

**STATISTICAL COMMISSION and  
ECONOMIC COMMISSION FOR EUROPE**

**COMMISSION OF THE  
EUROPEAN COMMUNITIES**

**CONFERENCE OF EUROPEAN STATISTICIANS**

**EUROSTAT**

**Joint ECE/Eurostat Work Session on  
Statistical Data Confidentiality**  
(Skopje, The former Yugoslav Republic of Macedonia,  
14-16 March 2001)

Working Paper No. 1 Rev. 1  
English only

### **INFORMATION NOTE TO PARTICIPANTS**

**The Joint UNECE/Eurostat Work Session on Statistical Data Confidentiality will be held at the Aleksandar Palas (Boulevard Oktomvriska Revolucija, Skopje, The former Yugoslav Republic of Macedonia), starting on 14 March, Wednesday, at 9.00 a.m.**

#### **I. PROVISIONAL AGENDA OF THE MEETING**

1. Adoption of the agenda.
2. Designation of officers.
3. Application of Statistical Disclosure Control (SDC) methodology and software in business statistics and social and demographic statistics  
*Invited papers by Germany, Netherlands; supporting papers from Germany, Spain (4) - (Universitat Rovira I Virgili (2), EUSTAT and Universitat de Valencia), The former Yugoslav Republic of Macedonia, United States(2) - (NASS and Carnegie Mellon University).*
4. Impact of new technological developments in software, communications and computing on SDC  
*Invited paper by Greece (National Technical University of Athens); supporting papers from Canada, Finland, Italy, Netherlands, Spain (3) (Institut d'Investigació en Intelligència Artificial, University of La Laguna and Polytechnical University of Catalonia), The former Yugoslav Republic of Macedonia, United Kingdom (2) - (University of Manchester), United States (Bureau of the Census), joint paper by Italy and United Kingdom (University of Plymouth).*
5. Attitudes of respondents towards statistical confidentiality  
*Invited papers by Sweden, United States (2) - (Census Bureau and Internal Revenue Service), Eurostat; supporting paper from Israel.*
6. Progress in the implementation of SDC methods and techniques in central and eastern Europe  
*Invited papers by Czech Republic, Estonia, The former Yugoslav Republic of Macedonia, ECE Secretariat; supporting papers from Armenia, Azerbaijan, Hungary, Kazakhstan, Kyrgyzstan, Lithuania, Mongolia, Ukraine, Turkmenistan, Yugoslavia.*
7. Future work.
8. Adoption of the conclusions reached at the Work Session.

## II. GENERAL INFORMATION

9. The Conference of European Statisticians, at its 2000 plenary session, included this Work Session in its meeting programme (see CES/2000/26/Add.2, programme element 2.1). The Work Session will be held in English and Russian with simultaneous interpretation.

10. All documentation for the meeting will be made available at the following Internet address:

**<http://www.unece.org/stats/documents/2001.03.confidentiality.htm>**

The documentation will be in English. The papers received in Russian will be translated into English and both English and Russian versions will be available on Internet. Hard copies of documents will be sent out to participants only if requested (please indicate your request on the Registration Form, or send an e-mail to [diane.serikoff@unece.org](mailto:diane.serikoff@unece.org)). Papers will be edited and formatted when received and put on the web-site by 16 February 2001.

11. The agenda items will be considered based on two main categories of papers, **invited papers** and **supporting papers**. The organisers of the meeting have contacted a small number of countries and asked them to prepare invited papers for specific items. The invited papers will provide the main basis for discussion. However, issues raised in the other papers that countries contribute to the meeting (supporting papers) will also be discussed under that item. The deadline for the receipt of all papers is 31 December 2000.

12. Consideration of individual agenda items will be led by Session Discussants. The sessions will start with the presentation of the invited papers, followed by a brief question period. The Discussants will then introduce the supporting papers. The authors will have an opportunity to comment briefly on their papers and to answer any questions. The Session Discussants and authors of both invited and supporting papers are encouraged to keep in close contact in order to better prepare the discussion and to take into account the requirements of the Session Organizers. The Session Discussants and their relevant contact information are provided below.

