



Republic of Macedonia

Ministry of Justice

**STRATEGY
FOR JUSTICE INFORMATION COMMUNICATION TECHNOLOGY
2007 - 2010**

Skopje, July 2007

Title: IV Version of Justice ICT Strategy

QUALITY PROCEDURE

Title: IV Version of Justice ICT Strategy

Code: P.01.001.01 **Confidentiality:Restricted**

Document: Justice_ICT_Strategy_ver_4.doc

Software: Microsoft Word 2003

Version: 4.0 **Author:**Ministry of Justice

Date: 10.07.2007 **Authorised:**

CONTROL OF VERSION

Version	Date	Remarks
1.0	04.11.2006	Initial version
1.1	09.11.2006	Integrated comments and proposals
1.2	22.11.2006	Change of PKIKTP and PKIKTE, creation of a single SIKTP, introduction of 2 new projects: e-mail and Internet, and Justice Network
2.0	04.04.2007	Integrated changes and supplements to the Strategy proposed by the Ministry of Justice after the holding of the expert debate upon the First Draft-Version of the ICT Strategy
3.0	22.06.2007	Integrated changes and supplements to the Strategy proposed by the Ministry of Justice after the holding of the meeting of the Working Group on the Second Draft-Version of the ICT Strategy
4.0	12.07.2007	Integrated opinions and observations by all justice institutions, USAID, Legislation Secretariat, Ministry of Finance, minister without portfolio in charge of information society on the Third Draft-Version of the ICT Strategy

Comments:

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Acronyms:

RM	Republic of Macedonia
MoJ	Ministry of Justice
JS	Justice System
ICT	Information Communication Technology
EU	European Union
JCRM	Judicial Council of the Republic of Macedonia
PPO	Public Prosecutor's Office
PS	Penitentiary System
PPORM	Public Prosecutor's Office of the Republic of Macedonia
PI	Penitentiary Institutions
JIS	Judicial Information System
IT	Information Technology
IP	Internet Protocol
VPN	Virtual Private Network
WAN	Wide Area Network
LAN	Local Area Network
LDBIS	Legal Database Information System
CARDS	Aid Project by the European Union for regional development and stability
PHARE	European Union Aid Project for the development of Poland and Hungary
MPLS	Multiprotocol Layer for Commutation
HDSL	High Digital Subscribe Line
Kbps	Kilobytes per second - Measure for flow capacity
Mbps	Megabytes per second - Measure for flow capacity
EC	European Commission
DEX	Directorate for the Execution of Sanctions
EAR	European Agency for Reconstruction
PEP	Pre-accession Economic Programme
NDP	National Development Plan
USAID	United States of America Aid
DPK	Private consulting house from San Francisco
OSCE	Organisation for Security and Cooperation in Europe
SAI	State Administrative Inspectorate
UNDP	United Nations Development Programme

1 INTRODUCTION

1.1 WHAT THIS DOCUMENT REPRESENTS

This document represents the intentions of the Ministry of Justice (MoJ) and the other justice institutions within the framework of the justice system (JS) in the Republic of Macedonia for full implementation of information and communication technology (ICT) in the justice system in the period 2007-2010.

When analysing the existing situation, from an organisational aspect, the Working Group has defined the scope of work, whereby it has been concluded that the justice information system in the Republic of Macedonia encompasses 27 basic courts, 4 courts of appeals, the Administrative Court, and the Supreme Court of the Republic of Macedonia, 22 basic public prosecutor's offices, 3 higher prosecutor's offices, and the Public Prosecutor's Office of RM, as well as 13 penitentiary institutions of RM located in 40 separate facilities throughout the state. Within the frameworks of these institutions the justice staff needing ICT exceeds 3,600 employees.

The methodology being used in the determination of the strategic ICT development priorities of the JS is a methodology of comparison of the current situation and the future needs and perspectives, assessing the positive aspects (the advantages) and especially the negative ones (disadvantages) within the context of the future development (possibilities) and the possible future problems. The method of SWOT analysis was also used in the process of preparation of the "Strategy for the Reform of the Justice System" adopted by the Government in November 2004, as well as in the formulation of the "National Strategy and Action Plan for the Development of Information Society" of the Republic of Macedonia, adopted in June 2005 on which this Strategy is also based.

On the other hand, the Strategy in its entirety represents one of the national priorities of the Government of the Republic of Macedonia (as part of the NPAA), harmonised with both the Programme of the Government and with the Pre-accession Economic Programme (PEP) and National Development Plan (NDP).

The consistent adherence to the principles, methods, activities, and measures given in this document should bring about more efficient use of the ICT in Macedonian justice and support for the process of its comprehensive reform.

This strategy does not represent an initial effort of the justice in Macedonia to systematise the process of increase of efficacy by means of an intensive application of ICT. On the contrary, this document is based on all previous studies prepared by the Government of the Republic of Macedonia, Ministry of Justice, Supreme Court, and others, as well as consultations, technical

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assistance, and reports realised with the cooperation of the World Bank, the representatives from the European Commission, USAID, OSCE, and other international organisations. It considers all to date accomplishments in the field of modernisation and automatization of processes taking place in the justice institutions and takes as a starting point the existing level of interoperability and functional connection, which, as a matter of fact, is a starting ground for all further development activities. Moreover, this strategy, given the present, the requirements, and the real possibilities, faces the future and the ways how to come to it.

The strategy refers to the joint activities connected with ICT among the institutions in Macedonian justice and their cooperation, interoperability and coordination, while the individual competences and responsibilities for the creation and realisation of their own ICT and other strategies continue to remain with each justice institution individually in line with the positive legal regulations.

This document contains plans of a high and medium priority (short-term and mid-term objectives) for the development of ICT in the justice sector. It does not contain strategic determinations for the use of software, for the use of corresponding operational systems, databases, standards in ICT, and software with an open code”.

1.2 STRATEGY AIMS

The general aim of the Strategy is to establish and develop modern and automated justice in the Republic of Macedonia, in the direction of increasing the full efficacy of the system, based on ICT solutions and systems in line with European and international standards.

1.2.1 MAIN STRATEGY AIMS

The ICT Strategy is in the function of supporting the reform process of the justice system, notably in the segment of increasing justice efficacy. In that direction, specific determinations are:

1. Increase in the efficacy of justice, which implies introduction of new methods of work, transparency, and promptness of the court system;
2. Improvement in data protection and security;
3. Improvement in IT systems and communications security;
4. Definition and implementation of IT standards for backup and restore of the data having highest priority relevance;
5. Support in fighting corruption;

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6. Support in the efficient management with justice human and material resources;
7. Centralisation of the status of cases with a view to obtaining automated statistics that will depict the justice work;
8. Centralised and replicative nomenclatures with which uniformity in the IT work and the statistics will be enabled;
9. Electronic and more precise keeping of statistics;
10. Providing access to public information, legislation, case-law, and other information;
11. Gradual elimination of data storage on paper by replacing paper documents with electronic forms of data files, and
12. Backlog decrease and court cases flow management.

1.3 STRATEGY PRIORITIES

The practical implementation of the Strategy for the Justice ICT System, in principle, means support and reengineering of court proceedings as well as simplification of complex processes that last for a long period of time, real integration, access, and distribution of qualitative information through the court system and external entities, ensuring the necessary data and tools for analysis of the court process, ensuring management for control and maintenance of ICT systems (centrally and locally), as well as corresponding education and training of end users.

With a view to realising the main goals of this strategy, this document contains short-term and mid-term priorities and it encompasses all the aspects important for modern and efficient working environment in Macedonian justice:

- Communication, interoperability, creation, and exchange of information;
- Development of application solutions, aspiring to create unified standards and regulations for security and development of a complex integrated information system based on case management and document management systems that would be used in general practice in Macedonian justice;
- ICT infrastructure;
- Conditions for implementation;
- Legislation;
- Education.

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1.4 STRATEGY ACQUISITIONS

With the realisation of the activities noted in the Strategy, the justice system shall gain the following acquisitions:

- a) improvement of the quality of the decisions of justice authorities and decrease of the length of procedures;
- b) gradual elimination of data storage on paper by replacing paper documents with electronic data forms;
- c) simplification of complex court processes;
- d) support in redesigning court processes;
- e) standardisation of procedures, processes, and nomenclatures at central level as a whole;
- f) accessibility and distribution of public information;
- g) accessibility to legal regulation, case-law, and other information;
- h) fast access to legislation, case-law;
- i) real integration of ICT system in the justice sector;
- j) electronic, unified, and more precise statistics management in justice institutions for obtaining relevant results;
- k) support in the efficient management of the justice human and material resources;
- l) improvement of data protection and security;
- m) development and implementation of control and maintenance management; and
- n) regular and appropriate education and training.

