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Topic (iii) - Administration and policy of statistical data confidentiality

**QUESTIONNAIRE ON DISCLOSURE AND CONFIDENTIALITY -
SUMMARY OF REPLIES**

Submitted by the ECE secretariat¹

Invited paper

BACKGROUND

1. Aiming to increase the knowledge of the state-of-the-art of statistical data confidentiality in the transition countries, the UN/ECE secretariat organised, in cooperation with Eurostat and the transition countries, a survey on the Disclosure and Confidentiality of Statistical Data in fall 1998. The questionnaire for this survey was based on the methodology used for a similar survey conducted by Holvast & Partner on behalf of the European Commission in the Member States of the European Union in 1997.

2. The following transition countries participated in the survey:
Eastern Europe: Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia, Slovakia, The former Yugoslav Republic of Macedonia;
Commonwealth of Independent States (CIS): Azerbaijan, Belarus, Kyrgyzstan, Turkmenistan.

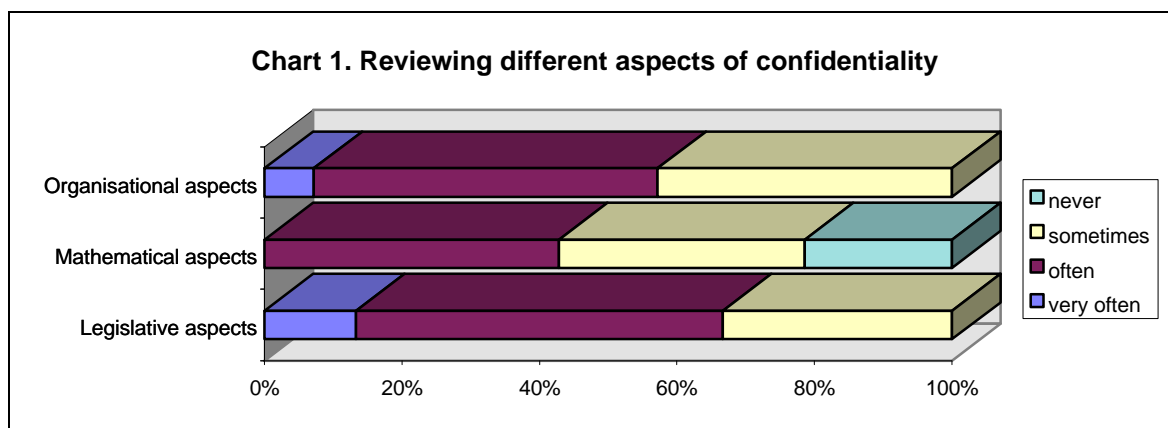
3. The goal of this paper is to present to participants an overview of the survey. Some observations which are accompanying the summary should be understood as the thoughts of the secretariat aiming to support the discussion on the given issue. Another important goal of the survey is to contribute to identifying the issues in which the international cooperation could assist transition countries in solving them.

I. GENERAL OVERVIEW

I.1. Importance of the statistical data confidentiality issues for statistical agencies.
(Questions 1-3)

4. Most responding agencies considered the protection of statistical data to be very important. With regard to the different aspects of confidentiality, more attention is drawn to the legal and administrative aspects. Organizational aspects are also of great importance. Relatively lower attention is drawn to the computing aspects. Concluding from the responses concerning the different methods used to ensure confidentiality, it is often assumed that anonymisation (omitting identification variables) is sufficient to avoid disclosure.

¹ Prepared by Tiina Luige.



5. The assessment of public attitudes, perceptions and reactions to confidentiality is not conducted in the following countries: Croatia, Hungary, Romania, Slovenia, Azerbaijan, Belarus and Kyrgyzstan. It is performed irregularly in the Czech Republic, Slovakia, the 3 Baltic states and Turkmenistan. No country but Poland and The Former Yugoslav Republic of Macedonia conducts such assessments often. Compared to the EU, public awareness and the statistical offices' concern of the public opinion on statistical data confidentiality is somewhat lower. From the responding CIS countries, Turkmenistan was the only one to conduct (sometimes) an assessment of public attitudes.

I.2. Online data transmission (questions 4-5)

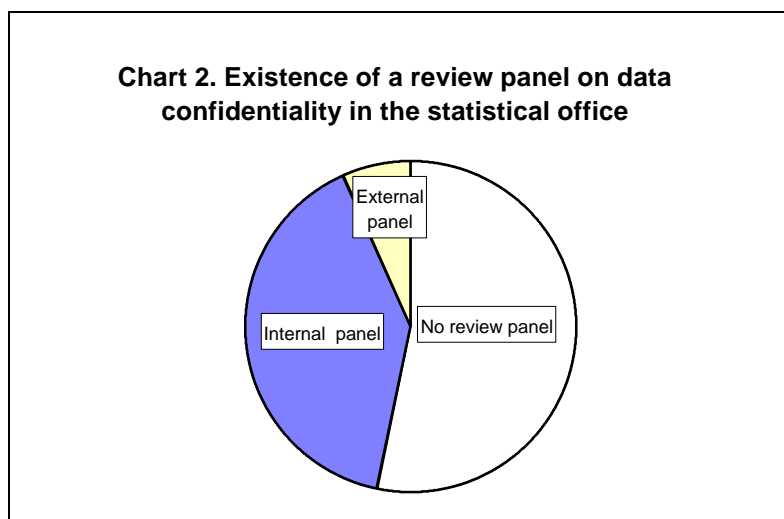
6. Online data collection is performed (at least sometimes) in about 60% of the responding transition countries. The data is often received online by the statistical office in Czech Republic and Poland, sometimes in 7 countries. Croatia, Romania, The Former Yugoslav Republic of Macedonia, Lithuania, Belarus and Turkmenistan never receive data online.

7. Surprisingly, the data is transmitted online to the users even less frequently: often in 3 countries (Poland, Slovenia, Kyrgyzstan), sometimes in 5 countries (Croatia, Czech Republic Hungary, Estonia and Azerbaijan), but never in 7 countries (Romania, Slovakia, The Former Yugoslav Republic of Macedonia, Latvia, Lithuania, Belarus and Turkmenistan).

