

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

**DATA PROTECTION IN PRACTICE - ORGANIZATIONAL SOLUTIONS
AND PROTECTION MEASURES**

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Contributed paper

I. INTRODUCTION

1. This presentation will provide an example of how data protection is organised and what kinds of protection measures are applied in practice at Statistics Finland. The present organisation and protection measures have primarily been implemented after 1992, when Statistics Finland's organisation and decision-making system were revised to conform with the principles of management by results. The organisation and protection measures have proved to be very efficient in practice.

II. BASIS OF DATA PROTECTION

2. In Finland, the protection measures of confidential data obtained for statistical purposes are based on several legal acts and directions. The basic provision concerning personal data is included in the constitution, which decrees that the protection of personal data shall be prescribed by law. This means that the protection of privacy is a basic right and the central provisions concerning the processing of personal data (the collection, use, secrecy and release of data) must be included in the laws requiring reading in the Parliament. Lower-level norms, such as decrees and official decisions, can only give rules and regulations clarifying the application of the laws.

3. The Personal Data Act requires that personal data shall be handled according to the law with care and good data processing practice. Good data processing practice means that the protection of data is given appropriate attention. The person handling personal data shall make use of all the necessary technical and organisational measures to protect personal data against illegal use. The nature of data shall be taken into consideration when specifying the required measures. Special attention shall be given to protecting sensitive information.

4. According to the Statistics Act (62/1994), the data obtained for statistical purposes are, as a rule, confidential. Data on the activities of the central and local government and data maintained in the Business Register by Statistics Finland form an exception to this rule. Confidential data may be

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released to a third party only for the purpose of statistical surveys and scientific research, as a rule, without identification data. Data on a person's age, gender, occupation and education may also be released with identification data for research purposes. The release of data for the purpose of administrative decision-making, or other similar purposes, is specifically forbidden.

5. The Statistics Act includes several provisions regarding the obligation to protect data. The Act stipulates that an authority producing statistics shall make sure that, at all stages of statistics production, the data are duly protected against unauthorised processing, use, destruction and alteration, as well as against theft. No person's privacy, or business or professional secret, shall be endangered during the processing, storage or destruction of the data. The Act also provides that data processing shall take into account the international recommendations and procedures generally applied in the field of statistics. When releasing data for scientific research, the statistical authority shall issue any orders necessary for the protection of the data. Violation of these orders shall be punishable under the Statistics Act and the Penal Code.

6. There are also several data protection orders concerning all State authorities. The decree on data management in public administration requires that the authorities' information systems meet the data protection criteria. According to the decisions of the Council of State on data security, the authorities should make and comply with an up-to-date data security plan for data processing, approved by the senior management. The management should also specify the internal organisation in charge of data security issues.

7. New, more binding and detailed legislation on data security measures is being prepared. A legislative proposal before the Parliament on the publicity and secrecy of data in the possession of authorities contains a detailed list of general data protection measures for confidential data. At present, the need for a general act on data security is also under discussion.

8. On the basis of the legislation mentioned above, Statistics Finland's Director General has confirmed several internal instructions for data protection, the most important being as follows:

- an instruction on granting permission to Statistics Finland's personnel for the use of confidential micro data,
- an instruction on granting permissions to outsiders for statistical and scientific research purposes,
- an instruction for the application of the Personal Data Act at Statistics Finland,
- a data protection instruction for the network environment,
- a data protection instruction for PC work.

9. There are also instructions for outsiders who apply for permission for scientific research purposes, specifying on what conditions the permission can be granted for the use of data for research purposes and how to proceed when applying for a permission. Application instructions and forms can be found on Statistics Finland's homepages in the Internet.

10. In order that data protection could be successfully implemented, it is required that the entire personnel are aware of and understand the basic ideology of data protection in official statistics. To this end, Statistics Finland has prepared an Ethical Guide for all its personnel, and this has proven a very effective instrument for understanding and internalising the principles of data protection.

