

Distr.
GENERAL

CES/AC.71/2005/4
8 March 2005

ENGLISH ONLY

**UNITED NATIONS STATISTICAL COMMISSION and
ECONOMIC COMMISSION FOR EUROPE (ECE)
CONFERENCE OF EUROPEAN STATISTICIANS**

**EUROPEAN COMMISSION
STATISTICAL OFFICE OF THE
EUROPEAN COMMUNITIES (EUROSTAT)**

**ORGANIZATION FOR ECONOMIC
COOPERATION AND DEVELOPMENT (OECD)
STATISTICS DIRECTORATE**

Joint ECE/Eurostat/OECD Meeting on the Management of Statistical Information Systems (MSIS)
(Bratislava, Slovakia, 18-20 April 2005)

Topic (i): IT governance in statistical offices

PERFORMANCE MANAGEMENT AND IT GOVERNANCE AT STATISTICS FINLAND

Invited Paper

Submitted by Statistics Finland¹

I. SOME GENERAL FACTS ABOUT STATISTICS FINLAND

1. Statistics Finland operates administratively under the Ministry of Finance, but is fully and independently responsible for its activities, services and statistics. Statistics Finland has a staff of about 1,100, of whom 200 are employed as statistical interviewers. In addition to its head office in Helsinki, Statistics Finland has regional service offices in Turku, Tampere, Seinäjoki and Oulu.
2. The total funding available to Statistics Finland in the year 2003 was EUR 53.3 million, which was 2.4 per cent more than in the previous year. However, in real terms the amount of available funding contracted. Seventy-one per cent of the funding came as appropriations for operating expenses from the national budget. The remainder was made up by income from services subject to charge, funding from the EU and other joint projects, and savings from previous years. Revenues from operations subject to charge amounted to EUR 8.0 million, in other words 15 per cent of the total funding. Some key indicators are presented in Figure 1
3. The organization of Statistics Finland is a kind of matrix organization. It consists of vertical statistical units and horizontal supporting units. The organization is presented in Figure 2.

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Key indicators on Statistics Finland's operations 2002–2003

	2002	2003
	EUR 1,000	EUR 1,000
FINANCING	52,668	52,606
Appropriations for operating expenses	36,458	38,051
Appropriations carried forward from previous years	4,323	3,043
Revenue from operations subject to charge	8,114	8,057
External financing ¹⁾	3,756	3,450
Sale of movable property	17	5
EXPENSES	49,065	46,769
Transfer to the next year	3,043	5,418
Publication titles, number	142	138
Completed databases, number	164	163
HTML text pages on the Internet, number	29,800	34,600
Personnel, staff-years	941	886

¹⁾ External funding (incl. EU funding) actually used.

