

**UNITED NATIONS
ECONOMIC COMMISSION FOR EUROPE**

CONFERENCE OF EUROPEAN STATISTICIANS

Work Session on Statistical Data Editing
(Ljubljana, Slovenia, 9-11 May 2011)

INFORMATION NOTICE No.1*

The Statistical Office of the Republic of Slovenia will host the meeting at Hotel Slon, Slovenska cesta 34, 1000 Ljubljana, Slovenia, from 9 to 11 May 2011.

I. PURPOSE OF THE MEETING

1. At its 2010 plenary session, the Conference of European Statisticians included the Work Session on Statistical Data Editing in its 2010-2011 meeting programme. The meeting will be held from 9 to 11 May 2011 in Ljubljana (Slovenia) at the kind invitation of the Statistical Office of the Republic of Slovenia (SORS). The study programme of the meeting focuses on methods and evaluation with particular emphasis on quality related issues.

2. The target audience of the meeting includes statisticians dealing with editing and imputation of statistical data derived from surveys, censuses, and administrative sources and spanning various subject-matter areas, both social and economic.

II. AGENDA OF THE MEETING

3. The programme of the meeting will consist of the following substantive topics:

- (i) Editing of administrative and Census data;
- (ii) Editing of electronic collections;
- (iii) Macro editing methods;
- (iv) Micro editing – methods and software;
- (v) Changing organizational cultures;
- (vi) International collaboration;
- (vii) New and emerging methods;
- (viii) Future outputs and K-base/wiki.

4. Detailed explanatory notes on the nature and expected outcomes of topics (i) – (viii) are provided in Section VI of this Information Notice.

III. PARTICIPATION AND ACCREDITATION

5. Representatives of all Member States of the United Nations and of interested intergovernmental organizations are welcome to participate in the meeting. Participants representing non-governmental

* The provisional agenda and timetable will be issued at a later date as WP.1. Information on the venue and local arrangements in Ljubljana (hotel accommodation, transportation etc.) will be provided in Information Notice No. 2. See also Section IV of this Information Notice.

organizations in a consultative status with the United Nations Economic and Social Council may also attend. **All participants must be accredited by the competent authorities of their country or international organization.**

6. All participants attending the meeting are requested to have a valid passport and, if required, a visa. Applications for visas should be made as soon as possible to the Embassy of Slovenia in the country in which the participant resides, with a reference to the UNECE Work Session on Statistical Data Editing. A letter to facilitate obtaining a visa can be requested from the UNECE secretariat.

7. Statistical offices and international organizations should inform the UNECE secretariat **before 21 January 2011** if their organization intends to participate at the meeting and/or submit a contribution on the topics mentioned above. Please send a short abstract and indicate the topic to which the paper will refer as well as participant(s) name(s) and their contact data.

8. Participants should complete the registration form, which can be found on the last page, and return it to the UNECE secretariat **by 1 April 2011.**

IV. TRAVEL AND ACCOMMODATION

9. Participants and/or their offices are requested to make their own travel arrangements and hotel reservations. The Statistical Office of the Republic of Slovenia will provide a list of recommended hotels in Information Notice No.2.

10. The organizers regret not being able to assist participants in their travel arrangements (air tickets, trains, local transportation, etc.). Neither the SORS nor the UNECE secretariat can take any responsibility for financial arrangements with respect to travel or accommodation.

V. DOCUMENTATION, METHODS OF WORK AND OFFICIAL LANGUAGES

11. The working language of the work session is English. The documents should, therefore, be submitted in English only. The following deadlines and requirements apply:

- A short abstract of the paper should be submitted to the UNECE secretariat (diane.serikoff@unece.org) as soon as possible and **by 21 January 2011 at the latest.**
- The papers, not exceeding 10 pages, should be sent electronically to the UNECE secretariat **by 9 March 2011 at the latest.**
- Documents should be submitted in MS Word or PDF formats. Templates in Word containing the header, document number and format will be sent to authors or may be requested by e-mail (diane.serikoff@unece.org).

12. For each substantive item on the agenda the discussants will invite 2-3 speakers to write an **invited paper** and to present them at the meeting. All other participants are welcome to submit a **supporting paper** on any topic of the agenda. The supporting papers will be distributed to the delegates. They will be summarized by the discussants and the issues raised in them will also be discussed.

13. Authors of invited papers will have about 20 minutes per paper for the presentation. Authors of supporting papers may be given about 5-10 minutes (time permitting) to highlight the main issues raised in their papers. Presenters may use PowerPoint or Adobe Acrobat full screen for their presentations. The UNECE secretariat cannot provide translation of the presentations.

