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**EUROPEAN COMMISSION
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**ORGANISATION FOR ECONOMIC
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Topic II: Impact of technical measures and standards on data quality

QUALITY ISSUES IN THE ISRAELI CENTRAL BUREAU OF STATISTICS

Supporting paper

Submitted by the Israeli Central Bureau of Statistics (ICBS)[1]

Summary

1.   In discussions between statistical offices and other information organizations, emphasis is frequently put on the quality of data from the aspect of the statistical analysis of the gathered information. The methodology of data analysis is of course, of great importance but it is not the only factor influencing the quality of published data.

2.   Today, in the Israeli Central Bureau of Statistics most data is gathered by computerized methods, either transferring data files between organizations or gathering information in the field and inputting it into the computerized system (by typing, OCR or other methods from the wide range of inputting possibilities). The quality of these processes is essential.

3.   Another factor influencing statistical product quality is the tools and applications used to support the gathering, processing and analyzing that make up the statistical process.

4.   The computerized side of the work process is handled differently in different organizations. The Israeli Central Bureau of Statistics executes a policy in which all tools that are not shelf products are developed in-house. The organization uses over 150 applications in addition to the numerous tools and generators, and has a well-developed Information Technology Department (IT).

5.   Until the year 2000, not much emphasis was given to quality assurance. The need for constant inspection and control of the applications and tool development and maintenance, rose during the year 2000 in the Information Technology department.

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6.	This awareness began with the rise in the use of technologically advanced computerized tools, and following cumulative experiences of implementation of new systems within the organization's workflow.

Activities in the ICBS IT department for the assurance of quality

7.	In 2001, a quality assurance unit was established which is responsible for:
   a.	Development and implementation of work procedures for the Department. This activity includes gathering and updating existing procedures in addition to development of new procedures and standards for the work methodology in the IT department.
   b.	Inspection of the documentation in the software development process and maintenance.
   c.	Configuration management – version management, files and documents.
   This activity is in its initial stages. The IT department today is executing preliminary actions in the areas of documentation and file management.
   d.	Risk analysis of development projects for a better assessment of their expedience and of the obstacles expected during the development process.
   e.	Development of a software testing team (QC). This is delayed due to budget limitations, and is expected to take place in the near future.
   f.	The setting of standards and indexes for the measurement of product quality.
   g.	Inspection of shelf products to be purchased.

8.	Projects that will enhance the sharing of information and efficiency of the work will be developed:
   a.	Announcements relevant to all or many employees or in areas of interest published on the intranet, and appear with every booting of the computers connected to the internal network.
   b.	Development of a data warehouse for data in all subjects treated by the Central Bureau of Statistics.
   c.	Development of an organization portal within the intranet.
   d.	Development of a launcher directly from the Novell internal network. The launcher provides easy access to frequently used network based applications.
   e.	Development of a document management system that will be accessible from the portal.
   f.	Develop an internal e-mail service.

9.	Data collecting process in surveys and other data collecting projects will be transferred from paper questionnaires to a collection method in which, the data is typed directly to a laptop computer by the surveyor. This process was developed jointly by the IT and survey departments of the Israeli Central Bureau of Statistics.
   a.	This enables logical tests during the initial data input by the surveyor.
   b.	This prevents an extra work process of typing data in to computer from the filled paper questionnaires.

10.	During the year 2000 a process of evaluating automatic tools for assurance of confidentiality in data published or transferred to 3rd parties out side the organization (mainly academic) was initiated. We intend to implement automatic tools to assure this subject in the near future.
   a.	Since 1998 a confidentiality committee is active within the Central Bureau of Statistics. Its main function is to examine the data to be published and assure its confidentiality.
   b.	Since 2001 there is an ongoing evaluation project of the software Argus, in cooperation with the Netherlands Central bureau of Statistics and the TES institute. This evaluation is done by the IT department, in cooperation with the confidentiality committee.

11.	The success of these actions cannot be measured in the short run, but only over a longer period and after the implementation of more of these actions. This highlights the very problematic issue of presentation and development of the quality issue to the higher management levels. This is due to the investments that have to be made in the short term versus results that will only become apparent in the end. The implementation of many of the above-mentioned issues is not easy and strong support of the ICBS management is vital.