Figure 1: Key indicators on Statistic Finland operations 2002-2003

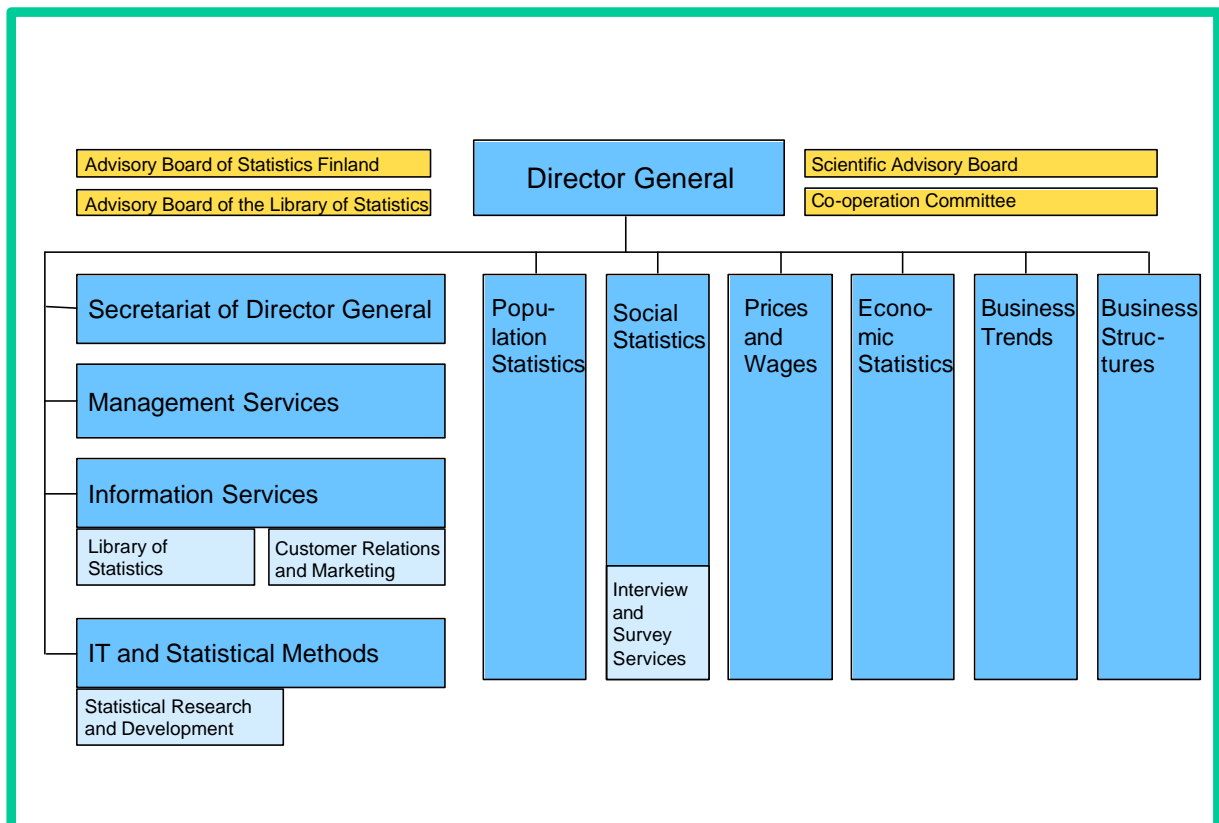


Figure 2: Organisation chart of Statistics Finland

4. The support functions are as follows:

Information Services	Management Services	IT and Statistical Methods	Secretariat of Director General
Public relations and translation services Service products Data on neighbouring regions Customer relations and marketing Library of Statistics	Financial administration Administrative and legal services Personnel development Facilities and materials management	Applications Mainframe Data entry Work stations Data care Communications ADP training Systems methodology Statistical methods Classification services	Strategies International Affairs Development of management and quality Development of official statistics Data administration Internal auditing

II. PERFORMANCE AGREEMENT BETWEEN THE MINISTRY OF FINANCE AND STATISTICS FINLAND

5. Annual budgets are based on the plans and financial frameworks for the next four years. The government ratifies the financial frameworks of its ministries annually for the next four years. The ministries then decide upon the corresponding financial frameworks for the agencies subordinate to them. The government's proposal for the annual state budget is based on these financial frameworks. The parliament ratifies the annual state budget.

6. The annual performance agreement between the Ministry of Finance and Statistics Finland is based on the strategic plan and annual budget. The budgetary period is one calendar year. The system of planning and budgeting covers both the activities financed out of tax revenues and those financed from fees paid by customers or from other income (net budgeting system). Funds granted may be used within the current year or the next. Implementation of the performance agreement is monitored at four-month intervals.

III. PERFORMANCE AGREEMENT BETWEEN THE DIRECTOR GENERAL AND THE DIRECTORS OF THE UNITS

7. All directors of units make their own performance agreement with the Director General of Statistics Finland. The annual agreement process is iterative: top-down and bottom-up. It is based on the performance and accounting report from the previous year, the annual state budget and the financial framework for the next four years.

