CURRICULUM OUTLINE

New Directions for Growth, Regulation, and Public Policy: Broadband and Mobile for the Western CIS Region

Chisinau, Moldova

June 12-15, 2012

By Judith Hellerstein & Sofia Abraham Mendoza

CONTENT

1   INTRODUCTION

The Center for Global Communication Studies at the Annenberg School for Communication, University of Pennsylvania and the Ministry of Information Technology and Communications of the Republic of Moldova are pleased to announce a four-day ICT policy workshop for government officials and business leaders on New Directions for Growth, Regulation, Public Policy: Broadband and Mobile for the Western CIS Region, to be held in Chisinau, Moldova from June 12-15, 2012.

International and local trainers and respondents with extensive public administration, consulting and business background participated in the delivery of the training:

Judith Hellerstein (Trainer)
Judith Hellerstein is the President of Hellerstein & Associates, www.jhellerstein.com, an ICT consulting group specializing in policy consulting, regulatory reform, regulatory capacity building, e-government assessment, convergence and its impact on regulatory frameworks, and in evaluation & assessment of the broadband marketplace. Judith Hellerstein has over eighteen years of experience in business and competitive analysis having worked on several high profile projects while she was at the International Bureau of the Federal Communications Commission, MCI Communications, and Former U.S. Vice President Al Gore's Reinventing Government office. She advises private sector companies, Governments, and multilateral organizations on telecom, ICT capacity building, E-Government Strategies, Intellectual Property and regulatory projects involving technology and convergence. Ms. Hellerstein is a board member of the DC Chapter of the Internet Society. She has written extensively on telecommunications, competition policy, broadband access, and convergence strategies.   She earned a Master of Arts degree in Public Administration from the Columbia University's School of International and Public Affairs, where she focused on International Management.

Sofia Abraham Mendoza (Co-Trainer)
Sofia Abraham Mendoza is an international consultant. She began her career at The World Bank, where she contributed to a number of publications and helped organize seminars on national economic management and education policies. She has extensive experience in working and leading multi-cultural and multi-disciplinary teams and with organizations in Europe, Latin America, Africa, and the Middle East. She earned her Bachelor of Arts degree in International Relations from Columbia University and her Master of Business Administration degree in Management and Marketing from Johns Hopkins University. Recently, she has lectured on the most pressing issues facing the telecom sector and the impact of convergence on the regulatory framework. She is currently a Managing Director at GlobeInvent, an international organization dedicated to bring technological and scientific innovation to the market place.

Mikhail Doroshevich
Mikhail Doroshevich is a founder of e-belarus.ORG, a Minsk-based news and analytical site covering developments in ICT in Belarus, and Information Policy Blog http://www.i-policy.org, which provides daily news about information policy. DoWire.org Democracies Online features him as one of the most notable human rights bloggers on the Internet. He is a frequent contributor to Internet periodicals about technology and freedom in Eastern Europe and worked as an UNDP ICTD Policy Consultant in 2003-2004. He influenced the 2005 Belarus government policy change to allow Wi-Fi access. He advocates for communications technology freedom and related human rights issues in Belarus and neighboring countries.   In Oct 2007, he launched International Expertise Of The Belarusian Draft Law On Information, Informatization And Information Protection. He participated in 2005-2007 Monitoring of Belarus – telecommunications and the information society for European Commission. Since 2008 Doroshevich, together with Gemius

began to conduct regular surveys Belarusian Internet audience. He is the author of numerous publications, research and conference speakers: ICT expertise, Internet governance statistics, assessments on new technologies, new media, Internet audience, web2.0 features.

Oleksii Khmara
Oleksii Khmara is one of the lead trainers for good governance in Ukraine and has more than 7 years of experience as a coach-consultant. He is the leading Ukrainian specialists in conducting civic expertise and introducing anti-corruption policies. He has established a number of national civil society coalitions and networks on public procurement and good governance. He is currently the head of Transparency International – Ukraine, the national chapter of the global anticorruption network. He works as a member of National Anti-corruption Committee within the Office of the President of Ukraine.

Rodolfo Orjales
Rodolfo Orjales is a Senior Trial Attorney with the U.S. Department of Justice in the Computer Crime and Intellectual Property Section. His primary focus is in prosecuting cyber crime, including fraud over the Internet, the distribution of computer viruses, and violations of intellectual property, including Economic Espionage and trade secrets. Currently, he is the Chairperson of the Group of Experts on Cyber-crime at the Organization of American States. He was also the legal attaché at the U.S. Embassy in Argentina and handled extraditions of fugitives and on foreign requests for legal assistance. He speaks Spanish fluently and has extensive experience providing training to the judiciary and police in Latin America in the areas of cyber crime and intellectual property. From 1983 to 1997, Mr. Orjales was Assistant U.S. Attorney in San Francisco, California. He tried over 65 felony trials involving fraud, child exploitation, narcotics, and intellectual property. He is a graduate of the School of Law at Syracuse University, and he received his Bachelor of Science degree from the University of Santa Clara.

Margareta Petrusevschi
Margareta Petrusevschi is currently the Knowledge and Learning Coordinator, e-Government Centre, Government of Moldova. She coordinates the Centre's activities related to capacity building for e-Governance and e-Transformation in the public services sector. She is focused on Knowledge Management, training and learning needs assessment, design and coordination of training plans. Prior to this position, Margareta worked in the research sector and in the Central Public Administration. She has nine years of working experience with UNDP Moldova as a Programme Officer/Analyst on Governance. She has trained local public authorities and is an expert in strategic planning, knowledge management, project design and management, M&E. She graduated from Moldova State University and earned a PhD, a Professional Level Certificate in Governance from UNDP Virtual Development Academy and Jones International University.

Irina Tisacova
Irina began working at the Electronic Government Center in August 2011, where she is currently the Coordinator for Open Government. She is responsible for cooperation among ministries and civil society in issues related to open government data and its extensive use. She previously worked as an intern with the Permanent Mission of the Republic of Moldova to the United Nations in New York and at the U.S. Chamber of Commerce in Washington, DC. She international relations, economics and statistics at George Washington University in Washington, D.C. and Sciences Po Paris.

Marianne Sokolova
Marianne Sokolova is a member of Belarus' e-Delegation, a member of E-Belarus.org research team, and an assistant professor at European Humanities University in Vilnius, Belarus. She is the author of several publications on Internet, Online media and e-Government strategies. She received

her doctorate degree from the Institute of History, National Academy of Science of Belarus and was an International Policy Fellow with the Open Society Institute (Budapest).

Start	End	
		Day 1 Basic Training: Tuesday June 12
9:00	9:15	**Introduction** *Judith Hellerstein*
9:15	10:45	**Leadership for policy makers and regulatory officials** *Sofia Abraham Mendoza*
10:45	11:00	**Coffee Break**
11:00	12:30	**Broadband Development and Deployment** *Sofia Abraham Mendoza*
12:30	13:30	**Lunch Break**
13:30	15:00	**Upgrading institutions for a more effective ICT policy** *Judith Hellerstein*
15:00	15:15	**Coffee Break**
15:15	16:30	**Discussion and Q&A** *Judith Hellerstein & Sofia Abraham Mendoza*
18:00		**Welcome Dinner – Local Cuisine** *Restaurant "Vatra Neamului"*
		Day 2 Basic Training: Wednesday June 13
9:00	9:15	**Welcoming Remarks and Day's Agenda** *Sofia Abraham Mendoza*
9:15	10:30	**Tools for e-Leaders, e-Government tools, Open Government plans and governance issues** *Margareta Petrusevschi, Knowledge & Learning Coordinator; e-Government Centre*
10:30	10:45	**Coffee Break**
10:45	12:00	**Open Government plans, and Governance Issues (continued)** *Irina Tisacova, Open Government Coordinator, e-Government Centre*
12:00	13:15	**Lunch Break**
13:15	14:45	**Open Government Discussion and Presentation by Regional Trainers** *Oleksii Khmara, TORO Creative Union (Transparency Int'l - Ukraine)*
14:45	15:00	**Coffee Break**
15:00	16:15	**Discussions & Knowledge Sharing** *Sofia Abraham Mendoza*

