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**PROTECTION OF CONFIDENTIAL DATA IN PRACTICAL WORK OF STATE
STATISTICAL BODIES OF UKRAINE**

Supporting paper submitted by the State Statistics Committee of Ukraine

I. INTRODUCTION

1. Over the last several years the state statistical bodies of Ukraine have made considerable progress in legal, organizational and technical protection of confidential data. This report presents a summary of the main achieved results, the problems that have arisen and plans for the future.

II. LEGISLATIVE SUPPORT OF PROTECTION OF CONFIDENTIALITY OF DATA

2. The consecutive integration of Ukraine in economic, cultural and information environment of the European Union implies the adaptation of national legislation to the modern European legal system. Harmonization of statistical legislation with international legal norms and standards is an integral part of this process. Confidentiality of statistical information relates to basic regulations of legal documents governing state statistical activity in Ukraine.

Standards of statistical data confidentiality within the national legislation

3. In national legislation a definition of confidential data was stipulated, first of all, in the Law of Ukraine "On information" adopted in 1992. According to this definition, confidential information is "information which is in possession, use and disposal of separate natural and legal persons, and

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disseminated according to their desire and conditions established by them”. In line with the Regulation on technical protection of information in Ukraine, adopted by the Decree of the President of Ukraine in 1999, “confidentiality is a feature of information to be protected against unsanctioned familiarization”.

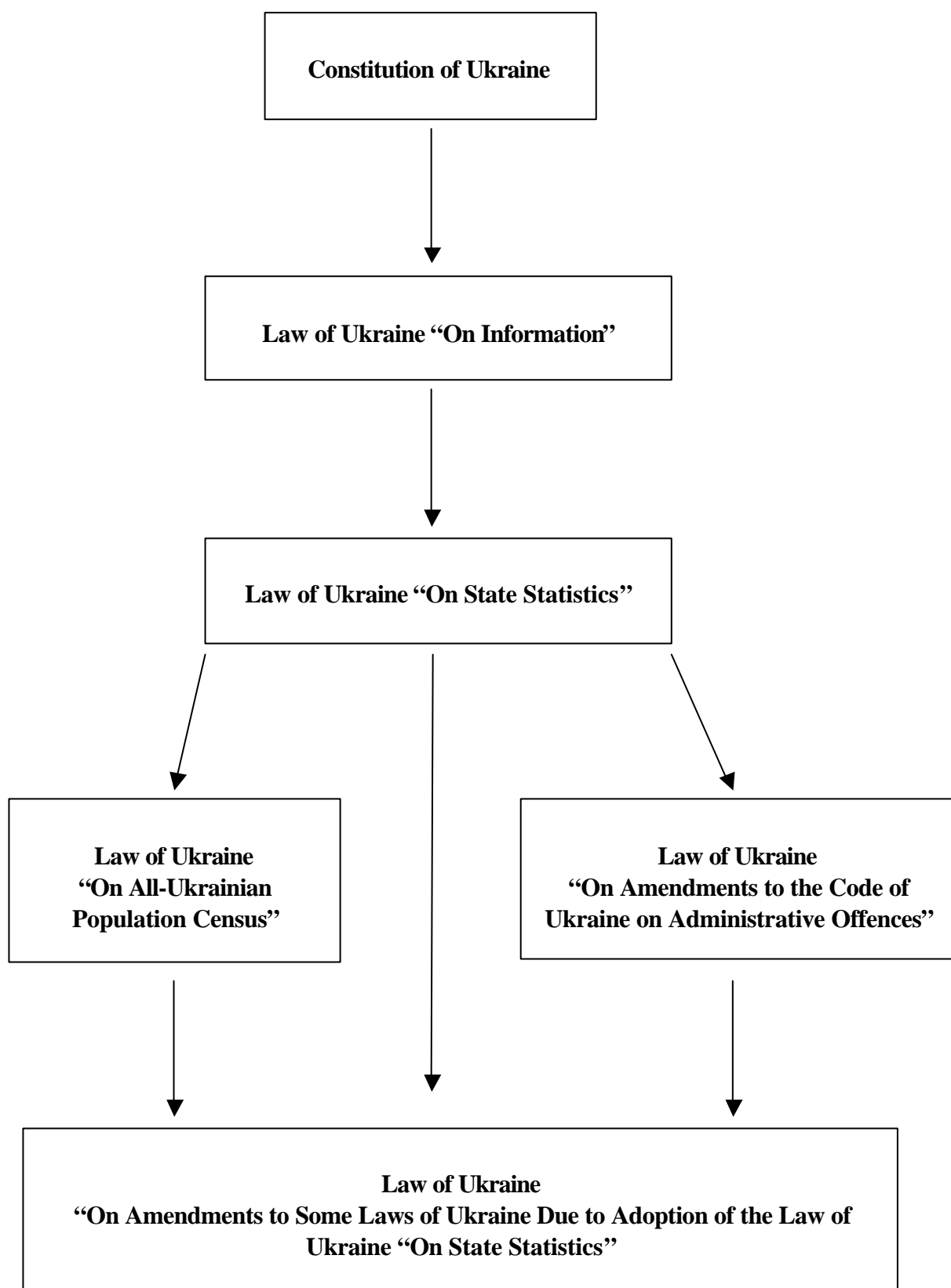
4. Stemming from this, national statistical legislation has strengthened further the principle of confidentiality in relation to statistical data. Thus, the Law of Ukraine “On State Statistics” adopted in 2000 stipulates that primary data obtained by state statistical bodies from respondents when carrying out statistical observations is the confidential information that is protected by the Law and used only for statistical purposes in depersonalized form. Dissemination of statistical information, which could allow access to confidential statistical data concerning a particular respondent, is prohibited. Statistical information obtained by state statistical bodies in the process of statistical observations can not be requested by the government authorities, local executive authorities, other legal persons, public associations, officials and other persons in order to be used for making decisions with respect to particular respondents.