1.5 STRATEGY PURPOSE

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The strategy is earmarked for several different types of users. Its basic purpose is to be a kind of a guide and a direction according to which will act the decision-makers in Macedonian justice, as well as those working in the justice system in the field of ICT. This group of users have a goal to lay down the foundations for undertaking direct concrete measures and activities, such as: programmes, projects, activities, and anticipated results from the field of application of ICT according to priorities determined by the needs that are constantly on the rise in the process of reform of Macedonian justice.

The second group of users are those officials from the institutions of the Republic of Macedonia who have a role in the process of the Republic of Macedonia gaining the status of a full member of the EU and NATO. With the signing of the Stabilisation and Association Agreement with the European Union in March 2004, the announcement of the compulsory standards in view of the functioning of the democratic institutions and the state of law contained in the Copenhagen criteria for EU membership, as well as with the acquisition of the Republic of Macedonia with the status of a candidate country for EU membership in December 2005, this strategy shall assist in the direction of further harmonisation of the Macedonian justice system with that of the EU also from the aspect of ICT implementation. To that aim, this document takes into consideration the strategic EU documents on ICT, such as the new strategy for the development of information society and implementation of ICT in the EU named "i2010 - European Information Society for Growth and Employment" announced by the European Commission on 1 June 2005, and others. On the other hand, the Strategy is compatible with the EU priorities and national priorities of the Republic of Macedonia, defined in the Priorities and the Programme of the Government of the Republic of Macedonia.

The third group of users are the international institutions, such as the European Commission and its instruments of assistance, the diplomatic-consular missions of other states in the Republic of Macedonia and other institutions (USAID, OSCE, the World Bank, and others) which have defined support in their plans for the reform process of Macedonian justice system, notably those that plan technical and/or financial assistance in the field of support for intensive ICT implementation in all domains of Macedonian justice.

2 THE JUSTICE SYSTEM IN THE REPUBLIC OF MACEDONIA

2.1 ORGANISATION OF THE JUSTICE SYSTEM IN RM

The justice system of the Republic of Macedonia consists of the following stakeholders:

- the Ministry of Justice;
- the Judicial Council of the Republic of Macedonia;
- the courts;
- the public prosecutor's office;
- DES/PI;
- the Academy of Judges and Public Prosecutors;
- the notary profession;
- the executors;
- the bar profession; and
- the mediators.

The Ministry of Justice - performs the functions relating to the judiciary, the public prosecutor's office, the public legal office, the state administration, and many other issues defined by law.

Within the MoJ what has been created is a Sector for ICT (**information communication technologies**) within the frameworks of which will function the newly established Centre for Information Technology. The most important function of the Sector for ICT is the unifying-centralising function in the justice system which will ensure the same nomenclatures and compatible statistics that will depict the work in the justice system, will make a link with the other segments of the executive branch and through it with the international institutions. It will contribute to the justice system becoming more transparent and with diverse web devices to be closer to the citizens of the Republic of Macedonia.

The Judicial Council of the Republic of Macedonia is an autonomous and independent body of the judiciary that ensures and guarantees the autonomy and independence of the judicial branch. Its basic competence is the election and discharge of judges.

The judicial branch is exercised by the **basic courts, courts of appeals, the Administrative Court, and the Supreme Court of the Republic of Macedonia, in accordance with the**

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Constitution. Currently the judicial office is carried out by 629 judges. In all the courts 1,811 civil servants and 330 public servants are employed.

The Supreme Court of the Republic of Macedonia is the highest court in the state which ensures the unity in the implementation of the laws by the courts. It is competent to decide in the second and third instance when it is defined by law, decides on the conflict of competence in the cases defined by law, and decides on the request of parties and other participants in the procedure on a violation of the right to a trial within a reasonable time, in a procedure defined by law.

The courts of appeal - are second instance courts. They are competent to decide on the appeals against the decisions of the basic courts. Currently there are 4 courts of appeals: Skopje, Stip, Bitola and Gostivar. The Court of Appeals in Gostivar is in a stage of establishment pursuant to the Decision of the Judicial Council of 07.05.2007.

In RM there are 27 **basic courts**. They are established as courts with basic competence and courts with extended competence. In 5 basic courts are set up specialised court divisions competent to try offences from the field of organised crime. The Basic Court Skopje I is established as a solely criminal court, while the Basic Court Skopje II as a solely civil court.

The Administrative Court of the Republic of Macedonia - in administrative disputes shall decide on the legality of the acts of bodies of state administration, the Government, other state authorities, the municipalities and the City of Skopje, organisations defined by law, and of legal and other entities in the performance of public mandates, when deciding on the rights and obligations in individual administrative matters, as well as on the acts adopted in the minor offence procedure. The Administrative Court is under establishment pursuant to the Decision of the **Judicial Council of 07.05.2007**.

The Public Prosecutor's Office - is a single and autonomous state body prosecuting the perpetrators of criminal and other legally defined punishable offences. The function of the public prosecution is carried out by the Public Prosecutor of the Republic of Macedonia and the public prosecutors. Under the existing law 22 basic public prosecutor's offices and 3 higher public prosecutor's offices are set up for the areas of the first instance courts. With the new **Law on the Council of Public Prosecutors** it is envisaged to reinforce the autonomy of the public prosecution through redefinition of the system for the election and discharge of public prosecutors. Together with this law as a roundup of the Strategy for Reform of the Court system of 2004, it is envisaged that the new Law on the Public Prosecutor's Office promote the position of the public prosecutor in the criminal justice system. It is particularly important to note that the opinions, suggestions and observations obtained from the CARDS 2005 Twinning Project of the European Commission and the Italian Government, as well as from the Venice Commission have been integrated into the law whereby its content has been significantly improved.

The Academy for the Training of Judges and Prosecutors as a public institution carries out selection, organisation and implementation of initial training of the candidates for judges and prosecutors in the basic courts, that is, basic public prosecutor's offices and a constant

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professional advancement of judges and public prosecutors and court and public prosecution clerks. The Academy is fully functional - what has been provided is spacial housing, equipment and budget.

The notary profession is an autonomous, professional, unbiased and independent service carrying out tasks of public mandates on the basis of a law. Currently 130 notaries carry out the jobs from the field of notary profession.

Executors are the persons having public mandates defined by law and undertaking actions in order to have the executive decision enforced. Until now 41 executors have been appointed who began their work on 26 May 2006.

The bar profession is an autonomous and independent public service which only provides and renders legal assistance to natural and legal persons in the exercise and protection of their rights and legally based interests in procedures before courts, state authorities and other legal entities.

Mediators are natural persons assisting the parties to reach an agreement, without the right to impose a solution to the dispute, in accordance with the principles of mediation. In 2006, 60 mediators were appointed. The undertaking of these activities is expected to stimulate the extra-judicial resolution of disputes, whereby the courts would be unburdened from a significant number of cases.

The **penitentiary system** in the Republic of Macedonia is set in certain horizontal and vertical link, as a single and complete system of penitentiary institutions. The tasks for the execution of sanctions are within the competence of the **Directorate for the Execution of Sanctions**. The prison term and the correctional-educational measure sending to a house of correction is carried out in the 8 penal, that is, 2 correctional institutions, in which a total of 509 persons are employed. The adaptation of the second wing of the penitentiary institution Idrizovo has been completed and an appropriate room has been provided for the housing of the **Training Centre for the Training of the Employees in the Penitentiary Institutions**. Draft-Projects for the adaptation of the penitentiary institutions Stip and Kumanovo have been prepared.

3 GENERAL ANALYSIS AND ASSESSMENT OF THE CURRENT SITUATION

3.1 CURRENT SITUATION IN THE JUSTICE INSTITUTIONS IN RM

The current ICT organisation in the justice system was not completely adequate and fully coordinated from the aspect of projects and technical approaches. That is due first of all to the insufficient number of ICT personnel in the justice system, but that problem will be overcome with the establishment of the Sector for Information and Communication Technologies within the Ministry of Justice and the employment of expert and competent personnel in 2007, with continuous communication with representatives of the working groups with all justice institutions.

Several projects were conducted in the past years. Thereby, their practical implementation causes objective extension of the period for the creation of an integrated justice ICT environment. The absence of a more organised structure causes the existence of risks, such as:

- the multiple development and implementation of the projects for the computerisation of same processes and functions generates a need to engage increased human and financial resources;
- the lack of plans at user level results in non-standard and different way of execution of one and the same functions. This causes major problems in the maintenance, which is reflected the most in view of the efficacy of the functioning;
- the lack of clear organisation and division of ICT roles and responsibilities in Macedonian justice led to insufficient interoperability and cooperation of different institutions, as well as to impossibility to share experiences and resources.

