

Editorial

The ECE/UNDP Statistical Computing Project (SCP-2), in which twenty-three ECE member countries participated, was operational from 1988 through 1991.

The main objective was to increase the efficiency of national statistical offices through better use of computers, in particular microcomputers, and to improve prevailing conditions for the application of software tools in statistical offices in the wake of recent hardware innovations. To achieve that, six Joint Groups were organized, one of them the Joint Group on Data Editing.

Its goal was to explore and to develop new methods and technologies for checking and correcting statistical data, and to exchange experiences on their implementation.

In individual statistical applications, national statistical offices very often use diverse approaches for editing and imputation. For example, some statistical services aim at developing efficient and productive software tools to assist editors while others attempt to replace human work as much as possible by using computers to edit at the record level. Sometimes general software such as SAS is applied to data-editing procedures. Another possibility is to introduce specific data-editing functions into database technology. Whatever the approach, data editing should not be considered an isolated task. This is underlined by the fact that efficient data-editing methods and techniques result in significant cost savings.

When reviewing applied methods and software, the Joint Group investigated in particular problems connected with macro-editing. Macro-editing can significantly economize data editing in statistical production. It can solve problems in cases where editing at the record level is difficult, not only for economic reasons but often for organizational reasons. Macro-editing methods have proved that in some cases the impact on the data quality is comparable with micro-editing.

The article of Cox and Croot describes a system developed for editing at the record level at Statistics Canada. It first introduces the General Survey Function Development Project (GSFD). Editing facilities are described as they are used for a relational database management system – namely Oracle – together with the ISO standard interface language SQL. Technical and managerial problems in implementing the system are also considered. Granquist's article portrays macro-editing methods and presents the results of several studies which show that macro-editing can be a viable alternative to micro-editing methods. A special application of macro-editing on PC SAS is demonstrated by Lindström. Experiences in the use of SAS for data editing in survey processing by national statistical offices is described by Ferguson, who proves that it reduces the demands on the pro-

grammers who develop data-editing systems. Finally, the article of Rubio and Peirats illustrates the impact of data editing on data quality by comparing different editing methods and showing the results of simulation approaches.

Cooperation on data editing will continue under the auspices of the Conference of European Statisticians, and experts will certainly have occasions to share their work with international professional audiences.

The Editor