UNITED NATIONS **ECONOMIC COMMISSION FOR EUROPE** **CONFERENCE OF EUROPEAN STATISTICIANS**	**EUROPEAN COMMISSION** **STATISTICAL OFFICE OF THE EUROPEAN UNION (EUROSTAT)**

Joint UNECE/Eurostat Work Session on Statistical Data Confidentiality

(Helsinki, Finland, 5 to 7 October 2015)

INFORMATION NOTICE No. 1

I.   PURPOSE AND TARGET AUDIENCE OF THE WORK SESSION

1.   The main objectives of the meeting are to facilitate the exchange of experience and identify the best practices in dealing with technical issues related to statistical data confidentiality in national statistical offices. The meeting is primarily intended for experts from national and international statistical offices as well as invited academics dealing with statistical disclosure limitation.

2.   Statistical disclosure limitation is an important issue influencing public perception of official statistics. Statistical confidentiality and protection of respondents' privacy is included in the Fundamental Principles of Official Statistics, which were endorsed by the United Nations General Assembly in 2014.

II.   AGENDA OF THE WORK SESSION

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

(i)   Identifying and measuring risk of statistical disclosure
(ii)   New Methodologies for Protecting Data (Disclosure Limitation)
(iii)   Preserving Data Quality and Usability in Disclosure-Limited Data
(iv)   Access to Statistical Data for Scientific Purposes
(v)   Practicum: Case Studies and Software
(vi)   Emerging Challenges to Data Confidentiality
(vii)   Closing Panel Discussion

4.   Detailed explanatory notes on the nature and expected outcomes of these topics are provided in Section V 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 work session. **All participants must be accredited by the competent authorities of their country or international organization.**

6.   All participants attending the work session are requested to have a valid passport and, if required, a visa. Applications for visas to Finland should be made as soon as possible to the Embassy of Finland in the country in which the participant resides, with a reference to the Joint UNECE/Eurostat Work Session on Statistical Data Confidentiality. A letter to facilitate obtaining a visa can be requested.

7.   Statistical offices and international organizations should inform the UNECE secretariat **by Friday 8 May 2015** if their organization intends to participate in the work session.

8.   Participants should register online at https://www2.unece.org/uncdb/app/ext/meeting-registration?id=f6XqVY **by Friday 2 September 2015**.

IV.   TRAVEL AND ACCOMODATION

9.   Participants and/or their offices are requested to make their own travel arrangements and hotel reservations. The UNECE secretariat regrets not being able to offer any financial assistance regarding travel and accommodation arrangements.

V.   DOCUMENTATION, METHODS OF WORK AND OFFICIAL LANGUAGES

10.   The official language of the work session is English. Any contributions should, therefore, be submitted in English only. Contributions can include papers, presentations, demonstrations or posters. Other forms of contribution may be proposed. *Full guidelines for contributions will be given following the acceptance of abstracts*. At this stage, contributors should indicate the preferred format of their contributions but please note that due to the nature of the work session, it may not be possible to allocate time to all proposed contributions.

11.   The following deadlines and requirements apply:
  * A short abstract of the proposed contribution should be submitted to the UNECE secretariat (by email to Christopher Jones [christopher.jones@unece.org] as soon as possible and **by Friday 8 May 2015 at the latest**. Information about the selection of contributions for the work session, guidelines on formatting, and a reminder of deadlines will be sent to authors by email.
  * Any written papers must be received **by Friday 31 July 2015 at the latest**.
  * Any presentation slides, videos or other electronic materials should be sent to the UNECE secretariat by **Friday 18 September 2015 at the latest**.

12.   Papers will be made available on the UNECE website at the following location: http://www.unece.org/stats/documents/2015.10.confidentiality.html. Presentations will be added to this web site after the work session. Presentations will not be made available to delegates before the work session, unless requested by the presenters.

13.   Participants are encouraged to download the papers from the website and, where feasible, to use electronic devices to read papers in order to minimise paper use. Documents posted on the website before the work session will **not** be distributed in the conference room.

V.   EXPLANATORY NOTES TO THE AGENDA

Topic (i): Identifying and measuring risk of statistical disclosure

Session Organizer: Josep Domingo-Ferrer (Universitat Rovira I Virgili)

14.   This session focuses on:
  * Formal privacy models
  * Risk and utility measures
  * Translating risk into effective disclosure limitation policies and procedures, and
  * Transparency, verifiability and intervenability of anonymisation

15.   The aims of the session are to discuss research and practice aspects of balancing privacy guarantees against utility guarantees. This session should bridge the computer science viewpoint (focused on privacy guarantees) and the official statistics viewpoint (focused on utility guarantees).

16.   Contributions to this session could address the above topics in a scientifically rigorous manner whilst keeping a practical orientation.