With a view to overcoming all these risks a new ICT organisation in the Ministry of Justice and all justice institutions has been proposed.

In line with the provisions of the Law on the Courts and on the basis of the books of rules for the systematisation of the jobs in the courts of the Republic of Macedonia a need arose to fully fill in the envisaged jobs for computer experts, as well as to provide additional financial means for their continued education.

On the other hand, there is no ICT sector within the structures of the public prosecutor's offices, and there are no employed computer experts, except that the systematisation envisages to have an advisor - computer expert, so the new Law on the Public Prosecutor's Office is expected to set up a special sector for ICT with provided financial means for its optimal functioning.

It is envisaged that the Judicial Council of RM have an ICT division with one advisor-analyst and one junior associate.

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The Academy for the Training of Judges and Public Prosecutors has a Division for Information with 1 employed head of division, and according to the Book of Rules for the systematisation of the jobs it is required to have an advisor and a junior associate.

The global problem of lack of appropriate ICT personnel in the justice sector will be completed with the systematisation of the jobs in the penitentiary institutions in RM and in the Directorate for the Execution of Sanctions within the Ministry of Justice.

3.1.1 CURRENT SITUATION WITHIN THE MINISTRY OF JUSTICE

Under Article 99 of the Law on the Courts ("Official Gazette of the Republic of Macedonia", no.58/06 of 11.05.2006), a single information centre is established within the Ministry of Justice with a database for all justice authorities.

The Ministry of Justice provides for the setup, maintenance, and functioning of the information system on a single methodological and technological basis.

The Information Centre is organised with a Sector for ICT and performs the tasks from the sphere of competence of the Ministry of Justice, which are related to the information technology.

The tasks in the Sector (ICT Centre for the Ministry of Justice) will be carried out through:

- Development and Application Support Division;
- Technical Support Division.

In view of the hardware equipment it is emphasised that the following equipment has been installed in the Ministry of Justice:

- Independent local area network (LAN) in the buildings of the Ministry of Justice/IT Centre of the Ministry of Justice of RM;
- 3 servers / 10 servers;
- 80 working stations / 20 working stations;
- 50 local printers / 10 local printers;
- 6 network printers / 5 network printers;
- IP VPN network (WAN connection) has been installed between the buildings of the Ministry of Justice.

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3.1.2 CURRENT SITUATION IN THE COURTS IN THE REPUBLIC OF MACEDONIA

Under Article 99 of the Law on the Courts, paragraphs (1), (2) and (3) ('Official Gazette of the Republic of Macedonia', no.58/06 of 11.05.2006):

- (1) A Centre for Information with database for the Court Information System shall be set up in the Supreme Court of the Republic of Macedonia.
- (2) The courts shall have services for information, as separate organisational units.
- (3) The President of the court, or a judge appointed by him/her shall manage with the Centre, that is, the service for information.

Since 2000 with the technical and financial support of the Budget of the Republic of Macedonia and the donors such as the European Commission, the World Bank, USAID and other, has begun the modernisation and automation of the justice system in Macedonia with development and implementation of ICT solutions and systems. This should bring about significant improvements of the efficacy of the judiciary and the justice system as a whole. However, these ICT systems, despite the several realised programmes and projects, have not been accepted to a great extent by the judges and administrative workers in order to build them in and integrate them into their daily work.

That is the situation also with the application solution for the minor offence procedure, realised in 6 pilot-basic courts, within the PHARE 1999 Programme, which despite the full installation of the application solution noted in the rest of the 21 basic courts (activity conducted within the PHARE 2000 Project), has been differently accepted in some courts, so there are courts which still do not use the software application noted.

The Judicial Information System (JIS) which was designed and implemented within the frameworks of the PHARE 2000 Programme in several stages, despite the full installation to all servers/working stations in all the courts in RM, has not been practically implemented yet in practice and is optimally used only in the Basic Court Skopje I, the Court of Appeals in Skopje, the Supreme Court of the Republic of Macedonia, as well as in the Basic Court Kriva Palanka and the Basic Court Ohrid. It is underlined that despite the carried out training for more than 1,600 employees in all the courts in RM (activity within the frameworks of PHARE 2000) what is required is additional training for the administrative personnel, expert associates, judges and other users for the purposes of its optimal usage.

The so far practical use of the JIS application has demonstrated that its to date performance has been facing some functional lacks and they need to be upgraded within the frameworks of the future project activities connected with the upgrade of the application software in the justice sector in the Republic of Macedonia.

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As to the hardware equipment, it is stressed that the following equipment has been installed in the courts in RM:

- 31 local area network (LAN) in all the court buildings in RM;
- 70 servers;
- 1,800 working stations;
- 700 local printers;
- 200 network printers;
- IP VNP network (WAN connection) has been established between all court institutions in RM.

Depending on the donor programme and the time of procurement it is emphasised that in the so far procurement over 60% of the total requirements have been met and that over 80% of the procured and installed hardware equipment is already relatively obsolete and worn-out (being used over 5 years) and in line with the implementation of the world standards regular and continued replacement of the same with new and up-to-date configuration is required.

3.1.3 CURRENT SITUATION IN THE PUBLIC PROSECUTOR'S OFFICES IN THE REPUBLIC OF MACEDONIA

Through the realisation of the activities within the PHARE 2000 Programme, in 2004, a special pilot-software application was made for the Basic Public Prosecutor's Office - Skopje, the Higher Public Prosecutor's Office - Skopje and the Public Prosecutor's Office of the Republic of Macedonia. It was installed in the institutions noted and concomitantly a training of the employees for its use was conducted. On the other hand, training for the basic computer skills of the employees in the public prosecutor's offices was conducted.

In view of the hardware equipment it is stressed that the following equipment has been installed in the public prosecutor's offices in RM:

- 26 local area network (LAN) in all the buildings of the public prosecutor's offices in RM;
- 3 servers;
- 280 working stations;
- 80 local printers;
- 20 network printers;
- IP VPN network (WAN connection) has been established between all public prosecutor's offices in RM.

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Depending on the donor programme and the time of procurement it is emphasised that in the so far procurement over 90% of the total requirements have been met and that over 80% of the procured and installed hardware equipment is already obsolete and worn-out (being used over 5 years) and in line with the implementation of the world standards regular and continued replacement of the same with new and up-to-date configuration is required.

3.1.4 CURRENT SITUATION IN DES/PI IN THE REPUBLIC OF MACEDONIA

Through the realisation of the activities within the PHARE 2000 Programme, in 2004, a special pilot-software application was made for the Stip Prison with the Open Division in Strumica. It was installed in the institution noted and concomitantly training of the employees for its use was conducted. On the other hand, training for the basic computer skills of the employees in the penitentiary institutions was conducted.

In view of the hardware equipment it is stressed that the following equipment has been installed in the penitentiary institutions (DES/PI):

- 13 local area network (LAN) in all the buildings-prisons in RM;
- 9 servers;
- 110 working stations;
- 40 local printers;
- 13 network printers;
- IP VPN network (WAN connection) has been established between all penitentiary institutions in RM.

Depending on the donor programme and the time of procurement it is emphasised that in the so far procurement over 90% of the total requirements have been met and that over 80% of the procured and installed hardware equipment is already obsolete and worn-out (being used over 5 years) and in line with the implementation of the world standards regular and continued replacement of the same with new and up-to-date configurations is required.

3.1.5 CURRENT SITUATION IN THE JUDICIAL COUNCIL OF THE REPUBLIC OF MACEDONIA

Through the realisation of the activities within the PHARE 2000 Programme, in 2004, a special pilot-software application was made for the Republican Judicial Council. It was installed in the

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institution noted and concomitantly training of the employees for its use was conducted. On the other hand, training for the basic computer skills of the employees in the Republican Judicial Council was conducted.

In view of the hardware equipment it is stressed that the following equipment has been installed in the Republican Judicial Council:

- local area network (LAN);
- 3 servers;
- 30 working stations;
- 30 local printers;
- 5 network printers;
- IP VPN network (WAN connection) has been established with possible communication with the courts in the Republic of Macedonia.

Depending on the donor programme and the time of procurement it is emphasised that in the so far procurement the total requirements have been met and that over 80% of the procured and installed hardware equipment is already obsolete and worn-out (being used over 5 years) and in line with the implementation of the world standards regular and continued replacement of this equipment with new and up-to-date configurations is required.