9:00	9:15	**Welcoming Remarks and Day's Agenda** *Judith Hellerstein*
9:15	10:45	**Development of National Broadband Strategies** *Sofia Abraham Mendoza*
10:45	11:00	**Coffee Break**
11:00	12:30	**Regulation and Competition Issues** *Judith Hellerstein*
12:30	13:30	**Lunch Break**
13:30	15:00	**Belarus Presentation** *Mikhail Doroshevich and Marianne Sokalova* *e-Belarus.org*
15:00	15:15	**Coffee Break**
15:15	17:00	**Cyber Crime Presentation** *Rudy Orjales, USDOJ CCIPS*
		Day 4 Advanced Training: Friday June 15
9:00	10:30	**Going Mobile: A Review of Spectrum Policy and Management** *Judith Hellerstein*
10:30	10:45	**Coffee Break**
10:45	12:15	**Open Access and Infrastructure Sharing** *Judith Hellerstein*
12:15	13:15	**Lunch Break**
13:15	14:15	**DISCUSSION** *Judith Hellerstein & Sofia Abraham Mendoza*
14:15	15:45	**Internet Governance** *Marianne Sokalova*
15:45	16:15	**Summary and Concluding Remarks** *Judith Hellerstein & Sofia Abraham Mendoza*

DAY 1

1.1 <u>Session 1:</u> Leadership for Policy-Makers and Regulatory Officials

Main topics:

- What is Leadership?
    - Difference Between Leadership and Management
    - Definition of Adaptive Change
- Traits of Great Leaders
    - Productive Paranoia
    - Fanatic Discipline
    - Empirical Creativity
- Practices of Effective Leaders (According to Peter F. Drucker)
    - They Ask What Needs To Be Done
    - They Ask What is Right For the Enterprise
    - They Develop Action Plans
    - They Take Responsibility for Decisions
    - They Take Responsibility for Communicating
    - They Focus on Opportunities Rather Thank Problems
    - They Run Productive Meetings
    - They Think and Say "We" Rather than "I"
    - They Listen First and Speak Last
- Practices of Effective Leaders (According to Other Experts)
    - They Establish Legitimacy
    - They Protect Voices of Descent
    - They Practice Self-Awareness
    - They Develop Necessary Emotional Skills
    - They Know When To Or Not Apply Pressure
    - They Facilitate Dialogue
- Cultural Leadership Expectations
- Policy-Makers and Regulators Leadership Skills (According to the World Bank)
    - They Have the Capacity to Develop and Mobilize Stakeholders Around a Shared Vision
    - They Have the Ability to Ensure Effective Translation of the Vision into Concrete Outcomes
    - They Have a Commitment to Integrity and Ethics
    - They Have a Commitment to be Held Accountable
    - They Have a Good Understanding of Laws, Regulations and Procedures

- o They Have an Ability to Ensure Effective Administrative Accountability
- Regulators Leadership Skills
  - o Develop Relationship Skills to Deal with Operators, Consumers, Private Interests, and Political Authorities
  - o Understand the Need for Transparency
  - o Understand that Policymaking Role is Limited and Informal
  - o Able to Adapt to an Ever Changing Environment
  - o Have Solid Technical Skills
- Professional Challenges
  - o A Symbiotic Relationship Exists Between the Quality of a Country's Leadership and the Quality of its Governance
  - o Complex Environment of Multiple, Immediate Demands
  - o Limited Resources
  - o Sometimes in Environment of Extreme Poverty
  - o Conflicting Political Agendas
  - o Multiple Policy Challenges
  - o Pressure from Multiple Stakeholders: Politicians, Citizens, Private Sector, International Organizations, Operators
  - o Multiple Timetables and Political Cycles
  - o Historical and Cultural Context
  - o Immediate Results are Expected
  - o Expected to Make a Difference
  - o Restricted by Laws, Political Realities, Public Sentiments, Budgets, License Provisions
  - o Partial Independence (regulators)
  - o Slow Processes
  - o Demands From Investors
  - o Other challenges

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1.2 <u>Session 2</u>: Broadband Development and Deployment

Main topics:

- What is Broadband?
  - Definition
  - Economic Impact of Broadband
  - What is Driving Broadband Deployment?
  - Broadband Ecosystem and Its Impact on the Economy
  - Elements of Absorptive Capacity
- Trends in Supply
  - Technology and Business Models Allow for Lower Connection Costs
  - Installation of Fiber Optic Cables Closer to Consumer (in Developed World)
  - Continued Increase in High-Speed Wireless Networks, Especially in Developing World
  - Global Shift from Narrowband to Broadband
  - Capability, Mobility and Portability Improvements
  - Continued Migration of Services from Traditional to Online
  - Larger Demand for Applications and Cloud-Based Computing
  - Increased Use of Online Video (70% of YouTube Content Created Outside the U.S.)

- o Growing Social Networking (Facebook 500 million Users Share 30 Billion Pieces of Content)
- Challenges of Broadband Deployment
  - o Supply Side (Availability)
    - Underdeveloped broadband networks
    - Limited access to investment capital
    - Difficulty in accessing and retaining skilled ICT workers
    - Low expected return on investment for operators
  - o Demand Side (Accessibility)
    - Low Digital Literacy and Demand
    - Cultural/Educational Factors
    - Affordability
    - Age and Economic Inactivity
    - Quality of Service (Including Customer Service)
- Policy Tools Available – Supply Side
  - o Develop National Broadband Plans
  - o Liberalize Markets (e.g., Opening Gateways to International Competition)
  - o Develop Universal Access Mechanisms to Eliminate Access Gap
  - o Enact Domestic Competition Policies
  - o Identify Cases Where the Government Can Address Market Failure
  - o Remove Potential Supply Obstacles
  - o Guarantee Legal and Regulatory Certainty
  - o Provide Predictability, Transparency, Neutrality and Protection of Investment
  - o Create Market Incentives for Providers to Invest in Underserved Areas. Establish Pro-Market Tax Policies
  - o Add Own Demand to the Market
  - o Create Coherent, Integrated Policies Across All Sectors
  - o Eliminate Bottlenecks at All Levels of Supply Chain
  - o Provide Grants to Fund Capital Investments
  - o Provide Flexibility to Private Companies, with Better Understanding of Market, to Determine Technology and Investment (but Monitor)
  - o Encourage Public-Private Initiatives to Finance Infrastructure
  - o Develop Digital Literacy Programs
  - o Establish Flexible Licensing Policies
- Policy Tools Available – Demand Side

- o Create Public Access Centers
- o Develop of e-Government, e-Health and e-Learning Incentives/Applications
- o Make it Affordable (e.g., Reduce or Eliminate Taxation of Services or Equipment)
- o Implement Universal Access Policies
- o Raise Awareness (e.g., Grassroots Campaigns)
- o Establish High-Level Coordination Between Government Agencies
- o Establish Policies and Mechanisms to Protect Privacy and Ensure Security
- o Pay Attention to Needs of Small and Medium Enterprises (SMEs)
- o Provide Subsidies of Service Costs
- o Protect Consumer from Pricing Scams
- o Promote Useful, Attractive and Creative Content
- Universal Access (UA)
  - o First Generation Definition
  - o Definition Measured Different Variables and Required Different Policy Measures
  - o Original Issues Dealt with *Availability*, *Accessibility* and *Affordability*. Need to Add *Awareness* (of Services) and *Ability* (to Use Computers, Navigate Internet, etc.)
  - o Need to Find Better Ways of Measuring UA Success from Coverage to Usage and Quality of Service
  - o Urban vs. Rural Definition – What are the Allowed Contention Rations?
  - o Focus Shifts to Bandwidth/Speed, ICT Capacity/Ability, Application/Service
- Universal Access Study Findings
  - o Successful programs and funds are characterized by:
    - Clearly Defined Objectives and Strategies in Consultation with Stakeholders Taking into Account National ICT Policy
    - Clear and Unambiguous Legal and Regulatory Framework
    - Well Defined and Transparent Process and Procedures for Requesting and Obtaining Subsidies
    - Strong and Continued Political and Administrative Support
    - An Environment that Facilitates and Actively Promotes the Deployment of New Services and Technologies
    - Clearly Defined Funding Obligations with Some Flexibility
    - Strong and Effective Leadership at Policy and Implementation Levels.

