

AG(98)02

**PROGRESS ON SMALL-SCALE TESTING
OF POSSIBLE CENSUS QUESTIONS****Summary**

1. This paper outlines the latest developments in the 2001 Census Small Scale testing programme comprising work on the cultural topics, the employment questions including closed questions on *industry* and *occupational group*, and alternatives to the relationship matrix for collecting information about kinship. The paper concludes with an outline of the plans for the remaining testing before the census forms are finalised for the Census Dress Rehearsal in 1999.
2. The paper does not cover recommendations for questions to be included in the Census. No decisions or recommendations have yet been made. These will be announced in the White Paper (an outline of which is given in paper AG(98)07) and an oral statement will be made at the Advisory Group meeting.
3. **Members of the Advisory Groups are asked to note:**
 - **the recent testing of questions about ethnicity, religion and language;**
 - **progress in testing both the open and the closed questions about industry and occupation, and the changes to give compatibility with the ILO definitions of employment and unemployment;**
 - **the problems encountered with the relationship matrix in the 1997 Census Test, and the current testing of relationship questions; and**
 - **that the small-scale testing programme is almost completed, and the tests remaining to be carried out.**

The questions about cultural topics

4. As reported in Advisory Group Paper (97)12, proposals for a test of questions about *ethnicity*, *religion* and *language spoken at home* were prepared by the Social Survey Division of the Office for National Statistics. Two separate tests have been carried out. The first focused on representatives from the *Asian* and *Black* communities and the second targeted members of the *White* ethnic minority drawn from the Southern Irish, and Northern Irish Catholic and Protestant communities.
5. These tests had five inter-related objectives:-
 - to evaluate alternative versions of the *ethnicity* question including two versions of a two-tier question about ethnic group and cultural background and, as an alternative, two separate questions;

- to establish the feasibility of sub-dividing the *White* category
- to look further at the public reaction to the categories *Black British*, *Asian British* and *Mixed*;
- to consider the acceptability of a question on *language spoken in the home* and assess whether it provides an effective proxy for ability in English; and
- to review responses to a revised question on *religion*.

The questions about ethnicity

6. In the first test, on Black and Asian respondents, three alternative ethnicity questions were tested. Respondents reacted favorably to the overall scope and layout of the questions and considered that they provided a realistic and representative selection of ethnic and cultural divisions. Most respondents felt the form of question at Annex 1 to be the best. The recognition of *Black British* and *Asian British* as groups was welcomed and most respondents were happy for them to be combined, or positively welcomed this as it avoided disagreement between parents and children about whether they were *Asian* or *Asian British*.
7. The preferred question and one of the other options, were taken forward to the second test on Irish respondents, but with the important change that the *Irish* category was divided into *Southern Irish* and *Northern Irish*. At the time of writing, the second test is still being analysed.
8. Some refinements may be needed to the detailed categories below the main categories. Firstly, in the *White* section, the category for *Other European* should be deleted. Secondly, the word "British" should be deleted from the categories in the *Mixed* section.

The question about religion

9. The scope and detailed wording of the revised religion question (at Annex 1) took account of the findings in the follow-up surveys to the 1997 Census Test and the views of members of the Religion Sub-Group canvassed at their last meeting. Most respondents had a clear understanding about the requirements of the revised question and had no difficulty in answering it, and it was therefore an improvement on the question included in the 1997 Census Test. No major problems have been reported.
10. However, the lack of sub-division of the 'Christian' category caused some adverse reactions. It is anticipated that the absence of separate categories for the main Christian denominations would increase the use of write-in responses to some extent; for example, on the basis of the test results it is likely that Catholics and Jehovah's Witnesses would wish to record their allegiances.
11. The pre-coded categories are being reviewed in the light of the recent test and the write-in responses to the 1997 Census Test and may need modification. It may not be justified to allocate space for the minority religions of Jain and Zoroastrian, and in addition it may be that the Jains are one among a number of branches of the broad Hindu religion and should not be given special prominence.

The question about language used in the home

12. In view of the need to limit the overall burden on the public, and the demand for new questions on other topics, the Census Offices felt that no more than one question about *ability in English* could be considered. Having considered the findings of the recent survey of adult literacy, it became clear that the assessment of proficiency in a language is a complex matter and generally requires answers to a range of questions. To get as close as it is possible to the prime requirement, which is to collect information about people who have difficulty with English, ONS Social Survey Division proposed that a relatively simple question on *language spoken most often at home* (at Annex 1) should be tested.
13. The question was indeed effective in collecting information about the languages people use at home, but failed to offer an effective proxy for ability in English which is the prime requirement in the business cases.
14. **Members are asked to note the recent testing of questions about ethnicity, religion and language.**

The questions about employment

Industry and Occupation.