3.2 REALISED ICT PROJECTS

3.2.1 PROGRAMME: PHARE 2000 - Technical assistance for the reform of the court system and court administration (3 stages)

With the realisation of the PHARE 2000 Programme, in January 2005, were realised the activities connected with the implementation of the justice information system, as follows:

- achieving greater functionality of the application software for the courts in Skopje;
- installation, parameterisation, and configuration of the application software (JIS) in all the courts in the Republic of Macedonia, as well as training of the end users (conducted training for the basic computer skills for over 2,400 end users and for the use of software applications in the courts for over 1,600 employees in the courts);
- installation, parameterisation, and configuration of the application software in the divisions for the minor offences procedure in the rest of the 21 basic courts in the Republic of Macedonia, as well as training of the end users (for over 500 employees in the basic courts);

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- making of new pilot-application software solutions for the Basic Public Prosecutor's Office Skopje, Higher Public Prosecutor's Office Skopje and the Public Prosecutor's Office of the Republic of Macedonia, as well as training of the end users (for over 500 employees in the prosecutor's offices noted);
- making of new pilot-application software solutions for the Penitentiary Institution Stip with the Open Division in Strumica, as well as training of the end users (for over 500 employees in the prison noted);
- making of new pilot-application software solutions for the Judicial Council of the Republic of Macedonia, as well as training for their use in the institution noted (30 employees).

Also, within the frameworks of the project noted, with the successful realisation of the procurement, distribution, and installation of hardware equipment in the justice institutions 60% of the total requirements of the courts for the procurement of hardware equipment has been met.

3.2.2 PROGRAMME: CARDS 2003 - Technical assistance for the reform of the court system and court administration

This project has ensured the continuous upgrade and functional completion of the PHARE 2000 Project, and with a view to completing the entire process of computerisation in the justice authorities in the Republic of Macedonia.

With the Project what has been realised is technical assistance and procurement of equipment in the following areas: IT policy, project management capacity, system development and implementation, training for systems. Practically the final objective was realised, which is: support for the Republic of Macedonia in combating crime and the reinforcement of the rule of law; improvement of the administrative procedures in justice institutions; improvement of the capacity to act upon the cases in the courts; establishment and development of sustainable capacity for acting upon the cases in the Ministry of Justice.

The entire project was developed in several components with their own sub-components:

- A) procurement, distribution, and installation of hardware equipment for the justice institutions;**
- B) Support for the establishment of a modern ICT in the Ministry of Justice and support for the other justice institutions:**
 - procurement, distribution, and installation of hardware equipment;
 - creating WAN - IP/VPN (broadband virtual private network for the justice system.

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The component for the establishment of a broadband network (WAN) for the justice system implies realisation of interconnection of 56 locations-institutions from the justice system by using a database IP MPLS network.

The WAN-IP/VPN network is put into operation only in the judiciary, while in the other justice institutions it is not functional yet. With a view to achieving full functionality in the other justice institutions as well, the Ministry of Justice has been making continuous efforts both in personnel manning with professional ICT cadres, and with projections for future direct training of the end users.

- Technical solution of the WAN-IP/VPN network

The technical solution is based on the use of the public telecommunications infrastructure for the creation of a private corporative network. The physical network has been established on the IP MPLS public telecommunications infrastructure of the Macedonian Telecommunications with the use of the following hardware devices:

- Cisco2801 and Cisco1841 routers; and
- Cisco Catalyst 2950-24 LAN switches, depending on the institution.

Communications and physical connections with the basic network of MacTel are realised by using HDSL modems that are owned and maintained by MacTel, and for the use of which a contract was concluded within the frameworks of the project for a period of 3 years. Full interoperability of the network and its optimal use is expected in the period noted.

- Advantages of the WAN-IP/VPN network

- a) The established WAN connection enables optimal transfer of data structures via IP MPLS network which is due to the TCP/IP-oriented applications.
- b) Creation of encrypted tunnels through the public network infrastructure, in order to enable protection of the transfer of data or transactions or other classified data.
- c) Quality and accessibility of the service.

- Arrangement of network equipment and minimal speeds

The interconnection is realised with IP/VPN communication, using the IP MPLS infrastructure. The data transfer speed via the network with this technology ranges from 64 Kbps to 512 Kbps.

- Principled scheme of the physical network

All institutions of the Macedonian justice are physically connected to the geographically closest location by the use of a router from the central network (IP Backbone) of

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Macedonian Telecommunications with the help of a HDSL modem and transfer systems of MT.

- The physical structure of the network is as described in Figure 2.

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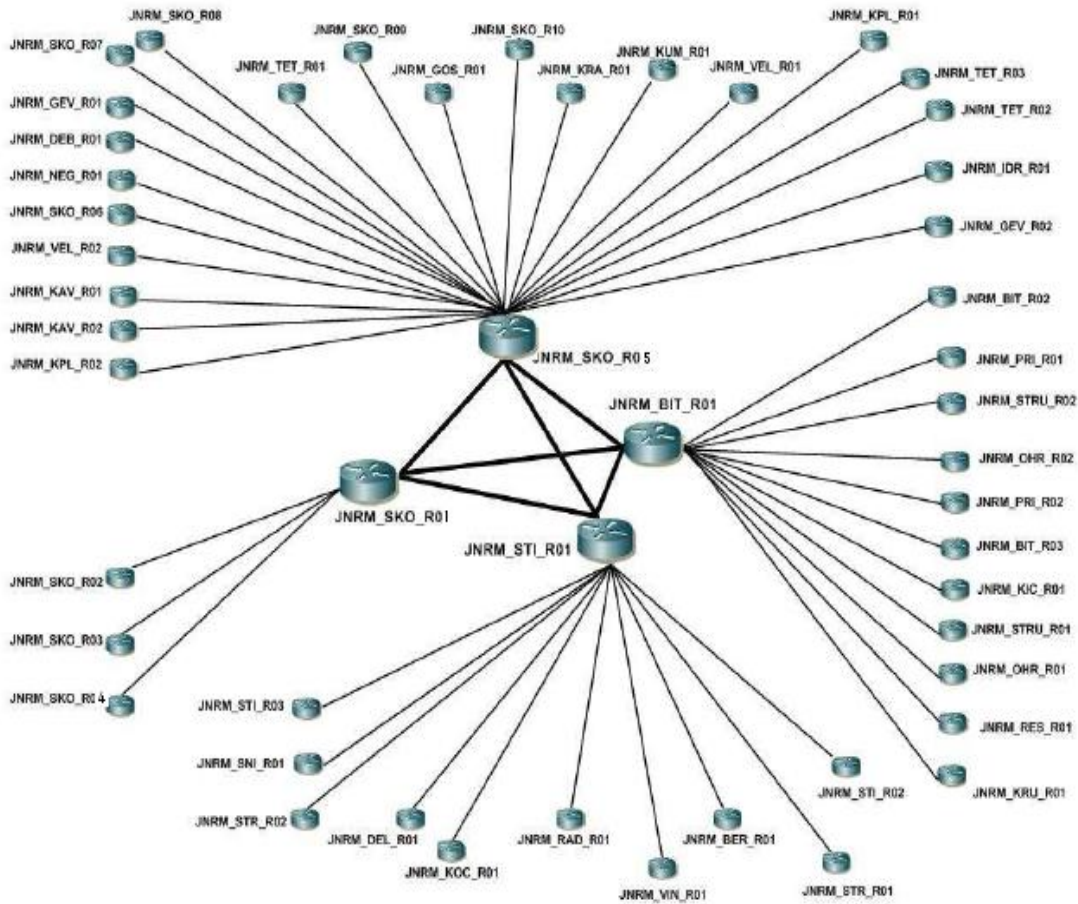


Figure 2. - Principled scheme of the physical network

Logical design of the WAN - IP/VPN network

The logical design of the network is based on 2 main characteristics: 1) the geographic location of the institution; and 2) the functions of the institution. There are 4 hub&spoke VPNs in the first level distributed according to the geographic location - 2 VPNs with hubs in Skopje, VPN with a hub in Bitola and VPN with a hub in Stip, and this distribution has been made with a view to optimising the routing and the traffic flow.

At the second level all the 4 hubs are connected in a fully networked VPN, which enables communication among all the points that are part of the different VPNs.

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C) Implementation of the justice information system**- Development and implementation of legal database information system (LDBIS)**

The realisation of the project implies development, documentation, implementation, and training for WAN and LAN version (CD-ROM) of the legal database information system (LDBIS).

The LDBIS has not been fully implemented, but at the moment a software application has been developed and it is necessary through future projects activities to load the database and to implement it in the IT Centre in the Ministry of Justice and in the IT Centre in the Supreme Court.

