Role of Regulators and Policy Makers in Addressing Cyber Security

Elaborating the National Information Policy of the Republic of Macedonia

Aleksandar Acev, BSc.EI.Eng.
Telecommunications Directorate
aleksandar.acev@dtk.gov.mk
www.dtk.gov.mk
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**Strategic goals**
- Significantly increased number of internet users
- Increased number of electronic services for citizens
- Continuous and sustainable ICT development
- Being “e” in (education, governance, health culture, commerce....)

**Initiatives supported by :**
- Government
- business community
- non-Governmental sector and
- citizens
Status of ICT in Macedonia regarding infrastructure

Facts and numbers

- **Fixed Line**
  - ~ 600,000 users
- **Mobile**
  - ~ 780,000 users
- **Internet connection**
  - 5 major providers ~ 9% penetration
- **CATV**
  - 64 providers

Preconditions

- Approval of legislation acts in compliance with the international conventions and agreements that Republic of Macedonia has proceeded to or ratified
- Introduction of legislation that will entirely be synchronized with the EU Directives on information society and knowledge-based economy
Legal and Institutional Framework

- Law on Electronic Communications: Enacted, 2005
- Law on Broadcasting: Advanced draft expected 2005
- Law on Postal Services: Initial draft
- Protection of Personal Data: Enacted, 2005
- Protection of Consumers: Enacted, 2004
- Copyright and Related Rights: Enacted, 2005;
- Access to Information: Advanced draft, expected 2005
- Electronic Signature: Enacted, 2001
- Electronic Commerce/ Business: NO
- Amended Criminal Code: Yes
- Convention on Personal Data Protection: Signed; ratified: 24.01.2005
- Convention on Cyber Crime: Signed; ratified: 15.09.2004
- Independent regulatory body of telecommunications: planned for 2005
- Committee for Information Technology: Established
Current situation regarding legal framework and applicable policies

**Main stakeholders and introducers**

- Government of the Republic of Macedonia
- Ministry of Transport and Communications
- National Regulatory Authority (Agency for Electronic Communications)
- Ministry of Legal Affairs
- Ministry of Interior
- Ministry of Defense
- MARNET
- Private Sector
- Macedonian Association for Information Technology
- …
The new Law on Electronic Communications was enacted in the first quarter of 2005, and it regulates the communications area based on the European legislation, more precisely, the directives, decisions and recommendations from the reform packages of the European Union, such as:

- Directive 2002/19/EC (Access Directive);
- Directive 2002/20/EC (Authorisation Directive);
- Directive 2002/21/EC (Framework Directive);
- Directive 2002/22/EC (Universal Service Directive);
- Directive 2002/58/EC (Directive on Privacy and Electronic Communications);
- Directive 98/84/EC on the legal protection of services based on, or consisting of, conditional access;
Law on Electronic Communications

REGARDING SECURITY OF INFORMATION, THIS LAW ADDRESSES:
• management of electronic communications
• protection of secrecy and confidentiality of electronic communications
• protection of interests of the users
• penalty provisions

COMPETENCE FOR THE ELECTRONIC COMMUNICATIONS

Ministry of Transport and Communications
• Carries out the politics of the Government of the Republic of Macedonia in the field of electronic communications
• Prepares the National Strategy for development of electronic communications and information technology

Agency for Electronic Communications
• established as an independent and non-profitable legal person
• works in accordance with the national strategy for development of electronic communications and international agreements
• supervision, control and monitoring of electronic communications networks operators, activities and service providers
• cooperation with Other State Bodies and Institutions
• exchange of available information with other regulatory bodies
MEASURES FOR PROTECTION OF PUBLIC COMMUNICATIONS NETWORKS

- The operators shall be obliged to ensure confidentiality of subscriber data, including its storage, disclosure and usage, in accordance with this and other laws

SECRECY AND CONFIDENTIALITY OF COMMUNICATIONS

- Protective Measures
- Confidentiality of Communications
  - content of communications
  - traffic data and location data relating to communications
  - unsuccessful attempts to establish a connection
  - surveillance, tapping, interruption, recording, storage, transfer and diverting of communications and data
  - Traffic Communication Data
  - Lawful Interception of Communications
National Strategy for Development of Information Society

- Infrastructure
- e-Business
- e-Government
- e-Education
- e-Health
- e-Citizen
- e-Legislation

**ICT**

- Legal framework
  - Standards and protocols
  - Database
  - Agency for certification
  - ID card
  - Harmonization with EU

- Technology and application
  - ICT Management
  - Development of Physical infrastructure
  - Applications and data

- HR
  - IT Staff for maintenance and development
  - Educated users of IT
  - Managers with IT skills

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CURRENT SITUATION

• infrastructure for public keys/security certificates
• clear rules for privacy and storing personal and confidential data in electronic version
• trust of the citizens in the new systems
• impact on e-business
NSDIS - Infrastructure

**Goals**
- provision of appropriate environment for developing modern, easily accessible and acceptable ICT infrastructure
- modern infrastructure and extensive Internet utilization

**Strategic measures**
- to comply with the actions and duties of the State for joining European Union
- continuously follow the ICT updates, trends in Europe and worldwide.
- to provide educated and trained personnel to deal with dynamic changes brought by information era decrease the gap between the regulations and new trends in technology
- higher flexibility of the legal frame in virtue of passing new bye-laws to provide rapid implementation of new technologies.
- full market deregulation or approval of statutory regulations and establishing an Agency to act as a regulatory authority on the electronic communications and services market.
Main stakeholders and introducers of infrastructure development

- Government of the Republic of Macedonia
- MARNET;
- Ministry of Transport and Communication;
- Ministry of Interior;
- Ministry of Defense
- Ministry of Education and Science
- Ministry of Environment and Planning
- Scientific Institutions
- CIT
- Private Sector
- Macedonian Association for Information Technology

Infrastructure projects

- Assessment of legislation for ICT infrastructure development
- Design and implementation of spin network for the need of Governmental Institutions, Public Administration and Private Sector
- Analysis for introduction of all relevant standards connected to IT utilization (information, service, infrastructure, management, security, documentation etc.)
NSDIS e-Legislation

- Standards and systems for digital records, their management and archiving;
- Establishment, development and usage of the state and local databases (registers) and interconnection and exchange of information from the data bases by the interested people, Government, administration authorities and the local self-government;
- Formation of the Certification Agency as the base for using PCI
- Better and more efficient solutions for administration and court procedures, simplification of the procedure and reduced costs
- Establishment of system for electronic ID card with electronic certificate for the citizens
- Standardization of the services for exchange of information and documents with European systems;
- Obeying the principles of accessibility, multiple languages, safety, privacy, subsidiary of e-services in all sectors of society
- Protection of the rights of intellectual property, data bases, security of information and confidentiality of data
- protection from computer crime.
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Thank you for your attention!