III. ORGANISATIONAL SOLUTIONS

11. The principle of impartiality of official statistics requires that the statistical authorities themselves decide about the processing, use and release of the data obtained for statistical purposes. For example, Finland's Statistics Act excludes the possibility that some third party, such as a ministry, could make decisions about the access to confidential data for outsiders.

12. At Statistics Finland, the Director General decides on the general data protection measures concerning the whole of Statistics Finland, such as instructions to be issued and other matters of principle. Decision-making in individual cases is decentralised to the directors of the operational units who are responsible for the implementation at their own units of the data protection instructions confirmed by the Director General. To supplement the general instructions, the directors can also issue more detailed data protection instructions for their own unit. They grant permission to their employees and employees of other units for the use of confidential data and decide on granting permission to outside researchers for scientific research purposes. The Director General makes decisions on the release of data to foreign surveys and Eurostat.

13. An advantage of the decentralised decision-making system is that data protection issues are regarded as a natural aspect of the activities of the operational units and the responsibility for the decisions is borne where they are put into practice. The problem is primarily how to ensure the expertise required in the decision-making and the uniformity of decisions within the whole statistical office. Apart from instructions, the decentralised decision-making system also needs constant expert support. For this expert support, Statistics Finland has legal advisers well-versed in data protection legislation, data security experts and two expert bodies.

14. One of the expert bodies is an in-house data protection board comprising representatives of various operational units and lawyers. The purpose of the board is to issue, when necessary, statements to the directors of the operational units or the Director General on the following issues:

- fundamental matters relating to the application of data protection legislation
- the applicable ethical statistical principles,
- particularly important applications for permission to use data for scientific research purposes,
- applications for permission to use data for foreign research purposes or to release confidential data to Eurostat,
- procedures to be applied in extensive and sensitive data collection.

15. The statements made by the data protection board are not binding but, in practice, the Director General and the directors of the operational units make decisions in compliance with the statements of the board.

16. The other expert body is a data security group consisting of data security experts, legal advisers and representatives of the operational units. Its task is to control and monitor the implementation of data security and prepare measures for improving data security and maintaining it up-to-date. The data security group prepares instructions relating to data security.

17. The supervision of the whole data protection system is the responsibility of the Director General, the expert bodies and the internal auditor, in particular, who supervises the general legality and appropriateness of all activities.

IV. PRINCIPLES OF DATA PROTECTION

18. The practical basis for the protection of statistical data at Statistics Finland is the data protection classification. Its purpose is to classify statistical data material into different groups according to its confidentiality (sensitivity). The main classification principle is the sensitivity of the data from the viewpoint of personal integrity, the integrity of business enterprises or the safety of the country. The most important criterion is what the disclosure or misuse of the data might cause to the interests to be protected.

19. The data protection classification forms the basis for deciding or regulating what kinds of protection measures each data material requires.

V. DATA PROTECTION CLASSIFICATION

20. The data protection classes are as follows:

- (i) Data material with highly confidential data, data protection class 3.
- (ii) Data material with very confidential data, data protection class 2.
- (iii) Data material with confidential data, data protection class 1.
- (iv) Public data material.

21. Highly sensitive data² equipped with identification data and regulated by the Personal Data File Act belong to data protection class 3. This class also includes data files containing information which might endanger the safety of the country. In addition, extensive material containing several variables (e.g. census files) can be classified into this group. Material in data protection class 3 or part of it must not under any circumstances fall into the hands of outsiders.

22. Data protection class 2 includes data material which does not contain highly sensitive data, but in which units (persons, enterprises, etc.) are identifiable and which cannot be released outside the statistical office. The majority of Statistics Finland's micro data files belong to this class. Highly sensitive data from which identification data have been removed can also be classified into this group.

23. Data protection class 1 comprises data which can be released outside the statistical office, but their use is limited. The limitations concern, for example, the purpose for which the data material is to be used. The material is compiled from data belonging to the data protection classes defined above. The data are made unidentifiable by aggregating or removing the variables that would make unit identification possible. It should be noted that removing identification data is not often sufficient to prevent identification.