The LDBIS enables:

- access to the existing legislation; and
- optimal access to the relevant precedent law.

The LDBIS contains:

- Legal regulation:

- ◇ Constitution of RM;
- ◇ international treaties and conventions ratified by RM;
- ◇ laws and regulations of RM published in the "Official Gazette of RM";
- ◇ archive of non-active laws of at least 2 years prior to the beginning of the work of the system;

- Precedented law:

- ◇ key precedented law selected by the EC Justice Department;
- ◇ precedented law connected with the European Convention for the Protection of Human Rights and Fundamental Freedoms;
- ◇ decisions of the courts:
 - the basic courts of RM, upon their choice;
 - the courts of appeals of RM, as the result of their selection from the precedented law;
 - the Supreme Court of RM, upon its choice;
 - decisions and definitions of the Constitutional Court;
 - decisions and definitions of the Administrative Court;
 - commercial and industrial chambers.
- ◇ Principled views and opinions of the Supreme Court of RM.

With the project **it was envisaged** to realise training for the following users of the LDBIS as well as loading and maintenance of the base.

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- Installation of software applications for the Public Prosecutor's Offices, the Judicial Council of the Republic of Macedonia and the Directorate for the Execution of Sanctions (prison administration) (completed)

The purpose of this Project subcomponent is:

- implementation of the other parts of the "Justice Information System" (JIS), that is, upgrade and implementation of the previously developed software applications earmarked for - the Judicial Council of the Republic of Macedonia (JCRM), the Public Prosecutor's Office (PPO) and the Prison Administration to the level of usefulness which will satisfy these institutions.

The further completion of the JIS with applications for the JCRM, PPO and US is actually third stage that follows the previous two projects financed by the EAR (PHARE 2000 and CARDS 2003) for the development of the Judicial Information System (JIS) realised in the period December 2003 - February 2005.

Continued upgrade of the software applications was realised using Borland Delphi for an environment operating under MS Windows 2000/2003 operational system and MS SQL Server.

- Upgrade of the software application for DES/PI

The designed software application contains the following functionality:

- users and user rights;
- registration of sentenced persons;
- registration of visitors to penitentiary institutions;
- registration of professional documents;
- following the health of the convicts;
- registration of suspensions and escapes;
- requests by sentenced persons to work outside;
- release; and
- reports.

- Upgrade of the software application for the Basic Public Prosecutor's Office Skopje, Higher Public Prosecutor's Office Skopje and the Public Prosecutor's Office of RM

The upgrade of the software application, within the frameworks of this project, in view of the part from the JIS with practical application in the Basic Public Prosecutor's Office - Skopje was realised with an analysis of the existing software application designed within

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the framework of the PHARE 2000 Programme. After the analysis made a change was prepared in the initial application which is fully functional for the Basic Public Prosecutor's Office - Skopje, in respect of:

- the existing documentation;
- user's usage, in order to define all functions and procedures that are covered in the existing application;
- the design of the application;
- the database and the way of making certain modules.

- Upgrade of the software application for the Judicial Council of the Republic of Macedonia

The upgrade of the existing application was made with a view to integrating into it the new legal changes that entered into force as of September 2006. The application sees to the operation with database, so that it stores in electronic form the files of the judges and has functional components for electronic maintenance of record books and the procedures for the election and discharge of judges.

A detailed evaluation and opinion on the successfulness of the realisation of this project is contained in the final report of the European Agency for Reconstruction.

3.2.3 PROJECT: USAID/DPK - Modernisation of the judiciary**a) Automated budget management system**

The noted activity is within the frameworks of the Project for Modernisation of the Macedonian Judiciary financed by the USAID, and in the realisation of DPK Consulting. The aim is in all 32 courts in Macedonia to place into function an integrated computer solution in 5 areas: 1) financial work; 2) material work; 3) personnel records and salaries; 4) budget planning and realisation; 5) inventory records.

The base is central, in the Professional Service of the Judicial Budget Council at the Supreme Court of the Republic of Macedonia, where the database will be maintained.

The link between the courts and the central base is realised via the WAN network described above in this document.

On the part of the judiciary, the Professional Service of the Judicial Budget Council is the competent one for the realisation of this project.

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(b) Testing of the Judicial Information System (JIS) in four courts and preparation of recommendations for its upgrade and improvement

(c) Active Directory for 27 courts in Macedonia

This Project component is realised with a view to assisting in the improvement of the IT systems management in 27 courts in Macedonia, supplying logic design, implementation and two-month maintenance of MS Active Directory.

The MS Active Directory shall contain:

- scripts for automatic start-up and shut down of computers;
- user log-on and log-off sessions;
- automatic copying of certain files onto all servers and working stations in all courts in RM;
- automatic installation from central location.

The total completion of all previously noted and described projects through the USAID Project - Modernisation of the Judiciary in the Republic of Macedonia - is expected to take place in July 2007 with the adoption of the DPK Consulting final report.

3.2.4 PROJECT: Automatic assignment of cases

Automatic assignment of cases in the Macedonian courts.

In the period July - November 2006, within the frameworks of the programme for justice reforms at the OSCE Mission in Skopje the Project "Automatic assignment of cases in the Macedonian courts" was conducted.

The Project was a realisation of the idea for making a software solution which will automatically make assignment of court cases to judges, ruling out the possibility for an influence of the human factor on this procedure. In that way the human and political factor in the assignment of cases to certain judges will be annulled. That decreases the room for manipulation and delay of the court proceedings. The software enables automatic, equal and independent random assignment of cases to judges, according to which each judge will receive equal number of cases, without including any external influences and factors whatsoever, which will contribute to the beginning of an independent and impartial just assignment. The initiative for this solution originated from among the ranks of the judiciary and was supported by the three presidents of the courts of appeals in the Republic of Macedonia. With their help was drafted a detailed specification of the criteria and functions that the software should meet, which was later offered to several information companies. The software was envisaged as a subsystem of the existing ICIS (JIS) computer system which had already been installed in all the courts in RM. The first version of the software was made on 17

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September 2006, when it was installed in the Court of Appeals Skopje as the first pilot-court. On 13 October there was a public presentation of the software in the Court of Appeals Skopje. On 27 October training was organised in Skopje for the use of the software, earmarked for the court clerks that were to use the software, which was attended by 48 users from all the courts in the country. The information company that made the application solution also conducted training for the end users. The software was installed in all the 30 courts by 3 November.

3.3 PROPOSED NEW ICT ORGANISATION IN THE JUSTICE SYSTEM

The basic role of the new ICT organisation is to ensure computerisation and automation of the justice system in accordance with a single justice ICT strategy through:

- short-term planning - setting the basic presuppositions and preconditions necessary for continued and coordinated implementation of ICT in the justice system;
- long-term planning - creation of a comprehensive environment that will enable and support the development of an effective, efficient, and transparent justice system in the Republic of Macedonia.

To this aim the following is proposed:

- **Administrative Committee for ICT in the justice system;**
- **Reorganisation and optimisation of the human resources;**
- **Assessment of the situation with hardware and software equipment as well as taking care of the performances, security, protection, safety, etc.;**
- **Operational activities for the improvement of the overall computer system.**

The Administrative Committee for ICT of the justice system in RM is a form of management the task of which will be planning and realisation of the needs of the justice institutions - composed of representatives from all justice institutions. In its work and definition of policies for ICT and their implementation the Administrative Committee is led by the strict respect for the Law on the Protection of Personal Data, the Convention for the Protection of Persons Regarding Automatic Data Processing, as well as Directive 95/46 of the European Parliament and of the Council for the Protection of Individuals Regarding the Processing of Personal Data and the Free Flow of Such Data. Also, the Council sees to the consistent enforcement of the measures envisaged by the "Rulebook about the Technical and Organisational Measures for Securing Secrecy and Protection of Personal Data Processing", the "Rulebook about the Personal data Processing which is a Special Risk for the Freedoms and Rights of the Subject to Personal Data", and the "Rulebook about the Manner of Keeping Records and the Form for Records of Sets of Personal Data" prepared by the Directorate for the Protection of Personal Data of the Republic of Macedonia. The operativeness of the Administrative Committee will be defined through the setting up of the working groups. The members of the working groups for ICT in the justice system of RM will be determined by the employers of the corresponding justice institutions.