Autonomy for Fund Administrator

- Universal Access Mechanisms
  - Recent World Bank Studies Highlight Innovative Mechanisms to Promote Broadband and Close the Access Gap; Among Them:
    - Increased Flexibility of Spectrum Rights, Licensing, and Authorizations
    - Create a Special Rural Specific License Where Interconnection Rate, Charges and Other Access and Costing Issues are Priced Differently
    - Implement a Simple Competitive Licensing Regime
    - Remove Burdensome Restrictions or Prohibitions on IP Based Networks and Applications
    - Promote and Facilitate Sharing of Infrastructure and Facilities. Examples, Brazil, India, Dominican Republic
    - License Local Entrepreneurs to Run Programs or Telecenters
    - Government Needs to Act as an Anchor User to Guarantee Revenues During the Ramp-Up Phase
    - Local Governments Need to Proactively Coordinate Demand from Public Administration, Public Safety, Local Schools, and Health Care Facilities to Create an "Anchor Tenant"
    - Government Needs to Negotiate a Wholesale Rate and Long-Term Contract with Provider to Ease Initial Economic Pressure and Reduce Investment Risk
    - Government Needs to Stimulate Demand from the Private Sector by Working at the Grass-Roots Level
  - In Certain Cases Subscriber Subsides Can Reduce Backhaul Costs, Infrastructure Sharing (e.g., Backbone & Towers)
    - Infrastructure Sharing Alleviates Cost Pressures on Competing Providers
    - Regulators May Reduce Right of Way or Access Costs (e.g., Spectrum Costs or Pole Attachment Fees)
    - They May Also Attempt to Regulate Backhaul Costs by Providing Grants for Capital Investment
    - In a Last Resort, Governments Can Act as a Risk Taker & Can Auction the Right to Operate the Broadband Infrastructure to Highest Qualified Operator
  - Many Universal Service Funds Use Reverse Auctions under OBA guidelines
  - An Alternative and Faster Approach is to Provide Capped Subsidies per Location to Companies that are Willing to Serve Rural Towns that Fit Certain Criteria

- Financing of Broadband Deployment
    - Private Sector Primary Source of Investment
    - Government Role:
        - Implement Policy that Encourage and Support Private Investment
        - Identify Effective Regulation Mechanisms and Promote Competition
    - When Private Financing is not Possible, Provide Fiscal Support
    - OECD Identified a Number of Policy Initiatives that May Promote Investment:
        - Improve Access to Passive Infrastructure and Coordinate Civil Works
        - Ensure Access to Rights-of-Way in a Fair and Nondiscriminatory Manner
        - Encourage and Promote the Installation of Open Access to Passive Infrastructure
        - Allow Municipalities or Utilities to Enter Market
        - Provide Greater Access to Spectrum and Promote Efficient Spectrum Use
    - When Fiscal Support is Necessary, Consider the Following:
        - Subscriber Subsidies
        - Subsidies for Investment
        - Tax Incentives
        - Municipal Broadband Development
        - Public-Private Partnerships
        - Undertaking Civil Works
        - Establishment of Public Internet Access Points
    - European Commission Guidelines for Fiscal Support
        - White Areas
        - Gray Areas
        - Black Areas
    - European Commission Balancing Test Questions
        - Is the aid measure aimed at a well-defined objective of common interest?
        - Is the aid well designed to deliver the objective of common interest i.e., does the proposed aid address the market failure or other objectives?
        - Is the aid an appropriate policy instrument to address the policy objective concerned?
        - Is there an incentive effect, i.e., does the aid change the behaviour of the aid recipient?

- Is the aid measure proportionate to the problem tackled, i.e., could the same change in behaviour not be obtained with less aid?
- Are the distortions of competition and effect on trade limited, so that the overall balance is positive?
    - European Commission Guidelines for State Aid in Broadband Development
        - Ex-Ante Mapping and Coverage Analyses
        - Open Tender Process
        - Most Economically Advantageous Offer
        - Technology Neutrality
        - Use of Existing Infrastructures
        - Open Access (Wholesale Access)
        - Benchmarking Pricing Exercise
        - Claw-Back Mechanism to Avoid Over-Compensation

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  http://ec.europa.eu/competition/sectors/telecommunications/broadband_decisions.pdf
  ICT Regulation Toolkit:
  http://www.ictregulationtoolkit.org/en/index.html
  International Telecommunications Union Statistics:
  http://www.itu.int/ITU-D/ict/statistics/
  International Telecommunications Union Broadband Portal:
  http://www.itu.int/ITU-D/treg/broadband/
  Telecommunications Regulations Handbook:
  http://www.infodev.org/en/Publication.1057.html
  OECD Broadband Portal:
  http://www.oecd.org/document/54/0,3746,en_2649_34225_38690102_1_1_1_1,00.html

1.3 Session 3: Upgrading Institutions for a More Effective ICT Policy

Main topics:

- ICT and Leadership
- ICT Role in Economic Growth
- Creating E-Leaders
- ICT Institutions
- Leadership Examples
- Successful ICT Strategies
- Institutional Leadership Structures
    - Integrate ICT Into Governance Reform And Into ICT Strategy
    - Pursue A Holistic Approach To E-Government
    - Adopt A Coherent And Tailored Approach To Equity
    - Take A Political, Economy Perspective
    - Adopt A Participatory Approach
    - Seek Quick Wins
    - Build Strategic Partnerships
    - Balance Strategic Differences With Local Initiatives

- o Build Capabilities For Innovation And Learning
- The Role Of Technology
- Capability Of ICT Institutions
  - o Core Capabilities That ICT Institutions Should Possess Are: Human Resources Development
    - ▪ Focusing On Capacity Building And "On The Job" Training
  - o Mobilization Of Resources, I.E., Obtaining And Managing Funds For Specific Programs)
  - o Program Management, i.e., Coordinating Between Stakeholders, And Using Reliable Evaluation And Monitoring Tools
  - o Forming Partnerships With Key Stakeholders
  - o Using Strategic Communications To Raise Awareness At All Levels Of Society
  - o What Kinds Of Institutional Arrangements Are Necessary To Promote Integration Of ICT Into Development Strategy And Management?
  - o What Role Should Be Played By The Central Ministries (Finance, Planning Or Economy)?
  - o How Should Demand For The New Institutions Be Mobilized And Articulated So As To Align And Integrate ICT Strategy With Development Policy And Goals?
  - o How Should Government Organize Itself To Lead Its Own ICT-Enabled Transformation And To Deal With The Cross-Sectoral Roles Of ICT?
  - o What Incentives And Institutional Frameworks May Encourage Collaboration?
  - o What Is The Best Way To Promote Bottom Up Innovation?
  - o How Can E-Leadership Institutions Enforce This Optimal Level Of E-Governance?
- Five Basic Models for Institutional Development
  - o Model 1: Share Responsibility
  - o Model 2: Coordinating Function Under Head of State
  - o Model 3: Lead Ministry
  - o Model 4: Government ICT Agency
  - o Model 5: Public-Private Partnership ICT Agency
- Alternative Models
- Use of Ad-Hoc Commissions

