

**Technical Audit of
the Informational System of the
Parliament of the Republic of Moldova
and
Analysis of Informational Processes and
Flows in
the Decision Making Process**

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This assessment was developed within the framework of the UNDP project „Strengthening the institutional capacity of the Parliament of the Republic of Moldova”. Opinions expressed therein do not necessarily reflect the official views and policies of the United Nations Development Programme.

1 Introduction

The present Survey has been conducted within the framework of the UNDP Moldova Project “Strengthening Institutional Capacity of the Parliament of Moldova” and represents an analysis of the ICT infrastructure (hardware, software, human resources) of the Parliament of Moldova. The report contains data on the existing ICT structure and recommendations on further actions for development.

Currently, in organizations and companies specialized in various fields of activity, IT has changed its role from an auxiliary element into a component, which has an impact on the efficiency of the whole organization. This is applicable to the legislative bodies as well.

For an efficient work of the legislative bodies, there is a need for informational systems which would function feasibly and would be developed in compliance with the general and specific requirements of the IT systems. Timely provision of the necessary information, management of documents’ flow and storage, efficient cooperation in the legislative field depend on the good operation of such informational systems.

The present survey aims at covering complete and objective information on the current situation of the ICT infrastructure of the Parliament of Moldova, including software and hardware, databases, local area network and Internet. This information will be used in planning the development direction of the ICT in order to obtain the most efficient results with minimum resources.

The methodology applied in the ICT infrastructure survey was based on the assessment of the available IT assets in the Parliament.

The level of IT-literacy was assessed based on questionnaires which were filled in by the employees and members of the Parliament. The results were later introduced in a database, structured and analyzed.

Informational flows were researched by means of interviews with employees of the Parliament participating in the decision making processes.

The survey was conducted in the period of December 2005 – March 2006. The present report reflects the situation of ICT of the Parliament of the Republic of Moldova during the above mentioned period.

2 Executive Summary

Within the current project, a survey of ICT assets used by the Parliament of the Republic of Moldova was conducted, information flow charts applicable to the process of legislative activity were drawn up, the use of IT in these processes was studied, the web-site of the Parliament was analyzed and a comparative analysis with web-sites of the Parliaments of other states was performed. A concept of the Parliament IT infrastructure (e-Parliament) development, which aims at increasing the efficiency of organization's work based on expanded use of IT assets, was drafted with the participation of the staff of UNDP and Parliament of Moldova. If IT is intensively used in the activity of the Parliament, the users will need a certain level of training, therefore, the assessment of skills of the staff and MPs in this field was also conducted.

2.1 The e-Parliament Concept

The concept of electronic Parliament (e-Parliament) is proposed as a benchmark for the development of information system of the Parliament of Moldova. This concept emerged and was developed in the conferences dedicated to ICT usage. The notion of e-Parliament involves an intensive use of technical and organizational means aimed at achieving the following objectives:

- § improve the activity of the Parliament and its structures
- § develop interaction between the society and the Parliament and between the society and MPs
- § increase transparency of the Parliament's activity for the society
- § involve society in Parliament's activity
- § increase society's trust in the Parliament

The development of IT oriented towards electronic Parliament will lead to a substantial increase in the efficiency of work of the staff and MPs, based on new means of searching, processing, structuring and presenting the information.

The use of **Intranet** technologies in the activity of the Parliament will lead to qualitative changes in the decision making processes, will give the opportunity to collectively process electronic documents in real time, thus reducing the waste of time for the production, coordination and editing of documents.

If the Internet is used and an appropriate level of security is ensured, the staff and MPs will be able to accomplish their tasks even when they have to work far from their working place, i.e. at home, hotel or any other place with Internet access. Apart from this, the electronic Parliament is open to the society and provides the citizens and organizations have an opportunity to involve in a more active cooperation with the Parliament.

2.2 Informational processes and flows

The working group held a number of meetings and discussions with representatives of the Parliament structures and conducted a detailed analysis of the Rules and procedures of the Parliament, draft regulations on the structures of the Administration of the Parliament, instructions on working with documents in the Parliament of the Republic of Moldova, instructions on conducting secretarial works related to petitions of individuals and legal entities addressed to state bodies, enterprises and organizations of the Republic of Moldova.

As a result, the operation of the Parliament was described through a set of defined processes which could, in their turn, be divided into sub-processes. The basic processes included the legislative procedure; the special procedure on adopting amendments to the Constitution; the voting procedure; petitions and audiences of individuals. The complex analysis of the set of identified processes proved that the other ones can be tracked down and described within the above mentioned basic processes.