8. However, considering data dissemination over Internet online transmission, the situation looks a little different. Although Latvia, Lithuania and Slovakia have replied "never" to online data dissemination, they do provide some statistical data on Internet. Latvia and Lithuania have static tables with basic economic indicators available on the statistical office's homepage. Lithuania, in addition, provides restricted access via the homepage to the Business Register. Slovakia is developing an Automated Statistical Information System that includes dissemination of dynamic tables over Internet. The pilot application of the project, including access to selected economic and demographic data, was launched last year.

I.3. General policy regarding confidentiality (questions 6-11)

9. In about half of the responding countries a review panel is used to judge whether the statistical data are sufficiently safe for outside users. All the reported panels were internal, except in Hungary.



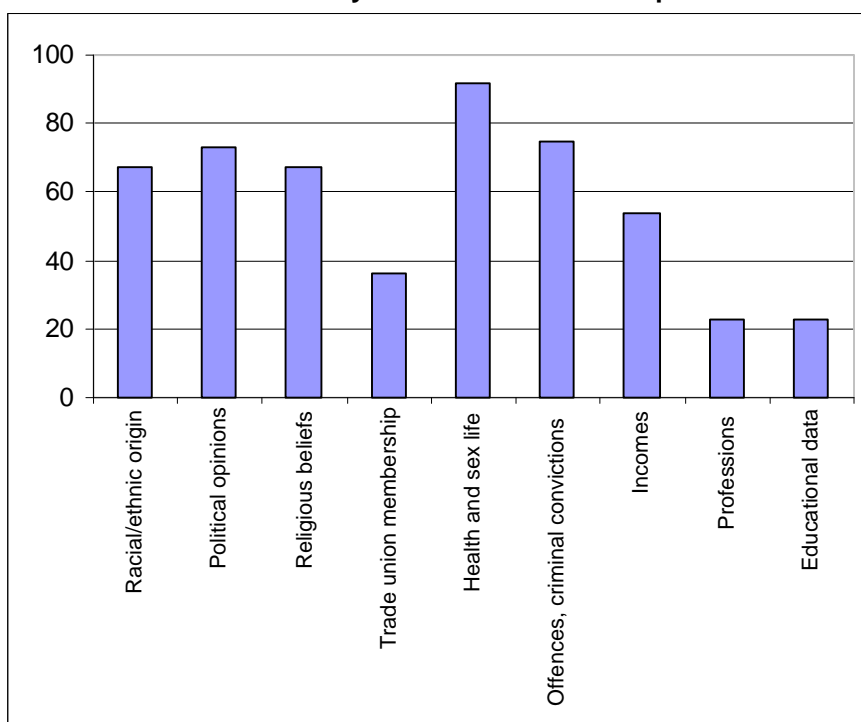
10. In general, the willingness of the responding statistical offices to allow access to original data to other institutions is rather low. Concerning data on natural persons, 67% of the responding countries do not allow any access to the original data from outside the statistical agency. There are 5 countries which allow access to data on natural persons: Croatia, Romania, Slovakia, Estonia and Kyrgyzstan. In Estonia and Kyrgyzstan, access is allowed to legal authorities (e.g. police). Access to universities and research centers is permitted only in about 25% of the cases (4 countries: Croatia, Romania, Slovakia and Estonia). Romania is the most flexible in this respect; the statistical office provides original data on explicit request for statistical studies or joint statistical projects also to international organizations (e.g., OECD, World Bank) and other statistical offices (e.g., ISTAT, INSEE).

11. Access to the original data on enterprises is provided more frequently (in 8 countries, amounting to 53% of responding countries). The only exception is Azerbaijan where the protection of data on enterprises is even more important than that on natural persons. However, in most cases, access is allowed to legal, fiscal or other government authorities for the purposes of monitoring and control of the activities of enterprises. In about half of the countries (Belarus, Hungary, Latvia, Lithuania, Poland, Slovenia, Turkmenistan), no external agency can access the original data. Providing original data on enterprises to universities and research centers is allowed only in Croatia, Romania, Slovakia and Estonia.

12. Business organisations and market institutions do not have any access to original data in all the responding countries.

13. Informed consent is not very often used. Natural persons can authorise to divulge original data in about 25% of the responding countries (Hungary, The Former Yugoslav Republic of Macedonia, Belarus and Turkmenistan). Informed consent for enterprises is used a little more frequently: in about 40% of the countries (Czech Republic, Hungary, Romania, Slovakia, The Former Yugoslav Republic of Macedonia and Turkmenistan). Informed consent is not at all used in Baltic countries, and seldom used in the CIS countries.

14. As for the sensitivity of the data on natural persons, the statistical offices of Azerbaijan and Kyrgyzstan have not determined what kind of data could be considered sensitive. The same is valid for Croatia and Latvia with regard to data on specific items (see Annex I, table 10). Therefore, these responses are excluded from the total in the following chart. The most sensitive items seem to be data on health and sex life (in all responding countries, except the above-mentioned cases), data on political opinions, and data concerning offences and criminal convictions.

Chart 3. Sensitivity of the data on natural persons

I.4 Legal basis for confidentiality (Questions 16, 22, and notes)