- Presentations in PowerPoint or Adobe Acrobat should be sent to the UNECE secretariat by **25 April 2011 at the latest**, so that these can be installed on the conference room computer prior to the meeting.

14. Invited and supporting papers will be made available on the website of the UNECE secretariat at the following location: **<http://www.unece.org/stats/documents/2011.05.sde.htm>**

15. Participants are encouraged to download the papers from the website and bring their own copies to the meeting. Documents posted on the website before the meeting will **not** be distributed in the conference room.

VI. EXPLANATORY NOTES TO THE AGENDA

(i) Editing of administrative and Census data

Session Organizers: Orietta Luzi, Istat, Italy (luzi@istat.it) and Heather Wagstaff, United Kingdom (Heather.Wagstaff@ons.gsi.gov.uk)

16. This topic focuses on the methodological advances of editing and imputation (E&I) techniques applied to both administrative and census data:

- Incorporating administrative data into the statistical production process raises significant challenges and opportunities for National Statistical Institutes (NSIs). This is especially true for E&I, where the primary objectives are to maintain the quality of the statistical outputs, reduce costs and minimize respondent burden. However, using administrative data for E&I poses additional challenges in terms of methodological problems and appropriate solutions.
- Many NSIs have finalized their testing activities for the 2010 Census round, and are currently implementing the E&I strategies for their economic/households censuses. Alongside traditional census taking, a number of NSIs implement register-based census or incorporate administrative data, with significant effects on their E&I strategies. This is ideal timing for discussing results and evidence related to the methodological developments that have been carried out in this area.

17. Papers discussing the results of studies and applications of E&I for administrative and/or census data should describe the methodologies developed and/or used, with particular attention to the evaluation of the benefits/risks/open problems deriving from the adoption of the specific E&I solutions.

(ii) Editing of electronic collections

Session Organizer: Pedro Revilla, National Statistical Institute of Spain (previlla@ine.es)

18. Electronic collections present new challenges and opportunities in order to improve editing tasks. They offer the possibility of using built-in edits in electronic questionnaires previously not possible in paper or other modes of data collection. This topic covers all issues relating to methods or strategies about editing of data acquired through electronic data collection (CAPI, CATI, CAWI, etc) and the way the respondents can carry out editing when using electronic questionnaires. Other related topics may include comparisons of editing practices between electronic collections and other collection modes, as well as different problems using multimode data collections. Measuring the respondent burden and the quality and reliability of the responses in order to provide valuable information to other survey processes is another issue of interest. Papers describing editing strategies to improve the relationship with respondents or the general editing process are also welcome.

(iii) Macro editing methods

Session Organizers: Paula Mason, United States (pweir112@smartneighborhood.net) and Maria Garcia, United States Census Bureau (maria.m.garcia@census.gov)

19. This topic covers issues concerning the use of macro editing techniques for optimizing manual review resources while maintaining the quality of the statistical data products. Macro editing techniques in the data editing process could be used before or after data release or to complement the existing micro editing procedures. Contributions may focus on data visualization methods, selective macro editing techniques, development of local and global score functions, aggregate outlier detection methods, software and tools for macro editing, and quality measures to support macro editing. Papers dealing with

the assumptions, methods, software development, evaluations, strategies and experiences are especially welcome.

(iv) Micro editing – methods and software

Session Organizer: Matthias Templ, Vienna University of Technology,
(templ@statistik.tuwien.ac.at)

20. Virtually all survey data come with errors and missing values at the record level. In addition, some observations can have a (much too) large influence on models or on indicators which are derived from the microdata. Micro editing methods are techniques for finding errors and possible influential observations by inspection of individual observations. Manual micro editing is rather time-consuming and of limited usefulness in detecting errors in a multivariate setting. Automatic procedures based on statistical estimation may often help to detect them in short time. However, such methods may need to cope with various challenges including semi-continuous distributions, missing values, and sampling weights, to name a few. Furthermore, imputation methods that can cope with measurement errors and outliers to decrease the effect of influential observations are also needed. Innovative functionality in software is required to apply micro editing and imputation successfully to complex datasets.

21. Contributions of methods for micro editing and imputation including multiple imputation are warmly welcome. Of particular interest are innovative approaches that deal with longitudinal collections. We are especially interested in solutions that are accompanied with appropriate software.

(v) Changing organizational cultures

Session Organizers: Emma Bentley, Statistics New Zealand (emma.bentley@stats.govt.nz) and Jeroen Pannekoek, Statistics Netherlands (jpnk@cbs.nl)

22. There are two themes of interest for this session. The first is how to influence a change in organizational culture with the purpose of realising more effective editing strategies that meet the users needs as well as possible while keeping costs as low as possible. Aspects of this cultural change may include awareness throughout the organization of the targets of the data editing strategy including the balance between data quality and costs and support and training for using modern selective and automatic editing tools. The second is how to adapt existing editing systems and policies such that they remain effective and relevant when an organization is going through a period of changing culture. In response to the challenging fiscal environment, rapid technological developments and increasing demands from users for supply of information, organizations are changing their culture and statistical architecture to better meet these demands and needs. The editing systems and policies in place may be challenged by these changes. Of interest is how to adapt and take advantage of the opportunities that change brings.

