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Joint UN/ECE-Eurostat Work Session on  
Population and Housing Censuses  
(Dublin, 9-11 November 1998)

**REPORT OF THE 9-11 NOVEMBER 1998 JOINT ECE/EUROSTAT  
WORK SESSION ON POPULATION AND HOUSING CENSUSES**

INTRODUCTION

1. The Joint UN/ECE-Eurostat Work Session on Population and Housing Censuses was held from 9 to 11 November 1998. It was held at Dublin Castle in Ireland at the invitation of the Central Statistics Office of Ireland.
2. The meeting was attended by Albania, Armenia, Austria, Belarus, Bosnia and Herzegovina, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Latvia, Lithuania, Moldova, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Turkey, Turkmenistan, Ukraine, United Kingdom and United States of America. The European Commission was represented by Eurostat. Japan and Mongolia participated under article 11 of the Terms of Reference of the UN/ECE. A Representative of the Interstate Statistical Committee of the Commonwealth of Independent States also attended.
3. Opening statements were delivered by Mr. Donal Murphy, Director-General of the Central Statistics Office of Ireland; Mr. John Kelly, Deputy Director of the UN/ECE Statistical Division and Mr. Aarno Laihonnen, Administrator responsible for Censuses within Eurostat.

#### AGENDA, TIMETABLE AND WORK PROCEDURES

4. The Provisional Agenda (CES/SEM.40/1/Rev.1) was adopted. The study programme of the work session comprised the following topics:

- (i) Collection issues relating to the topics identified in the UN/ECE-Eurostat census recommendations as "core" topics;
- (ii) Data processing issues connected with the forthcoming censuses;
- (iii) Innovative approaches to be used in producing census products and for disseminating data.

5. Mr. Aidan Punch (Ireland) chaired the meeting; Messrs. Alex Clark (United Kingdom), Benoit Laroche (Canada), and Aidan Punch (Ireland) served as Session Organisers for the three study topics.

#### FUTURE WORK

6. The participants recommended that a similar joint UN/ECE-Eurostat work session be organised after the 2000 round of population and housing censuses is over -- around the second half of 2002. This meeting would focus on lessons learned from the 2000 round and preparation of the 2010 round of censuses. In order to ensure the quality of invited papers and facilitate the preparation of the work session it was suggested that the UN/ECE secretariat and Eurostat invite a limited number of countries to a preparatory meeting to be held in 2000/2001 aiming at planning and preparing the work session.

7. The Work Session, therefore, recommended that the Conference includes the following in its programme of work:

#### 4.5 POPULATION AND HOUSING CENSUSES

##### Activities of the ECE:

a) A preparatory meeting in 2000/2001 (jointly with Eurostat, and in co-operation with a small number of selected countries) in 2000/2001 to help to plan and prepare (organisation, invited papers, venue, practical issues) the 2002/2003 joint UN/ECE-Eurostat work session on population and housing censuses.

b) Joint UN/ECE-Eurostat work session on population and housing censuses in 2002/2003 to consider: (i) Lessons learned from the 2000 round of population and housing censuses (concepts, collection, processing, outputs); (ii) Planning for the next census; and (iii) Process to be used in producing an updated set of "Recommendations for the 2010 Round of Population and Housing Censuses".

8. The Work Session noted that there is a close relationship between some of the topics proposed for the future work on population and housing censuses and the work underway within other programme elements of the Conference. In particular, issues related to the use of administrative registers and records to complement and/or to replace the traditional census are studied within Programme Element 4.4 - "Registers and Administrative Records for Social and Demographic Statistics", and issues related to the use of geo-referenced data in censuses are studied within Programme Element 2.6 - "Geographical and Regional Data". The meeting agreed that the output from work on censuses conducted in Programme Elements 2.6 and 4.4 of the Conference's programme should feed into the 2002/2003 meeting on censuses.

#### CONCLUSIONS AND ADOPTION OF THE REPORT

9. A summary of main conclusions reached by the participants during their discussion on substantive items of the agenda is provided in the Annex to this report.