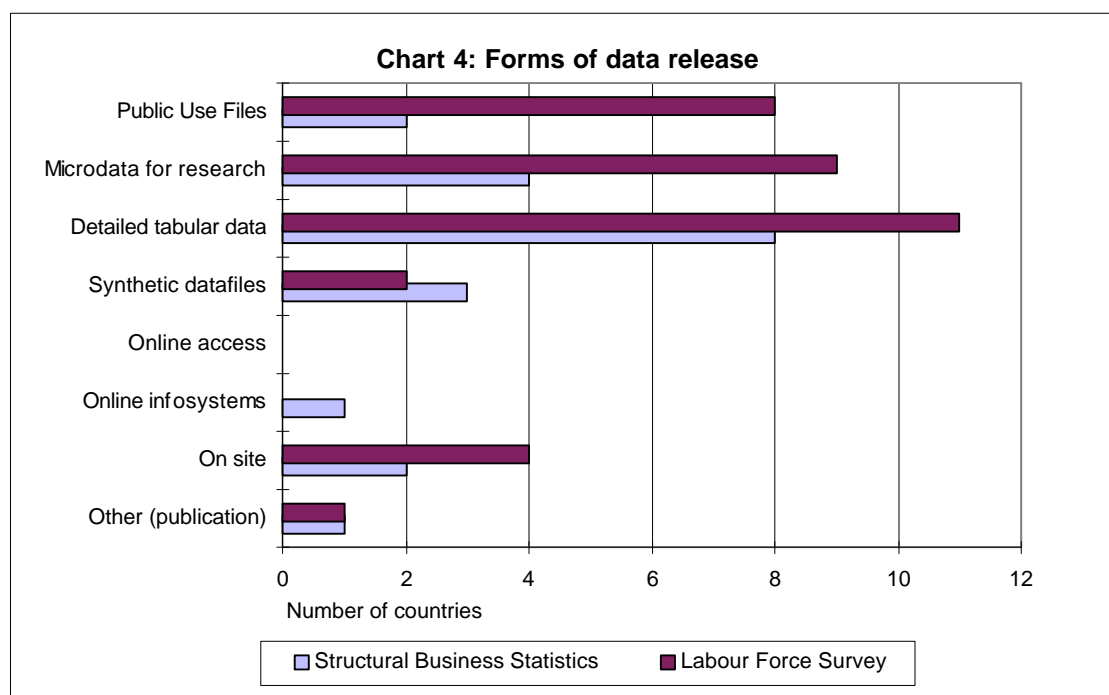
15. In all the responding east European countries, the confidentiality of statistical data is regulated by a Data Protection Law, Law on Statistics, Specific Regulations on Statistical Confidentiality and/or principles and laws on public access to government information. The respective laws and regulations have been adopted mostly in the mid-90s. However, in many cases, these legal acts are being reviewed and amended. This is especially true in the EU candidate countries in order to make their legal acts consistent with the respective EU regulations.

16. In contrast to the east European countries, in the responding CIS countries, the legal basis does not exist or is not yet sufficiently developed. There are some specific regulations on statistical confidentiality in Belarus, where also some indication on sensitivity of personal data has been developed.

II. LABOUR FORCE SURVEY

II.1 Forms of data release from the Labour Force Survey (LFS) (Questions 12 and 13)

17. About two thirds of the countries disseminate Public Use Files (PUF) of the Labour Force Survey. More frequently other forms of data dissemination are used, especially Microdata for Research (9 countries out of 15) and Detailed tabular data (11 countries out of 15). In Croatia and Latvia also synthetic datafiles are used. There is no possibility of online access to these data. Croatia, Poland, Estonia and Kyrgyzstan allow access to original data from these surveys on the premises of the statistical office (on site). Such a form of data release is usually protected with special organizational or administrative measures (specified by an agreement, contract, or using specially sworn employees).

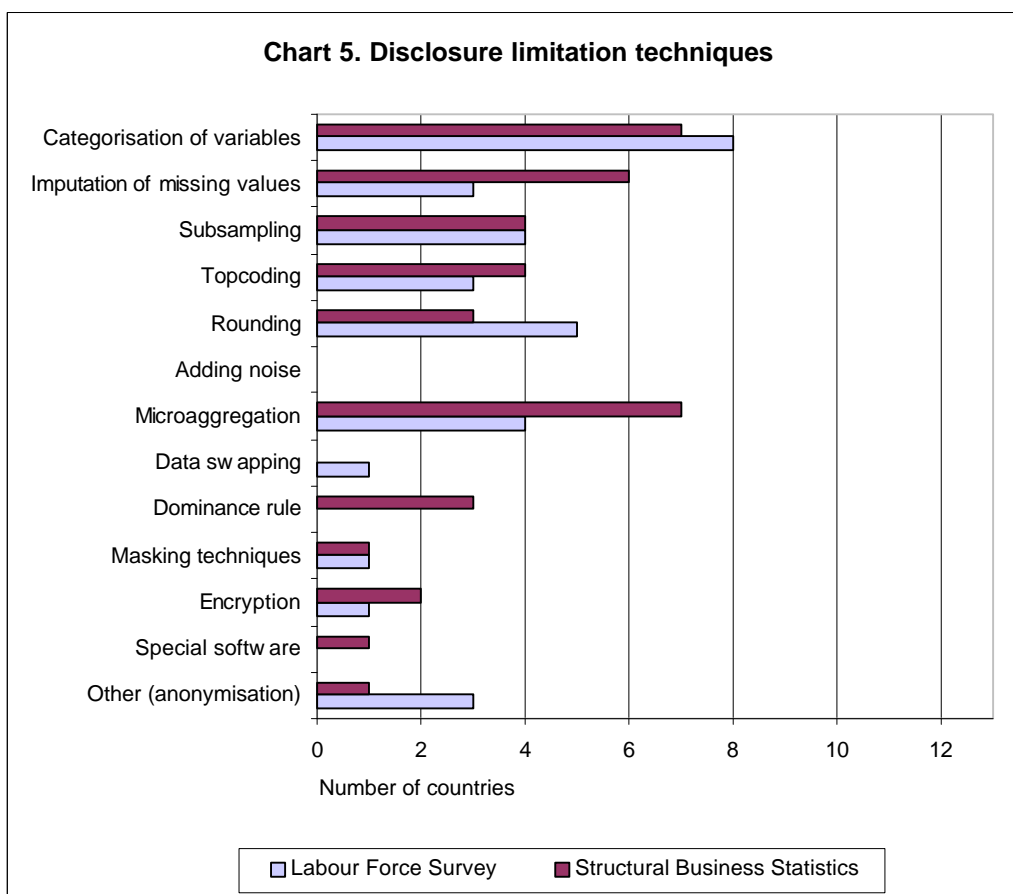


II.2 Disclosure limitation techniques for data release from the LFS (Question 14)

18. For the LFS, the most frequently used disclosure limitation technique is categorisation of variables. Rounding, subsampling, microaggregation, imputation of missing values and topcoding are also used. A prevailing number of east European countries use several techniques in parallel. The most notable example is Latvia where 7 to 8 different techniques are used. Another technique mentioned was anonymisation, or omitting identification variables (Romania, Slovenia). However, anonymisation might not always be sufficient for ensuring confidentiality.