- Customizable Governments
  - Cape Verdean Example
- Recipes for Success
- Key Principles to Successful Institutional Structure
- Six Principles
  - Engage Key Stakeholders And Implement A National ICT Strategy, Vision, And Sector Plan
  - Develop A Policy Framework That Includes Laws, Regulations And Standards Enabling E-Government, E-Business, And E-Society
  - Build A High Level Executive ICT Function Into The Government That Would Be Responsible For Overall E-Development Process And For Coordinating The National, Regional, And Cross-Sector Strategy And Programs
  - Develop An Effective Division Of Labor And Coordination Of E-Development Activities Across Various Agencies In The Government
  - Create Special Task Forces And Funding Arrangements For Implementing High Priority Projects And Programs
  - Create Mechanisms For Monitoring And Evaluating E-Government Projects Across Different Government Bodies And Ensuring Accountability And Learning For The Whole E-Government Transformation Program
- Conclusions
  - Effective Demand For Institutions Can Be Created By Building Business And Civil Society Pressure For Better Public Services, By Raising Awareness Of Societal Leaders And Exposing Them To International Best Practices.
  - Citizens Can And Should Be Made Owners Of E-Government Programs. They Should Be Engaged—Through E-Leadership Institutions And Political Leaders—In Shaping The Kind Of Government, Information Society And Knowledge Economy They Could Have.
  - The Design Of E-Leadership Institutions Should Be Also Guided By A Deep Understanding Of The Political Economy Of Reform And Modernization
  - Countries Or States With Low Institutional Capacity (Weak Civil Service) May Opt For More Centralized Models At The Start To Harness Sufficient Authority For Coordination, Build On Scarce Local Capacity And Achieve Some Economies Of Expertise

- While, Countries That Enjoy Widely Shared Institutional And Technological Capacity As Well As Political Consensus On The Importance Of ICT For Modernization And Competitiveness May Opt For Shared Responsibility And Decentralized Implementation

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2 DAY 2

2.1 Session 4: Tools for e-Leaders, e-Government Tools, Open Government Plans and Government Plans and Governance Issues

Main topics:

- Short History
- E-Government Center
  - E-GC Was Set Up By Government Of Moldova In August 2010 To Carry Out The Development And Implementation Of The E-Government Agenda, Which Aims At Ensuring The Country's Sustainable Development
  - Center's Mission Is To Foster The Use Of Information And Communication Technologies For Purposes Of Enhancing The Government Efficiency, Increasing The Country's International Competitiveness, And Improving The Standards Of Living In The Republic Of Moldova
- Institutional Set Up
- Our Partners
- Strategic Program for Governance Technological Modernization
  - Promoting The Principles of Open Government
  - Public Service Digitation
  - Reengineering of Public Service and Operational Processes
  - Providing Modern Channels of Access Public Services
  - Shared Government Technology Platform
  - Data Center Consolidation
  - Implementation of Enterprise Architecture
  - Implementation Interoperability Framework
  - Ensuring Information Security
  - Application Of Innovation Technology
  - IT Capacity Building In Public Sector
  - Intelligent IT Investments In The Public Sector
  - Enabling A Favorable Regulatory Policy And Standards Framework
- Open Government Data Globally
- E-Transformation Objectives For E-Services
  - By 2020
    - All Public Services Shall Have Their Electronic Counterparts
    - 50% Adoption Of Electronic Public Services Shall Be Reached
  - Existing Information System Shall Be Rationalized And Integrated Into Governmental Data Interchange Framework
- G2C G2B Portal Launched May 10, 2012

- National ID Card Program – User Identification in Public Places
  - Authentication and Access Control Service will offer at least three ways to identify in cyberspace
    - User ID and Password
    - Digital Certificate
    - Digital Certificates on Mobile Phone
  - Mobile eID Works on the Same Principles as eID, But:
    - It does not require smart cards and card readers, instead it uses mobile phones
    - In Mobile eID Infrastructure the Cryptographic Material is Stored on the Subscriber Identity Module (SIM) Card which Contains PKI Functionality. Mobile eID works on the Same Principles as eID, But,
    - It Does Not Require Smart Cards and Card readers, Instead It Uses Mobile Phones
    - Mobile Penetration in Moldova is Close to 129% of the Population
  - Governemnt E-Payment Gateway Will Make It Possible To Pay For Any Public Service Using Any Financial Instrument Available On The Market:
    - Visa And Mastercard;
    - Banks' Internet Banking Systems
    - Mobile Banking
    - Approximately 900,000 Bank Cards Issued So Far
    - In 2011, the Volume of Transactions with Cards was Approximately 16 bln. MDL
    - Only 5% of Transactions Were Cashless
  - Government E-Payment Gateway Architecture
  - Online Payment Scenario
  - Government Notification Service
    - Government Notification Service will keep citizens informed while offline about various events and emergencies.
    - Notifications will be delivered through different channels, such as e-mail, SMS, telephone etc..
    - Use cases:
      - Alerts In Case Of Regional Or National Wide Natural Disasters
      - Notifications When Demanded Documents Are Ready To Be Picked Up
      - Informational Assistance In Healthcare, Drug Administration, Etc.
  - M-Cloud and Interoperability
  - M-Cloud: Shared Technological Platform
    - Electronic Public Services Provided By Ministries And Agencies Will Be Hosted And Operated From M-Cloud – The Shared Platform Built On Cloud Computing

- - Government Private Cloud (G-Cloud), Delivering All Common Services At IaaS, PaaS and SaaS Levels
  - First Choice For Public E-Services And Back-Office Information Systems Hosting And Delivery Platform /Government Ordinance 21-D From 26 March 2012/
  - M-Cloud Platform High Level Architecture
  - A. Services for Citizens and Business
  - B. Services for Government
  - C. Re-Usable Platform-Level Services
  - M-Cloud Phase I (2012)
  - Will Be Deployed At CTS And Will Reuse Its DC Infrastructure
  - Will Prototype All Main Initiatives Of M-Cloud, Including:
    - Cloud Specific Features Such As Self-Service Provision, Elasticity, Metering And Billing Etc. At IaaS, PaaS And SaaS Levels
    - Disaster Recovery
    - Scalability By Adding New Servers, Storage
    - VDI
    - LPA Involvement
    - Development And Testing Sandboxes For Development Teams
    - Data Center Consolidation
  - M-Cloud Phase II (2013-2015)
  - M-Cloud Phase II Will Consist Of Extending M-Cloud Capacity By:
    - Building A New Tier 3 Datacenter Using PPP
    - Reusing M-Cloud Phase I Datacenter As A DR Site
    - Migrating *All* Existing Services To M-Cloud
    - Adopting Cloud-Optimized Architecture;
    - Adding More Servers;
    - Adding More Storage;
    - Consolidating Datacenters According To DCC Plan
  - M-Cloud Incremental Development
  - Phased approach facilitates:
    - Faster Time-To-Market;
    - Reducing Implementation Risks;
    - Early Adoption Of Technologies And Services;
    - Learning From Feedback On Previous Phase.
- Components of E-Governance Conversion
  - Technology 20%
  - Social/Administrative Dimensions 80%

- Change Management 35%
- Restructuring the Business 40%
    - Legal Infrastructure (E.g., E-Signature)
    - Basic Database Records (E-Population, Real Estate Registrarion, Vehicles Registration, Online Business)
- Chance 5% (E.g., Unexpected Administrative Barriers)
- Capacity Building for E-Transformation
    - Knowledge Management Platform:
    - Quarterly Forums
    - Thematic Seminars
    - Sporadic Events (Visits Of International Experts)
    - Organized Training Activities
    - Inception Course On E-Governance (Feb-May 2012; 5 Rounds : ~ 140 Public Servants Trained) With Final Written Test And Certification)
- Inception Course on E-Governance
    - e-Government, Leadership (e-Government, Leadership in 21st Century; Strategic Planning, BPR, Change Management, etc.)
    - Abilitati Tehnice (Enterprise Architecture, e-Services, Information Security)
    - IT Project Management
    - Efficient Communication (Making Business Case; Negotiation, Making Presentations, Etc.)

