National E-Strategy For Lebanon

OMSAR

ICT National Policies

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UNDP

Launching the National e-Strategy for Lebanon

The United Nations Development Programme

&

The Office of the Minister of State for Administrative Reform

Track 2: National Policies

Priority Projects

Priority project have been identified for all Tracks of the National e-Strategy, and not only for this particular Track. As for the nature of these projects, they generally fall under one of four categories:

A- Infrastructure

B- ICT Legislation

C- Projects focusing on preparing future generations for being active in a knowledge society

D- Projects focusing on bringing relevant digital content and affordable ICT services to the population at large

The first two categories are self-explanatory and have been discussed extensively in various forums over the past years. They constitute the basic enabling environment for a knowledge-based economy and society to take place. As will be discussed under the relevant Tracks of the Implementation Plan, work is moving along on the ICT Legislation portion, while Infrastructure projects seem to be stalled.

The third and fourth categories focus on providing basic building blocks for the "people" part of the knowledge society. They focus amongst other things on public schools curricula, teacher training, and providing affordable technology access points (MPCTs) as a public good service. They also focus on providing locally-relevant content and training to all segments of the population at large. In brief, they are projects with the aim of taking the majority of the population on their first steps towards incorporating technology as a tool in their lives, starting in many cases with basic awareness campaigns.

Projects dealing with the digitization of public domain content and with providing e-government services also take priority, since they are usually strong drivers of technology adoption. These projects fall under the fourth category, along with other non-governmental content and e-services.

It should be noted that while the first two categories require strong involvement and political will from the government, a lot can be done with the second two harnessing the efforts of the private sector and civil society, and using various donor funding. The point is made later under "Next Steps" that work on these projects should proceed in parallel to infrastructure work and legislation, and a lot can be done even before any coordinating Entity is put in place.

Finally, it should be stated that even if some projects are not listed as Priority but there is some momentum around implementing them (i.e. clear ownership and available funds) then such projects should be implemented. Therefore, within this context Priority Projects simply indicate projects where special focus and effort should be put towards getting them implemented.

Track 2: National Policies

The priorities in National Policies are clustered around three areas of work: Regulatory Environment; Government Actions including the creation of a National e-Strategy Coordination Entity; and Deregulating the Telecom Sector.

In regards to the first, the good news is that there is significant work taking place around creating a basket of ICT enabling laws. There are a few committees/ projects focusing on this, the most significant of which is the ECOMLEB project being implemented at the Ministry of Economy and Trade with funding from the European Union. Another group working on such laws is the ICT Parliamentary Committee. It is essential that these various groups coordinate their effort, to avoid duplication. The ECOMLEB project expects to complete its work in the first quarter of 2005, with the laws being passed later in the year.

A number of government actions constitute the second area of priority. Amongst these, the creation of a National e-Strategy Coordination Entity to oversee the implementation of the e-Strategy is the absolute pre-requisite and top priority project, irrespective of its format (ministry, independent government entity, etc.) On the one hand, its creation is a statement that the government recognizes the importance of ICTs for the general development and well-being of the country, and that there is clear leadership backing to the e-Strategy. On the other, there will be a formal body whose main task is to coordinate the effort and push for the implementation of Programs, both in the public and private domains.

As discussed earlier, the format for such an Entity that seems to be most favored amongst various stakeholders interviewed is an independent government agency. But again, regardless of the format, some entity needs to be created, as without a coordinating body all efforts to push for the implementation for the e-Strategy will remain scattered and weak.

Other needed government actions include the definition of a number of national objectives with benchmarks and dates for achieving them. In addition, the government has to demonstrate its commitment to using ICT as a development tool by increasing its ICT budgets, which would in itself add momentum to ICT usage in many sectors.

Deregulating the telecommunications sector is another area of priority. There has recently been some movement in this direction through the passing of Law 431, and the establishment of the Telecommunications Regulatory Agency (TRA). The operational setup of the TRA needs to be completed as soon as possible to ease restrictions and streamline licensing processes. The benefits of moving the sector into a free market economy include more competition to the benefit of the consumer and opening up to foreign investors.