19. There is no significant difference in the use of disclosure limitation techniques in east European and EU member countries. Concerning the LFS in the CIS countries, the listed techniques were practically not used. The only reported disclosure limitation method for the LFS was categorisation of variables in Turkmenistan.

20. Some countries (e.g. Kyrgyzstan, Slovakia) indicated in their reply that the terms used in the questionnaire are not applied in their office, or that the listed techniques are not known to them.



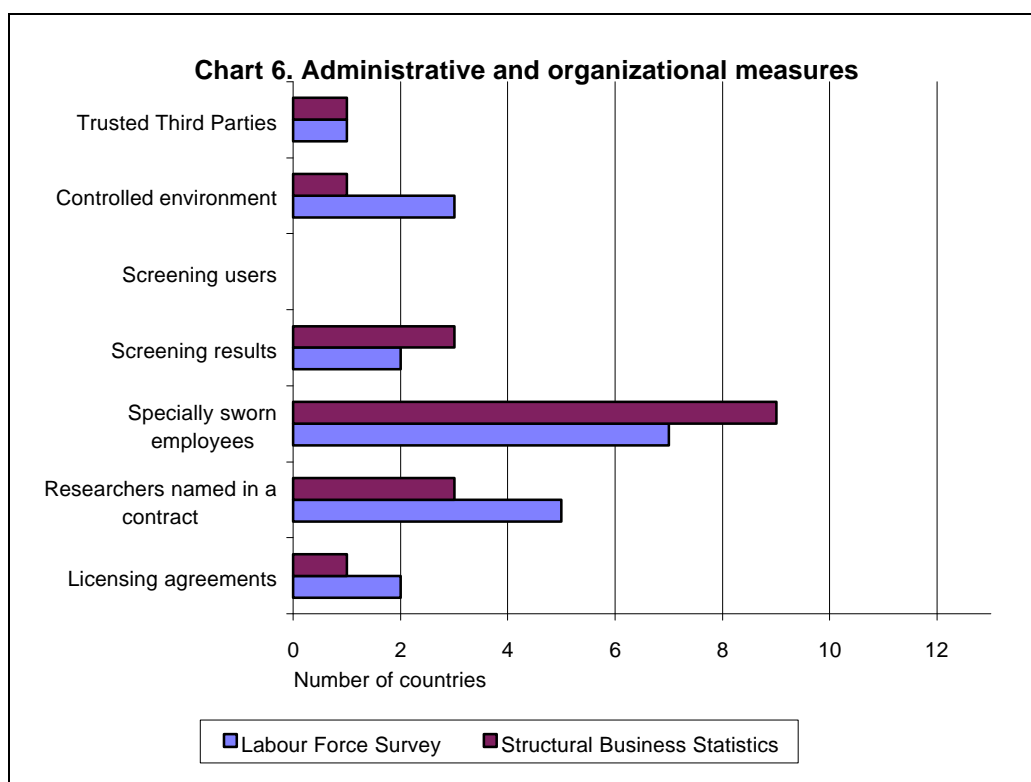
II.3 Access to original data for external users (Question 15)

21. The release of LFS original data to external users is allowed somewhat more easily than the general policy suggests (see Question 7). Access is allowed more often to universities and research centers, but also to government authorities and international organizations (in Czech Republic, Romania and The Former Yugoslav Republic of Macedonia). Businesses and marketing institutions can access the original LFS data in Lithuania.

II.4 Administrative and organizational measures (Question 17)

22. From the organizational aspect, the most frequently used method in east European countries is to allow access only for specially sworn employees. About two-thirds of these countries restrict access to the original data in this way. Special licensing agreements, access only for researchers named in a contract, and access in the controlled environment are also used. Some countries (Slovakia, Slovenia) use screening of the results with respect to disclosure control. Screening of the users is not reported. Only Romania involves Trusted Third Parties keeping the keys necessary for data identification.

23. The CIS countries have not indicated any administrative or organizational measures to prevent disclosure of the LFS data (in Belarus the survey is not conducted, in Kyrgyzstan the terms are not used).



III. STRUCTURAL BUSINESS STATISTICS

III.1 Forms of data release of the Structural Business Statistics (SBS) (Questions 18 and 19).

24. In contrast to the dissemination of LFS data (see Chart 4), only 2 countries release the PUF on Business Statistics (Poland and Slovenia, The Former Yugoslav Republic of Macedonia has indicated disseminating address files which could not be considered statistical data). Other forms of data release are used in a similar way to the LFS data: the most frequently used form is detailed tabular data. Microdata for research and synthetic datafiles are other methods used. On-site access is provided less frequently than LFS. Lithuania has an online information system including Business Statistics data. In other cases there is no possibility of online access to these data.

III.2 Disclosure limitation techniques for data release from the SBS (Question 20)

25. The disclosure limitation techniques used for the SBS are somewhat different from the LFS survey (see Chart 5). Categorisation of variables, imputation of missing values and microaggregation have equal importance among the techniques used (in about half of the responding countries). Subsampling, topcoding, rounding and dominance rule are also used sufficiently often. Of these techniques, the least frequently used ones are adding noise (0), data swapping (in Czech Republic for LFS data), and special software (in Belarus for SBS).

III.3 Access to original data for external users (Question 21)

26. Compared to the LFS, access to the original data on SBS is much more restricted. Universities and research centres can access the data in Estonia, Romania and Slovakia (as opposed to 6 countries in the case of LFS). In Estonia also legal authorities, and in Slovakia and Azerbaijan other governmental authorities can be provided with the original data on SBS. No access to business organizations, marketing institutions, international organizations or other institutions is allowed.

III.4 Administrative and organizational measures (Question 23)

27. The most frequently used organizational measure is to allow access only for specially sworn employees (see also Chart 6). This method is used in 9 countries out of 13 (Hungary and Kyrgyzstan are excluded). Other procedures applied are access only for researchers named in a contract (Romania, Estonia and Turkmenistan) and screening of the results with respect to disclosure control (Czech Republic, Poland and Slovakia). The remaining measures from the list are seldom applied, or not at all (screening of the users).