It is necessary to mention that except for the Rules and Procedures of the Parliament, there are no other documents regulating the activity of the Administration of the Parliament and its structures. The lack of such documents leads to an ambiguous interpretation of the functions, obligations, methods of execution and relations between different parliamentary structures.

The votes are counted by the counters and, consequently, the procedure on announcing the vote results is delayed, affected by the human factor and, last but not least, the image of the Parliament suffers. Another aspect of voting by raising hands is the lack of a mechanism to keep the track of persons participating in the voting.

Another problem identified as a result of the analysis of functionality of the parliamentary structures is the lack of a common system of entry, registration and identification of documents addressed to the Parliament, committees, MPs, as well as of documents circulating inside the Parliament. As a result, it becomes difficult to check the status of a document.

All registers of the incoming/outgoing documents are maintained manually due to the lack of an automated system. The use of ICT instruments is very limited. For instance, in order to distribute a working document created electronically, a large number of hard copies have to be prepared. This leads to waste of time and materials, while in the case of an electronic dissemination of a document the distribution process would be cheaper and more efficient.

In this respect, the lack of a system to manage documents and work collectively on them should be also mentioned. The implementation of such a system would contribute to the efficiency of:

1. paper management;
2. contribution of different structures to the process of creation, collective work;
3. control over a version of a document under work and over each stage of its predefined life cycle;
4. editing and approval of a document; transparent control over document's status;
5. increased level of security and differentiated access to the document under work and to archived documents.

2.3 User ICT skills

The assessment of computer literacy of the Parliament staff demonstrated that at the moment their skills are not sufficient and it is necessary to undertake a number of actions in order to improve them. The precise level of IT skills of MPs could not be determined due to their extremely low participation in the testing process, i.e. out of 101 members; only 18 have submitted their responses to the test.

The main conclusion of the study on the ICT infrastructure of the Parliament of the Republic of Moldova is that this structure, in its current state, is not ready to be switched to the new, modern and efficient working methods by applying the existing informational technologies.

2.4 Informational system of the Parliament

During the analysis, it was found out that the level of automation of the main functional processes (e.g. legislative process, registration and control of the incoming and outgoing correspondence) is extremely low.

The use of informational systems is limited to the use of electronic basis of the legislative documents of the Republic of Moldova “MoldLex”/”Jurist”, a software for recording petitions (Petitions and Audiences Service) and accounting applications.

With regard to the use of operating systems and applications at the working places, one should mention the lack of record, standards and a common classification of the set of applications as well as an incomplete compliance with the requirements of the licensing policies of software producers.

The IT infrastructure of the Parliament of the Republic of Moldova is at initial stage of development. The IT concept, department regulations and IT development strategy are missing.

Currently, this infrastructure of the Parliament of the Republic of Moldova includes: 214 PCs of different models used as work stations, 4 PCs used as servers, 102 printers of different models and a local computing network.

At the moment of undertaking the analysis, the coverage with computers represented 72.5%, meaning that there were 214 PCs for 295 working places of the staff and MPs of the Republic of Moldova. At the same time, out of the total number of computers, some 22.5% were old models (48 PCs based on Pentium and Pentium II), 48% - computers based on Pentium IV processor and the remaining 29.5% were PCs based on Pentium III processor.

Some 33.2% of monitors were very old models with unsatisfactory technical specifications which do not correspond to the modern requirements on safe use. The share of liquid crystal displays monitors was 14.5%.

The access of staff and MPs of the Republic of Moldova to printing devices is also limited. Some 18.7% of PC users do not have standing access to printers.

The wire infrastructure of the local area network covers all the offices in the Parliament building where computers are or were installed, however it was built without respecting the appropriate standard requirements. Consequently, it is not possible to connect new work stations to the network without undertaking additional works to install new wires.

The supply with electrical energy does not correspond to the common acceptable standards as well. Computers and peripheral devices are connected to the common network, and separated groups of plugs and over-supply protection systems are missing.

Equipment which does not correspond to the requirements of this class of devices is used as servers. This equipment does not have, first of all, error tolerance and capacities to increase productivity.

The room where the server and the central communication equipment are installed needs to be finished as it does not correspond to the appropriate standards for a server's room. In particular, the requirements on supplying the room with electric power are not observed either are the fire protection, ventilation and air-conditioning standards; access control is also insufficient.

Such elements of the IT organization as backup copying and effective monitoring are also missing due to the lack of informational systems and databases which would ensure the main processes of the secretarial works of the Parliament.

There are no organizational or technical measures to ensure informational security.