## III. EXPLANATORY NOTES TO THE AGENDA

13. The meeting will focus on the substantive topics listed in the Programme of Work of the Conference of European Statisticians under the Programme activity 2: *Technical infrastructure and other cross-cutting issues*, Programme element 2.1: *Management of information technology infrastructure* (see CES/2000/26/Add.2).

### **Agenda item 3: Application of Statistical Disclosure Control methodology and software in business statistics and social and demographic statistics**

**Discussant:** Lawrence Cox

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#### **Invited papers:**

- Germany – *New tools for cell suppression in Tau-Argus: one piece of the CASC project work draft* (Sarah Giessing – Federal Statistical Office)
- Netherlands – *Statistical disclosure control (SDC) in practice: some examples in Statistics Netherlands* (Eric Schulte Nordholt – Statistics Netherlands)

14. Based on these and other contributions, the meeting is expected to consider the use of appropriate statistical and computing tools to improve the protection of statistical outputs, as well as reducing the resources required to undertake this protection. This may enable statistical institutes to safely improve the quantity, quality and timeliness of statistical outputs.

15. This programme item will include papers illustrating innovative applications of SDC tools which may be applicable to other potential users. Differences between business statistics and social and demographic statistics in terms of the confidentiality risks posed and the degree of protection required will be discussed along with SDV problems in both domains.

#### **Agenda item 4: Impact of new technological developments in software, communications and computing on SDC**

**Discussant:** Josep Domingo-Ferrer

Universitat Rovira i Virgili	Tel: +34-977 55 96 57
Dept. of Computer Engineering and Mathematics	Fax: +34-977 55 97 10
E-43006 TARRAGONA, Catalonia	e-mail: jdomingo@etse.urv.es

#### **Invited Paper:**

– Greece – (*George Kokkolakis – National Technical University of Athens*)

16. This session is expected to consider the impact of the technical developments on data confidentiality. New technologies allow statistics to be produced in new ways from previously unexploited data sources, and for these statistics to be supplied in more flexible ways which more closely meet the needs of users. However, in association with these technical innovations and the increased availability of powerful computing hardware and software, is the increased risk of disclosure of confidential information. Developments in the application of disclosure control methods must take place in parallel with developments in the production and dissemination of statistics.

#### **Agenda item 5: Attitudes of respondents and users towards statistical confidentiality**

**Discussant:** Julia Lane

LSP	Tel: +1-202 261-4797
The Urban Institute	Fax: +1-202 463-8522
2100 M St. NW	e-mail: JLane@ui.urban.org
WASHINGTON, D.C. 20237	
U.S.A.	

#### **Invited papers:**

- Sweden - *Statistical microdata - confidentiality protection versus freedom of information (Bo Sundgren - Statistics Sweden)*
- United States - *How the public views confidentiality in statistical data products – the role for research on perceptions (Gerald Gates – Census Bureau)*
- Eurostat – *Meeting the need for research access to confidential Eurostat data (David Thorogood)*
- United States - *Perception issues in the economic/organizational sector (Nick Greenia - Internal Revenue Service and Brad Jensen - U.S. Census Bureau)*

17. The discussion on these and other papers contributed to the meeting is expected to deal with the perceptions of respondents and users about confidentiality. It is an important aspect to be taken into account when implementing any disclosure control methods and software. Relatively little is known about the extent to which respondents understand and believe the confidentiality promises made by statistical institutes; which variables are seen as sensitive and which, therefore, require the greatest protection, and the extent to which

data ageing is felt to make certain types of data less confidential. Discussion on research and the application of information technology in this area is encouraged.

### **Agenda item 6: Progress in the implementation of SDC methods and techniques in central and eastern Europe**

**Discussant:** Eric Schulte Nordholt (Statistics Netherlands)

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2270 JM VOORBURG  
Netherlands

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#### ***Invited papers:***

- Czech Republic – *Statistical data confidentiality in the Czech Republic – Reality and intentions (Stanislav Drapal – Czech Statistical Office)*
- Estonia – *Experience in data protection and techniques in Estonian population and housing census 2000 (Mati Sundja – Statistical Office of Estonia)*
- The former Yugoslav republic of Macedonia – *Legal basis of statistical confidentiality in candidate countries (Dobrinka Borisovska Gospodinova – Statistical Office)*

18. The session will examine progress in the development of data confidentiality methods and techniques in the statistical agencies of the transition countries. The meeting will consider both successful experiences and problems faced when developing the SDC projects on the national level. Experiences gained internationally and proposals and/or requests for international assistance in this field will also be explored during the general discussion.