ANNEX 1. SUMMARY TABLES OF RESPONSES

1. How important is the protection of statistical data to your agency?

Data concerning...	not important	slightly important	important	very important
...natural persons		1 [*]	2	12
...enterprises			3	12

* Azerbaijan

2. How often does your agency review the following aspects of confidentiality?

	very often	often	sometimes	never
Legislative and administrative aspects	2	8	5	
Mathematical and computing aspects		6	5	3
Organisational aspects	1	7	6	

3. Does your agency conduct assessment of public attitudes, perceptions and reactions to confidentiality in order to promptly address public concern?

very often	often	sometimes	never
	2 [*]	6 ^{**}	7

* Poland, The Former Yugoslav Republic of Macedonia

** Czech Republic, Slovakia, Estonia, Latvia, Lithuania, Turkmenistan

4. To what extent is basic data received by your agency transmitted online?

	very often	often	some-times	never
Croatia				✓
Czech Republic		✓		
Hungary			✓	
Poland		✓		
Romania				✓
Slovakia			✓	
Slovenia			✓	
The former Yugoslav Republic of Macedonia				✓
Estonia			✓	
Latvia			✓	
Lithuania				✓
Azerbaijan			✓	
Belarus				✓
Kyrgyzstan			✓	
Turkmenistan				✓
Total		2	7	6

5. To what extent is statistical output to the users transmitted online?

	very often	often	sometimes	never
Croatia			✓	
Czech Republic			✓	
Hungary			✓	
Poland		✓		
Romania				✓
Slovakia				✓
Slovenia		✓		
The former Yugoslav Republic of Macedonia				✓
Estonia			✓	
Latvia				✓
Lithuania				✓
Azerbaijan			✓	
Belarus				✓
Kyrgyzstan		✓		
Turkmenistan				✓
Total		3	5	7

6. Does your agency use a review panel (e.g. an ethical or statistical committee) to judge whether statistical data are sufficiently safe for use by persons outside the agency? Is this panel internal or external?

	yes	no	external	internal
Croatia		✓		
Czech Republic		✓		
Hungary	✓		✓	
Poland	✓			✓
Romania		✓		
Slovakia		✓		
Slovenia		✓		
The former Yugoslav Republic of Macedonia	✓			✓
Estonia		✓		
Latvia		✓		
Lithuania	✓			✓
Azerbaijan		✓		
Belarus	✓			✓
Kyrgyzstan	✓			✓
Turkmenistan	✓			✓
Total	7	8	1	6

7. Do any of the following institutions have access to the original data concerning natural persons? If yes, for what purposes?

	Universities	Research centers	Business organisations	Legal authorities	Fiscal authorities	Other gov. authorities	Marketing institutions	Other
Croatia		✓						
Czech Republic								
Hungary								
Poland								
Romania	✓	✓						✓
Slovakia		✓						
Slovenia								
The former Yugoslav Republic of Macedonia								
Estonia	✓	✓		✓				
Latvia								
Lithuania								
Azerbaijan								
Belarus								
Kyrgyzstan				✓	✓	✓		
Turkmenistan								
Total	2	4	0	2	1	1	0	1

8. Do any of the following institutions have access to the original data concerning enterprises? If yes, for what purposes?

	Universities	Research centers	Business organisations	Legal authorities	Fiscal authorities	Other gov. authorities	Marketing institutions	Other
Croatia		✓						
Czech Republic						✓		
Hungary								
Poland								
Romania	✓	✓						✓
Slovakia	✓	✓				✓		
Slovenia								
The former Yugoslav Republic of Macedonia								✓
Estonia	✓	✓		✓				
Latvia								
Lithuania								
Azerbaijan					✓	✓		
Belarus								
Kyrgyzstan				✓	✓	✓		
Turkmenistan								
Total	3	4	0	2	2	4	0	2

Notes on questions 7-8 concerning individual countries:

Belarus, Hungary, Latvia, Lithuania, Poland, Slovenia, Turkmenistan: No access to original data from outside the statistical office

Croatia: The CBS of Croatia may supply the specialised scientific and research institutions with individual data such as name and family name, residence, age, sex and occupation only for the purposes of sampling and carrying out surveys. Individual data obtained under these conditions shall not be used for other purposes.

Czech Republic: Departments of the State Statistical Service of Ministries can access original data on enterprises to complete their statistical surveys

Estonia: Universities and research centers can access original data concerning natural persons and enterprises for the purposes of scientific research, pursuant to the procedure established by the Government; legal authorities can access the same data according to an article on the Official Statistics Act, stating that “data collected through official statistical surveys may be used to prevent a criminal offence, apprehend a person suspected of a criminal offence, or the ascertain the truth in criminal proceedings”

Romania: original data concerning natural persons or enterprises is available upon explicit request for statistical studies, joint statistical projects (with OECD, WB, other NSIs, ISTAT, INSEE) or specific databases after anonymisation; identification data concerning enterprises is available from the Business Register upon explicit request for all users (institutions); individual data on turnover, no. of employees, or other balance sheet data is confidential

Slovakia: Research centers can access only non- identifiable original data concerning natural persons and enterprises for research or educational purposes, the same is valid for universities access to data on enterprises; other governmental authorities can access original data about enterprises with written permission from the respondent

The Former Yugoslav Republic of Macedonia: No access to original data on natural persons. The only authority who can access original data on enterprises is the Payment Office - for the accounts in relation with main activities (the Office is responsible for registration of enterprises and changes in their main activities).

Azerbaijan: access to original data on enterprises allowed to fiscal and other governmental authorities, purpose not indicated in the reply

Kyrgyzstan: Governmental authorities have access to the original data on persons and enterprises for the monitoring and control of the activities of enterprises; fiscal and legal authorities have access for the purposes of fulfilling their functions, it is very seldom used

9. Can a respondent authorise your agency to divulge original data about himself to a well specified third party (informed consent)?

	natural persons		enterprises	
	yes	no	yes	no
Croatia		✓		✓
Czech Republic		✓	✓	
Hungary	✓		✓	
Poland		✓		✓
Romania		✓	✓	
Slovakia		✓	✓	
Slovenia		✓		✓
The former Yugoslav Republic of Macedonia	✓		✓	
Estonia		✓		✓
Latvia		✓		✓
Lithuania		✓		✓
Azerbaijan		✓		✓
Belarus	✓			✓
Kyrgyzstan		✓		✓
Turkmenistan	✓		✓	
Total	4	11	6	9

