



**Economic and Social  
Council**

Distr.  
GENERAL

CES/1999/21  
26 March 1999

ORIGINAL: ENGLISH

---

STATISTICAL COMMISSION and ECONOMIC COMMISSION FOR EUROPE

CONFERENCE OF EUROPEAN STATISTICIANS

Forty-seventh plenary session  
(Neuchâtel, Switzerland, 14-16 June 1999)

**REPORT OF THE MARCH 1999 JOINT ECE/EUROSTAT WORK SESSION ON REGISTERS  
AND ADMINISTRATIVE RECORDS FOR SOCIAL AND DEMOGRAPHIC STATISTICS**

**PARTICIPATION**

1. The Joint ECE-Eurostat Work Session on Registers and Administrative Records for Social and Demographic Statistics was held in Geneva from 1 to 3 March 1999. It was attended by delegates of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Hungary, Israel, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom and United States. The European Commission was represented by Eurostat. A representative of the International Labour Office (ILO) was also present.

**AGENDA AND PROCEDURE**

2. The study programme of the meeting consisted of the following substantive topics:
- Session 1.: Use of registers in the 2000 round of censuses;
  - Session 2.: New statistics made possible by the use of registers;
  - Session 3.: Methods to integrate statistics from administrative sources including problems of linkage; and
  - Session 4.: National reports on the progress in the use of registers and administrative records.

3. Ms. Irena Krizman (Slovenia) chaired the meeting and Mr. Petrus Everaers (Eurostat) served as a vice-chair. Mr. Eliahu Ben-Moshe (Israel), Mr. Paul van der Laan and Ms. Berna Schaafsma-Harteveld (Netherlands) and Mr. Folke Carlsson (Sweden) were Session Organisers for Sessions 1-3, respectively, above.

4. Conclusions reached by the participants during the discussion of the substantive items of the agenda are outlined in the Annex (in English only).

#### **FUTURE WORK**

5. The participants considered that it would be useful for countries to exchange experiences on developments in this field at a future meeting. They recommended, therefore, that the Conference convene a meeting in this field in two years time, jointly with Eurostat, and possibly in Luxembourg. Therefore they recommended to include the following in the work programme of the Conference of European Statisticians:

#### **4.4 REGISTERS AND ADMINISTRATIVE RECORDS FOR SOCIAL AND DEMOGRAPHIC STATISTICS**

##### **Activities of the ECE:**

Work session/seminar on registers and administrative records for social and demographic statistics, jointly with Eurostat, Luxembourg, 2000/2001 to consider: (i) Quality considerations in the use of administrative data and registers for statistical purposes; (ii) New developments in methodology for linking of registers and administrative records (including methods of editing); (iii) Use of business register in social statistics; (iv) Innovative usage and planned future use of information technology in social and demographic statistics; and (v) Progress reports by Eurostat on harmonisation and integration, and specific research programmes under the "Fifth Framework".

6. The following persons/offices expressed their tentative interest in serving as Session Organisers for the next meeting: United Kingdom Office for National Statistics for topic (i), Mr. Paul van der Laan of Statistics Netherlands for topic (ii), Statistics Sweden for topic (iii) and Mr. Petrus Everaers of Eurostat with Statistics Netherlands for topic (iv). The ECE secretariat agreed to follow up with the countries/offices concerned after the meeting to confirm their willingness to serve as Session Organiser. The Work Session noted that the Session Organisers may also be assisted by members of Eurostat staff on topics identified as priority topics in Eurostat's programme of work.

#### **ADOPTION OF THE REPORT**

7. The participant adopted the report and the attached summary of main conclusions of the work session at its closing session.

## ANNEX

### Summary of main conclusions reached by the participants during the discussion ...

#### Session 1.: Use of registers in the 2000 round of censuses

Documentation: Invited papers by Denmark, Norway, Slovenia, United States and Eurostat; Supporting papers by Belgium, France and Spain.