Useful Websites

- http://www.egov.md/index.php
- http://www.facebook.com/eGovernment.Center.Moldova
- http://twitter.com/#!/eGovCenterMD
- http://www.flickr.com/photos/e-overnment_center_moldova/
- http://www.slideshare.net/E-Gov_Center_Moldova
- http://www.youtube.com/user/eGovCenterMoldova

2.2 Session 5: Open Government Plans

Main topics:

- Open Government, Open Data and E-Government
- Strategic Program for Governance Technological Modernization (E-Transformation)
- Core Principles of Open Government
    - Transparency
    - Citizen Participation

- o Accountability
- o Technology and Innovation
- Transparency: 2011 Open Government Data Portal Goes Live
  - o Public Budget Expenditure Data Base
- Citizen Participation: Public Consultations Portal
- Moldova Open Government Action Plan
  - o 3 Grand Challenges
  - ▪ Increasing Public Integrity
  - ▪ Better Managing Public Resources
  - ▪ Improving Public Services
  - o 10 Commitments
- Moldova Open Government Day
  - o Open Government Partnership
  - o International Experts from U.S., U.K. and the World Bank
  - o Civil Society
  - o Media
  - o Government Representative
- Open Government Innovation Week – May 2012
  - o Open Data Application Development Contest
  - o Data Journalism Workshop
  - o Public Expenditure and Financial Training
- Key Players
  - o Government
  - o Private Sector
  - o NGO Network
  - o Journalists
  - o International Development Partners
  - o App Developers
  - o Citizens

2.3 Session 6: Open Government Partnership Initiative How does it Work from Ukraine's Experience

Main topics:

- Ukraine's Traditions

    o Total Corruption

    o Illusive Influence Of The Public On The Authority's Decisions

    o Restricted Access to Public Information

    o Confused Administrative Procedures

    o Electronic Government on Paper

- Assessment of Corruption in Ukraine: Some Quantitative Data

- National Integrity System Ukraine

- OGP Initiative Is A Chance For Ukraine To Haste Key National Reforms Under Such Conditions:

    o To Draft The National Action Plan Within 6 Months With Participation Of Civil Society And To Submit It To The Initiative Steering Committee

    o To Ensure An Appropriate Coordination On Fulfillment Of Obligations Undertaken Under The Action Plan And In A Close Contact With Civil Society Organizations;

    o To Publish The Report-Self-Assessment After The First 12 Months Of Beginning Of National Plan Implementation;

    o To Give Consent For The Independent Result Assessment

    o A Month Before The Presentation Of The National Plan, Ukraine Practically Did Not Have The Agreed Document And Risked To Be Excluded From The Initiative

- What is the Result?

    o Non-Governmental Organizations In Ukraine Helped The Government To Adequately Fulfill The OGP Requirements

    o The National Action Plan Of Ukraine Is Approved By The Order Of The Cabinet Of Ministers Of Ukraine On April 5, 2012 No. 220, And The OGP Steering Committee Adopted It Without Comment

    o By Content, The National Action Plan Of Ukraine Is On Top 10 Among 55 Member-Countries

    o The National Action Plan For 80% Consists Of Proposals Of Public Experts.

    o The Draft Plan Was Presented To The Public Personally By The Premier-Minister Of Ukraine – Mykola Azarov

    o The Direct Responsible Persons For OGP Initiative In Ukraine On The Part Of The Government Are The First Prime-Minister And The Head Of State Agency On Science, Innovations And Information

    o How Can The National Action Plan Help Change Ukraine? (In The Context Of Using IT-Technologies)

- In the Field Of Counteraction Against Corruption and Ensuring Access To Public Information
  - To Publish From 2013 On Official Web-Sites Of Authorities All Declarations Of Public Officials Indicating Data On Their Incomes And Incurred Costs
  - To Ensure A Free And Gratuitous Access Of Citizens To A Number Of Important Thematic Data Registers: Register Of Rights To Real Estate, Land Cadastre, Register Of Persons Who Have Committed A Corruption Offence
  - To Guarantee A Complete Fulfillment Of Requirements Related To The Participation Of Ukraine In The Extractive Industries Transparency Initiative
- In The Field Of Electronic Governance
  - To Create A System Of Electronic Interaction Of Public Authorities Of Ukraine
  - To Implement A Pilot Model "Electronic Region" With The Complete Switch To The Use Of IT-Technologies In Providing Key Public Services
- In The Field of Simplification Of Administrative Procedures
  - To Create A Unique Portal Of All Administrative Services, Provided By Public Authorities Of Ukraine
  - To Create Centers On Administrative Service Provision In All Regions Of Ukraine
- In The Field of Civic Participation In Decision-Making Process
  - To Create A System Of Citizens' Electronic Addresses To Public Authorities
  - On The Basis Of 7000 Public Libraries Of Ukraine To Create A Network Of Points Of Access To Public Information
- What We Plan To Do In The Future?
  - Local Level
    - Introduction In Each Of Ukraine's Regions Of At Least 5 Best Practices On Implementation Of OGP Initiative Components (Electronic Purchases, Electronic Queue To Kindergartens, Centers On Administrative Service Provision)
  - National Level
    - Formation From The Government Representatives, Expert Public And Key Executors Of The National Plan Of The Coordination Council On The Implementation Of The OGP Initiative National Action Plan
      - Direct Work On The Implementation Of The National Action Plan
      - Preparation To Undergo Self-Assessment And Independent Assessment Of The Progress While Fulfilling OGP Initiative Requirements
  - International Level
    - Positioning Of Ukraine As The Regional Center On Exchange Of Experience And Best Practices Of Implementing OGP Initiative Components In The Directions: "Access To Public Information", "Local Democracy" And "Counteraction To Corruption"

- What Key Lessons Have Learned?
    - Dialogue Between Government Authority and the Public
        - Only Pressure Of The Public (Internal Or External) Can Stir A Real Interest Of The Authorities In Reform Implementation
        - Only The Public That Has Its Own Expertise And A General Vision Of The Issue, Can Count On Being Heard By The Authorities
        - Only An Open Dialogue, Initiated By The Authority, Guarantees A Common Interest Of The Parties In The Positive Result
    - Bureaucracy's Influence
        - Good Plans Are Always Difficult To Draw Up, But It Is Even More Difficult To Fulfill Them
        - One Should Always Make Friends With Those Who Make Decisions; To Communicate With Those Who Prepare Them; To Understand Those Who Execute Them
        - There Will Always Be A Bureaucratic Possibility To Stop Any New Beginning
    - Other Lessons
        - Only That Person Achieves Success Who Believes In The Matter And Is Not Afraid Of Finding Himself Alone;
        - Once We Lose The Interest In The Matter, Everything Immediately Returns To Ground Zero

Reference Material:
- Official website of the global Open Government Partnership Initiative - http://www.opengovpartnership.org/
- Blogs of Experts on the openness of Governments -http://blog.opengovpartnership.org/
- "Open Government: Collaboration, Transparency, and Participation in Practice. Edited by Daniel Lathrop, Laurel Ruma - books.google.com.ua/books/about/Open_Government.html?id=JQJ5LF3h4ikC&redir_esc= y

3 DAY 3

3.1 Session 7: Development of National Broadband Strategies

Main topics:

- Review of Broadband Ecosystem
- Review of Policy Tools Available
  - Supply Side
  - Demand Side
- Strategies and Policies According to World Bank Studies
  - Promotion, Oversee and Universalize
    - Early Stage: Promote
    - Mass Market: Oversee
    - Universal Service: Universalize
- Building Blocks
  - World Bank Studies Suggests Three Building Blocks That Are Important When Designing and Implementing Broadband Policy:
    - Be Visionary, But Flexible
    - Use Competition to Promote Market Growth
    - Facilitate Demand
  - What Is Your Country's National Broadband Strategy?
    - How Was It Developed?
    - Who Leads The Strategy?
    - What Are The Unique Challenges?
    - Has It Demonstrated Flexibility To New Technologies And Needs?
  - Competition
    - More Successful Countries Promoted Inter-Model Competition (Digital Subscriber Line, Cable Modem And Third Generation Wireless)
    - Countries Fostered Collaboration Between Public And Private To Promote Broadband Service
    - Some Countries Focused On Facility Competition; Others On Service Competition
  - Facilitate Demand:
    - Successful Countries Facilitated Demand, Especially At The Early Stage To:
    - Raise Awareness Among End Users
    - Make Services More Affordable
    - Expand Networks And Services
    - Some Countries Used Public Funding For Research, Manufacturing Promotion, Conten Development, User Awareness, ICT Skill Development, Digital Literacy Programs
- Examples of Policies and Programs for Broadband Development
  - Low Income Economy Case: Kenya
  - Lower Middle-Income Economy Cases: Vietnam, Morocco and Sri Lanka