10. What kind of data is seen by your agency as sensitive data concerning natural persons?

	Racial or ethnic origin	Political opinions	Religious or philosophical beliefs	Trade union membership	Data concerning health and sex life	Data relating to offences, criminal convictions and security measures	Data related to incomes	Data about professions	Educational data	Other data (please specify)
Croatia	✓	-	✓	-		✓	✓	✓	✓	
Czech Republic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hungary	✓	✓	✓		✓	✓				
Poland	✓	✓	✓	✓	✓					
Romania					✓	✓	✓			
Slovakia	✓	✓	✓	✓	✓	✓				
Slovenia	✓	✓	✓	✓	✓	✓	✓			
The former Yugoslav Republic of Macedonia		✓	✓		✓	✓				
Estonia	✓	✓	✓		✓	✓				
Latvia	-	-	-	-	✓	-	✓	✓	✓	
Lithuania	✓	✓			✓	✓	✓			
Azerbaijan	-	-	-	-	-	-	-	-	-	-
Belarus					✓		✓			
Kyrgyzstan	-	-	-	-	-	-	-	-	-	-
Turkmenistan					✓					
Total	8	8	8	4	12	9	7	3	3	1

- the data on these items is not collected by the statistical office, therefore there is no decision about the sensitivity of these data

11. Are there special rules that apply to the transmission of data to Eurostat?

No

(Yes - in the former Yugoslav Republic of Macedonia)

LABOUR FORCE SURVEY

The LFS is not conducted in Belarus. Kyrgyzstan has given no replies from table 14 onwards as the terms are not used in the office. These cases are marked '-' in the tables.

12. Do you disseminate Public Use Files (PUFs) of the Labour Force Survey?

	yes	no
Croatia	✓	
Czech Republic	✓	
Hungary	✓	
Poland	✓	
Romania		✓
Slovakia		
Slovenia	✓	
The former Yugoslav Republic of Macedonia		✓
Estonia		✓
Latvia	✓	
Lithuania		✓
Azerbaijan		✓
Belarus	-	-
Kyrgyzstan	✓	
Turkmenistan	✓	
Total	8	5

13. Are data of the Labour Force Survey released in another form than PUFs?

	Microdata for research (MUCs)	Detailed tabular data	Synthetic Datafiles	Online access	Online information systems	On site	Other
Croatia	✓	✓	✓			✓	
Czech Republic	✓	✓					
Hungary	✓	✓					
Poland	✓	✓				✓	
Romania	✓	✓					
Slovakia	✓	✓					
Slovenia	✓	✓					
The former Yugoslav Republic of Macedonia		✓					
Estonia	✓	✓				✓	
Latvia		✓	✓				
Lithuania							✓*
Azerbaijan							
Belarus	-	-	-	-	-	-	-
Kyrgyzstan	✓	✓				✓	
Turkmenistan							
Total	9	11	2	0	0	4	1

* Publication

14. What kind of disclosure limitation techniques are used in relation to the release of statistical data of the Labour Force Survey?

	Categori- sation of Variables	Imputa- tion of Missing Values	Sub- sam- pling	Top- cod- ing	Rounding	Adding Noise	Micro aggrega- tion	Data Swapping	Domi- nance Rule	Masking Tech- niques	En- cryp- tion	Special Software	Other Technique (please specify)
Croatia	✓						✓						✓
Czech Republic	✓			✓				✓		✓			
Hungary													
Poland	✓		✓		✓								
Romania		✓											✓*
Slovakia	✓		✓		✓								
Slovenia													✓*
The former Yugoslav Rep. of Macedonia	✓			✓	✓		✓						
Estonia					✓								
Latvia	✓	✓	✓	✓	✓		✓				✓		
Lithuania	✓	✓	✓				✓						
Azerbaijan													
Belarus	-	-	-	-	-	-	-	-	-	-	-	-	-
Kyrgyzstan	-	-	-	-	-	-	-	-	-	-	-	-	-
Turkmenistan	✓												
Total	8	3	4	3	5	0	4	1	0	1	1	0	3

anonymisation, omitting identification variables

15. Is access to the original data of the Labour Force Survey possible for specific users outside the agency?

	Universities	Research centers	Business organisations	Legal authorities	Fiscal authorities	Other gov. authorities	Marketing institutions	Other
Croatia		✓				✓		
Czech Republic	✓	✓						✓*
Hungary								
Poland								
Romania	✓	✓						✓*
Slovakia	✓	✓				✓		
Slovenia								
The former Yugoslav Rep. of Macedonia								✓*
Estonia	✓	✓		✓				
Latvia								
Lithuania	✓	✓	✓	✓	✓	✓	✓	
Azerbaijan								
Belarus	-	-	-	-	-	-	-	-
Kyrgyzstan	-	-	-	-	-	-	-	-
Turkmenistan								
Total	5	6	1	2	1	3	1	3

*

Czech Republic: international organizations

Romania: OECD, INSEE

The Former Yugoslav Republic of Macedonia: international organizations, IMF, WB

16. What kind of legal regulations are applicable to statistical data of the Labour Force Survey?

	Data Protection Law	Principles and laws on public access to government information	Specific regulations on statistical confidentiality	Other
Croatia	✓	✓	✓	
Czech Republic			✓	
Hungary	✓		✓	
Poland	✓	✓	✓	
Romania	✓	✓	✓	
Slovakia	✓	✓	✓	
Slovenia	✓	✓	✓	
The former Yugoslav Republic of Macedonia	✓		✓	State Statistical Law
Estonia	✓		✓	
Latvia		✓	✓	
Lithuania		✓		Law on Statistics
Azerbaijan				
Belarus				
Kyrgyzstan				
Turkmenistan				Law on Statistics
Total	7	6	9	

17. Do you use specific organisational or administrative measures to prevent disclosure of data from the Labour Force Survey?