24. Public data, which can be released outside the statistical office without any data protection limitations, fall beyond these data protection measures.

25. The data protection classes are confirmed by the director of the respective operational unit, who, when required, can also give additional instructions concerning the protection of the material at the unit and oversees that the unit concerned operates in compliance with the instructions and orders relating to data protection.

VI. DATA PROTECTION MEASURES

26. The data protection measures are classified into three groups:

- (i) basic protection
- (ii) additional protection
- (iii) intensive protection

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- 1) racial or ethnic origin
- 2) social, political or religious convictions of a person
- 3) a criminal act, punishment or other sanction for an offence
- 4) health, illness or disability of a person or treatment or other comparable methods to which he/she has been subjected
- 5) the sexual behaviour of a person
- 6) social services, economic support, social assistance and related social welfare services received by a person

At least, the basic protection measures are applied to material belonging to any of the data protection classes, additional protection is applied to class 2 material in addition to the basic protection, and intensive protection is applied to class 3 material in addition to the above two measures.

27. **Basic protection** requires that data material and data processing equipment are stored in locked premises. The persons in charge of the statistical system are allowed to use the material. The director of the operational unit can also grant permission to other Statistics Finland's employees for a fixed term if they need these data for their work. The permission is given in writing. Statistics Finland recently revised its granting process for permissions and an application form for special permission for internal use was introduced at the same time. The form also specifies the conditions and restrictions of the permission. The length of the term was also defined more strictly. Special attention was also paid to ensuring that permission follows administrative events, i.e. when an employee leaves Statistics Finland, his/her permission will be cancelled. Technically, the permission is linked to the personal user code.

28. At the unit level, data can be released for external use only if the provisions specifically stipulate a right to release. The Statistics Act prescribes about the granting of permission to use Statistics Finland's micro data and specific permission directions are applied in granting them.

29. According to the Statistics Act, tasks relating to the production process of statistics may also be carried out by outside contractors. Data falling under the basic protection can also be commissioned to be processed outside Statistics Finland. In such cases, issues relating to data protection are recorded in the processing agreement. Only persons responsible for the software in the statistical system in question are authorised to alter the data material processing program.

30. All the basic protection measures described above apply to the material defined subject to **additional protection**. Material requiring additional protection must not, however, be released outside Statistics Finland unless the material is processed so that the possibility for identifying unit data is removed, in which case the material will fall under data protection class 3. A study of the material, undertaken on the premises of and supervised by Statistics Finland, can be allowed with a fixed-term special written permission. This applies to some cases of enterprise material, for example, where it is impossible to render unit level material unidentifiable by removing identification data in such a small country as Finland, where just a few companies are engaged in certain economic activities.

31. Material subject to **intensive protection** must be stored in locked premises which are supervised by assigned persons. In case the data are needed for compiling other statistics, employees of the operational unit responsible for the data make the compilation, or the director of the operational unit can grant a fixed-term and restricted permission to an employee of some other operational unit.

32. It is strictly forbidden to release material subject to intensive protection outside the statistical office. Data processing by an outside contractor should also be avoided. Where an outside contractor has to be used, data protection should be given particular attention in the processing agreement and the sufficiency of data protection arrangements should be ensured in practice, too. The microprocessing of material is allowed only if the identification data in the data medium are encrypted.

33. The director of the operational unit decides on the permission to use the material at the unit, considering the limitations imposed by the data protection class of the material. The operational unit must have an up-to-date list of the material and the persons authorised to use the material.

34. Internal auditing at Statistics Finland is assigned to a director at the Secretariat of the Director General. The matters to be audited are decided separately each year. In the latest audit, data protection

arrangements and especially procedures relating to permission and the compliance of the orders given on them were inspected. The above-mentioned revision of the internal permission procedures was implemented because of some procedural differences found between operational units in this audit.