Topic (ii): New Methodologies for Protecting Data (Disclosure Limitation)

Session Organizer: Sarah Giessing (Federal Statistical Office of Germany)

17.   This session focuses on new disclosure limitation methods for:
  * Tabular data
  * Micro data, or
  * Statistical database query systems

18.   The aims of the session are to discuss all kinds of new developments proposed in the field of disclosure limitation methods, such as suppression, perturbation, masking or use of synthetic data. Proposed methods

might be intended for application to either the input side (e.g. to the micro data) or to the output side (e.g. tabulations or other results) of statistical data analysis. We also welcome papers evaluating and comparing methods, or addressing practical aspects, like implementation effort, etc.

19.   Contributions to this session could address the following topics:
- The need (or not) for output checking, or more generally
- The case of data releases across multiple modalities

Topic (iii): Preserving Data Quality and Usability in Disclosure-Limited Data

Session Organizer: Lawrence H. Cox (National Institute of Statistical Sciences)

20.   Statistical disclosure limitation (SDL) methods remove, replace or adjust original data in order to reduce disclosure risk to an acceptable level. These modifications typically have adverse effects on data quality and usability. In the past, quality effects were not well-assessed and went largely unreported to data users. Modern SDL attempts to identify quality effects and to incorporate methodology to measure and control them. This topic is focused on examining methodological, policy and implementation issues related to balancing data confidentiality and data quality in statistical data products designed for public or restricted use. Aspects of this problem of particular interest are:
- Transparency of disclosure limitation procedures: What can the releaser safely divulge to the data user about disclosure limitation procedures?
- Privacy models vs. data utility: How to measure and compare data security and data quality side-by-side?
- Methods that balance data confidentiality and data quality: Specific technical approaches
- Achieving consistent data release: How to harmonize multiple data products and releases from the same data set such as, and importantly, tabular and micro data products from the same survey? and
- Related issues for longitudinal products and releases

21.   Contributions relevant to the issues outlined above would be welcomed.

Topic (iv): Access to Statistical Data for Scientific Purposes

Session Organizers: Aleksandra Bujnowska (Eurostat) **and Annu Nissinen** (Statistics Finland)

22.   This session focuses on:
- Data access on an international level
- Remote data access
- Remote program execution, and
- Remote analysis and table servers

23.   The aims of the session are to discuss different modes of micro data access, such as onsite access in safe centres, secure remote access systems, release of heavily protected micro data files (scientific use files) and freely available public use files. Alongside papers describing national solutions, we invite papers discussing different means of trans-border access that ensures statistical confidentiality and privacy of respondents.

24.   Contributions to this session could address the following topics:
- Legal and organizational aspects, and
- Output checking issues

Topic (v): Practicum: Case Studies and Software

Session Organizers: Eric Schulte Nordholt and Peter-Paul de Wolf (Statistics Netherlands)

25.   This session focuses on:
- Case studies (presented as papers)
- Software studies (presented as papers), and
- Software demonstrations (abstract and demonstration only)

26.   The aim of the session is to discuss the link between the technical work carried out in the work session and the daily practice of implementing statistical disclosure control methods. Bridging this gap helps to identify the need for further methodological and technical developments, thus enriching initiatives from both sides.

27.   Contributions to this session could address the following topics:

- Practical implementations and solutions;
- Organizational issues;
- Progress in the state of development of standard tools;
- Implementations of recently proposed methods including prototypes; and
- Introducing software.

Topic (vi): Emerging Challenges to Data Confidentiality

Session Organizers: Michelle Simard (Statistics Canada) **and Peter-Paul de Wolf** (Statistics Netherlands)

28.   This session focuses on new aspects related to confidentiality and privacy.

29.   The aim of this session is to discuss confidentiality and privacy in a changing world. Both society, as well as institutes, change their opinions about confidentiality and privacy over time. Nowadays several new developments in producing statistics require consideration. In this session new methods, as well as new circumstances, could be discussed.

30.   Contributions to this session could address the following topics:
- Evolving technologies
- New types of data structure
- New integrated information management
- Geography (geographical publications, geospatial data)
- Big data
- Open data
- Linked data, or
- Social networks.

Topic (vii): Closing Panel Discussion

Session Organizers: Annu Nissinen and Faiz Alsuhail (Statistics Finland)

31.   Topic to be decided based on abstracts received for the work session.

VI.   VENUE

32.   The work session will be held at:

> Statistics Finland
> Tyopajankatu 13
> FI-00580 HELSINKI
> Finland

33.   A second information notice will be issued and made available on the work session website in February 2015, giving details for locating and entering the work session, along with additional logistical information.

VII.   FURTHER INFORMATION

34.   For further information, please contact:

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