	Special licensing agreements	Access only for researchers named in a contract	Access only for specially sworn employees	Screening the results with respect to disclosure control	Screening of the users	Access only in controlled environment	Trusted Third Parties that keep the keys necessary for identification	Other (please specify):
Croatia						✓		
Czech Rep.	✓	✓	✓					
Hungary								
Poland		✓						
Romania		✓	✓				✓	
Slovakia			✓	✓		✓		
Slovenia			✓	✓				
The former Yugoslav Rep. of Macedonia		✓						
Estonia	✓	✓	✓			✓		
Latvia			✓					
Lithuania			✓					
Azerbaijan								
Belarus	-	-	-	-	-	-	-	-
Kyrgyzstan	-	-	-	-	-	-	-	-
Turkmenistan								
Total	2	5	7	2	0	3	1	0

BUSINESS STATISTICS

In Hungary the Survey is under preparation. Kyrgyzstan has provided no replies as the terms are not used in the office. These cases are marked '-' in the tables.

18. Do you disseminate Public Use Files (PUFs) of Business Statistics?

	yes	no
Croatia		✓
Czech Republic		✓
Hungary	-	-
Poland	✓	
Romania		✓
Slovakia		
Slovenia	✓	
The former Yugoslav Republic of Macedonia	✓*	
Estonia		✓
Latvia		✓
Lithuania		✓
Azerbaijan		✓
Belarus		✓
Kyrgyzstan	-	-
Turkmenistan		✓
Total	3	9

only address files

19. Are Business Statistics released in another form than PUFs?

	Microdata for research (MUCs)	Detailed tabular data	Synthetic Datafiles	Online access	Online information systems	On site	Other
Croatia		✓					
Czech Republic							
Hungary	-	-	-	-	-	-	-
Poland							
Romania	✓	✓					
Slovakia	✓	✓	✓				
Slovenia	✓	✓	✓			✓	
The former Yugoslav Republic of Macedonia		✓					
Estonia	✓	✓				✓	
Latvia		✓	✓				
Lithuania					✓		✓*
Azerbaijan							
Belarus		✓					
Kyrgyzstan	-	-	-	-	-	-	-
Turkmenistan							
Total	4	8	3	0	1	2	1

* Publication

20. What kind of disclosure limitation techniques are used in relation to the release of business statistics?

	Categorisation of Variables	Imputation of Missing Values	Sub-sampling	Top-coding	Rounding	Adding Noise	Micro aggregation	Data Swapping	Dominance Rule	Masking Techniques	Encryption	Special Software	Other Technique
Croatia	✓						✓						
Czech Republic				✓									
Hungary	-	-	-	-	-	-	-	-	-	-	-	-	-
Poland							✓						
Romania		✓											✓*
Slovakia	✓	✓	✓		✓		✓						
Slovenia	✓						✓						
The former Yugoslav Rep. of Macedonia	✓												
Estonia	✓	✓	✓				✓		✓				
Latvia	✓	✓	✓	✓	✓		✓		✓		✓		
Lithuania		✓	✓	✓			✓		✓	✓			
Azerbaijan													
Belarus	✓	✓		✓	✓						✓	✓	
Kyrgyzstan	-	-	-	-	-	-	-	-	-	-	-	-	-
Turkmenistan													
Total	7	6	4	4	3	0	7	0	3	1	2	1	1

* anonymisation

21. Is access to the original data of the Business Statistics possible for specific users outside the agency?

	Universities	Research centers	Business organisations	Legal authorities	Fiscal authorities	Other gov. authorities	Marketing institutions	Other
Croatia								
Czech Republic								
Hungary	-	-	-	-	-	-	-	-
Poland								
Romania	✓	✓						
Slovakia		✓				✓		
Slovenia								
The former Yugoslav Republic of Macedonia								
Estonia	✓	✓		✓				
Latvia								
Lithuania								
Azerbaijan						✓		
Belarus								
Kyrgyzstan	-	-	-	-	-	-	-	-
Turkmenistan								
Total	2	3	0	1	0	2	0	0

22. What kind of legal regulations are applicable to statistical data of the Business Statistics?

	Data Protection Law	Principles and laws on public access to government information	Specific regulations on statistical confidentiality	Other
Croatia	✓		✓	
Czech Republic				✓
Hungary				
Poland	✓	✓	✓	
Romania	✓	✓	✓	
Slovakia	✓	✓	✓	
Slovenia	✓	✓		
The former Yugoslav Republic of Macedonia	✓		✓	State Statistical Law
Estonia	✓		✓	
Latvia		✓	✓	
Lithuania		✓		Law on Statistics
Azerbaijan				
Belarus			✓	
Kyrgyzstan				
Turkmenistan				Law on Statistics
Total	7	6	8	

23. Do you use specific organisational or administrative measures to prevent disclosure of data from the Business Statistics?

	Special licensing agreements	Access only for researchers named in a contract	Access only for specially sworn employees	Screening the results with respect to disclosure control	Screening of the users	Access only in controlled environment	Trusted Third Parties that keep the keys necessary for identification	Other (please specify):
Croatia								
Czech Rep.			✓	✓				
Hungary								
Poland			✓	✓				
Romania		✓	✓				✓	
Slovakia			✓	✓				
Slovenia								
The former Yugoslav Rep. of Macedonia			✓					
Estonia	✓	✓	✓			✓		
Latvia			✓					
Lithuania			✓					
Azerbaijan								
Belarus								
Kyrgyzstan								
Turkmenistan		✓	✓					
Total	1	3	9	3	0	1	1	0

ANNEX 2. NOTES BY COUNTRIES

EASTERN EUROPE

Croatia

The Central Bureau of Statistics (CBS) of Croatia may supply the specialised scientific and research institutions with individual data such as name and family name, residence, age, sex and occupation only for the purposes of sampling and carrying out surveys. Individual data obtained under these conditions shall not be used for other purposes.

The results of statistical surveys are published in aggregated form. Exceptionally, data can be published individually, but only if it does not indicate the reporting unit which provided the data (according to the Law on National Statistics).

Czech Republic

Statistical data confidentiality protection is regulated by the State Statistical Service Act (in force since June 1996). This act will be amended to enable transmission of individual data to Eurostat according to the EU Directive No. 322/97. A legal decree on individual data protection has been prepared by the CSO. Currently, it is used as a CSO internal regulation. After its verification in practice, it will become a generally valid legal document.

Special attention in the Statistics Act is paid to providing data for research purposes. In this case, the CSO and other statistical services are obliged to secure individual data protection and to take necessary organizational and technical measures.