Finally, there are other legislative action items the government needs to take to provide the environment and incentives for ICT to help in various sectors. Examples of these are the reduction of taxes on ICT equipment and accessories and the creation of laws designed to provide increased access to information and technology to groups with special needs. Appropriate regulations need to be developed as well for sectors such as Healthcare and Education, both to enforce usage as well as control quality of services.

1 Enabling Environment- Infrastructure

Program/ Project	Relevant Projects	Ownership	Other Track	Reference to WSIS-RPoA	Implementation Timeline		
					Immediate	By End of 2008	By End of 2015
1.01 Improve Connectivity & Network Speeds in Lebanon							
Make Broadband Access Available Throughout the Country (xDSL)		Ministry of Telecommunications		ICT Infrastructure			
Increase International Bandwidth		Ministry of Telecom		ICT Infra			
Improve Nat'l Fixed Line Telecom Infrstructure to Allow for Enhanced Internet Backbone		Ministry of Telecommunications					
Complete Intelligent Network Project		Ministry of Telecom					
Consider Altrernative Technologies to Fixed Lines (Wireless, Satellite) esp in Rural Areas		Ministry of Telecommunications		ICT Infrastructure Access to Info & Knowledge			
1.02 Improve Affordability of Connectivity		Ministry of Telecom					
Further Decrease Dial-Up Connectivity Costs		Ministry of Telecom & ISPs					
Lower High Cost of Bandwidth to ISPs, & High Cost of Internet Access (ISPs) to Consumers			5.01				
1.03 Increase Usage of ICTs including the Internet							
Establish Multi Purpose Community Tele Centers (MPCTs) (subsidized and/or self-sustaining)	Various (PiPop; UNDP Regional; Safadi Found;etc)	Various Government; NGOs; Private		Access to Info; Enabling Envmt			
Equip 15 Public Libraries with Multimedia Centers & Free Internet Access		Relevant Ministries (Education; Culture; Social Affairs..)		Access to Info; Enabling Envmt			
Provide Access in All Rural Areas Currently Outside the Telecom Backbone				ICT Infra; Enabling Envmt			
1.04 Provide Infrastructure in Schools							
Equip Public Schools with Computer Labs & Connectivity (maybe used after hrs as MPCTs)	Various Limited Initiatives	Ministry of Education		ICT Capacity Bldg/ Dev HR			
Identify, Collect, Refurbish, & Redistribute Second Hand Equipment	UNESCO Computer Refurbishing Project	UNESCO	2.05				
1.05 Increase PC Penetration							
Provide Low Income Families with Affordable PCs	PC4All (not begun)	OMSAR					
Develop Mechanism to Streamline Donations			3.02,6.02	ICT Capacity Bldg/ R&D			
1.06 Revitalize R&D & Indigenous ICT Innovation							
Equip R&D Centers with High-Speed Internet Access			6.07				
1.07 Upgrade Industrial Zones							
Equip Zones with High-Speed Internet Access							
1.08 Develop Sector-Specific Secure Networks							
Realize Banking Secure Network Infrastructure	SEBIL (BDL)						
Realize Education Secure Network Infrastructure							
Realize Tourism Secure Network Infrastructure							