5. The Law of Ukraine “On State Statistics” also specifies statistical information that could be disseminated by state statistical bodies. In line with international standards, depersonalized statistical information in disaggregated format is considered to be information that does not allow identifying confidential information about a respondent.

6. In particular, such information as names, addresses, number of phones, type of activity of enterprises and organizations are not considered as confidential. In line with this, as well as according to the Regulation on Unified State Register of Enterprises and Organizations of Ukraine (USREOU), maintained by state statistical bodies, users are provided with restriction-free information on the name of an enterprise, its location, post code, area code and locality, number of phones and faxes. All other information not covered by this list is considered as confidential data of the USREOU.

7. Organization of a number of statistical observations with regard to respondents – natural persons (population census, household living conditions survey, labour force survey, household survey on agricultural activity, etc.) is regulated, in the first place, by the Constitution of Ukraine adopted in 1996, which set up strict restrictions in terms of the possibility to access identified data on natural persons. Article 32 of the Constitution of Ukraine says that “it is prohibited to collect, store, use and disseminate confidential information about a person without his/her agreement, except in cases specified by the law, and only for the interest of national security, economic welfare and human rights”.

**LEGISLATIVE SUPPORT SYSTEM FOR PROTECTION OF CONFIDENTIAL
STATISTICAL INFORMATION IN UKRAINE**



8. The Law of Ukraine “On State Statistics” indicates that employees of the state statistical bodies are obliged to observe the requirements for protection of confidential information about physical persons collected in the course of statistical surveys.

9. The guarantees for protection of confidential information about an individual are also anticipated in the Law of Ukraine “On All-Ukrainian Population Census”, which was adopted in 2000. According to this Law, primary data and other information, obtained during the Census taking, are confidential and protected by the Law. Records in census questionnaires concerning respondents are not subject to dissemination without the respondent’s consent and are used in aggregated depersonalized form only for statistical purposes. The primary census data cannot be requested by the court, public prosecutor’s offices or other authorities to be examined and used as evidence in civil and criminal cases. Completed census questionnaires, other census documentation comprising primary data are subject to archive storage in premises inaccessible for unauthorized persons. After the term for storage of census documents is expired, this information is destroyed in accordance with established procedure.

10. It should be mentioned that the norms listed above not only meet the requirements of international law in the field of personal data protection, but also create a more trustful attitude on the part of respondents to statistical observations. Such an approach is a key one in establishing transparent and constructive cooperation of all stockholders in implementing state statistical activity. Thus, it is well-known that even in cases where the law stipulates an obligatory participation of the population in a statistical observation (e.g. in Ukraine, participation in the Census is a duty of respondents), reliable data can be expected only if the citizens have confidence in the observation. Such an attitude should be based on respondents’ confidence in the fact that confidentiality of information provided by them would be ensured. In this case, as practice shows, a wide scale informing of respondents about the responsibility for inobservance of requirements for statistical data confidentiality set by legislation is also a very convincing argument.