- o Upper Middle-Income Economy Cases; Turkey, St. Kitts and Nevis
  - The Case Study of Brazil
  - Broadband Strategies Handbook

Reference material

- International Telecommunication Union (ITU)/United Nations Educational Scientific and Cultural Organization (UNESCO). Broadband: A Platform for Progress – A Report by the Broadband Commission, ITU/UNESCO, June 2011. http://www.broadbandcommission.org/Reports/Report_2.pdf
- Jensen, Mike. Broadband in Brazil – A Multipronged Public Sector Approach to Digital Inclusion. Information for Development Program, (infoDEV) Publication, The World Bank, 2011. www.infodev.org/en/Document.1128.pdf
- Kelly, Tim and Carlo Maria Rossotto (Eds.) Broadband Strategies Handbook, The World Bank, Washington, D.C. 2012. http://broadbandtoolkit.org/en/home
- Kim, Yongsoo, Tim Kelly and Siddhartha Raja. Building Broadband: Strategies and Policies for the Developing World. Global Information and Communication Technologies (GICT) Department, The World Bank, Washington, D.C., January 2010. http://siteresources.worldbank.org/EXTINFORMATIONANDCOMMUNICATIONANDT ECHNOLOGIES/Resources/282822-1208273252769/Building_broadband.pdf

Useful Websites:

- http://www.broadband.gov/
- http://www.broadband-europe.eu/Pages/Home.aspx
- http://ec.europa.eu/information_society/digital-agenda/index_en.htm

3.2 Session 8: Regulation and Competition Issues

Main topics:

- Competition Policy: An Overview

- Competition Law

- Market Power

- Dominance

- Competition Terms Defined

- Interconnection

  - o Interconnection In An IP World

  - o Access To International Gateways

  - o Challenges To Interconnection Regime

  - o Pricing and Access Issues

  - o Interconnection Cost Models

  - ▪ Types of Costing Methods

- Licensing

- License Classes
    - Approaches to Authorizations
    - Results of ITU World Telecommunication Regulatory Database Survey, 2008
- GSR 2011 Best Practice Guidelines
- ITU Guidelines and Recommendations
- Conclusions
    - Governments And Regulators Play A Key Role In Stimulating Demand For ICT Services And Applications, In The Framework Of Broader Strategic Goals, Such As Connecting Public Institutions, Businesses And Residential Users With Broadband, Promoting Economic Development, Digital Inclusion, Social Cohesion And Equality Of Opportunity
    - Regulators Need To Be Attentive To The Challenges Stemming From Convergence To Pave The Way For The Establishing A Regulatory Environment That Is Transparent, Conducive To Investment And Growth, Fosters Fair And Greater Competition And Innovation, Stimulates The Deployment Of Infrastructure, Promotes The Development Of New Services, Protects Consumers, And Is Security Conscious
    - Regulators Should Adopt Appropriate Regulation On Interconnection And Access, Including Pricing, Taking Into Account The Relevant Technological Market Developments Including The Roll-Out Of Next Generation Networks In The Core And In The Access Layer.
    - Governments Need To Build An Adaptive Regulatory Framework By Adopting A Technology Neutral Approach, And A Simplified And Flexible Licensing Regime That Provides For Easy Market Entry Of New Players, Such As Through General Authorizations And Multiservice/Unified Licenses.
    - Establish Appropriate Policy Goals And Refrain From Imposing Regulatory Restrictions Except When Strictly Necessary To Promote Competition And Consumer Protection, And That Are Proportionate To The Established Policy Goals.
    - Foster Competition In Converged Services Over Wireless Networks Through Efficient And Integrated Spectrum Management
    - The Telecom Network Is Evolving Toward A Future In Which IP-Based Networks Replace Circuit-Switched Networks, Both For Fixed And Mobile (3G And 4G) Services, But This Will Not Happen Overnight Hence The

Need To Continue With Legacy Interconnection Regulations Necessitating A Call For Greater Oversight.

- o Promote Innovation And Research And Development

Reference material

- Bezzina, Jérôme, "Interconnection Challenges in a Converging Environment: Policy Implications for African Telecommunications Regulators," The World Bank, June 2005.

- Economic Community of West Africa States, Supplementary Act A/SA.2/01/07 on Access and Interconnection in Respect of ICT Sector Networks and Services, 19 January 2007, Article 20.4(a)

- Gasmi, F, Noumba, P, Virto, L Political accountability and regulatory performance in infrastructure industries: an empirical analysis: WBPRWP,

- Gómez-Ibáñez, José. 2003. *Regulating Infrastructure: Monopoly, Contracts, and Discretion*. Cambridge, MA: Harvard University Press.

- ITU/InfoDev's ICT Regulation Toolkit, Modules 2, 3, 5, 6, & 7 http://www.ictregulationtoolkit.org

- Jamison, Mark, *The Regulator's Challenge: Providing Stability While Leading Change,* Australian Competition and Consumer Commission's Ninth ACCC Regulatory Conference, "Revisiting the Rationale for Regulation October 2008, http://www.accc.gov.au/content/item.phtml?itemId=854729&nodeId=97fe41be3bd40b6154 f4811cd33f3357&fn=Network%20issue%2030%20December%202008.pdf.

- Jamison, Mark, *The Importance of Telecommunications Development*, NTC Annual Review 2007, Vol. 1, pp. 58-87. Available at SSRN *papers.ssrn.com/sol3/papers.cfm?abstract_id=1083791*

- Jamison, Mark A. Cost Concepts for Utility Regulators PDF Available University of Florida, Department of Economics, PURC Working Paper, 2006.

- Jamison, Mark A. Methods for Increasing Competition in Telecommunications Markets University of Florida, Department of Economics, PURC Working Paper, 2008.

- Laffont, Jean-Jacques and Tirole, Jean. *Competition in Telecommunications*. Cambridge, Mass.: The MIT Press, 2000

- Laffont, Jean-Jacques**.** 2005. *Regulation and Development*. Cambridge: Cambridge University Press.

- *Muente-Kunigami, Arturo & Navas-Sabater, Juan*, Options to Increase Access to Telecommunications Services in Rural and Low-Income Areas, *World Bank* Working Paper #178

- Regulation Body of Knowledge http://www.regulationbodyofknowledge.org

The Body of Knowledge (BoK) on Infrastructure Regulation website was created by the Public Utility Research Center (PURC) at the University of Florida under a contract with the Public-Private Infrastructure Advisory Facility (PPIAF) and the World Bank (Infrastructure Economics and Finance Department). PURC manages the BoK website under a contract with PPIAF and the World Bank

- WTO Agreement on Basic Telecommunications Services 1996. World Trade Organization

3.3 Session 9: Electronic Government in Belarus: To Overcome Inertia of Informatization

Main topics:

- Infrastructure
  - o Broadband Growth in Belarus
  - o Internet Population Growth in Belarus
  - o Internet Population Growth in the Region
  - o Internet Penetration
  - o Mobile Internet Traffic Growth
  - o Minsk.gov Audience Demographics
  - o Most Popular Sites Given Demographics
  - o E-government Index For The Republic of Belarus (Difference With The Mean Value in Europe) and General E-Government Index For The Republic Of Belarus
  - o Adequate And Conceptual Legal Framework To Organize The Processes Of Electronic Interaction Between Citizens And State Authorities
- Models and Concepts of Electronic Government
  - o Electronic Government – the Programme of Transformation Of The State Management (With The USE of ICT)
  - o Free Exchange Of Information
  - o Information And Effective Participation Of Citizens In The Political Forum
  - o Accessibility And Individualization Of Services
  - o Empowerment Of Representative Institutions
  - o Accountability And Transparency Of Government Authorities' Activities
  - o Two Models Of Electronic Government
  - ▪ Customer Centricity
    - Security Of Personal Data Undergoing Automatic Processing
    - «Life Episode» As The Basis For Design
    - Media Education
    - High Level Of Trust Of Citizens And Organizations
    - Oriented At Citizens' And Organizations' Needs
    - Training Of Citizens, Stimulation Of Demand For Electronic Interaction
  - o Open Data – Government Data In The Machine-Readable Format, Which Can Be Used For Commercial And Non-Commercial Purposes
  - o Planning Principles