2 Enabling Environment- National Policies

Program/ Project	Relevant Projects	Ownership	Other Track	Reference to WSIS-RPoA	Implementation Timeline		
					Immediate	By End of 2008	By End of 2015
2.01 Launch ICT Enabling Legal Framework				Bldg Confidence, Trust, & Security			
2.02 Promote & Encourage e-Commerce		Ministry of Economy & Trade	6.04, 7.05	e-Commerce Apps			
Develop & Pass Laws Against Harmful Content for the Protection of Minors	ECOMLEB			Enabling Envmt			
Develop & Pass Security & Data Privacy Laws	ECOMLEB	MoET		Bldg Confidence, Trust, & Security			
Develop & Pass Cyber Crimes Laws	ECOMLEB	MoET		Bldg Confidence, Trust, & Security			
Setup Collaboration with Interpol HiTechCrime Unit & Rapid Info Exchange System		ISF		Bldg Confidence, Trust, & Security			
Join Int'l Organizations against Cyber Crime Prevention e.g. The Council of Europe's Convention on Cyber Crime							
Develop & Pass Consumer Protection Law for Online Communications & Transactions	ECOMLEB	MoET					
Develop & Pass Anti-Spam / Unsolicited MarCom Prevention Laws	ECOMLEB	MoET					
Implement Laws that Prevent Unauthorized Access to Communication		TRA Civil Courts					
Set-up Real Time Incident Handling Points		MoET					
Develop & Pass Effective Dispute Res Systems esp ADR	ECOMLEB	MoET					
Develop & Pass e-Signature Law							
Implement IPR laws on Content & ICT Solutions (inc trademarks, domain name registrations, copyrights, patents, & geographic indicators)		MoET		Bldg Confidence, Trust, & Security			
Develop Legal Frameworks for e-Gov Applications, Particularly e-Procurement	On Hold	OMSAR	4.04, 7.03	e-Gov Apps			
2.03 Government Agencies and Actions							
Setup an Independent (cross-sectoral) Government Entity to Coordinate e-Strategy Implementation				Policies & Strategies			
Increase Government ICT Spending (Inc. for R&D)				Cap Building/ R&D & ICT ENT			
Set National Objectives and Benchmarks across Sectors				Policies & Strategies			
Launch an Entity to Gather and Publish All ICT Data across Sectors							
Setup an Inf Decision Support Center (Public & Private Use)							

2 Enabling Environment- National Policies

Program/ Project	Relevant Projects	Ownership	Other Track	Reference to WSIS-RPoA	Implementation Timeline		
					Immediate	By End of 2008	By End of 2015
Program/ Project				Enabling Envmt			
2.04 Deregulate & Privatize Telecom Sector							
Implement New Telecom Law 431		Ministry of Telecom					
Finalize Telecom Regulatory Authority (TRA) Setup	TRA Project						
Streamline Telecom Licensing Procedures to Eoncourage Competition							
Formulate a Nat'l Radio Freq Strategy & Policy Doc							
Encourage Convergence of Telecom Services							
2.05 Increase PC Penetration			1.05	Enabling Envmt			
Reduce Taxes on ICT Equipment and Accessories							
2.06 Empower Vulenerable Groups to Use & Access ICTs			5.04				
Develop Laws to Allow the Disabled to Access Information (Disability Legal Framework)							
2.07 Use ICT to Improve and Increase Access to Healthcare			5.06	e-Health Apps			
Develop a Legal Framework & Quality Criteria for e-Health Applications							
Develop Electronic Medical Records							

3 ICT as a Production Sector

Program/ Project	Relevant Projects	Ownership	Other Track	Reference to WSIS-RPoA	Implementation Timeline		
					Immediate	By End of 2008	By End of 2015
3.01 Formalize & Boost the ICT Sector (Reduce Brain Drain)							
Identify Niche Towards Establ a Center of Excellence In SW and/or HW Development							
Streamline & Improve Quality of Local HW Production (if applicable)				Cap Building; ICT Enterprises			
Gather & Disseminate Best Practives & Professional Expertise in Bldg Software (e.g. CMM) (if applicable)							
Launch Lebanon-Based Int'l Call Center (if applicable)				e-Gov			
Agree on Open, Inter-Operable, Market-Driven Standards				e-Employment			
Launch ICT Professionals Syndicate & Reform **Labor Laws to Incentivize ICT Professionals**				e-Employment			
Enhance National ICT Professional Associations				Cap Building; ICT Enterprises			
Simplify Govermental Processes Relating to Import & Export of ICT Products			1.06, 6.02	Infra			
3.02 Revitalize R&D & Indigenous ICT Innovation							
Establish Joint Gov/Private Sector/Academia R&D Modalities to Develop Local Technological Solutions e.g. Arabic Talkster				Cap Bldg/ R&D			
Establish Incubators & Parks (with related legislation & fiscal incentives)	BETZ; Berytech			ICT Capacity Building/ R&D & ICT ENT			
Create an Enabling Environment for ICT Researchers & Faculty Members				Cap Bldg/ Dev Hmn Res			
Establish an Open Source Forum with a Network of OSS Experts to Assist Public, Private, & NGOs In Using Freeware Solutions				Cap Bldg/ ICT Enterprises			
Develop OSS Applications for Private Sector Commercial Use esp SMEs				Cap Bldg/ ICT Enterprises Enabling Envmt			
3.03 Encourage FDI In the ICT Sector							
Setup SME|CT Fund							
Review & Improve Incentives (Inc Tax Breaks) for ICT Startups (including e-Commerce Businesses) (Law 360)	Ongoing	IDAL		Cap Bldg/ ICT Enterprises			
Reduce Taxes & Duties on ICT Hardware Manufactureres & Software Developers, Including on Components (if applicable)				Cap Bldg/ ICT Enterprises			

