

Distr.  
GENERAL

CES/AC.71/2005/14  
4 February 2005

ENGLISH  
Original: RUSSIAN

UNITED NATIONS STATISTICAL  
COMMISSION AND ECONOMIC  
COMMISSION FOR EUROPE

EUROPEAN COMMISSION  
STATISTICAL OFFICE OF THE EUROPEAN  
COMMUNITIES (EUROSTAT)

CONFERENCE OF EUROPEAN  
STATISTICIANS

ORGANISATION 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 II: Development strategies for statistical information systems

**Information Technology Management - the National Statistical Service  
of the Republic of Armenia**

**Supporting paper**

**Submitted by the National Statistical Service of the Republic of Armenia\***

1. Information technology (IT) management must use all available financial resources to create an information system that responds to current needs and ensures optimum management of available information resources and staff to carry out both scheduled tasks and additional work involving all the subdivisions of the National Statistical Service of the Republic of Armenia (NSS RA).

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2. Efficient IT governance is possible only when there is a conceptual framework (strategy) for developing a statistical information system. The Conceptual Framework for the Development of a Unified Statistical Information System of NSS RA (USIS NSS RA) was prepared in close cooperation with various international organizations, Eurostat and the International Monetary Fund.
3. It should be noted that the strategy covers the basic areas for developing USIS NSS RA, leaving considerable freedom to choose the technology for carrying out specific tasks. The Conceptual Framework for the Development of USIS NSS RA, introduced in [1] was approved in 2003 by the State Council on Statistics of the Republic of Armenia [2].
4. IT governance is the management of staff and of projects (tasks) with a view to ensuring the timely provision of the information resources and qualified personnel needed for the successful completion of each project.
5. Types of projects (tasks) conducted by the IT sector:
  - Development of software;
  - Maintenance of earlier programmes;
  - Development of a network infrastructure in subdivisions of NSS RA;
  - Planning and expansion of the corporate network;
  - Administration of the network;
  - Electronic exchange of information with regional subdivisions;
  - Purchase and installation of the necessary computer technology;
  - Technical support for all subdivisions of NSS RA;
  - Administration of databases;
  - Storage of information on servers;
  - Introduction of new software packages;
  - Maintenance of the output of all NSS RA publications;
  - Maintenance and modernization of the NSS RA Internet web site ([www.armstat.am](http://www.armstat.am));
  - Maintenance of the NSS RA corporate web site;
  - Training of NSS RA staff;
  - Careful attention to Internet enquiries from users and respondents of statistical information.

6. Staff management should include:
  - Ongoing training in special courses, and certification of specialists;
  - Development of communication skills;
  - Creation of opportunities for self-study and personal growth;
  - Compilation of a “passport” for each specialist indicating his or her personal experience.
7. Project (task) management at all levels should include:
  - Planning and monitoring;
  - Results-based approach that respects deadlines;
  - When necessary, allocation of additional resources.
8. In NSS RA, the optimum distribution of resources is a particularly thorny problem since State funding for IT projects (for example, purchase of the necessary technology) is often cut back. Over the past two years, funding from international projects has been practically non-existent.
9. Bearing in mind the small number of IT sector specialists (11 in all), NSS RA adopts a flexible approach in organizing their work. Working groups that include IT sector specialists are established to carry out a variety of statistical tasks. Once the working group has completed its tasks, the specialists return to their work on the common tasks of the IT subdivisions.
10. Since the staff of the IT subdivision is so limited, it is important to ensure that specialists are interchangeable; this is particularly crucial when specialists are on leave, or when new staff are recruited. Unfortunately, we often lose highly qualified staff because of the low salaries in the State sector.
11. The need to decrease the time (or, to be precise, man-days) spent on IT sector tasks can be solved through the use of unification methods in software development, the creation of a unified base of catalogues and modules, and the placement of a library of technical tasks for software development on the corporate server [2].
12. The well-coordinated operation of IT subdivisions makes it possible for all NSS RA departments to work without interruptions or delays and to complete all tasks of both a statistical and administrative nature in a timely manner. The statistical information system should be organized with a view to ensuring the reliability of its primary servers so that technical malfunctions do not affect the system’s efficiency.

13. In view of the lack of funding for the IT sector, management in the construction of USIS in NSS RA is becoming extremely difficult. We need, where possible, assistance from international organizations to solve this problem, particularly in order to:

- Provide the regions with the necessary technology and build a corporate network;
- Create a centralized statistical data and metadata warehouse in NSS RA;
- Develop a statistical geographical information system in NSS RA.

14. The problems involved in the management of the IT sector of NSS RA include:

- Systematic lack of funding for IT projects;
- Shortage of staff in IT subdivisions because the Information System of NSS RA has significantly grown (expanded) in recent years;
- Shortage of highly qualified staff owing to a lack of funding for the organization special courses for IT sector specialists.

#### **Literature**

- [1] V. Davtyan. *Development of a unified system of statistical information - the National Statistical Service of the Republic of Armenia*, Geneva, 17-19 February 2003, CES/AC.71/2003/25.
- [2] V. Davtyan. *Statistical information system, USIS*. Geneva, 17-19 May 2004, WP.3.

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