



**Economic and Social
Council**

Distr.
GENERAL

CES/AC.71/2001/28 (SUM)
28 November 2000

Original: ENGLISH

STATISTICAL COMMISSION and
ECONOMIC COMMISSION FOR EUROPE

COMMISSION OF THE EUROPEAN
COMMUNITIES (EUROSTAT)

CONFERENCE OF EUROPEAN STATISTICIANS

Joint ECE/Eurostat Meeting on the Management of Statistical Information Technology
(Geneva, Switzerland, 14-16 February 2001)

Topic (iv): Integration of statistical (survey) data with registers (administrative) data

INTEGRATION OF STATISTICAL DATA WITH ADMINISTRATIVE DATA

Submitted by ISTAT, Italy ¹

CONTRIBUTED PAPER

SUMMARY

1. Several important factors have induced the National Statistical Institutes (NSIs) of Europe to deeply modify their operation and organisation. Among these factors we can mention the increasing user demands for information, the need to reduce the respondent burden and to have a new strategy of data collection responding to the demands of broadening the field of statistical observation, improving the timeliness of information, and being able to monitor different aspects of the economic reality. In addition to the continuous demand for information from the national accounts on main sector aggregates, there exists an increasing demand for aggregate statistics on detailed sectoral and territorial levels, representing economic phenomena that are difficult to survey using traditional statistical methods.

2. The growing need to provide detailed information at the NSI level raises problems related to the

¹ Prepared by Enrico Giovannini, Chief Statistician of OECD, and Alberto Sorce, ISTAT.

efficiency of the production of the statistical information, particularly in a country like Italy, where the number of small and very small enterprises is notably high. This increases the statistical burden on respondents in comparison to the countries with a high concentration of enterprises. The greatest problems are those connected to the monitoring of the universe of productive units, characterised by high birth and mortality rates of enterprises and a multiple number of samples necessary to guarantee the quality of sectoral aggregate estimations.

3. It is therefore essential to find an information source to complement direct statistical surveys. Such a solution has been found by using an administrative source (the ASIA archive) that is strategically and functionally accurate and with a controlled quality. It provides access to administrative databases that contain:

- ◆ Balance sheet Variables (extracted through the Chamber of Commerce network);
- ◆ Data related to the employment, salary and wages (extracted by National Social Security Institute's records);
- ◆ Fiscal data.

4. The administrative data can be used at two levels:

- ◆ in data production: for producing preliminary estimates of the principal variables within 10 months from the reference period, and for the processing of the missing data of the surveys, to provide meaningful results within 18 months from the reference period;
- ◆ for integration of the administrative data in the design of the surveys.

5. The use of new methodologies in the collection and processing of data from administrative sources necessitates making changes in methods of data collection and editing, the data consolidation in the database, the structure of the reference database, and metadata. The introduction of Electronic Data Interchange (EDI) has a great impact on the organization of work. The quality of the statistics will improve, in particular regarding consistency of the data. Concentration of information in a unique archive makes it necessary to standardize the statistical concepts and questionnaires. The process will have positive effects on the collaboration of ISTAT with various respondents by sharply reducing their response burden. The traditional paper questionnaires will become inadequate for the data collection in the changed circumstances, both concerning timeliness, and the lack of a continuously updated metadata model that guarantees the correct capture of the information.