3 ICT as a Production Sector

Program/ Project	Relevant Projects	Ownership	Other Track	Reference to WSIS-RPoA	Implementation Timeline		
					Immediate	By End of 2008	By End of 2015
3.04 Increase Visibility of Local Industry (inc. ICT)			6.03				
Industry Level Participation In Int'l Forums & Exhibitions to Promote the Industry				Cap Bldg/ ICT Enterprises			
				Cap Bldg/ ICT Enterprises			
Create Strategic Alliances with International Firms				Capacity Building			
3.05 Develop & Implement Distance Learning & Virtual Universities			4.06				
Survey Educational **Software to Determine Those Suitable to Local Needs** (customization and/or translation)				Cap Bldg/ ICT Enterprises			
Use R&D Centers (above) to Trigger Innovative Modalities & Methods Related to Teaching and/or Adapt International Modalities				e-Learning Apps			
Invest in R&D for Arabic-Based Applications for Education & Learning							
Invest in e-Learning Commercial **Solutions to Develop an e-Learning Industry**				e-Learning Apps			

4 ICT for Human Capacity Development

Program/ Project	Relevant Projects	Ownership	Other Track	Reference to WSIS-RPoA	Implementation Timeline		
					Immediate	By End of 2008	By End of 2015
Review & Update Education Strategy to Include Formal ICT				Cap Bld/ Dev Hum Res			
4.01 Education Programs							
Complete Incorporation of ICTs in Public Schools Curricula		Ministry of Education		Cap Bld/ Dev HR			
Complete All Public Schools Teacher Training	SIS (Eduware Project)	M of E; OMSAR; NGOs		Cap Bld/ Dev HR			
Encourage ICTs in Private Schools Curricula				Cap Bld/ Dev HR			
Encourage Training of All Private Schools Teachers				Cap Bld/ Dev HR			
Institute ICT as a Prereq Skills for Graduating Teachers		Ministry of Education		Cap Bld/ Dev HR			
Adopt Hybrid Courses in Schools & Combine Instructor-Based with Online Instruction (Dynamic Learning Environments)	SchoolNet Project	Ministry of Education		Cap Bld/ Dev HR			
Modify Existing University Curricula to Include ICT in All Degrees e.g. Law Degrees				Cap Bld/ Dev HR			
Partner with Leading Int'l Institutions (e.g. IEEE & ACM) for ICT Program Development				Cap Bld/ Dev HR			
Develop Postgraduate Degrees in ICTs (Masters & PhDs) (Potentially Joint, Virtual, & Distributed)				Cap Bld/ Dev HR.			
Review & Update Vocational Education Strategy to Incorporate				Cap Bld/ Dev Hum Res			
4.02 ICTs							
Complete Incorporation of ICTs in Vocational Education		Ministry of Education					
Train Vocational Schools Teachers on ICT Skills		M of E; OMSAR; NGOs					
Develop or Customize More Digital Educational Content for Vocational Training				Cap Bld/ Dev HR			
Upgrade Vocational Schools' Curricula to Align with Evolving Market ICT Needs				Cap Bld/ Dev HR			
Adopt Hybrid Courses in Vocational Schools & Combine Instructor-Based with Online Instruction (Dynamic Learning Environments)		Ministry of Education					
4.03 Encourage Informal ICT Training Programs				Res	5.05		
ICT Skills Portal (ICT Skills Learning Online)							
Develop/ CustomizeTraining Content Aligned with Evolving Skills Based on Market Demands				Cap Bld/ Dev HR			