- To Improve The Methods Of Government Service Focus To Population And Business;
- To Increase The Level Of Citizens' Participation In The Processes Of State Management;
- To Support And Expand The Possibilities For Citizens' Self-Service
- To Raise Technical Awareness And Qualification Of Citizens
- Belarus Profile of Electronic Government
  - Technocratic Approach
  - Orientation At State's Needs
  - Absence Of A Complex Concept Of Electronic Government
  - Not Customer Centric
- Subprogramme "Electronic Government" Is Published. What is Next?
  - There Are No Mentions Of The Fact That The Convenience And Needs Of Citizens Are Crucial In Forming A Set Of Services On The Basis Of "Life Situations" Principles Rather Than Automation Of Existing Administrative Procedures
  - The Effect Of Implementation Of The Programme For Citizens Is Determined Only In Terms Of Quantity (Reduction Of Administrative Burden On Citizens And Business, Reduction Of The Number Of Referrals To The Authorities For Service Provision, Reduction Of Waiting Time);
  - Expected Results Concern Mainly State Organizations And Organizations Which "Use Global Computer Network Internet To Obtain Information From State Authorities And To Present It To State Authorities
  - A State-Oriented Approach
  - A Programme Without Concept
  - Overcoming Inertia Of Informatization And Drafting And Implementing Effective Projects
  - Basic Principles
  - Gaps In Strategic Planning Of Belarus Government
  - Identification Of Electronic Government;
  - Priorities And Classification Of Goals By Short- And Long-Term;
  - Studying Needs And Actions To Build The Demand From Citizens And Businesses For E-Government Services;
  - Identification Of Priority Groups Of Services Which Are To Be Transferred Into Electronic Form, And The Task Of Their Integration Up To The Level Of Life Episodes And Business Situations;
  - Issues Of Improvement Of Fulfilling State Functions In The Field Of Monitoring, Surveillance, Forecasting, Regulation Within The E-Government Formation;
  - Convenience Of Service Provision And Their Effectiveness In Terms Of Citizens And Businesses As Basic Criteria For E-Government Evaluation;

- National Standard Of Citizens' Media Literacy;
- Clear Definition Of Directions Of Strategic Partnership With The Representatives Of Civil Society And Business-Community
  - Ensuring A Regulatory Framework That Corresponds To The Concept Of Citizen-Oriented E-Government
- Normatively Fixed Definitions Of Terms "Electronic Government" And "State Service";
- Developing The Draft Law On Ensuring Access To The Information About State Authorities' Activity;
- Signing The Convention Of Council Of Europe For The Protection Of Individuals With Regard To Automatic Processing Of Personal Data
  - Unique Information System and Resources
- Open, Regularly Replenished And Adaptable To The Needs Of The Thematic Resource, Which Includes A Structured Thesaurus Of Terms, Principal Directions Of Monitoring And Evaluation, Analysis Of Results, Discussion Of Perspectives, Designation Of Key Success Factors, Etc
  - Programme, Planning and Monitoring
- Citizens' Electronic Maturity
- Priority Of Electronic Government Services
- Needs Of State Authorities In Activity Automation And Level Of Readiness For Providing Electronic Services
- Experts' Surveys
- Rating Of Electronic Government Development By Fields
- Systematic Monitoring Of Government Web-Sites
- Quality Of Providing State Services In Electronic Form
- Citizens' Satisfaction
  - Necessary Steps To Overcome Inertia Of Informatization, And, Therefore, To Implement Effective Projects:
- To Develop An Integral Electronic Government Concept Oriented At Providing Services To Citizens,
- To Ensure Regulatory Framework,
- To Form An Open Resource To Expand The Expert Network,
- To Organize A Public Control As Effective Monitoring On The Basis Of International Methods Which Consider Qualitative Characteristics
  - Conclusion

- State Authorities And Organizations Must By January 1, 2016 Switch To Provision Of Electronic Services Through [A Unique Portal Of Electronic Services](#) In Compliance With Annual Plans, Approved By Council Of Ministries. This Is Stipulated In The Government Ordinance No. 509 Dated May 31, 2012
- The Ministry Of Communications And Information Must Before May 1, 2013, Organize The Operation Of The System Of Information Intermediaries That Provide E-Services
- The Ministry Of Justice And The Ministry Of Communications And Information Together With The Operational And Analytical Center Must Ensure By January 1, 2015, The Work Of The Program Complex "Single Window"
- Electronic Services Shall Be Provided By The Newly Created Republican Unitary Enterprise "National Center For Electronic Services"

3.4 Session 10: Cyber Crime

- International Cooperation: Obtaining Electronic Evidence
- Hack Simple – Not That Simple
  - ISP
  - Hop Site
  - Tool Site
  - Drop Site
- What is the Computer Crime & Intellectual Property Section (CCIPS)?
  - Department of Justice
  - Geographic Boundaries
  - Criminal Division
    - Started 1997
    - 40 Prosecutors
    - Attacks On Computers
    - Intellectual Property Offenses
    - Fraud
    - Child Exploitation
    - International & Domestic Training
  - Challenges:
    - Identifying The Perpetrator And Extent Of The Crime

- Volatility Of Electronic Data
- Need For Fast And Confidential Investigations

- Obtaining Electronic Evidence
  - What Type of Evidence Can You Get?
    - E-Mails
    - Logs Identifying Who Had An IP Address
    - Logs Showing Who Accessed A Service
    - Other
  - Where is Electronic Evidence?
    - Stored On Servers
    - Servers Are In Different Nations
  - Formal Solicitations
    - Why do you need it?
      - Emergency or Criminal Investigation?
      - Life & Death Emergency?
  - Obtain It Immediately Without U.S. Judicial Process
    - What do you want?
      - E-mail / subscriber info/ traffic data
    - Can we provide it?
      - What is our relationship? Treaty?
    - How do we get it for you?

- Why Do You Need It?
  - Criminal Investigation?
    - First Step: Preservation
      - Notify ISP---"2703(f) letter"
        - Preserve Records 90-180 Days
        - Extension Available
      - Formal Request Needed
      - 24/7 High Tech Crime Network
    - What is Requested?
      - Historical Data
      - Future Data
      - Contents
      - Non-Content
  - Balance Privacy And Law Enforcement Needs

- How Do We Obtain It?
- Pen/Trap: What Do You Get?
  - Includes:
    - Origen Of An Email
    - Destination and Port
  - Excludes:
    - Subject Line
    - Attachments
    - Value: Locate Target
  - Show Connection To The Crime
    - Prosecutor Must "Certify To The Court That The Information Is Relevant To A Criminal Investigation>" 18 U.S.C. §3123
    - 60 Days + 1 Extension
  - General Framework
- Interceptions
  - Telephone Interceptions (Wire Tap) Laws Applicable To Electronic Communications
  - Available Only In Joint (U.S.) Investigations
  - Why?
- Email Content
  - What Does It Include?
    - Messages Received, Sent, Drafts & (Maybe) Deleted
    - Photos & Attachment
    - Contacts
  - How To Get It?
    - Search Warrant = Probable Cause
      - Probable Cause Is When Facts And Circumstances, Being Both Reasonable And Trustworthy, Are Sufficient To Warrant The Belief That A Crime Has Been Or Is Being Committed Or That Evidence Will Be Found In A Specific Location
    - Non-Content/Past
      - Which ISP Customer Had This IP Address?
      - What IP Address Is Used To Read This Yahoo E-Mail Account?