1. This Session was organised by Mr. Eliahu Ben-Moshe (Israel).
2. The meeting discussed experiences of countries which are at different stages of using administrative records and registers in their censuses. The discussion showed that administrative data were used in the past and are currently used in many statistical tasks including census operations. Traditionally smaller countries were seen as having an advantage in using these data sources. However, the meeting considered that large countries also, even without national updated registers, can use administrative sources for some census-related tasks. There was general agreement that moving to some kind of administrative census is a long process, but a perhaps inevitable one in at least some countries.
3. Legal provisions and the public opinion: The presentations as well as the discussion showed an importance of legal provisions enabling the statistical offices to access and collect information from administrative sources. It was pointed out that public opinion is also very important, and therefore the process should be made more transparent, particularly since the public is concerned about privacy and confidentiality. In this connection it was also pointed out that census operations are increasingly more fully in the public focus compared to other data collections and surveys.
4. Quality control: Many participants were concerned with the quality of administrative data. It was highlighted that quality checks (e.g. using surveys) are important for all statistical data collections whether data are collected through questionnaires or from administrative sources. An opinion was expressed that the quality of administrative data is closely related to the quality of the administrative processes. In connection with quality checking, it was mentioned that comparisons are possible on both the micro-level (in case the data can be linked at this level) and macro-level (in cases where data from different sources cannot be linked).
5. The need for consistent concepts and definitions in different administrative sources was emphasised in the discussion. This is important when de-facto and de-jure concepts are different like in the case of

"residence" or "status of employment". A problem with the household and dwelling definitions was also mentioned.

6. Information technology developments: The meeting agreed that technological developments do not change but bring to re-enunciation of the original census goals. Also, the IT development influences the way and speed in which these goals are achieved. It was emphasised that IT development together with cost factors are both facilitating and motivating factors for having greater use of administrative data for census purposes. Examples of "on-line" connection to the administrative records and "off-line" periodic updates were also discussed.

7. There was also discussion on whether operations on statistical information systems enabling a continuous update of census-type information should be still called "censuses". There was a general opinion that the term "Census" should be seen in connection to the output type and not to the way in which the outputs are obtained. Therefore, both "continuous censuses" and "rolling censuses" should continue to be seen as censuses.

8. Costs measurement: The meeting considered that the increasing prices of traditional censuses accelerate the use of administrative data in census operations. Some participants stressed that when comparing costs of traditional and administrative censuses, the proportional part of costs of maintenance of administrative registers should be considered.

9. Cooperation between institutions: The importance for statistics offices establishing and maintaining good cooperation with institutions maintaining administrative records and registers was emphasised. In some countries an integrated data collection approach is used -- The administration collects data through its channels but with a special purpose to be used in statistics.

## **Session 2.: New statistics made possible by the use of registers**

Documentation: Invited papers by Finland and Netherlands. Supporting papers by Netherlands and Eurostat/Netherlands.

10. The session was organised by Ms. Berna Schaafsma-Harteveld and Mr. Paul van der Laan (Netherlands).

11. Labour statistics: An example of linking the data files of the Survey of Employment and Earning and the Labour Force Survey with the Social Security register was presented to the Work Session. This permits more information on employees to be obtained which is not covered by business surveys such as occupation and highest education completed.

12. The meeting also discussed a possible matching at the micro-data level of the Labour Force Survey files with the disability benefits register. Significant differences were found in this matching exercise. The discussion showed that many countries are looking into possibilities of micro-level linking for purposes of producing labour accounts. An opinion was expressed that combining macro- and micro-level linking can be useful in producing the labour accounts. Some participants pointed out that when using micro data in labour accounting the institutions maintaining the registers can benefit from a possible feedback concerning the quality of data.

13. Longitudinal data files: Other examples discussed at the meeting included longitudinal data files compiled on the basis of census data and employment data files that enable statisticians to follow the changes in the labour force in a detailed way (e.g. change in the occupational status and mobility between branches of the economy). Another study based on the longitudinal files related health to social and economic characteristics (e.g. deaths by previous economic activity, etc.). Some participants were concerned about costs of the necessary computerisation of the longitudinal census data. However it was pointed out that once the data were stored in the computer it was possible to use them for many other purposes also. Samples from the database containing non-identifiable data are also made available to the research community.

14. Job files: A Eurostat-sponsored project on creating register-based job files in several countries was also discussed. The future work on this project aims at harmonisation of concepts and definitions, methodology for data linkage, coordination of work on the use of administrative sources and the creation of a network of experts.

15. Quality of statistics and coverage: The discussion showed that combining different data sources can permit improvements to be made in the quality of statistics. However, the discussion on the quality also stressed that in order to be regarded as a quality measure the combination of sources should be specifically designed for such purpose. The discussion also showed that the statistics has to make a trade-off between the unbiased results and the low variance requirements.

16. It was pointed out that non-inclusion of small enterprises in surveys can introduce a bias. On the other hand, statistical offices are under considerable pressure to reduce the reporting burden on small enterprises.