10. The Work Session adopted this report and the attached summary before it adjourned.

**Summary of main conclusions reached by the participants  
during the discussion on substantive items of the agenda  
at the Joint UN/ECE-Eurostat Work Session on  
Population and Housing Censuses  
(Dublin, 9-11 November 1998)**

STUDY TOPIC ONE: COLLECTION ISSUES RELATING TO THE TOPICS IDENTIFIED IN  
THE UN/ECE-EUROSTAT RECOMMENDATIONS AS "CORE" TOPICS

Documentation: Invited Papers by Austria (CES/SEM.40/3), Canada (5), Czech Republic (2) and France (4); Supporting Papers by Italy (19 and 27), Norway (21) and Poland (22).

1. The preparation and discussion of this topic was organised by Mr. Alex Clark (United Kingdom). Ms. Anita Lange (Denmark), Mr. Eliahu Ben-Moshe, (Israel), Mr. Mati Sundja (Estonia) and Mr. Ian Diamond (United Kingdom) were discussants.
2. The session was designed to cover consultation and testing of data needs, the pilot testing, application of geography for censuses, enumeration methods and demographic surveys based on census data and their coverage.
3. In discussion the identification of data needs and the evaluation of responses in pilot testing was highlighted. The importance of clear formulations of questions on the census form was stressed (e.g. ethnic origin, time use and unpaid work). The need to reflect changes in the society have to be considered in setting the Census design -- for example changes in legislation requirements and family relations (e.g. same sex partners, blended families). Some participants stressed concern about the differences between statistical concepts, the official recognition of the family status and the effect of the differences in coverage. The use of administrative records was also discussed in the context of data collection. Besides the advantages of such an approach, concerns like confidentiality and technical issues related to the retrieval of administrative data were mentioned.
4. Various aspects of questionnaire design were discussed - the conceptual issues related to its content and structure and formulation and the testing of questions on one hand, and the importance of the questionnaire's graphic design and user friendliness on the other hand. It was also pointed out that the census questionnaire should be well balanced and be of a reasonable length, and therefore, that it cannot contain all the questions which may be of interest statistically. An opinion was expressed that respondent burden can be reduced by selection from a list of answers rather than asking for full text entries. The discussion also

highlighted the impact of new technologies on both questionnaire design and the whole data collection process.

5. A major issue identified in connection with the delineation aspects of censuses is the determination of the size and border of geographical areas to be used for censuses and their relation to existing administrative boundaries. Traditionally the same areas have been used for both the collection of data and the dissemination of census results, but the introduction of geographical information systems enables this to be reviewed, and presents an opportunity to use variable areas. It was also mentioned that the size of geographical units in rural areas should ensure the confidentiality of individual data. Reference was made to the possible use of automation in the design and sampling of enumeration areas. The meeting also discussed the level of detail needed in maps for census purposes, and the need to have up-to-date maps. The use of geo-coded address files was also discussed, taking into account its advantages on the one hand and costs and efficiency on the other hand.

6. The use of census data for the sample design of postcensal surveys was discussed. Moreover, the information from sample surveys can be used to confirm the quality of data in censuses. Problems connected with non-responding and non-existing households were considered.

7. The potential for using Internet in census data collection for data transfer, and for publication of instructions and explanations for respondents was discussed.

8. The general discussion on this Study Topic focused on problems of coverage, security and access control, contacts with respondents and evaluation with the coverage. Participants emphasised that it is different in nature in some countries, and that it should be seen in the context of the possible use of statistics. Generally this context is seen in connection with relevant legislation, but it was stressed that it can also be related to the political structure in the country as the coverage can be regarded differently by different political parties.

#### STUDY TOPIC TWO: DATA PROCESSING ISSUES CONNECTED WITH THE FORTHCOMING CENSUSES

Documentation: Invited Papers by Israel (CES/SEM.40/6), Slovenia (8) and United Kingdom (9); Supporting Papers by Norway (20) and Yugoslavia (17).

9. The preparation and discussion of this study topic was organised by Mr. Aidan Punch (Ireland). Messrs. Gerry O'Hanlon (Ireland), Fernando Casimiro (Portugal) and Yashuo Ishida (Japan) were discussants.

10. The Work Session discussed the impact of developments in information technology on data processing. It was emphasised that computerisation allows a tremendous saving in human resources, and also allows censuses to be designed and their objectives to be defined in a way which was not possible before. However, it was stressed that the continuous quality controls through all the phases of census processing are still extremely important. Examples of various approaches to data editing, including the use of administrative records, were referred to. Experience shows that greater emphasis should be given to macro editing, and the use of micro editing should be minimised. It was also recognised that the use of such methods as optical character recognition and automated and computer assisted coding has to be taken into account at the questionnaire design stage.