4 ICT for Human Capacity Development

Program/ Project	Relevant Projects	Ownership	Other Track	Reference to WSIS-RPoA	Implementation Timeline		
					Immediate	By End of 2008	By End of 2015
4.04 Government Agencies and Actions			2.03, 7.03				
Adopt Public ICT Literacy Syllabus & Benchmarks (e.g. ECDL)							
Set National Targets (e.g 100% Digital Literacy in Relation to Literacy by 200X)							
Launch an Entity to Gather and Publish All Relevant ICT Data: Number of Institutes Providing Quality Training; Number of ICT Grads; etc							
Establish Website to Consolidate All Student Loan Information (and Later On, Applications) Online							
4.05 Alignment & Cooperation btw Private Sec & Academia							
Align ICT Skills & Curricula with Market & Economic Needs							
Align University Policies to Produce Number of ICT Grads in Line with Projected National & Regional Market Demands							
ICT Educational Career Counceling							
Encourage Businesses to Benefit from Student Training & Final Year Projects				Cap Bld/ Dev HR			
4.06 Develop & Implement Distance Learning & Virtual Universities			3.05	e-Learning Apps			
Develop Specific e-Learning/ CBT Content for Lebanon				e-Learning Apps			
Implement Quality Certification for Online Educational Services				e-Learning Apps			
Launch Virtual Universities & Schools, Reducing Both Cost of Learning and Time Spent away from Work				e-Learning Apps			
Setup a National e-Learning Network							
Update Existing Education Policies & Legislation to Support, Regulate, and Formally Recognize Online Learning				e-Learning Apps			
Encourage Education Institutes to Publish Data on the Internet				Access to Info			
4.07 in Arabic and Foreign Languages							
Create a Database of Studies, Thesis, & Articles							

5 ICT for Social Development

Program/ Project	Relevant Projects	Ownership	Other Track	Reference to WSIS-RPoA	Implementation Timeline		
					Immediate	By End of 2008	By End of 2015
5.01 Increase Usage of ICTs Including the Internet by Catering for Local Needs & Providing Incentives			1.03				
Local Surveys of ICT Needs	UNDP Regional; CRTD- A Needs Assessment						
Develop Applications/ Content Serving Local Needs; for Use in MPCCs	Netcorps; UNDP Regional			ICT Infrastructure			
5.02 Capacity & Increase Productivity & Visibility / Blend ICTs with Local Traditional Industry to Build Local				Cap Bldg/ R&D			
Develop Women-Based Micro Industries	Rural Delights						
Locate Potential Customers & Link Them to Rural Areas Through e-Commerce				e-Commerce & e-Business			
5.03 Develop & Promote Local Arabic Content				Access to Info			
Citizen's Guide to Skilled & Craft Services on the Web							
Sports & Recreational Network							
Youth & Volunteer Network							
Job Opportunities Portal							
Public Libraries & Museums Network							
Charity Services Network							
Virtual Citizen Communities	Baldati.org						
Digitize Journals, Books, Scientific Research (respecting IPRs)							
Country Development Gateway	LDG						
National History & Cultural Heritage Portal							
Encourage New Online Content Creation by Traditional Media			2.06	Cultural Content			
5.04 Empower Vulnerable Groups to Use & Access ICTs							
Develop Content for a Disabled Network/Resources Portal							
Establish Disability Training, Counceling, & Technology Center (around MPCTs)							
Develop Content for Promoting Women's Rights	ICT for Women & Children Rights (UNDP & Local NGO)		4.03				
5.05 Encourage Informal ICT Training Programs							
Introduce Courses Targetting Skills Training for Young People, Women, & the Elderly				e-Learning Apps			
Develop CBT Content to Fight Illiteracy				e-Learning Apps			
5.06 Use ICT to Improve and Increase Access to Healthcare			2.07				
Use MPCTs to Provide Online Access in Remote Areas to Doctors and Hospitals				e-Health Apps			
Develop Health Information Content (HIV; Women's Health; etc) for Use in MPCTs				e-Health Apps			