15. In view of the desirability of 100% processing of expensive-to-code topics such as *industry* and *occupation*, a series of trials has been mounted using the Omnibus Survey. As reported in Advisory Group Paper (97)¹² the Census Offices are researching two alternatives namely:
 - automatic capture using optical character recognition of the responses to the traditional open questions on industry and occupation; and
 - a radical new approach based on closed questions.
16. A test of possible questions were carried out in September 1997, and repeated in November with improved versions of the questions. In each test respondents were given a test form to complete before the normal Omnibus interview. The interview included the standard questions asked every month in the Omnibus, questions on other matters commissioned by other clients, and concluded with a few questions about respondents' reactions to the test census questions.
17. Analysis of a sample of responses to the open and the closed questions revealed problems with elderly or retired people finding the questions burdensome or irrelevant (there was no cut-off rule in the tests); incompatible replies to the open and closed questions; inadequate responses to the open questions for coding; and respondents being unable to select an appropriate category from the closed questions. The categories in the closed industry question for *manufacturing industry, wholesale or retail, health or social work* and *domestic service* caused particular problems.
18. It was concluded that further improvement to the questions was needed, and possible. A third test is about to be carried out, again using the Omnibus Survey, taking account of the findings from earlier tests and additional information about users' requirements for occupation and industry.

The employment section of the census form

19. In addition the employment section of the census form has been revised to take account of the need for compatibility with ILO definitions of employment and unemployment, and the question about number of employees (which is required only for deriving a social classification rather than in its own right) has been changed to ask about the size of the whole employer's organisation and not just the number of employees at the place of work.

20. The test form is at Annex 2. Particular points to note are:
- the closed industry classification has been extended and supplementary write-ins for *manufacturing* and *health* have been added to reflect needs identified by specific users in their business cases;
 - the *occupational group* question has been reviewed against the latest information from the ESRC team making the review of social classifications;
 - as examples proved helpful in the November test, more extensive guidance notes (not included in the Annex) have been drawn up to help respondents select the appropriate categories in both closed questions.
21. For this third test, results from both the open and closed questions on *industry* and *occupation/occupational group* will be analysed in conjunction with the detailed information collected by interviewers as an integral part of the Omnibus Survey. In this way we will be able to make an assessment of the overall accuracy achieved by the open and closed questions, and any specific areas of weakness. The census offices will consider the results of this test along with the business needs for detailed information from the open questions, and the implications for form size, in making recommendations on the questions for the 2001 Census.
22. **Members are asked to note progress in testing both the open and the closed questions about industry and occupation, and the changes to give compatibility with the ILO definitions of employment and unemployment.**

The questions about relationship

23. The testing of alternatives to the relationship matrix was begun before the results of the 1997 Census Test became available, as a contingency measure in case the relationship matrix was found not to work effectively. Several alternative versions of the relationship questions were tested by GRO(S). They focused on collecting information about spouses/partners and children by means of questions within the person section of the census form. As an additional option, the 1991 Census question about *relationship to person 1* was also included in the tests.
24. As it turned out the evaluation of the 1997 Census Test has revealed significant errors in completion of the relationship matrix including missing ticks, multiple ticks, missing persons, inconsistencies in the order of people and inconsistencies against other variables such as age. While it appears that these errors would be detected in the validation checks, it would not be possible to correct many of them automatically. It also seems that for large households, while there is an abundance of information on which to base corrections, much of this would have to be carried out manually.
25. In view of these findings it is proposed to carry out a final test of the relationship questions. The primary purpose is to try the alternative questions on a larger sample, but the relationship matrix is being included in case the ordering problem can be overcome by changes in design. A sample of 2000 households will be sent the questionnaires at Annex 3 using a split-sample design to ensure that equal numbers of households receive the relationship matrix and the alternative three questions.
26. **Members are asked to note the problems encountered with the relationship matrix in the 1997 Census Test, and the current testing of relationship questions.**

Plans for the remaining testing.

27. It is the Census Offices' intention that the census forms used in the Census Dress Rehearsal in 1999 should be carried forward to the 2001 Census unchanged, and the small-scale testing programme is therefore planned to come to an end before the forms for the Dress Rehearsal are signed off in September 1998.

28. Although most testing work has now been completed, there are a couple of outstanding issues which may need further research, such as:
- a new closed question on specific *professional qualifications* - a priority need for some users. It is highly desirable to keep the number of open questions to the minimum and it is intended to mount a test of a question about specific qualifications shortly;
 - to pilot the forms to be used in the Dress Rehearsal.
29. **Members are asked to note that the small-scale testing programme is almost completed, and the tests remaining to be carried out.**

John Dixie
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17 April 1998

NOTE

ANNEX 1, 2, 3 (Alternative Questions) AND
THIS PAPER

3 (Relationship Matrix) TO BE ADDED TO