11. The role of the pilot census in testing all phases of the census processing (e.g. data editing, linking with population registers where appropriate, database design and data transfer) was discussed. It was noted that the technical requirements and possibilities to link census data with administrative files depends heavily on local conditions. An opinion was expressed that as there are fixed costs connected to each census, this can represent a disadvantage for small countries. On the other hand small countries can save on the complexity of data processing because the total amount of data is significantly smaller. Some participants recommended that the testing of data processing methods should follow once the questionnaire design is finalised, because the re-designing of the questionnaire makes it necessary to redesign the data processing phase. In many countries the linkage of census data with the population registers is considered important.

12. Another important factor influencing the quality of data processing is the preparation of the field work (e.g. training and testing of interviewers). There was discussion on the advantages and disadvantage of using "mail back" rather than collection of questionnaires by enumerators. Various countries reported on their experiences which included a full use of the postal services, using enumerators to follow up non-respondents as well as complete collection of questionnaires by enumerators. The applicability of the different approaches depends on the experience with censuses and conditions in different countries. Moreover, the advantages of testing these and other types of new procedures on a limited scale (e.g. in a small number of cities) in the full-scale census was cited by a number of countries. In these situations the importance of having fall-back procedures was emphasised in case the method being tested should fail.

13. It was stressed that it is important to minimise the impact of systematic errors on census results. For small areas it is particularly important to ensure a minimum level of quality. Systematic errors may be

caused in a number of ways, such as by individual enumerators, in the clerical processing, and by scanner and software quality where OCR is used.

14. The imputation of missing data was also discussed, and different opinions were presented. Some participants stressed that there may be a bias introduced by using the distribution of respondents to impute data for non-respondents, because the distribution of these two groups may be radically different.

STUDY TOPIC THREE: INNOVATIVE APPROACHES TO BE USED IN PRODUCING CENSUS PRODUCTS AND FOR DISSEMINATING DATA

Documentation: Invited Papers by Hungary (CES/SEM.40/10), Switzerland (12) and United States (13); Supporting Papers by Austria (26), Finland (15), United States (24) and Yugoslavia (18).

15. The preparation and discussion of this study topic was organised by Mr. Benoit Laroche (Canada).

16. The session focused on several aspects of census dissemination activities, but mainly on identifying users needs, evaluating past census experiences at home and in other countries and on the impact of existing and emerging electronic media and tools on the census product line. Other topics such as data confidentiality and privacy, revenue generation, availability and organisation of tabulation software and the mix between electronic dissemination and paper-based publications were also discussed.

17. The meeting noted the importance of planning the dissemination of census data. There was a general view that this is an important part of the census cycle, and thus has to be carefully planned and be an integral part of the planning process. However, it was also stressed that, given the length of the census cycle, it is not always easy to predict user requirements for outputs and dissemination at that time. Acceleration in the development of new tools and the increased sophistication of data users in both statistics and informatics makes the planning even more difficult than in past censuses.

18. There was also considerable interest in marketing issues related to the dissemination of census products. Provisions for marketing of statistical information are based on a different legal background in individual countries. The use of private subcontractors and of secondary distributors for commercial dissemination was referred to in this context. A specific issue related to marketing is how to charge for access and use of statistical data through the Internet (i.e. how to establish the price, how to collect money, etc.).

19. The meeting acknowledged the need of responding to ad-hoc users' requests. Customers often require data for non-predetermined geographical areas. The geo-coding of the census micro-database, when feasible, allows statistical offices to better meet clients needs. An easy-to-use tabulation software that would generate results quickly is also a must for responding to ad-hoc requests.

20. Recent technological developments introduced a wide variety of dissemination means. There was discussion on electronic (particularly magnetic) media and paper-based publications, but there was not a common agreement on this point. Some participants stressed that despite the growing user-friendliness and easy accessibility (e.g. "one-stop shopping" on Internet) of electronic products, there are still many users of statistics who prefer to work with books or who do not have easy access to computers.

21. There was also a general concern about the importance of ensuring confidentiality of census data. It was pointed out that this has an important impact on the quality of data if respondents are aware of the security of their individual data.

22. Several participants also stressed that maintenance of historical data is another important issue.

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