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According to the new organisation, the managing role of the working groups for ICT in the justice system of RM will be reflected through the following competences:

- Definition of the ICT Strategy and priorities for the justice system in line with the needs for computerisation of the justice system noted in the Strategy for Reform of the Justice System;
- Provision of all the necessary preconditions for the implementation of the ICT Strategy in view of the financial means and human and technical resources for the concrete projects, thereby holding regular periodical meetings for the assessment of the progress and the effects from the implementation of the Strategy;
- Ensuring comprehensive automation of the justice system, rational in view of the costs and the effects from its realisation;
- Ensuring harmonisation of the computerisation of the Macedonian justice system with the other government policies for the development of ICT, information society and e-Government;
- Ensuring preconditions for computerisation of the Macedonian justice system in accordance with the legal regulation and the other regulation and standards in view of ICT security, personal data protection, etc.;
- Reevaluation and upgrade of the ICT Strategy for the justice system on regular basis, owing to the emergence of new requirements and priorities;
- Approval of all the new programmes, projects, and initiatives from the ICT area and automation of the Macedonian justice system;
- Regular following of the progress of the projects and evaluation and approval/dismissal of the effects coming from them;
- Definition of priorities in view of ICT development and automation in the justice system, as well as creation and development of ICT policies and overseeing their implementation;
- Implementation of the ICT policies in the justice system;
- Definition of financial means aimed at realising the activities;
- Action plan with defined times for realisation;
- Accounting that minimum 50% of the participants in these working groups will be computer experts.

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Human resources reorganising and optimising

- Organisation of the entire ICT personnel in the justice institutions as a single entity which will actively participate in the computerisation process;
- Establishment of the internal communication aimed at improving daily communication;
- Continued education and training for sustainable development and upgrade of the ICT possibilities;
- Inclusion of human resources in the building of loyalty, dedication, and professionalism in the overall process of computerisation.

Evaluation of the situation with hardware equipment

It is necessary that the Operational Management Committee make re-evaluation of the activities realised in the previous projects linked with the situation with the hardware equipment in the justice institutions. Thereby, it is necessary to pay attention to the interoperability and connection of the system, as well as the optimal use of the information.

Operational activities for the improvement of the overall computer system:

- provision of reliable and stable sources of financing/investment;
- provision of continued upgrade and usage of the computer system;
- minimisation of the total costs of the use of the system;
- elimination of unforeseeable situations;
- provision of protection/safety measures;
- provision of continued support to the computer system.

4 ICT TECHNICAL ARCHITECTURE (TA)

The technical architecture is a framework which is aimed at identifying the standards, specifications, and technologies that build and support the ICT systems in the justice system, which must be unified.

The ICT composition must ensure the long-lasting functioning and be set up in such a way as to be sufficiently flexible to remain efficient in all organisational and legal changes in the work of the justice system.

4.1 VISION FOR TECHNOLOGICAL ARCHITECTURE

The acceptance of a consistent framework in regard to which the ICT Administrative Committee in the justice system will be able to follow and evaluate the efforts for development and building of the ICT systems in the justice system, taking into consideration the following objectives:

- Easy integration of the applications, application services and data in order to enable easy and good cooperation of the institutions in the justice system;
- Increase of the level of interoperability between applications within the frameworks of the ICT systems in the justice system;
- Better response to the changing needs and requirements of the justice users and fast development of ICT solutions;
- Having new applications placed into function more rapidly;
- Efficient sharing and reuse of existing ICT solutions and acquisitions;
- Expansion of the process of consideration of possible alternatives as part of the process of evaluation of the most useful of all potential ICT solutions;
- Decrease of the resources and expenses necessary for the development, support, and maintenance of the applications from the ICT justice system;
- Enabling the employees in the justice system responsible for ICT to decrease expenses, to improve the level of services for the ICT users, and to increase the flexibility through the justice institutions.

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4.2 DESIRED SITUATION

The TA implementation will result in an integrated architecture in the work of the justice institutions in the Republic of Macedonia. Individual institutions, and the existing ICT solutions, are expected to migrate towards a situation in line with the TA when new investments for ICT will be placed at disposal, or when more significant upgrades, improvements, or replacements of the existing ICT systems are made.

4.3 TA PRINCIPLES

The development of the ICT systems for the needs of the justice institutions in the Republic of Macedonia will be built through a common principle where the software applications are designed to be protected, secure, flexible, to be able to make use of the advantages of components that will be able to be reused and exchanged between the institutions.

The technical architecture stimulates wherever possible delivery and exchange of data and their reuse, and concomitantly enables the best possible usage of the available existing technological infrastructure.

4.3.1 TA protection and security

The strategy establishes the measures that are undertaken:

- Security and protection of specific IT systems;
- Description of the protection that needs to be implemented and carried out;
- Procedures for the achieving and conduct of certain level of IT security.

4.4 TA STRATEGY

The technical architecture of ICT systems in Macedonian justice system has two aspects:

a) Logical

- Specific and general ICT software client (user interface)
 - ◆ Presentation logic
 - ◆ Business logic
 - ◆ Data access logic

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- ◆ Data
- ◆ Process modelling/managing (Workflow)
- ◆ Document management system
- ◆ Cooperation and communication (e-mail, messenger, etc.)
- ◆ Directory Services
- ◆ Security and protection (antivirus, digital certificates, etc.)
- ◆ Monitoring services
- ◆ Operational system (data, print and network services).

b) Physical

- Hardware
 - ◆ Servers
 - ◆ Desktop computers
 - ◆ Laptop computers
 - ◆ Printers
 - ◆ Network printers.
- Communications and Internet
 - ◆ WAN
 - ◆ LAN

In the realisation of the technical ICT architecture the Strategy envisages a centralised approach in view of each of the segments of the Macedonian justice system. This presupposes excellent communication infrastructure with high speeds and flows, but account should be taken of unified working stations on which the employees in the justice institutions will work. Due to the existing situation with the communications possibilities of the justice institutions in the Republic of Macedonia, what is recommended is a daily data replication. The existing servers that have already been procured for all institutions in the Macedonian justice system will be used for that purpose.

In the future, when satisfactory communications infrastructure is reached, it will be possible to move to a central system of operation with changes in the existing applications or development of new applications.

5 ICT DEVELOPMENT PRIORITIES

Under priorities for future development of ICT solutions will be presented all projects and initiatives for the realisation of short-term and mid-term objectives of the Macedonian justice system in view of ICT.

According to the analysis of the current situation and following the needs for further computerisation of the justice system given above in the Strategy, the following priorities have been identified:

DEFINED PRIORITIES AND ACTIVITIES

5.1 SHORT-TERM PRIORITIES (2007)

- 5.1.1 Ensuring ICT cadres for the Macedonian justice system and their permanent training.
- 5.1.2 Systemic support for the ICT sectors in the Macedonian justice institutions.
- 5.1.3 Procurement of hardware equipment, upgrade of software applications and their maintenance.
- 5.1.4 Upgrade of the Judicial Information System (JIS) and its introduction into the work of all the courts in the Republic of Macedonia.
- 5.1.5 Operationalisation, optimisation, and protection of WAN broadband network and procurement of appropriate software applications for network and network services management and monitoring.
- 5.1.6 E-mail system and introduction of the Internet into all justice institutions in RM.

5.2 MID-TERM PRIORITIES (2008-2010)

- 5.2.1 Creation of the application for nomenclatures management in the justice system;
- 5.2.2 Realisation of the "Justice Network" Project;

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- 5.2.3 Upgrade of the "Legal Database" (LDBIS) Project;
- 5.2.4 Development and implementation of Document Management System (DMS) in justice institutions;
- 5.2.5 Development and implementation of the Human Resources Management System;
- 5.2.6 Development and implementation of software application for the State Administrative Inspectorate;
- 5.2.7 Development of software application for the Ministry of Justice;
- 5.2.8 Development of web portals for the justice institutions to publish information of public character;
- 5.2.9 Development and implementation of a new Case Management System (CMS) in justice institutions;
- 5.2.10 Upgrade of the software application for the Judicial Council of the Republic of Macedonia;
- 5.2.11 Upgrade of the software application for the public prosecutor's offices and its introduction into the work of all prosecutor's offices in the Republic of Macedonia;
- 5.2.12 Upgrade of the software application for DES/PI and its introduction into the work of all DES/PI in RM;
- 5.2.13 Enlargement and maintenance of the WAN broadband virtual private network for the justice institutions in RM;
- 5.2.14 Definition of procedures for the training of users about issues connected with the safety and security of ICT systems in justice institutions in RM;
- 5.2.15 Evaluation and improvement of the security and safety of ICT systems in the justice system;
- 5.2.16 ICT equipping of the training centre for the training of the employees in the DES/PI in RM.

