M-CLOUD INITIATIVE: PROVIDING IT SERVICES FOR SOCIETY

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Outline

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• ICT Standards and Policies
• Building IT Capacity in Public Sector
“The fundamental word to describe my mandate as a Prime Minister is responsibility, and my key priority is care for the people. We are in need of a new relationship between state and citizen. The role of the state is to serve the citizen, and not vice versa. We must start from this idea in order for citizens to trust public institutions.

We speak often about the European future of the Republic of Moldova, but we cannot build this future without insuring optimal development for our youth. We will encourage the hiring of well prepared young people into central and local public administration, will improve the educational process through technology upgrades and promote electronic education services.”
Government e-Transformation Objectives

- Promotion of ICT for a better governance, research and education, public healthcare, e-commerce, social protection and national security.
- Acceleration of e-transformation process in order to sustain the EU integration agenda.
- Extending the communication infrastructure, thus increasing national economy competitiveness and facilitating access to information society services for all citizens.
- Development of high quality sectorial and cross sectorial e-services.
- Implementation of public private partnerships for e-transformation and stimulating investments in ICT
- Encouraging of partnerships between research and educational institutions and private ICT sector.
- Development and promotion of effective and efficient ICT regulatory framework – one of the key success factors for development of e-businesses, e-commerce, delivery services and integration with similar European and global networks.
- Etc.
e-Transformation Implementation Team

Prime Minister
e-Transformation Ministerial Council

Sets the overall strategic objectives, priorities for change and resolves cross Government problems

Supports the eGC in setting policy, standards and executing transformation projects

e-Government Management Board

e-Government Center

Supports eGC in delivering its objectives; Provides focus, resources and resolves issues with Ministries

“Owns” the Government e-Transformation Agenda

Leads the development of high impact e-Services for citizens and businesses

Leads and directs the CIOs Council to achieve the e-Transformation Agenda

Creates and manages a shared services infrastructure

Creates, updates and enforces policy framework

Supervises the IT projects portfolio on country level

Contributes to ICT industry growth and attracts investment

Facilitates training, education, and ICT skill growth

e-Government CIOs Council

Ministry

Ministry

Ministry

Ministry

Supports and delivers e-Transformation projects

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The Baseline

- Good Networking Infrastructure
- Good mobile communication infrastructure
- Medium level of computer literacy
- Good ICT regulatory framework
- Strong support for ICT from the Government
- Strong support from Moldova’s strategic partners
- Low number of e-services available for citizens
- Segregation level of services is quite high
- Heterogeneous information systems
- Low effectiveness of the ICT regulatory framework
- Increasing demand for high-quality e-services from the citizens
- Increasing demand from the Government to lower the operational costs
e-Services

• A high quality e-service is a mature and fully automated service made available online. There are several types of e-services - informational, interactional, transactional.

• Most e-services will include business process reengineering.

• Each sector will extend the set of e-services by implementing more demanded ones first.

• A clearly defined set of criteria for e-services prioritization has been developed.
Modernized Government IT Platform Key Principles

- **Modern** – the architecture should use modern, yet well proven technology stack
- **Cost efficiency** – the architecture should lead to optimal operational costs
- **Modular** – services should be organized as pluggable modules to facilitate flexibility, maintainability and scalability
- **Simple** – every module should follow “single responsibility” design principle, thus should be kept as simple as possible
- **Accessible** – the architecture should be built exclusively using open standards
- **Re-use** – the architecture should reuse existing information assets whenever is appropriate
M-Cloud Platform Architecture

- **Cloud Computing** based Service Oriented Architecture (SOA)
- Highly accessible e-services through multiple delivery channels
- Facilitates communication between systems and allows business process orchestration
- Introduces shared services across public administrations
- Infrastructure services (IaaS) provided by **CTS**
Cloud Computing and the IT Community

- **Reduced Cost** – Cloud technology is paid incrementally, saving taxpayers money.
- **Highly Automated** – No longer do IT personnel need to worry about keeping software up to date.
- **Flexibility** – Cloud computing offers much more flexibility than past computing methods.
- **More Mobility** – Employees can access information wherever they are, rather than having to remain at their desks.
- **Allows IT to Shift Focus** – No longer having to worry about constant server updates and other computing issues, government organizations will be free to concentrate on innovation.

Source: trends.google.com
Cloud-ready e-Services

• As a minimum architectural requirement e-services should implement n-layer architectural pattern, thus facilitating moving to different DBMS or adapting to new user interfaces when needed.
• Nowadays no information system is an island, therefore each newly developed service must provide facilities for inter-service communications. All required technical specifications and message contracts will be provided as part of national interoperability framework.
• Existing information systems will communicate through custom adapters.
Platform level services

- **Flexibility** – adaptability to different use cases
- **Neutrality** – offer equal possibility for various providers to come into play
- **Cost efficiency** – allow providers to compete on quality of service and on prices
- **Maintainability** – working parameters are configurable
- **Fast reaction to change** – parameters could be change at runtime
Provider pattern applied
M-Cloud Iterative Development

- **Phased approach** facilitates:
  - faster time-to-market;
  - reducing implementation risks;
  - early adoption of technologies and services;
  - learning from feedback on previous phase.
Technical Standards and Policies

- Our objective is to modernize our ICT regulatory framework, to align it to EU standards and to support M-Cloud platform.
- The policies are grouped in a series of specific sections:
  - Infrastructure
  - Application
  - Information
  - Information Assurance
  - Integration
  - Service Management
  - Channels
Building IT Management Capacity in Public Sector

• Trainings on Project Management Topics
  – Project Planning & Tracking
  – Risk Management
  – Change Management
  – Etc.

• Study visits for public sector IT managers to our partner countries
  – Estonia
  – United States of America
  – Singapore
  – Austria
  – Malta
  – Etc..

• Assistance from our partners
Key Points

• Our citizens deserve high quality e-services operated by a modern, reliable and cost efficient platform.
• e-Services and M-Cloud is the response to our people and Government demands.
• M-Cloud architecture is based on leading edge Cloud Computing technology and SOA.
• Modernized ICT regulatory framework may speed up Moldova’s integration into EU.
• Implementation of e-Transformation Agenda is our national priority.
Thank you for your attention!

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