**Session 3.: Methods to integrate statistics from administrative sources including problems of linkage**

Documentation: Invited papers by Sweden, United Kingdom and Eurostat; Supporting paper by Denmark.

17. This session was organised by Mr. Folke Carlsson (Sweden).

18. Key social indicators and core variables and a framework for the joint use of administrative sources, registers and survey data: The work session discussed Eurostat's proposals for key social indicators, core variables and a framework for the joint use of administrative sources, register and survey data. The harmonisation of concepts was highlighted as a prerequisite to the efficient use of administrative sources. It was pointed out that in constructing a set of core variables as a first step in the selection of key indicators to be harmonised, a broad range of statistical users has to be taken into consideration including the European Commission, national governments, the research community, etc. It was emphasised that the statistics should be regarded as a complex information including metainformation and concepts based on social theory rather than just a set of indicators.

19. Linkage and integrated registers: Various reasons for the integration of registers and data files were discussed like improvement of data provided, deduction of new variables and addition of variables. Both statistical and administrative registers were considered. Different way of integration of the information from registers were mentioned, particularly: (i) creation of integrated registers; and (ii) linking separate registers. The first way may contribute to the consistency of information, but may not always be available taking into account the character of individual registers.

20. Influencing factors: When discussing the factors providing a background for the linkage, the following were mentioned as being important: good coordination with various institutions maintaining registers as well as a coordination of use of various registers inside the statistical office; documentation and metadata for information kept in registers and data files; and standardisation and harmonisation (variable definitions, metadata, inks, etc.). It was stressed that in many cases a lack of the above still prevents statistical offices from establishing efficient links. The meeting also highlighted the importance of technological infrastructure (data storage, communication, software, etc.), legal provisions and public opinion and the possibilities of identification of records in various registers and data files (e.g. PIN, social security numbers, etc.).

21. Quality aspects were considered important also in the context of integration and linkage of register data. A need to develop statistical

methods and tools to handle the process to convert administrative registers into useful statistical registers and integrated register.

**Session 4.: National reports on the progress in the use of registers and administrative records**

Documentation: Invited paper by Eurostat; National reports by Hungary, Latvia, Lithuania, Luxembourg, Netherlands, Spain and United Kingdom; Summary by the ECE secretariat.

22. Inventory on main sources in social statistics and core variables on persons and households: The inventory described in the paper by Eurostat is a preliminary step in a broad plan for the harmonisation of a set of core variables on persons and households and the integration of surveys, administrative data and registers. The paper included a set of core variables, a list of the main sources in social statistics, a questionnaire on sources and a matrix showing in which sources a core variable is registered. The results of the inventory will be used by Eurostat as an input for its meta-information database on a core set of variables as a step in the project on harmonisation and integration of social statistics. One of the possible softwares planned to be used for such a metadatabase was also presented at the meeting. The software is already used in the field of business statistics.

23. Several delegates made comments on the concept of "harmonisation". It was pointed out that this should also include internal harmonisation within the statistical offices. The harmonisation can avoid differences between various data sources in certain cases. However other sources of differences should also be considered.

24. Inventory of use of registers in censuses: During the discussion on censuses (Session 1) a proposal was made to create a report outlining the extent to which administrative records and registers are used by countries in the region in conducting their censuses and to discuss the paper at the next joint ECE/Eurostat meeting on this subject. Eurostat explained that a group of authors sponsored by TES is producing a methodological manual which could be expanded to include a chapter on this subject, and that that manual was expected to be published in about one year's time, and to be available at the time of the next joint meeting.

25. National reports: Several countries submitted a national report on the use of registers and administrative records for social and demographic statistics, providing current information on ongoing activities and plans in the field of use of registers in the coming round of population and housing censuses. According to the national reports, there are many examples of registers and administrative records that are used for the purposes of

producing social and demographic statistics. The list includes: centralised or municipal population registers, civil status registers (marriages, divorces, births, etc.), building registers, business registers, unemployment registers, social security registers, tax registers and others.

26. In some countries administrative registers are also used in support of surveys and censuses, while in other countries they replace (or are planned to replace) traditional forms of data collection. However, the methodology adopted to use administrative sources for statistical purposes can influence the results, leading in some cases to significant differences between data obtained through administrative sources and data collected by statistical offices.

27. Other issues raised in the national reports included the identification of individual persons, technical aspects of the interchange between administrative databases and statistical systems, and legal concerns associated with the protection of individual data.

-----