed by ONS Census Division because of the importance of integrating it with management of the Census itself;**
 - c) **that the survey will be dress-rehearsed as part of the Spring 1999 Census Dress Rehearsal; and,**
 - d) **that the estimated cost of £6m is a reasonable amount on which to plan.**

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CENSUS COVERAGE SURVEY - MANAGEMENT, RESOURCES AND COSTS

The conclusions drawn from work on the design of the Census Coverage Survey - see Steering Committee paper 97/10 'Design of the Census Coverage Survey' indicate that a sample of 40,000 postcodes will be needed to achieve a relative standard error of 1%. Whether or not administrative records are used at the micro level in capture/recapture analysis, it is clear that the success of the ONC will rest on the ability to carry out a coverage survey of this size. A survey of this size and importance will need careful management and the right resources.

This paper considers the implication of a survey of the size proposed, the estimated costs and options for managing it.

Practicalities of the proposed design

Steering Committee paper 97/10 'Design of the Census Coverage Survey' refers to the research that has been carried out on the design of the Coverage Survey. The recommendation is for an interview - based survey of all households in some 40,000 postcodes to be carried out. Interviews will be short (5-10 minutes), concentrating on the main demographic and socio-economic variables (date of birth, sex, marital status, ethnic group, relationship within household, economic position, and tenure). The pilot of the Survey carried out in Brent after the 1997 Test made a number of recommendations regarding the operation of the survey such as interviewers working in pairs and the timing of the survey. These will be built into the strategy for the survey after 2001.

The pilot also provided an indication of the time taken to carry out the survey and the numbers of interviewers that are likely to be needed. The pilot used four interviewers to cover 20 postcodes, an average of 5 each. The Survey was carried out in a relatively difficult inner-city area (problems of gaining contact and co-operation) but nevertheless a reasonably high response rate was achieved. The number of interviewers required for a full survey cannot necessarily be extrapolated from this small pilot but some planning assumptions can be made.

Working on the basis of 5 postcodes per interviewer per week would indicate a field force of some 8,000 interviewers. However, given that in a full census, people may be more reluctant to answer the same questions as they had previously a few weeks before, a field force of 10,000 interviewers should be planned. The survey should be carried out as soon as possible after the Census. In practice, allowing for follow-up of non-response to the Census to have been completed and for selection and training of interviewers, this implies a start date about one month after Census Day.

The CCS interviews are estimated to take about one week - based on two interviewers covering 150 households but we should plan for a mopping-up period of a week with a gap of a week to allow for people on holiday etc. This implies a field force of 10,000 interviewers, working for two weeks over a three week period, 4-7 weeks after Census Day.

Field force recruitment

It seems highly unlikely that any current Survey organisation could provide a resource of 10,000 interviewers in such a concentrated period. The exception is the Census itself. Even if postal methodology is used to collect (and possibly deliver) Census forms, enumerators will certainly be required to back up the postal methodology and to follow-up non-response of Census forms.

Precise numbers of enumerators are not yet known, but a number in excess of 50,000 is likely to be required. The best of these can be selected for the coverage survey, and it is proposed that we plan on this basis.

Data Capture

Research is continuing into the capture of data from Census forms, with a view to developing systems to:

- provide images of Census forms on PC screens;
- recognise answers to pre-coded tick-box questions (OMR); and,
- recognise alpha-numeric characters in answers to questions such as date of birth and postcode

The Census Coverage Survey will be collecting the same data as the Census and will use the same pre-coded classifications. The data from the survey could be collected either by traditional interviewer completed paper schedules or directly into hand-held computers. No decision has yet been taken on this. If computer assisted interviewing is not used, and the costs may rule it out, the same systems as used for the Census can be used to capture the data from the CCS paper forms.

Options for Managing the Survey

The management of the survey can be done in two main ways; either

- contracting it out to a Survey organisation; or,
- managing it within the Census organisation itself.

There are a number of possible combinations with these options in terms of the degree to which data capture and analysis could be carried out by the Census Offices or by an outside contractor. The advantages and disadvantages of the survey being managed by the Census Offices are as follows:

	<u>Advantages</u>	<u>Disadvantages</u>
Managing the field force and data collection	Can be managed by the same team as those carrying out the Census.	Might be a lack of independence in that the same people who manage the Census manage the Survey.
Data Capture onto Database	Could be integrated with the capture of Census forms - using the same systems (image and tick-box recognition). Note, however that the Census data capture could be contracted out but this would include the capture of the CCS forms.	If different systems are used to those used for the Census, then there is a risk of a lack of integration
Analysis	As it is an inherent part of the ONC it is only sensible to take this approach.	

Recommendations

Because of the importance of the Survey to the ONC process, it is recommended that the management of the field force is done by a team within the Census Offices. This is also true of the analysis of the data because of the need to keep the estimation process in-house. It is recommended that the data capture aspects be treated in the same way as those for the Census.

Dress Rehearsal

It is proposed that the Census Coverage Survey be dress-rehearsed as part of the Census Dress Rehearsal in Spring 1999. Further details will be provided to the Steering Committee at the next meeting but it is proposed that the size of the survey will be in proportion to the size of the dress rehearsal and the sample size recommended for the full survey after the 2001 Census.

Costs

The major expense of the CCS will be the field force. The number of interviewers and the amount they are paid are the major elements of the cost of the Survey. Assuming a force of 10,000 interviewers paid £500 each, this implies a total field cost of £5m.

To this must be added the costs of data capture of printing interview schedules and of managing the CCS within the Census Offices. The analysis costs are subsumed within those to carry out the estimation process, the resources for which have yet to be estimated. Rough estimates are data capture costs are £0.5m but this is likely to be on the high side, printing costs of £50K, leaving the management costs. A **total of £6m** allowing for this and some contingency seems reasonable as a planning figure.