8. At first the units make their proposals for the performance agreements for the next year and for the strategic plan and financial framework for the next four years. These are based on the preliminary frameworks given by the Director General. Prior to this management discussions take place about the general performance and accounting framework for the next year. Once the proposals have been made there is a management planning and consolidation seminar between all directors and important specialists.

9. When the performance agreement between the Ministry of Finance and Statistics Finland is signed (December), the Director General and the directors of the units sign the performance agreements of the units (December – January).

10 The content of the performance agreement for the year 2003 was as follows:

(a) **Public responsibility** - How to develop the relevance and quality of statistics (EU, others):

- How to develop public profile and good image;

- Contribution to international co-operation;
- Targets for co-ordination of official statistics.

(b) Customer satisfaction - Targets for information and marketing activities:

- Measures for marketing and customer relations.

(c) Resource efficiency - Projects to increase efficiency:

- Measures for increasing productivity;
- Profitability of chargeable services.

(d) Processes and structures Electronic data collection

- Production time of data
- Share of data in archives

(e) Intellectual resources Measures for implementing competence strategy

- Measures for improving personnel satisfaction
- Projects on research and statistical methods
- Self-assessment (light EFQM)

11. The directors of the units report about the actions of their units three times a year at four-month intervals to the Director General and other directors. The structure of the report is the same as that of the performance agreement. Particular emphasis is laid on reporting about problems and delays. At the same time the economic situation is also examined very carefully. The directors of the units give their reports in writing. The reports are gone through at follow-up meetings where all directors and some important specialists are present.

IV IT WORK AT STATISTICS FINLAND

12. The basic IT work is done at the Information Technology and Statistical Methods unit (IT unit), which has a total personnel of 129, of whom around 100 are true IT-professionals, and most of the rest methodological experts.

13. Figure 3 shows the organization chart of the IT unit; the numbers in the figure show how many people work in each sub-unit.

14. The areas of responsibility of the IT unit are: Application development and maintenance – Mainframe - Network – Servers - Data entry - Workstations - Data care – ADP training - Systems methodology - Statistical methods – Classifications and metadata.