### **Agenda item 7: Future work**

19. Under this agenda item, the Work Session is expected to discuss issues of potential interest to countries for future work on statistical data confidentiality.

## **IV. DEMONSTRATIONS**

20. Since only a very limited amount of time can be set aside during the meeting for demonstrations, they will have to be made on the margins of the meeting (e.g. during the lunch break and after the afternoon session ends). To facilitate planning, participants wishing to give a demonstration should inform the UN/ECE secretariat well in advance of the meeting and also indicate the requested facilities and equipment for the demonstrations.

## **V. ORGANIZATIONAL INFORMATION**

### **General information**

21. The Joint UNECE/Eurostat Work Session on Statistical Data Confidentiality (14-16 March 2001) will take place in Aleksandar Palas (Boulevard. Oktomvriska Revolucija, Skopje, The former Yugoslav Republic of Macedonia), starting on Wednesday, 14 March, at 9:00. Simultaneous interpretation will be provided into English and Russian.

22. Before the Work Session, on 12 and 13 March, Eurostat is organising a special training session on the theory and practice of statistical confidentiality. The training course will take place at the Aleksandar Palas, and will be limited to a maximum of 25 participants. It is oriented towards the countries with economies in transition – with an emphasis on the needs of TACIS and Balkan countries. Other interested participants in

the Work Session may also take part in the training course, subject to available places. The training course will be held in English and Russian with simultaneous interpretation.

23. General tourist information about Skopje (what to do, where to go) can be found at the following Web-pages: <http://www.skopjeonline.com.mk/> and <http://www.skopje.com.mk/english/>

## Travel

24. The travel **from the airport to the hotel** is currently possible only by taxi or by specially organised transport. The local organisers plan to arrange transport from the airport to Skopje for the participants of the meeting. More information on this will be provided about 15 days before the meeting.

25. The cost of a taxi from the airport to the hotels situated in the centre of the town is about USD 10-15 (20-30 DEM). For hotels that are situated 4 km from the centre of the town, the cost of a taxi from the airport is USD 13-17 (25-35 DEM).

26. The major airlines flying to Skopje are, e.g., Austrian Airlines, British Airways, Lufthansa, Olympic Airways, Swissair and Turkish Airlines. However, most of these flights take place on certain days of the week. Attached in Annex 1 is the timetable for direct flights from Europe to Skopje as of November 2000. The timetable is subject to change until March 2001, please check with your travel agent for updated schedule.

27. More information about the Skopje airport is available online at <http://www.airports.com.mk/>

## Accommodation

28. The Statistical Office of Macedonia will make the hotel reservations for the participants. Please indicate your choice of the hotel on the attached Registration form and send it to the Statistical Office in Skopje and to the UN/ECE Statistical Division by **10 February 2001** at the latest.

29. The organisers recommend all participants to stay in Aleksandar Palas, as the meeting takes place in the same hotel. Special rates have been obtained on this occasion.

30. Aleksandar Palas is located about 4 km from the centre of town where all other hotels are placed. However, the Statistical Office will organise transport from the centre of town to the meeting place and back for participants who will not stay at Aleksandar Palas.

31. Information about hotels is provided below. The locations of the hotels are indicated on the attached map of Skopje (Annex 3).

Hotel Address, contact info	Price		Notes
	Single	Double/twin	
<b>Aleksandar Palas ****</b> Addr. Boulevard. Oktomvriska Revolucija, 1000, Skopje Tel: + 389 91 392 392 Fax: + 389 91 392 152	108 USD	167 USD	Suites 174 - 403 USD Situating 4 kms from the centre of the town; price includes breakfast, served from 6:00 - 10:00
<b>Holiday Inn ****</b> Addr. Vasil Agilariski 2 1000, Skopje Tel. +389 91 292 929 Fax: + 389 91 115 503	130 USD	190 USD / 210-220 USD	Suites 300 - 470 USD Located in the centre of town Price includes breakfast, served from 6:00 - 10:00