2.5 Parliament web-site

Internet resources represent a tool for mass information of the citizens. Accessibility, availability and easiness to use Internet and services based on web technologies represent an advantage in informing the citizens. Due to these reasons, the presence of the Parliament of the Republic of Moldova on the Internet is an opportunity to improve its relations with the citizens of the country. The web-site of the Parliament can be used also to inform the internal users such as the staff and MPs as well as other state institutions.

A study on assessing the available resources was conducted aiming at improving the quality of the web-site of the Parliament of the Republic of Moldova. For this assessment, the most important criteria for a legal web-site were selected. These criteria included the Content, Organization, Navigation and Usage as well as Accessibility. Based on these criteria, a questionnaire was drafted (see *Annex 8. Outline of questionnaire for evaluation of web-sites*), based on which the evaluation of the web-site of the Parliament of the Republic of Moldova was conducted. This questionnaire was also used for a comparative evaluation of web-sites of the legislative bodies of other countries (Latvia, Ireland and Romania).

The outcomes of the survey have demonstrated that the presence of the Parliament of the Republic of Moldova on the Internet is unsatisfactory. Not all the documents and information produced by the Parliament are published and the life cycle of a document or draft law cannot be followed. The documents which are published on the web-site are not published in a portable format and most of the published documents are not complete. There is only limited information on the web-site of the Parliament regarding MPs, political parties and committees.

The presentation of the Parliament of the Republic of Moldova on the Internet has to be developed simultaneously with the development of web technologies.

2.6 Recommendations

The report ends with recommendations on building an advanced ICT infrastructure within the Parliament of the Republic of Moldova. These recommendations include the necessary actions for the development of the Concept on ICT usage, staff training in the field of computer use and associated technologies, development and optimization of the ICT infrastructure and intensification of using the existing ICT in the functional processes at all levels.

2.6.1 Organizational changes

For an efficient functioning of the IT systems in the Administration of the Parliament, it is recommended to establish a department to deal with the management of IT systems and to assume responsibilities for the operation and development of IT systems.

2.6.2 Informational flows and processes

For a clear definition of functions and responsibilities, optimization and increase in the efficiency of processes taking place in the Parliament, it is recommended to finalize and approve the Regulations on the Parliament's structures, which are currently being drafted. It is necessary to create and approve documents, procedures and policies related to the use of information, such as the regulations on informational security, policies and procedures on using electronic resources (e-mail, Internet, files, information of the local archive and of the Parliament etc.).

It is very important to implement a common system to manage and process documents which would lead to automation of identified processes, ensuring the collective work both internally and with other public administration institutions, non-governmental organizations and the civil society.

The implementation of an electronic voting system will lead to an increased efficiency of the voting process and better image of the Republic of Moldova.

The unification of the library resources of the Parliament in a single electronic library will provide an opportunity to render a large number of services such as the electronic catalogue, on-line subscriptions, public access to the catalogues and interlibrary exchanges.

2.6.3 ICT skills

It is recommended to undertake actions aimed at increasing the IT knowledge of users. Training on personal computer use should be organized for the staff of the Parliament. In addition, the staff responsible for operation of computer network should benefit from specialized training in the field of IT systems management.

2.6.4 Infrastructure

The available IT infrastructure of the Parliament of the Republic of Moldova needs substantial improvement. The quantity of personal computers and peripheral devices is insufficient. Most of the available equipment is morally and physically obsolete. The architecture of the local network does not correspond to the relevant standards and cannot ensure a satisfactory activity for an

intensive use of informational systems. The network's logical structure is in a primitive condition and does not allow for an efficient management of IT resources. It is recommended to adjust the local network to the relevant standards.

It is also recommended to undertake certain technical and organizational measures in order to ensure the informational security, particularly saving backup copies of data, organization of antivirus protection and operational monitoring of the network.

2.6.5 Parliament web-site

It is recommended to further develop the web-site of the Parliament of the Republic of Moldova using the functions of modern web technologies.

2.6.6 Evaluation of costs

An estimated evaluation of costs of the recommended actions is presented in section 9.7 of the current report.

2.6.7 Recommended actions

In order to ensure an intensive use of IT in the activity of the Parliament, it is recommended to undertake of the following actions:

- Equip the working places with computers and peripheral devices;
- Organize training courses to improve the IT knowledge of users;
- Organize domain-structures for the Parliament network and train the network administrators in the field of IT. Install domain-servers;
- Create an electronic system of documents flow;
- Adjust the local network to the relevant standards;
- Organize an effective monitoring of the network.