Responsibilities for violating the standards of confidentiality

11. The Code of Ukraine on administrative offences stipulates responsibility for violation of the procedure for using confidential statistical data: for citizens – in the form of a fine amounting to five to ten untaxable minimum incomes of citizens; for officials, including employees of state statistical bodies – to the amount of ten to twenty untaxable minimum incomes of citizens.

Stages for implementing the legislative standards for confidentiality

12. Regarding the work undertaken by the state statistical bodies of Ukraine in the sphere of legal protection of statistical data confidentiality, the following main stages can be specified.

13. The first stage covers the period during which the legislation basis providing legal guarantee for securing confidential statistical information provided by the respondents to state statistical bodies has been developed. At this stage, laws in general regulating the implementation of state statistical activity in Ukraine have been drafted and then adopted by the Parliament of Ukraine. These laws include the Law “On state statistics”, the Law “On All-Ukrainian Population Census” and the Law “On Amendments to the Code of Ukraine on Administrative Offences”.

14. During the second stage, work was carried out to put some legislative acts in line with the above-mentioned laws. Thus, the Law of Ukraine “On Amendments to Some Legislative Acts of Ukraine Due to Adoption of the Law of Ukraine “On State Statistics”” has made amendments to 16 effective laws, which in one or another regulate activities related to statistical activity and information relations arisen from this process.

15. Today, the state statistical bodies of Ukraine are in the next, third stage of development of legal protection of confidential data, which obviously is the most complicated one and requires long painstaking work. The efforts of state statistical bodies are now focused, first of all, on organizing relevant training of both respondents and data users, in terms of their perception of legislative changes made, as well as on issues of practical implementation of these innovations.

Ways and problems to implement transformations

16. Attention must be paid to the fact that the reform of legislation regulating state statistical activity in transition countries can be undertaken in two ways. The first is a method of radical changes in statistical legislation and a rapid and complete adaptation of national legislation to corresponding international standards. The second method is evolutionary, with a gradual approaching of national statistical legislation to international standards in combination with gradual adaptation of all other legislative acts, regulating activities related to official statistics, to statistical legislation.

17. In Ukraine the first approach involving radical changes, which looks more effective, has been chosen. However, as experience showed, this approach has a number of drawbacks which could seriously affect the quality of results to be achieved.

18. Thus, precipitate amendments in national legislation could lead to certain legal collisions. In Ukraine, for example, one obvious legal contradiction is observed, i.e. on the one hand, state statistical bodies according to effective legislation are obliged to observe the confidentiality of statistical information, but on the other hand, in order to observe such laws of Ukraine “On Prosecutor’s Office”, “On Police”, “On investigating activity“, “On Organizational and Legal Basis to Combat Crime”, “On Security Service of Ukraine”, statistical bodies have to provide law enforcement authorities, based on their official written requests, with all data from statistical returns needed for the work of those authorities (including confidential information). Such a situation is explained by the fact that amendments to legislative acts regulating the activity of law enforcement authorities, especially changes of a restrictive nature, are quite difficult to pass due to the well-known specificity of this area of government regulation.

19. Apart from this, there are serious difficulties in the practical implementation of legislative changes in a statistical area if such implementation is precipitated. Both respondents and primarily data users cannot adequately comprehend the essence of changes, i.e. they find themselves unready for such radical changes, especially where strict observance of statistical data confidentiality is concerned.

20. The state statistical bodies of Ukraine also face other problems in ensuring data confidentiality in terms of legislation. In particular, one such problem is the absence of normative and legal regulations to define the types of aggregated indicators not subject to dissemination due to the confidentiality issue. It is also necessary to identify criteria for dissemination of data on small administrative areas (rayon level, settlements) with respect to those features that are presented in the observed population by only one respondent.

III. ORGANIZATIONAL AND TECHNICAL SUPPORT FOR PROTECTION OF DATA CONFIDENTIALITY

21. The guarantee of statistical data confidentiality, apart from the creation of a legal basis, also implies a number of organizational and technical measures, which should cover the whole process from data collection to their destruction.