23. Contributions with practical examples for either of the themes are welcome for this topic. Among other things, contributions could discuss:

- Engaging top-level management and each of the levels below in supporting editing principals for best practice, editing strategies and systems;
- Training and education to support changes in culture, processes and methods;
- Evaluation of editing strategies with respect to meeting users' needs and minimizing use of resources.
- Pressures that are placed on existing editing policies and systems when an organizational culture change is occurring and the opportunities that may arise.

(vi) International collaboration

Session Organizers: Li-Chun Zhang, Statistics Norway (lcz@ssb.no) and Claude Poirier, Statistics Canada (claude.poirier@statcan.gc.ca)

24. An international collaboration network was launched at a meeting organized in Paris last June. The goal is to face the challenges arising from the increasing user demand in combination with budgetary constraints, and to face the need for continuous evolution of tools. The six participating countries –

Australia, New Zealand, Sweden, Norway, UK and Canada – agreed to share knowledge and seek development on seven opportunities including data editing. Possible initiatives under editing are: establish needs; list current methods and tools; agree on a minimum set; figure out how to deliver the set; build and test the set; and plan training, support and maintenance. The climate of collaboration will change in order to bring national methods to a higher level, making sure local resources are put together for the benefit of this initiative. The UNECE work session will offer a good forum to start moving in that direction.

25. This session may be organized as a panel discussion. Papers focussing on any of the above possible initiatives or addressing issues among the following are welcome:

- Putting in place a governance entity
- Development of a Generic Statistical Information Model (GSIM)
- Competing goals of local programs against long-term collaboration network
- Identifying the scope of the editing opportunity
- Identifying national needs, schedules and expectations
- Moving national successes into an international perspective
- Communication means in a remote context
- Risk management.

(vii) New and emerging methods

Session Organizers: Daniel Kilchmann, Swiss Federal Statistical Office (Daniel.Kilchmann@bfs.admin.ch) and Rudi Seljak, Statistical Office of Slovenia (rudi.seljak@gov.si)

26. In recent years, new and emerging methods for improving and optimizing data editing and imputation processes have included the use of probabilistic modelling, robust statistical methods, Time Series analysis, graphical editing techniques, Bayesian Networks and Data Mining techniques. This topic aims to bring together contributions that contain innovative applications and new theory related to aspects of edit and imputation, for example:

- multiple imputation
- imputation procedures for large datasets
- imputation in longitudinal surveys
- outlier-robust imputation
- variance estimation under imputation
- detection and treatment of systematic errors and outliers
- methodology of selective editing procedures
- graphical editing techniques.

27. Contributions can highlight progress and advancements in developing new theory and techniques, present empirical comparison studies and evaluations and report on the impact of new edit systems on data quality.

(viii) Future outputs and K-base/wiki

Session Organizers: Steven Vale, UN Economic Commission for Europe (steven.vale@unece.org) and Claude Poirier, Statistics Canada (claudio.poirier@statcan.gc.ca)

28. This session will consider the future direction of the work of the group, including suggestions for future outputs and topics for discussion at future meetings. The "K-Base" knowledge base on statistical data editing (<http://www1.unece.org/stat/platform/display/kbase>) will be presented, and suggestions for further enhancements will be sought. The nature of this session means that contributions in the form of short written proposals will probably be more appropriate than full papers. The UNECE secretariat will consolidate these suggestions into a discussion paper.

VI. FURTHER INFORMATION

29. For further information, please contact the following organizers:

United Nations Economic Commission for Europe (UNECE):

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(Ljubljana, Slovenia, 9-11 May 2011)**

REGISTRATION FORM

This form should be completed by each participant and returned
by 1 April 2011 to:

Ms. Diane Serikoff
Tel: +4122 917-2241
Fax: +4122 917-0040
E-mail: diane.serikoff@unece.org

1. Surname (Family name):		Mr. <input type="checkbox"/> Ms. <input type="checkbox"/>	2. First name:
3. Representing (country or organization):			
4. Official function (in home country):			
5. Mailing address:			
6. Tel. No.:		7. Fax No.:	
8. E-mail address:			
9. Please indicate topic ((i)-(viii)) and title, if you intend to present a paper:			
10. Special requirements:			

Date _____

Signature _____