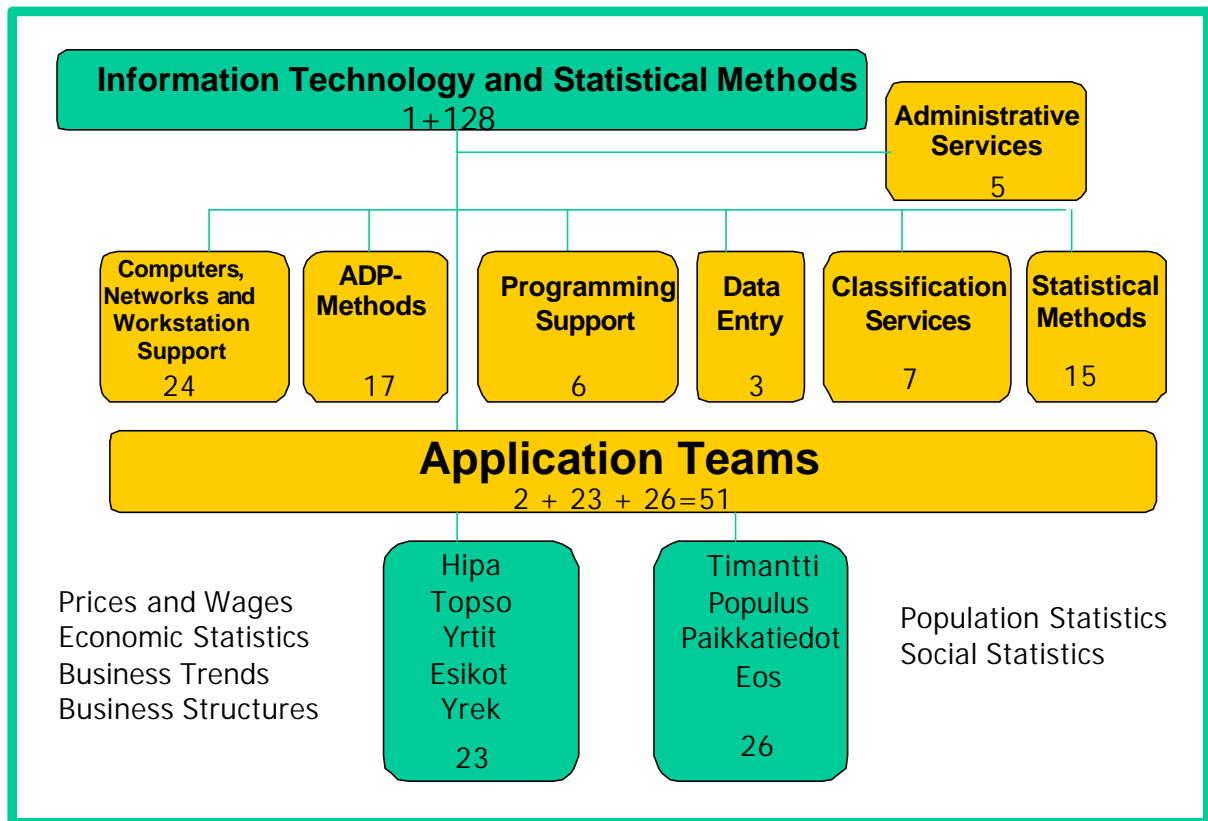


Figure 3: Organisation chart of the IT unit

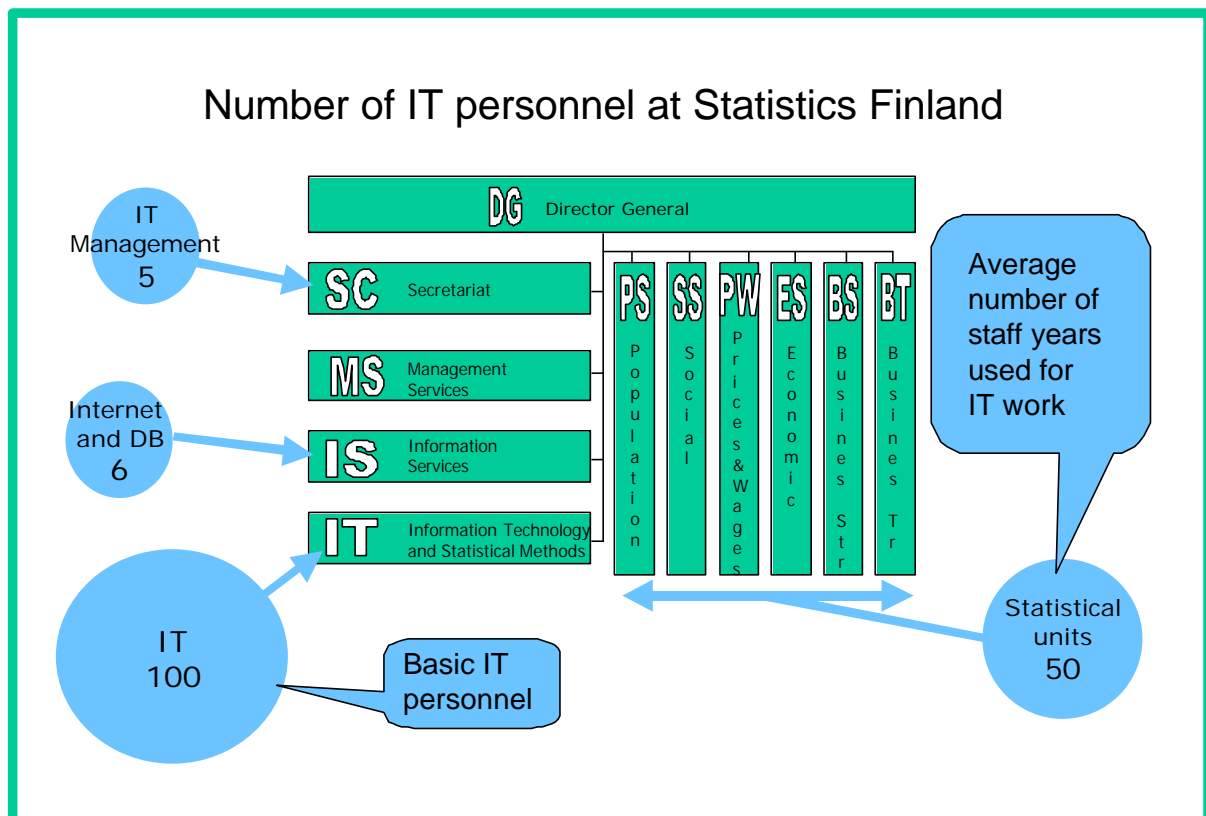


Figure 4: Number of IT personnel

15. IT work is not only done at the IT unit (see Figure 4). The statistical units have many employees doing IT-related work. In most cases the employees compiling and processing statistics use SAS software. The average number of staff years used for this kind of IT work is about 50.

16. The Information Services unit has about 6 employees working on Internet services and dissemination databases.

17. The IT Management unit of the Secretariat of the Director General is a sister unit of the IT unit, and has 5 IT –professionals working in it. They work very closely together with the staff of the IT unit. Among the tasks of the IT Management unit are the following:

- Managing the production model project;
- Keeping in contact with other governmental IT organizations;
- Preparing norms and guidelines regarding the use of IT;
- Monitoring compliance with IT standards;
- Taking care of the administrative data security while the IT unit is responsible for the technical data security.

18. In 2004, Statistics Finland's IT investments were EUR 0,8 million. About 40 per cent of the investments were used to purchase new workstations and the rest to acquire software programs, increase the capacity of open environment equipment and file system management tools.

19. In 2004, the IT unit spent EUR 5,6 million on staff expenses. Expenditure on IT infrastructure totalled EUR 1,6 million, comprising hardware and software licence fees and new investments (to purchase new workstations are not included to this numbers).

IV. FROM STRATEGY TO ACTION

A. Strategy planning at the agency level

20. The planning and execution of strategy are important elements of the management system of Statistics Finland. The starting point is the general, agency level strategy. If necessary it is updated once a year. The Secretariat of the Director General is responsible for the planning of the general, agency level strategy. Each unit also has its own strategy. The strategies of the units follow the same structure as the strategy of the whole of Statistics Finland. In addition to the unit level strategies, there are also functional strategies, such as communication strategy and network service strategy.

21. It is not enough to have a strategy, but the strategy also has to be put into action, which requires a plan for the execution of the strategy. One way of producing this execution plan is to set up a programme or list of actions for the deployment of the strategy. In addition to this, the person or organization responsible for each action has to be appointed.

22. The strategy planning of Statistics Finland is based on the balanced scorecard approach (Kaplan & Norton 1996). Figure 1 shows the critical success factors of Statistics Finland (or its strategic objectives).

23. The mission of Statistics Finland is:

Statistics Finland combines collected data with its expertise to produce statistics and information services for the needs of society, promotes the use of statistics and develops national official statistics;