6 ICT for Business & Economic Development

Program/ Project	Relevant Projects	Ownership	Other Track	Reference to WSIS-RPoA	Implementation Timeline		
					Immediate	By End of 2008	By End of 2015
Blend ICTs with Local Industry to Build Local Capability & Increase Productivity			5.02	Cap Bldg/ R&D; e-Com Apps			
6.01 Increase Productivity							
6.02 Revitalize R&D & Indigenous ICT Innovation			1.06, 3.02	Promoting ICT			
Encourage the Use of OSS in SMEs, Educational & Health Institutions, & in Public Sector				Cap Bldg/ ICT Enterprises			
Streamline All Processes Related to Operations to Lower Costs & Reduce Inventory (Accounting; HR; Inv Control..)				e-Commerce & e-Business Apps			
Develop a National Tourist Network (What's On)	Destination Lebanon	Ministry of Tourism					
Develop Media Industry and Encourage Convergence							
Mandatory Periodic Formal Training to ICT Professionals							
Agrobus		Ministry of Agriculture					
Transfer ICT Skills from Universities to Industries							
6.03 Increase Visibility of Local Industry (inc. ICT)			3.04				
Trade Information Center (online)	TIC @ MoET						
Trade Point for Lebanon (online)							
Lebanon Business Promotions Entity							
6.04 Promote & Encourage e-Commerce			2.02, 7.05	e-Com Apps			
Establish Adequate Framework for Electronic Payments	( )			e-Com Apps			
Build an e-Commerce Portal	e-ComLeb						
Design & Implement a Help Desk & Call Center							
Establish National e-Commerce Awards Scheme	USAID Awards						
Activate & Speed-Up E-Banking							
6.05 Develop New ICT-Services Based Industries							
Lebanon-Based International Call Centers							
Setup Data Entry & Transcription Centers	InfoPlus		7.01	Access to Info			
6.06 Develop & Promote Public Domain Content							
Setup Business Startup Advisor							
			1.07				
6.07 Upgrade Industrial Zones							

7 E-Government

Indicates Priority Projects

Program/ Project	Relevant Projects	Ownership	Other Track	Reference to WSIS-RPoA	Implementation Timeline		
					Immediate	By End of 2008	By End of 2015
	UNDP's "Access to Public Info" Project			6.05 Access to Info			
7.01 Develop & Promote Public Domain Content							
Citizen's Guide to Health Information & Services							
Citizen's Guide to Legal Issues							
Citizen's Guide to Governmental Procedures	INFORMS	OMSAR					
Citizen's Guide to Consumer Protection							
Citizen's Guide to Road & Transportation Information							
Citizen's Guide to International Relations & the Diplomatic Network							
Citizen's Guide to Labor Relations							
Citizen's Guide to Electoral Information	Digital Library	Ministry of Justice					
Judiciary Knowledge Base							
Social Affairs Information System (Including Statistics)							
National Archives (Digital)	Various						
Online Presence for All Ministries/ Gov Agencies							
Official Gazette (Online)							
7.02 Develop & Promote Public e-Services							
Automate Public Notary Services		Ministry of Justice					
Launch Web-based Tax Filing Forms	Ongoing	Ministry of Finance		e-Gov Apps			
Automate Customs Declarations	NOOR	Ministry of Finance		e-Gov Apps			
Real Estate Register	Cadastre Project	Ministry of Finance					
Online Commercial Registry							
National Fund for Social Security Register	First Stages						
Prepaid Charge Card for Public Sector Transactions				e-Gov Apps			
Implement National ID & Smartcard	Study	ISF & Ministry of Interior					
Online Civil & Criminal Records	Automated; Not Online	Ministry of Labor					
Residence & Work Permits							
Passport Issuance & Renewals				e-Gov Apps			
Automate Business Registrations & Renewal of Licenses	Automated; Not Online						
Automate Vehicle Registration & Excise Tax Payments							
Automate Applications for Building Permits							
Automate Declarations to the Police							
Publish Terms of All Bids & Tenders Online	GISEL						
e-Billing Services for Utilities							