<b>Jadran</b> ** "superior" Addr. 27 Mart 8 1000, Skopje Tel: + 389 91 118 427 Fax: + 389 91 118 334	60 USD	100 USD	Located in the centre of town Price includes breakfast, served from 8:00
<b>Turist</b> ** Addr. Gjuro Salaj 2 1000, Skopje Tel. +389 91 115 051 Fax: +389 91 114 753	50 USD	90 USD	Located in the centre of town Price includes breakfast, served from 6:00 - 10:00
<b>Boarding house "Centar" superior</b> Addr. Boulevard Koco Racin 1000, Skopje Tel. +389 91 114 844 Fax: + 389 91 114 025	60 USD	75 USD	Apartment ( for one person) 87 USD Apartment (for two persons) 100 USD Located in the centre of town Price includes breakfast, served from 7:00 - 10:00
<b>Kontinental</b> *** "superior" Addr. Boulevard Aleksandar Makedonski, 1000, Skopje Tel. +389 91 116 599 Fax: + 389 91 222 221	89 USD	138 USD	Triple room 177 USD; Situated 4 km-s from the centre of the town, price includes breakfast, served from 6:00 - 11:00

32. The hotels accept major credit cards (Visa, Mastercard, American Express, Diners International) except the "Centar" that accepts only Visa and Mastercard.

### Currency

33. The local currency is the Macedonian Denar, consisting of 100 Deni. Some exchange rates between the Denar and other currencies are given below (indicative exchange rates of the National Bank valid as of 6 February 2001):

1 Euro = 60.82 Denars  
1 Canadian Dollar = 43.11 Denars  
1 Swiss Frank = 39.54 Denars  
1 British Pound = 95.23 Denars  
1 US Dollar = 64.53 Denars

34. The updated exchange rates can be found at the Website of the national Bank at the address:  
<http://www.nbrm.gov.mk/>

### Visa regulations

35. All participants attending the Work Session and persons accompanying them 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 The former Yugoslav Republic of Macedonia in the country in which the participants reside. The list of countries whose citizens do not need a visa for entry into The former Yugoslav Republic of Macedonia is attached (status as of 1 November 2000, Annex 2). However, participants are requested to check with the authorities in their country on the latest status with visas before travelling to Skopje.

**Additional Information**

36. All correspondence regarding the Work Session should be addressed to:

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Joint UNECE/Eurostat Work Session on Statistical Data Confidentiality  
(Skopje, The former Yugoslav Republic of Macedonia, 14-16 March 2001)

### REGISTRATION FORM

This form should be completed in duplicate by each participant  
and returned **by 10 February 2001**

1 copy to:

Ms. Jana Meliskova  
United Nations Economic Commission for Europe  
Statistical Division  
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CH-1211 GENEVA 10  
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Tel.: +4122 917 4150

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1 copy to:

Ms. Tanja Ivanovska  
State Statistical Office  
4, Dame Gruev  
1000 Skopje  
The former Yugoslav Republic  
of Macedonia

Tel.: + 389 91 114 904

Fax: +389 91 111 336

e-mail: tanjai@stat.gov.mk

1. Surname (Family name) Mr./Ms.	2. First name
3. Representing (country or organization)	4. Professional title
5. Mailing address	
6. Tel. No.	7. Fax No.
8. E-mail address:	
9. Requested way of receiving documentation:  <div style="text-align: center;">           Paper form <input type="checkbox"/>      Internet <input type="checkbox"/> </div>	
10. Name of your hotel in Skopje	
11. Date and time of arrival in Skopje	12. Date and time of departure from Skopje
13. Special dietary or other requirements:	