Arrangements

22. While preparing the staff to carry out statistical surveys, each employee of statistical bodies of Ukraine dealing with personal data studies his/her duties and responsibility established for non-securing the confidentiality of information obtained, as well as with the rules for the protection of this data against inadvertent disclosure. One such rule is a ban on providing any other person with documents including confidential information or on discussion of the information provided by respondents with unauthorized persons, or leaving completed questionnaires lying around and so on. In this connection, one important task is the preparation, adoption and introduction in statistical practice of normative and methodological documentation on techniques to be used to protect statistical data against disclosure.

23. For example, statistical tools for household and natural persons surveys are developed in such a way that information on their identification characteristics in the course of data processing is presented in the form of a special system of codes within a primary area survey unit, which really ensures depersonalization of personal data. This avoids the unauthorized use of confidential information from magnetic tapes and in electronic format.

Special software and hardware

24. Modern systems of automatic processing and dissemination of statistical data, based on the use of local and global networks, Internet, and distributed and local databases, considerably contribute to the risk of loss of data or data disclosure. Therefore, the issue of program and technical protection of information, circulating within the information system of statistical bodies, requires permanent attention and resolution so as to ensure effective protection of confidential data. Measures to be taken for this

purpose are complex ones and should foresee the necessary organizational actions and application of relevant programs and technical tools.

25. In line with the Concept of informatization of state statistical bodies adopted in 2000, the State Statistics Committee of Ukraine conducts purposeful work on the application of programming and technical tools for data protection, ensuring data protection against distortion and destruction, as well as against unauthorized use of data.

26. Autonomous local networks providing access to databases through separate servers using a relevant system of passwords, thus eliminating access to the data from the outside, are developed for the purpose of automated processing of confidential information. In order to ensure sound data protection, special system tools and programs are used, in particular:

- establishing service units for administration of networks, databases and data security with clear identification of their functions on the basis of relevant regulations on these units and job descriptions;
- classification of users of the automated system by set of information, which prevents different users from working with the same set of data;
- allocation of a unique code to each user and providing users with passwords for authorized access, coding of user's passwords (number of symbols in password code and password itself could be different, thus preventing anyone who may possess the password code, even a system administrator, from identifying the original password);
- restricting users' possibilities in employing only those technical operations, which are specified for corresponding user category (e.g. only users from the group "scanning operator" could start modules for scanning and recording of document images);
- registration of all user's requests to databases;
- central storage of copies of primary data at a separate server, putting a ban on downloading information from databases into PCs, excluding cases requesting implementation of concrete tasks linked with the technological process.

27. The main focus is on use of tools for data protection, which are an integral part of the network and local operation systems, and systems for database management; programming and equipment components of networks that allow to differentiate users' rights and control access to the data. Antivirus software is widely used to protect servers, working stations and mail systems. Separate local computer networks, which are located in protected premises with restricted access, are used for processing and storage of information requiring restricted access.

28. In order to protect data from physical damage, first of all, databases and other more valuable information are copied onto removable magnetic tapes that are stored in separate premises protected from unauthorized access. When the required information is restored, this could lead to the loss of information due to differences in handling procedures. In the state statistical bodies of Ukraine, it is planned to use in future specialized data storage systems based on Storage Area Network technologies (SAN), which minimize the loss of information and time involved in the process of data restoration.

IV. THE KEY OBJECTIVES FOR THE NEAR FUTURE

29. The following key objectives are set for the state statistical bodies of Ukraine to ensure the protection of data confidentiality in the near future:

Legislative support

- to ensure the synchronization of standards for confidentiality laid down within the national legislation. It primarily concerns the coordination of legal acts that regulate the activity of law-enforcement bodies on the one hand, and the state statistical activity on the other hand;
- to develop and implement the measures aimed at increasing the confidence of respondents in state statistics with regard to confidentiality standards, so that users can also understand the need to implement these standards and the corresponding adjustment of these approaches to the work with statistical data.

Organizational and technical support

the preparation, approval and implementation of standard and methodological materials (rules, instructions, documentation, etc.) that regulate the practical work of the employees from the state statistical bodies to ensure the protection of data confidentiality;

the implementation and exploitation of the specialized software and hardware tools that could identify and eliminate the consequences of network attacks, identification of the vulnerability of operational systems and database management systems; data coding tools for exchange of information, tools for monitoring the state of information resources, etc.

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