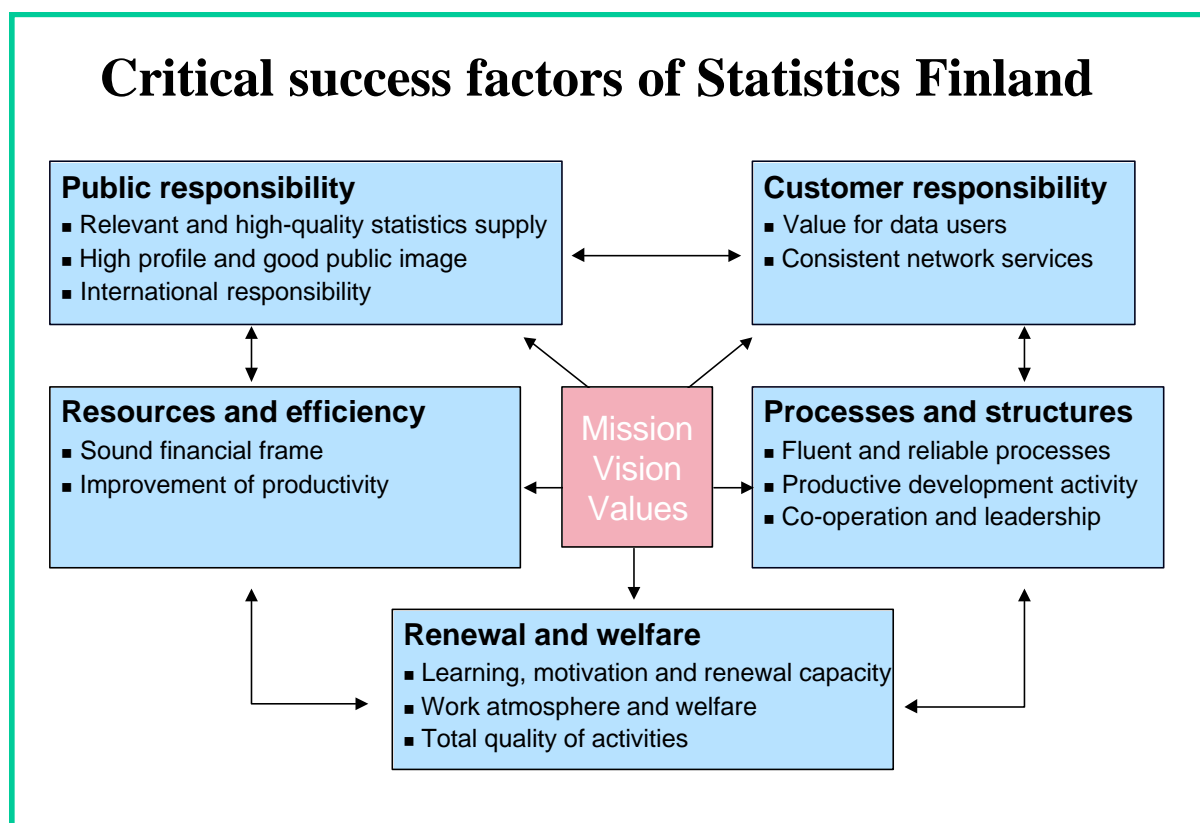


Figure 1: Strategic objectives of Statistics Finland

the vision of Statistics Finland is:

Statistics Finland is a top unit in its field, recognised nationally and internationally for its high-quality data production and expertise, and for its co-operative and service capacity;

and the values are:

Co-operation and mutual appreciation - Respect of the principles of statistical ethics - Innovativeness, continuous improvement of activity and know-how - Service orientation - Productiveness of activity.

24. The important actions connected with this strategic planning model are:

- Implementation of a New Production Model based on the Data Warehouse Approach and digitised production process;
- Customer relationship management;
- Development of web-based services;
- Quality and methodological improvements;
- Data security procedures;
- Introduction of new forms of learning (including e-learning);
- Project for the development of leadership and supervisory work;
- Improvements of internal communication (e.g. Intranet);
- Further implementation of the competence strategy.

25. From the IT point of view the new production model is the most important and interesting one. The work to develop a new production model started in 2002. The model is designed to support harmonization of production and integration of databases. Its central objectives are the introduction of data warehouse-based

thinking and creation of a consistent metadata system covering all production. In 2003, the project focused on analyses of the used hardware and methods, and acquisition of the Super-Star II software, which was introduced as the primary tabulation tool along with the SAS software. In 2004, this work was continued in same way. A major focus was on the development of an XML-based, multi-channel information dissemination environment. The work on the development of the production model continues and will span over a number of years.