Date \_\_\_\_\_ Signature \_\_\_\_\_

**ANNEX 1. Direct flights from Europe to Skopje and vice versa**

<b>NO.</b>	<b>DESTINATION</b>	<b>COMPANY</b>	<b>DAY</b>	<b>TIME</b>
1	AMSTERDAM – Skopje	MAT	TUE/THU/FRI	11.00
	SKOPJE - Amsterdam	MAT	TUE/THU/FRI	07.00
2	ATHENS – Skopje	OLYMPIC AIRWAYS	MON/THU/SAT TUE SUN	10.45 09.00 07.30
	SKOPJE - Athens	OLYMPIC AIRWAYS	MON/THU/SAT TUE SUN	12.00 10.10 08.40
3	BERLIN – Skopje	MAT	WED SAT	19.20 18.15
		AVIOIMPEX	SAT	17.20
	SKOPJE - Berlin	MAT	WED/SAT	14.20
		AVIOIMPEX	SAT	14.25
4	BUDAPEST – Skopje	MALEV	TUE WED/FRI	13.10 14.30
	SKOPJE - Budapest	MALEV	TUE WED/FRI	15.20 16.40
5	FRANKFURT – Skopje	AVIOIMPEX	MON/WED FRI	18.20 18.05
	SKOPJE - Frankfurt	AVIOIMPEX	MON/WED FRI	15.00 14.50
6	GENEVE – Skopje	AVIOIMPEX	SAT	19.30
	SKOPJE - Geneve	AVIOIMPEX	SAT	10.10
7	ISTANBUL – Skopje	TURKISH AIRLINES	TUE/FRI/SUN	15.20
	SKOPJE - Istanbul	TURKISH AIRLINES	TUE/FRI/SUN	17.10
8	KOPENHAGEN – Skopje	MAT	SAT	12.40
		AVIOIMPEX	TUE	17.00
	SKOPJE - Copenhagen	MAT	SAT	08.50
		AVIOIMPEX	TUE	13.20
9	LONDON – Skopje	BRITISH AIRWAYS	MON/WED/THU	12.15
	SKOPJE - London	BRITISH AIRWAYS	MON/WED/THU	17.45
10	MUNCHEN – Skopje	LUFTHANSA	MON/TUE/WED/S UN	11.20
	SKOPJE - Munchen	LUFTHANSA	MON/TUE/WED/S UN	15.25
11	ROME – Skopje	MAT	TUE	11.00
			THU/FRI/SUN	18.10

	SKOPJE - Rome	MAT	TUE THU/FRI/SUN	08.20 15.30
12	VIENNE – Skopje	AUSTRIA AIRLINES	EVERY DAY	13.35
	SKOPJE - Vienne	AUSTRIA AIRLINES	EVERY DAY	16.10
13	ZURICH – Skopje	SWISSAIR	MON/WED FRI/SAT/SUN	10.05 10.05
	SKOPJE- Zurich	SWISSAIR	MON/WED FRI/SAT/SUN	13.00 13.00

**ANNEX 2. Situation with visas (as of November 2000)****Countries which citizens do not require a visa:**

1. Austria
2. Belgium
3. Bulgaria
4. Croatia
5. Denmark
6. Finland
7. France
8. Germany
9. Greece
10. Hungary
11. Iceland
12. Ireland
13. Italy
14. Liechtenstein
15. Luxembourg
16. Malta
17. Monaco
18. Netherlands
19. Norway
20. Poland
21. Portugal
22. Romania
23. San Marino
24. Spain
25. Sweden
26. Switzerland
27. Turkey
28. United Kingdom
29. United States
30. Japan
31. Bosnia and Herzegovina
32. Cyprus (Turkey)

**Countries which citizens can obtain a visa on the border:**

1. Canada
2. Cyprus (Greece)
3. Estonia
4. Israel
5. Latvia
6. Lithuania
7. Republic of Moldova
8. Slovakia
9. Uzbekistan
10. Albania
11. Mexico
12. Mongolia
13. Republic of Korea

**Countries which citizens need a visa:**

1. Azerbaijan

2. Georgia
3. Kazakhstan
4. Kyrgyzstan
5. Russian Federation
6. Tajikistan
7. Turkmenistan
8. Ukraine
9. Armenia
10. Belarus
11. Czech Republic
12. Slovenia

ANNEX 3: Map of Skopje

City map of Skopje



- |                            |                     |                             |
|----------------------------|---------------------|-----------------------------|
| ① State Statistical Office | ③ Hotel "Jadran"    | ⑥ Hotel "Aleksandar Palace" |
| ② Hotel "Holiday Inn"      | ④ Hotel "Turist"    | ⑦ Pansion "Centar"          |
|                            | ⑤ Hotel Continental |                             |