5.1 SHORT-TERM PRIORITIES (2007)

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5.1.1 Ensuring ICT cadres for the Macedonian justice system and their permanent training

For adequate further development of the information systems in the justice and the process of automation of the justice to a level of building an integrated system, special attention is required to be paid to the ensuring of sufficient number of ICT personnel, but also to the adopting of a Programme for permanent ICT training of the staff in all justice institutions.

Moreover, the maintenance of what has been done so far or is being developed or implemented in the moment must be carried out by an internal justice ICT personnel which will also have a principal task in the process of giving support for the users of the ICT systems.

With a view to implementing the new Law on the Courts and the new organisational setup of the judicial branch, there is an ongoing drafting of criteria as to the number of the court administration, and hence the number of IT personnel in the judiciary. After the adoption these criteria will be integrated into the ICT Strategy. While the IT Centre in the Ministry of Justice, that is the ICT Sector, is already manned with 12 employees employed in accordance with the Rulebook on the systematisation of the jobs in the Ministry of Justice, as of May 2007, what is planned is to hire another 7 employees.

In this way it will be ensured that all courts have the necessary support from a central focal point in the stage of realising and maintaining the Judicial Information System.

5.1.2 Systemic support for the ICT sectors in the Macedonian justice institutions

The new ICT Sector of the Ministry of Justice should have a broad focus of action in the ICT field in the justice system and a full ICT strategy for the justice system should be developed and implemented. This sector should ensure that the different systems that were originally developed for the following and recording of diverse specific activities in the justice system enable exchange of information with one another and provide information for the Ministry of Justice.

The key question is the definition and documentation of the data standards. It will be a process led by the Sector along with the other representatives from all justice institutions in RM in order to introduce and institutionalise these standards. The Ministry of Justice should keep a main set of tables of regulations in the database and it should provide complete documentation of these standards. These regulations and the standardised data should enable data exchange from diverse parties in the justice system. This will enable and simplify the process of data collection both in the courts and at the level of the Ministry.

The justice institutions should be in a position to exchange and receive data.

With a view to achieving these objectives, the ICT Sector in the Ministry of Justice should be in a position to realise a significant number of activities:

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- Assistance in the creation of a clear vision (and documentation) about what has to be added to the existing Judicial Information System.
- Development, maintenance, and implementation of a comprehensive ICT strategy and provision of assistance for the justice system.
- Preparation of a description of the overall functional specifications by means of analysis of the current system and giving recommendations as to how and why the system should be changed in this manner.
- Development and finalisation of new forms of the system, which will be used for the purposes of making the new processes automated.
- Initiation of a formal revision and a procedure for approval of a module and all the necessary changes in the forms.
- Initiation of a procedure for internal decision-making on the preparation of the standards for the software and hardware platforms that are used for the system.
- Preparation of a base and an inventory of the entire hardware and software for the justice system.
- Procurement of technical assistance for implementation of an overall ICT Strategy and ensuring assistance for the justice system.
- Building technical capacities:
 - ◊ Procurements capacity;
 - ◊ Training capacity;
 - ◊ Operational capacity.

5.1.3 Procurement of hardware equipment, upgrade of software applications and their maintenance

The need for the Ministry of Justice, the courts, and the other justice institutions to procure new hardware is evident, notably if one takes into consideration that major part of the equipment has been operating for more than 5 years. The obsolete equipment will not be possible to function with the new applications that are currently being developed or will soon be initiated and are part of the project plan of this Strategy. This is especially important in view of the software applications that are under development and are part of the CARDS Programme for technical assistance of the justice system. For the purposes of following and developing ICT in the justice system and creating a strategy and its advancement, the Ministry of Justice in the new Draft-Law on the Performance of the Judicial Service envisages the creation of a Commission for Following and Developing IT in the justice system of RM, which should prepare a plan for the maintenance and future procurement of ICT equipment that will be adequately accompanied with planned and provided financial means.

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Also, it should be taken into consideration that it is necessary to make a secure and protected WAN computer network, connection of the two locations of the Ministry of Justice and the IT Centre, but also what is necessary is to procure hardware and software for the security and protection of the entire system, as well as procurements for the normal functioning of the system (hardware and software). With a view to better administration of the system, as well as increase in the data flow on the Internet in the IT Centre within the Ministry of Justice, the IT Centre should be established as the central point.

Undoubtedly, one should not forget the procurement of applications that could be used for the facilitation of the work of the IT Centre within the Ministry of Justice, such as: databases, creation of reports, application development and human resources and project management tools, upgrade or replacement of the existing software with a new and better one, etc.

It is necessary that the operational systems of the existing working stations be unified in all justice institutions, taking account of the licences.

5.1.4 Upgrade of the Judicial Information System (JIS) and its introduction into the work of all the courts in the Republic of Macedonia

On the basis of the analysis about the needs for changes and supplements to the current system which is made by the USAID in several pilot-courts in the Republic of Macedonia, it is envisaged to supplement the system with new modules and to improve the old ones, including: improved user environment; more efficient document flow; additional reporting and messages from the system, etc.

A final report is under preparation by the USAID, and it is expected to be completed by August 2007.

5.1.5 Operationalisation, optimisation and protection of WAN broadband network and procurement of appropriate software applications for network and network services management and monitoring

It is envisaged to operationalise and protect WAN broadband network in the justice institutions, to protect the data by means of encryption, software tools for network monitoring.

5.1.6 E-mail system and introduction of the Internet into all justice institutions in RM

This project is aimed at devising and realising a system of electronic mail for all justice institutions, and notably for the courts in the Republic of Macedonia. It is recommended that all e-mail addresses of the judges, jury judges, and expert associates from different courts be resolved

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through several e-mail servers with different domains, which will be located and maintained in the ICT Centre of the Supreme Court. Proposed domains are the following:

- osnoven.sud.mk
- apelacionen.sud.mk
- upraven.sud.mk
- vrhoven.sud.mk

The e-mail address of a judge, jury judge or expert associate from some basic court of RM would be: firstname.lastname@osnoven.sud.mk

Analogous to that to define it in the other justice institutions.

From the previous experience, there is a need in the Ministry of Justice in addition to Lotus mail, which is in function, to implement Exchange Mail Server.

5.2 MID-TERM PRIORITIES (2008-2010)

5.2.1 Creating an application for nomenclatures management in the justice sector

Division of nomenclatures according to sources:

General (are taken from external source, at state level):

- Personal registration number - natural persons;
- election stations;
- trade registry;
- customs tariffs;
- states;
- municipalities;
- inhabited areas;
- activities;
- ownership;
- nationality;
- education;
- occupation;
- fees;
- courts;
- areas of law;
- categorisation of laws and regulations (case registry);
- laws;
- articles of laws, grounds (article, paragraph, item, line);
- associations of citizens.

Common (from justice institutions):

- types of legal entities;

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- participants in a case;
- attorneys at law;
- notaries;
- translators;
- interpreters;
- bankruptcy administrators;
- liquidators;
- mediators;
- executors;
- jury judges;
- types of cases, procedures;
- type of ground;

- grounds descriptively;
- types of documents;
- type of extraordinary remedy;
- reasons for dismissing an initial act;
- reasons for discontinuing a procedure;
- reasons for suspending a procedure;
- categorisation of decisions while being processed;
- types of sanctions, etc.;
- types of hearings;
- judges

The aim of this priority is in the function of the overall reform of the justice system of the Republic of Macedonia to ensure greater transparency and accountability with standardised statistic reviews and indicators.

5.2.2 Realisation of the "Justice Network" Project

The justice network operates solely as an information infrastructure for optimisation of the work of the justice institutions in RM by means of collection, archiving, and systematisation of the documents which, on the basis of the laws, and on the basis of their own criteria, the institutions single out from their practice as important and send them in the network. In this way, via the Internet, it opens a possibility for a fast and efficient identification of and access to the data required. This gives an insight into the work of the justice institutions in RM and facilitates their mutual communications. The Justice Network Project also contains a separate part intended for the wider public. In that part a **special Internet page for each court in RM** is devised, on which are given all the relevant data about the court and the judges. Also, that part contains a fast, qualitative and simple search engine of the competence of each court.

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5.2.3 Upgrade of the “Legal Database” (LDBIS) Project

Procurement and installation of equipment and organisation and realisation of arrangement, input, and maintenance of the legal database (LDBIS) with laws, regulations, and case-law. The hosting of the legal database would be in the IT Centre of MoJ and the IT Centre in the Supreme Court with data replication. In the MoJ will be determined a Unit for Documentation which would be responsible for the input, arrangement, and maintenance of the data in the legal database in the part of laws and legal regulations management and same Unit for Documentation will function in the Supreme Court, which will manage the data that are case-law.