- What Credit Cards Are Used To Pay For This Service?
  - Traffic Data
    - What Is It?
      - Registry Of Activity: Where Has Subscriber Been
      - Similar To Telephone Records
      - Does Not Include Content
    - How Do We Get It?
      - Judicial Order
      - Need Only Establish "Relevancy"
  - Can We Assist?
    - What Is Our Diplomatic Relation?
      - MLAT's With 60 Nations
        - Egypt, Malta, Nigeria, South Africa
      - International Treaty
        - Budapest Convention
        - OAS Treaty On Cyber-Crime
        - UN Treaty On Terrorism
      - Letters Rogatory
    - Standard Treaty Language: "Assistance Will Include…Execution Of Requests For Search Warrants Or Other Orders Issued By The Judicial Authorities Of The Requested Country…"
    - Search Warrants. Requests Must Include:
      - Precise Description Of Facts That Constitute Probable Cause
      - Source Of The Information
      - Fairly Recent Events
  - Other Options
- Informal Assistance
  - Embassy Attaches
  - Connections, e.g., Rodolfo Orjales
- Limitations On Use
  - Not Admissible In Court
  - Significant Investigative Value

- o Alternatives To Advance An Investigation
  - ▪ Use Other Investigative Tools
    - • Surveillance
    - • Free On-Line Tools
      - o Public Records
      - o MapQuest
- • International Cooperation
  - o Success Requires Quick Action
  - ▪ Evidence Can Be Deleted
  - o Success Requires Confidentially
  - ▪ Otherwise Evidence And Targets Will Disappear
- • Final Points
  - o Do Not Overlook:
  - ▪ Physical Evidence
    - • PCs, Hard Drives, Cell Phone, PS3
    - • On-Line Sources, Who-Is
  - ▪ Documentary Evidence
    - • Admissibility At Trial
      - o "Official Documents"
      - o Custodian Of Records
  - o What Will You Receive?
  - ▪ Authentication
    - • Will You Need Custodian Of Records?
      - o If Defendant Does Not Oppose
      - o Witness To Authenticate Records
    - • Is The Data Understandable
      - o Bank Records Are Familiar
        - ▪ Not True With E-Bay/Paypal
      - o Telephone Records Are Simple
        - ▪ Not True With all Electronic Records
      - o Custodian Can Explain
- • Assistance Has Constitutional Limits
- • Limited Resources For More Serious Cases

4 DAY 3

4.1 Session 11: Going Mobile: a Review of Spectrum Policy and Management

Main topics

- Principles Of Spectrum Policy
  - Spectrum Overview
  - Trends
  - Regulatory Challenges
  - Balancing Between The National and Global Level
    - Is Coordinated At Global Level, But
    - Is A National Asset, And
    - Worth More and More As Technologies Improve
  - Managing Trade Offs Among Pubic Policy Objectives
    - Ensuring Efficient Use Of Spectrum (Including Preventing Harmful Interference)
    - Maximizing Public Reviews
    - Maximizing Benefits From Spectrum Access For Citizens And Consumer
    - Promoting Competition In Electronic Communications Networks And Services
    - Guarding Against Anti-Competitive Behavior
  - Spectrum Management Models
  - Command and Control
  - Market Based Property Rights
  - Spectrum Commons
  - Unlicensed Spectrum
  - Spectrum Models
  - Governments Worldwide Have Used A Mixture Of All Three Approaches
    - Legacy Command-And-Control Regimes For Government Services
    - Auctions And Bidding For Many Commercial (e.g., Cellular Mobile) Licenses
    - Unlicensed Uses For Low-Power Devices (e.g., Wifi)
  - Spectrum Policies
- Spectrum Management
- Spectrum Allocations
  - Auctions
  - Use of Coase Theorum
  - Spectrum Sales
  - Private Sales
  - Spectrum Sharing
  - Spectrum Trading
- Digital Dividend

- Cleared Spectrum Refers To The Broadcast Spectrum That Will Become Available Once Digital Switchover Occurs

- Interleaved Spectrum (Whitespace) Is Additional Capacity Available Within The Spectrum That Will Be Used In Digital Broadcast Based On How Digital Terrestrial TV (DTT) Networks Are Deployed. The White Space Spectrum Got Its Name Because It Can Be Used At A Local Level By Different Users On A Shared (Interleaved) Basis With Terrestrial TV

- Conclusions
  - Spectrum Is A Scarce Resource Which Can Be Used For A Wide Range Of Economic, Social, Cultural, Scientific And Developmental Purposes An Large Number Of End-User Services (Broadcasting, Mobile Broadband, Emergency Services Etc).

  - New Technologies Are Evolving That Allow For The Sharing Of Spectrum More Efficiently, The Leasing Of Unused Spectrum To Other Companies, And The Auctioning Of White Spaces Between Spectrum Licenses That Previously Were Thought To Not Be Usable.

  - New And Emerging Technologies Will Spur An Increase In Demand For Spectrum-Dependent Wireless Services, Challenging Regulators And Users Alike.

  - In Choosing How Much Spectrum To Allocate And For Whom, Regulators Are Placing Emphasis On Market Valuations, Economic Efficiencies And On Social, Development And Cultural Goals.

  - In Choosing How Much Spectrum To Allocate And For Whom, Regulators Place Emphasis On Market Valuations And Economic Efficiencies But Also On Social, Development And Cultural Goals.

  - The Key Question For The Allocation Of The Digital Dividend Appears To Be What Is The Best Way Of Maximizing The Total Value To Society And What Are The Trade-Offs.

  - Spectrum Policies Should Address Incentives For Innovation, Promote Flexibility, Establish Spectrum Users' Rights And Determine Practical Methods For Compliance Monitoring, Interference Management And Dispute Resolution.

    - These Factors Apply Whether Spectrum Is Used In The Spectrum Commons Or Shared By Some Other Means Where Implementation Relies Heavily On Advanced Radio Technologies Designed To Facilitate Spectrum Sharing.

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    www.publicknowledge.org   in   particular   the   numerous   articles   on   spectrum   policy
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6. Global Symposium of Regulators 2008, Six Degrees of Sharing: *Innovative Infrastructure Sharing and Open Access Strategies to Promote Affordable Access for All. Discussion Papers*
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8. Regulation Body of Knowledge http://www.regulationbodyofknowledge.org
    The Body of Knowledge (BoK) on Infrastructure Regulation website was created by the Public Utility Research Center (PURC) at the University of Florida under a contract with the Public-Private Infrastructure Advisory Facility (PPIAF) and the World Bank (Infrastructure Economics and Finance Department). PURC manages the BoK website under a contract with PPIAF and the World Bank

9. ITU/InfoDev's ICT Regulation Toolkit, Modules 2, 3, 5, 6, & 7
    http://www.ictregulationtoolkit.org

4.2 Session 12: Open Access And Infrastructure Sharing

- Open Access Overview and Definition
- Types of Sharing
- Benefits of Open Access
- Open Access Requirements
- Goals of Open Access
- Creating Incentives
- Open Access Guidelines
- Regulatory Mechanisms To Prevent Access Or Price Discrimination
    - There are a number of regulatory mechanisms that the EU, WATRA, and other regional groups have adopted to prevent dominance, barriers to entry, price discrimination and other forms of discrimination from occurring.
    - These are:
    - Accounting Separation
    - Functional Separation
    - Structural Separation
    - Divestiture

- Conclusion:
    - Open Access Is Critical For The Creation And Development Of Broadband Networks And Is A Key Tool Regulators Use To Foster Competition And Promote Investment In Backbone Networks, Especially Where There Exist Economic Bottlenecks.
    - It Allows Anyone To Connect To Anyone In A Technology-Neutral Framework Encouraging Innovative, Low-Cost Delivery To Users And Encourages Market Entry From Smaller, Local Companies
    - It Encourage New Networks To Expand To Areas That Are Completely Underserved Or Served Only By The Most Basic Of Telecom Services
    - Government Needs To Create Enough Incentives Within The Regulatory Framework For Operators To Invest In Infrastructure

Reference material

- Global Symposium of Regulators 2008, Six Degrees of Sharing: *Innovative Infrastructure Sharing and Open Access Strategies to Promote Affordable Access for All. Discussion Papers*
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- Economic Community of West Africa States, Supplementary Act A/SA.2/01/07 on Access and Interconnection in Respect of ICT Sector Networks and Services, 19 January 2007, Article 20.4(a)

4.3 Session 12: Internet Governance

Main Topics:
- Presentation Made in Russian. English Version Is Not Available