26. Statistics Finland's target is to discontinue using the mainframe in its present form by the end of 2006 and abandon it completely by the end of 2009. At the end of 2004 we abandoned the mainframe database DATACOM and stopped using the SAS system in the mainframe environment. After this we have only very few PL/I-based data systems running in the mainframe environment, and a big mainframe-based data archive. The important question is what to do with this data archive after all other mainframe-based functions have ceased.

B. The strategy of the Information Technology and Statistical Methods Unit (IT unit)

27. The IT unit manages almost all tasks that are connected with the information technology of Statistics Finland. Like all the other units the IT unit makes a performance agreement with the Director General. Because the IT unit administers almost all IT expenditure, it draws up and updates an ITC expenditure plan for the coming four years in connection with its performance agreement.

28. The mission of the IT unit describes its IT duties:

The IT unit guarantees that at Statistics Finland: - applications function - classifications and concepts are in use - computers are running and PC support is near - data are secured, protected and in use - statistical methods are available;

the vision of the IT unit is:

The IT unit is a unit of IT professionals who are managed by coaching, it provides with its own excellence the necessary equipment/facilities for the excellence of Statistics Finland;

and the values of the IT unit are the same as those of the whole of Statistics Finland.

C. Know-how and IT

29. The IT unit has its own knowledge data system on the know-how of its IT staff. The contents of the system are updated once a year. Every IT employee updates his or her own data. After this, IT teams go together through the data of the team members. This way the contents of the system are not based on personal opinions only.

30. The core competence of the IT unit is IT-based know-how connected with the statistical production process. The basic strategic fields of its IT-based know-how are:

K1. General know-how:

1. Production model;
2. Metadata systems;
3. Archiving;
4. Project work;
5. Data security and protection.

K2. Software designing:

1. Software architecture;
2. Object-oriented programming;

3. Component-based programming;
4. Description techniques;
5. Programming testing.

- K3. Databases:
1. Database designing and modelling;
 2. SQL;
 3. Data warehouses.

- K4. Tools:
1. Visual Basic and Microsoft VB.net;
 2. PowerBuilder;
 3. SAS;
 4. SuperStar II.

- K5. Technologies:
1. XML;
 2. WWW;
 3. GIS.

D. The basic strategic goals of IT for 2004 – 2008

31. The basic goals are:
- Development of leadership and supervisory work;
 - Development towards a unit of IT professionals;
 - Development towards a learning organization;
 - Promotion and support of the production model work.
32. To fulfil these strategic goals the IT unit has a programme where the details and responsibilities of strategy are defined. Below is a list of the most important actions of the programme at the headline level:
- P1. To develop leadership and supervisory work at the IT unit:
1. Definition of the management model of the IT unit;
 2. Improvement of the work methods of the IT management team;
 3. Intensification of management training.
- P2. To develop the IT unit towards a unit of IT professionals:
1. Planning and starting training for a professional IT driving licence (like a professional car driving licence);
 2. Ensuring the needed special know-how;
 3. Promotion of systematic project work;
 4. Defining the roles of the IT professionals and statisticians, especially developing the rules on how the IT-system's updating are defined and done;
 5. Transferring "simple" IT work from the IT unit to the statistical units – this concerns especially tabulation by SuperStar or SAS;
 6. Developing and defining the activities subject to a charge of the IT unit.
- P3. To develop the IT unit towards a learning organization:
1. Securing the resources and abilities for training;
 2. Further development of the IT unit's own knowledge system;
 3. Setting up a plan of actions to train the mainframe staff for new tasks;
 4. Setting up a plan that takes into account the increasing rate of retiring among the IT unit's staff within next five years;
 5. Promotion of job rotation at the IT unit;

6. Finding the critical and vulnerable areas of the IT unit.
- P4. To promote and to support the production model work:
1. Training the IT staff systematically for the new things developed in the production model project;
 2. Participating in the production model work at all possible levels;
 3. Actively adopting the modes of operation developed and recommended in the production model project;
 4. Transferring the mode of operations and know-how about the production model to the statistical units.