No external users have access to original data, except some Ministries to the data on enterprises. The LFS data can be accessed by outside agencies only in anonymised form. In addition to universities and research centers, access is allowed to international organisations.

Estonia

Statistical data confidentiality issues are legally regulated by the Data Protection Law and specific regulations on statistical confidentiality. Development of special rules to protect population census data, and procedures to ensure the protection of the released data is under way.

Access to original data for external users is allowed to universities and research centers for the purposes of scientific research, pursuant to the procedure established by the Government. The legal authorities, including police, can access the data "to prevent a criminal offence, apprehend a person suspected of a criminal offence, or to ascertain the truth in criminal proceedings".

Hungary

Statistical data confidentiality issues in Hungary are regulated by several laws, decrees and internal regulations:

- Act on Protection of Personal Data and Disclosure of Data of Public Interest;
- Act on Statistics;
- Government Decree on implementing the Act on Statistics;
- CSO internal regulations, namely Organisational and Functional Regulation and Data Protection Regulation.

No access to original data from outside the agency is allowed.

The Survey on Structural Business Statistics is under preparation, therefore questions 18-23 are not applicable.

Latvia

Confidentiality issues are regulated by the Law on State Statistics and Law on Protection of Personal Data.

The CSB databases do not include data on racial or ethnic origin, political opinions, religious beliefs, trade union membership, or data relating to criminal offences. Therefore, there is no decision in the CSB whether to consider these data sensitive or not.

No access to original data for external users is allowed.

The reply concerning online data transmission is "never". However, there are static tables with basic economic indicators available on Internet.

Lithuania

There is no access to original data for external users. There is no Data Protection Law, the statistical data dissemination is legally regulated by the Law on Statistics, and principles and Laws on Public Access to Government information.

The LFS data is released in a publication form using different disclosure limitation techniques. Exceptionally, specially sworn employees from all the listed institutions can access the original LFS data.

Lithuania is implementing a modernisation project financed from PHARE funds. The project also deals with introducing a data confidentiality policy, and implementing a policy of data security to control access to the planned Statistical Information System that integrates statistical data from all different stages of the statistical production process.

According to the questionnaire, Lithuania does not disseminate statistical data online. There are tables with basic economic indicators available on Internet. Restricted access via the homepage is provided to the Business Register.

Poland

The CSO of Poland carries out work on the adjustment of statistical data dissemination to the standards recommended by EU and Eurostat. Protection of individual data constitutes an integral part of this work. Currently, Polish law is being adjusted to the respective EU legal standards.

No access to original data from outside the agency is allowed, regardless of the purpose indicated by the institution who is interested in the data. Access is possible only to aggregate data or, in some cases, to anonymised data subject to the permission of a special committee.

Romania

Original data concerning natural persons or enterprises is available upon explicit request for statistical studies, joint statistical projects or specific databases after anonymisation. The data is also available upon request to international organisations: OECD, WB, other NSIs, ISTAT, INSEE. Identification data concerning enterprises is available from the Business Register upon request for all users (institutions). However, business register data on turnover, number of employees, or other balance sheet data is confidential.

Slovakia

As a general rule, there are only two possibilities to pass on individual data on natural persons or enterprises to users: with written permission of the respondent, or not identifiable data. Universities and research centers can access non-identifiable original data for research or educational purposes. Other government authorities can access original data on enterprises with written permission from the respondent.

Slovakia has replied in the questionnaire that statistical data is never transmitted online to users. However, within the ELIS database project (CES/AC.71/1999/13 "Internet technology in publishing statistical information in Slovakia") data is disseminated online. The first version of the project covered dissemination of static tables. The second phase includes an Automated Statistical Information System for dynamic tables. The pilot application was launched last year. Presently, the system is in a verification phase, users can access selected industrial and demographic data over Internet. Future development of the system focuses also on providing sufficient level of security of individual data.

The questions on disseminating PUFs are not answered as the term was not understood by the respondent. Both LFS and SBS data are disseminated in different forms, using several disclosure limitation techniques and organisational measures. Some of the mentioned disclosure limitation techniques are not known to the Slovak Statistical Office. Some methods used for transmission of data in WAN (adding noise, encryption) are mixed with other methods generally used.

Slovenia

No access to original data from outside the agency allowed.

The LFS data is disseminated as Public Use Files, Microdata for Research and detailed tabular data. The identification variables are omitted, no other disclosure limitation techniques are used.

The Former Yugoslav Republic of Macedonia

Protection of the confidentiality of statistical data is based on Data Protection Law (1994) and State Statistical Law (1997) which includes a special part dealing with the confidentiality of statistical data. The Law is in accordance with the regulations proposed by the Council of Europe and Eurostat.

In general, no outside agency can access the original data, this is valid also for the SBS and LFS Surveys. The only exception is the Payment Office who can access original data on enterprises for the purposes of registration of changes in their main economic activities.

CIS COUNTRIES

Azerbaijan

The confidentiality aspects are mainly considered at the level of legislation and administration. Protection of data concerning natural persons is even less important than of data on enterprises. The reply to question 10 (what kind of data is seen as sensitive concerning natural persons) suggests that the personal data confidentiality aspects are not yet seriously considered, and it is not defined what kind of data could be seen as confidential. No assessment of public attitudes is conducted. There is no review panel to estimate the level of safety of released data.

Fiscal and other government authorities can have access to the original data concerning enterprises. All the replies to questions concerning the LFS are negative, either they do not conduct the Survey, or the detailed data are kept strictly in-house. Access to original Structural Business Statistics is allowed to governmental agencies, all other replies concerning this Survey are also negative.

Belarus

No institutions outside the statistical system have access to original data. Informed consent is used for data concerning natural persons.

The Labour Force Survey is not conducted.

There are specific regulations on statistical confidentiality that apply to the release of Structural Business Statistics on Industry. The data is released in detailed tabular form, limiting

disclosure using categorisation of variables, imputation, topcoding, rounding, encryption and special software. Again, no outside agency can access the original data.

Kyrgysztan

Concerning data on natural persons, it is not determined which data to consider sensitive (the table in question 10 was not filled in).

Reply tables to questions 14-23 are not filled in because the terminology is not used in the NSC of Kyrgysztan.