Work will be initiated to make input in the base with data about laws. For a successful input of the legal database it is necessary that the IT Centre of the Supreme Court be equipped with the hardware and software needed, as well as the IT Centre within the Ministry of Justice with the software required. In the input of the LDBIS it is necessary to make use of the positive experiences from the “Official Gazette”, the Faculty of Law and the Supreme Court. It is necessary to set up a working group that will conduct the training of the cadre in the Ministry of Justice, the Supreme Court, and the lower courts and other justice organisations for the use of the LDBIS.

5.2.4 Development and implementation of the Document Management System (DMS) in the justice institutions

For further development and further building of a completed automated process of work of the courts it is necessary to introduce a modern system of document management.

Paper documents received in the service must be organised to be useful. They are usually marked, sorted, recorded, merged, placed in folders and in closets. Without these steps nothing can be found in a job. In this respect electronic documents do not differ. The system of digitalisation (scanning) of documents should ensure several different methods for the organisation of information for further use. Whatever combination of recording methodology is used, it should be easy to use and understandable for both the people requesting the documents and those managing them.

In the realisation of the DMS account will be taken of adjusting the document digitalisation system as much as possible to the existing procedures. In that way it will be necessary to introduce the changes into the process of work, and thereby some training for the employees that will use the system will be required.

5.2.5 Development and implementation of the Human Resources Management System

With a view to better managing human resources, this project will help to create an integrated, long-lasting strategy for human resources management. The objective will be to create a more

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flexible work force with broad qualifications in order to better meet the needs for qualitative services. For the purposes of developing more qualitative and more efficient personnel and in line with the recommendations for human resources, the training will be in the focus of this sub-component.

The sub-component in this project would provide technical assistance in the design of the plan for the training of the court sector together with the Ministry of Justice. The training plan should include the creation of curricula and recommendations for the courses' modules.

The key characteristic of the Human Resources Management System is to enable the Judicial Council and the court secretaries and presidents to use available data about decisions on the work. The current human resources management system is a manual system and does not allow fast access to the available data. This effort for automation should enable easy generation of "work reports".

5.2.6 Development and implementation of software application for the State Administrative Inspectorate

Development of a software for the State Administrative Inspectorate within the Ministry of Justice, for the purposes of keeping record of the working cases and centralised reports at the level of the State Administrative Inspectorate, administrative, office and archive work.

5.2.7 Development of software application for the Ministry of Justice

Development of a software for the Ministry of Justice and the regional units:

- administrative, office and archive work;
- record books of citizens, etc.;
- for keeping electoral lists, their printing, delivery on a location, etc.; and
- connection with the regional units of the IT Centre of the MoJ and the Mol.

5.2.8 Development of web portals for the justice institutions for publication of public information

Creating connected websites for each justice institution, with a view to bringing the institutions closer to the citizens and transparency in the work.

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5.2.9 Development and implementation of new Case Management System (CMS) in the justice institutions

Analogous to the projects that are in function so far and with a view to upgrading the overall information situation and its integration and interoperability, it is necessary to develop **Case Management System (CMS)** for the purposes of easier obtaining of reviews and reports that will advance the work of the justice administration.

5.2.10 Upgrade of the software application for the Judicial Council of the Republic of Macedonia

The existing application for the Judicial Council of the Republic of Macedonia, which was developed as part of the Judicial Information System (JIS), was actually developed at the time of existence of the Republican Judicial Council (RJC), and within the framework of the PHARE 2000 Programme. With the new law the JCRM gained new enlarged authorisations and functions, so in line with that it is necessary to make reengineering and upgrade of the software application for the Judicial Council of the Republic of Macedonia as part of the JIS. Concomitantly, this activity should encompass a procedure and/or agreement for services for the provision of further maintenance and development of the software application for the Judicial Council of the Republic of Macedonia.

This Training Centre should increase the level of the use of IT technology in the work of the employees, as well as a permanent, transparent and more successful education and training.

5.2.11 Upgrade of the software application for the public prosecutor's offices and its introduction into the work of all the prosecutions in RM

The project noted is aimed at further upgrade and development in all public prosecutor's offices (basic, higher and the PPORM) in the Republic of Macedonia of the existing application for the public prosecutor's offices which was developed as part of the Juudicial Information System (JIS). At the same time, this activity should include a procedure and/or agreement for services for the provision of further maintenance and development of the software application for the public prosecutor's offices in the Republic of Macedonia.

5.2.12 Upgrade of the software application for DES/PI and its introduction into the work of all DES/PI in RM

The priority noted is aimed at upgrade and centralisation of the software application at the level of DES and development of statistics reports.

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5.2.13 Enlargement and maintenance of the WAN broadband virtual private network for the justice institutions in RM

Within the Project for "Technical Assistance for the Reform of the Court System and Court Administration" supported by the CARDS 2003 Programme of the European Commission, it is envisaged to compensate for the costs for the use and maintenance of the WAN infrastructure of MacTel for a period of three years. Also, it is necessary to enlarge the WAN network with the new justice institutions. After the expiration of this period, it is necessary to provide for financial means in the budget of the Ministry of Justice and in the budget of the Judicial Council, for the purposes of ensuring a solution for a long-lasting dedicated lines.

5.2.14 Definition of procedures for the training of users regarding issues connected with the safety and security of the ICT systems in the justice institutions in RM

This priority is aimed at elevating the level of safety and security of the ICT systems in the justice institutions, with definition of procedures, and conducting training of users of the ICT systems for their usage.

5.2.15 Evaluation and improvement of the security and safety of the ICT systems in the justice system

The objectives of this project are the following:

- Making an evaluation of the security and safety of the ICT systems in the justice system of RM and identifying optimal technical solutions for the creation of a unitary secure network with special levels of information and data access;
- Implementation of the security solutions proposed in the security evaluation;
- Preparing compulsory security and safety measures for the ICT systems in the justice system which should be implemented by system administrators and users;
- Implementing a solution for electronic signature in all justice institutions;
- ICT experts employed in the justice institutions in RM and external members who will be tasked with the undertaking and managing of the protection and security mechanisms and creation of a "call-centre" for security-related questions by users of the ICT systems in the justice system.

5.2.16 ICT equipping of the Training Centre for training of the employees in DES/PI in RM

This priority is aimed at continued education of the employees in the PI in line with the EU standards.

6 SOURCES OF FINANCING

6.1 Financing of the short-term and mid-term priorities from domestic sources

It is unavoidable to increase the share by percentage of the budget funds provided for the ICT technology development in the justice system of RM, for the purposes of realising the ICT strategy in the justice system.

6.2 Financing of the short-term and mid-term priorities from foreign donations

6.2.1 Sources of financing:

- IPA FUNDS
- CADSES REGIONAL PROGRAMME
- CORDIS REGIONAL PROGRAMME
- TAIEX PROGRAMME OF THE EU
- EU TWINNING PROGRAMMES
- DIPLOMATIC-CONSULAR MISSIONS IN THE REPUBLIC OF MACEDONIA
- USAID
- THE WORKD BANK
- UNDP
- OSCE
- EAR

6.2.1 SOURCES OF FINANCING

- IPA FUNDS

The justice sector may use the funds:

- DIRECTLY - as the user of financial means;
- INDIRECTLY - services provider;
- WITH PUBLIC PRIVATE PARTNERSHIP.

- CADSES REGIONAL PROGRAMME

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Active participation is proposed in the International Programme for Crossborder Cooperation, notably in the so-called Priority 1 - access to information society.

- **CODSIS REGIONAL PROGRAMME**

It is proposed active participation in the Framework Research and Development Programme (FP7) with a special review of one of 7 thematic parts; Technology of Information Society.

- **EU TAIEX PROGRAMME**

- Active use of the programme of the Directorate General for Enlargement - Technical Assistance for Information Exchange (TAIEX) at all three levels;
- organisation of workshops;
- organisation of study visits; and organisation of expertises.

- **EU TWINNING PROGRAMMES**

- **DIPLOMATIC-CONSULAR MISSIONS IN THE REPUBLIC OF MACEDONIA**

The diplomatic-consular missions in RM are expected to have a bigger and more active role in the practical realisation of part of the projected activities noted in the Strategy, in both the part for provision of some of the financial means and the part for ensuring expert assistance.

- **USAID**

It is expected to have continuation of continued support for the activities financed by the USAID, and especially after the complete ending of the "project for Modernisation of the Judiciary in the Republic of Macedonia" with a new project for the support of the justice reforms.

- **THE WORLD BANK**

The LJIS project which is in an initial stage of realisation is expected to be fully harmonised with the activities that are envisaged in the Strategy.

- **UNDP**
- **OSCE**
- **EAR**