7 E-Government

Program/ Project	Relevant Projects	Ownership	Other Track	Reference to WSIS-RPoA	Implementation Timeline		
					Immediate	By End of 2008	By End of 2015
7.03 Remove Government Agencies and Actions (Streamline Processes and Anti-Patterns)				Access to Info; 2.03 Enab Envmt; Cap			
Formulate Public Sector Data Definition & Exchange Standards for All Sectors		OMSAR					
Implement Public Sector Data Definition & Exchange Standards for All Sectors							
Implement ICT Standards & Guidelines	On Hold	LIBNOR; OMSAR					
Manage ICT Resources in the Public Sector		OMSAR					
Streamline Domain Name Registration Process							
Develop ICT Org Structure & Salary Scales for Civil Servants	On Hold	OMSAR					
Improve Project Management in ICT Units	ARLA						
Adopt & Automate Streamlined Workflow Systems to Gov Processes (esp Services to the Citizen)				e-Gov Apps			
7.04 e-Government Infrastructure							
7.05 Promote & Encourage e-Commerce			2.02				
Centralize & Implement a Gov e-Procurement Application	Ongoing	OMSAR		e-Gov Apps			
Create LANs for All Government Ministries & Agencies				e-Gov Apps			
Link All Government Networks Together	Study						
Link Lebanese Government to All Its Diplomatic Missions							
Implement ERP Applications, Including Financial, Human Resource Management, & Property Management Systems				e-Gov Apps			
Develop Governmental Knowledge Management Systems, inc Document Management & Archiving				e-Gov Apps			
Automate Preparation and Control of National Budgets				Cap Bld/ Dev Hum Res			
7.06 Establish Formal ICT Training Programs							
Train All Civil Servants	Ongoing	OMSAR		e-Gov Apps			
Extensive Training for Law Enforcement & Judiciary Staff on Cyber Crimes & Relevant Security Issues	ECOMLEB			Building Confidence, Trust, & Security			
Train Staff in Public Health Institutions on ICT-Based Tools				e-Health Apps			
7.07 Expand the Use of GIS & GPS Systems							
Country Wide GIS Information Tool	CDR						

8 Media & Promotion

All for Immediate Design & Implementation

Audience	Medium	Objective	Relevant Projects
8.01 General Public	Local Workshops	Increase Awareness of How to Use ICT and the Internet as Tools	UNDP's Needs-Based Awareness Campaign
8.02 General Public	Mass Media & Local Workshops	Educate on Overcoming Privacy & Security Concerns, and Limiting Access to Harmful Content	
8.03 General Public	Mass Media	Promote Public Domain Content and e-Services	UNDP's "Access to Info" Project
8.04 Local Decision Makers	Local Workshops	Increase Awareness of ICT for Local Community Development	
8.05 Owners of Large Private Businesses	Workshops and Seminars	Increase Awareness of Efficiencies and Increased Prodcutivity from ICT Solutions	
8.06 Investors	Workshops and Seminars	Educate on Investment Opportunities in Knowledge-Based and ICT Industries	ECOMLEB
8.07 Parliamentarians	Workshops and Seminars	Inform about New ICT Legal Frameworks	ECOMLEB
8.08 Legal Community	Workshops and Seminars	Inform about New ICT Legal Frameworks	
8.09 Senior Government Decision Makers	Presentations & Case Studies	Educate on Impact of ICT on Development	
8.10 Lebanese Diaspora	Local Events through Consulates; Em	Promote Investment Opportunities & Incentives	