



ITU-D Regional Development Forum for the Europe and CIS Region:
"NGN and Broadband, Opportunities and Challenges"



Challenges of e-development in Moldova

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Republic of Moldova general presentation



Source: <http://www.worldatlas.com/webimage/countrys/europe/md.htm>

- Surface (Area): 33.7 sq km
- Population: 3.386 million (excepting Transnistria)
- Capital city : Chisinau
- GDP per capita PPP-2008: 3173 USD (ICT share in GDP – 9.1%)
- The Knowledge Economy Index 2008: rank 67 of 140 countries
- Global Competitiveness Index 2008-2009: rank 95 of 134 countries
- Happy Planet Index 2.0 2008: rank 32 of 143 countries
- Telephone Density (2009 Q1): Fixed 31.6%, Mobile 74.9% (Source: ANRCETI)
- Computer penetration per households, 2009 Q3 : 33 % (-preliminary - UNDP research)
- Internet penetration, 2009 Q3 : 36% (2009 Q3-preliminary -UNDP research)
- Household broadband penetration, 2009 Q3 - 7.9% (2009 Q3-preliminary- UNDP research)

Moldova toward the Information Society: institutional framework progress

- Ministry of Informatics Information and Telecommunications (1990)
- National Informatics Centre (1990)
- Ministry of Communications (1994)
- State Inspectorate for Radio Frequencies (1993)
- State Commission for Radio Frequencies (1995)
- Ministry of Transport and Communications (1998)
- National Regulatory Agency for Telecommunications and Informatics (2000)
- Department of Information Technologies (2001)
- Ministry of Information Development (2005)
- National Regulatory Agency for Electronic Communications and Information Technology (2008)
- Institute for Information Society Development (2008)

Moldova toward the Information Society: legal and methodological framework (1/2)

- Moldova's Information Society Development Concept (1993)
- Moldova's Information Society Development Director Project of (1995)
- Telecommunications Law (1995)
- National Table for Assignment of Radio Frequencies (1997)
- Law on Informatics (2000)
- Law on Informatization and State Information Resources (2003)
- Presidential Decree on Building the Information Society (2004)
- First e-Readiness country Report (2004)
- Government Policy on Information Society Building (2004)
- Law on Electronic Commerce (2004)
- Law on Electronic Document and Digital Signature (2004)
- Presidential Programme "SALT"- "The LEAP" for schools (2005)
- The National Strategy and of Action Plan "e-Moldova" (2005)

Moldova toward the Information Society: legal and methodological framework (2/2)

- The mechanism of monitoring, planning and annual financing of IS development (2006)
- e-Governance Concept and e-Governance Portal Concept (2006)
- Law on Data Protection (2007)
- Law on Registers (2007)
- Law on Electronic Communications (2007)
- Standard Requirements toward the official web-pages of Public Administration Authorities in Internet (2006)
- The e-Tax Declaration Portal & Information System (2006-2008)
- e-Statistics Reporting Subsystem Concept (2007)
- e-Voting Information System Concept (2008)

Investments in ICT, mln MDL

Indicator	Year					Total	
	2004	2005	2006	2007	2008	Amount	%
Total investments	1177	1555	1853	2642	4113	11341	100
inclusive: in EC	871	1147	1245	1926	3280	8470	74,7
in IT	306	408	608	716	832	2870	25,3

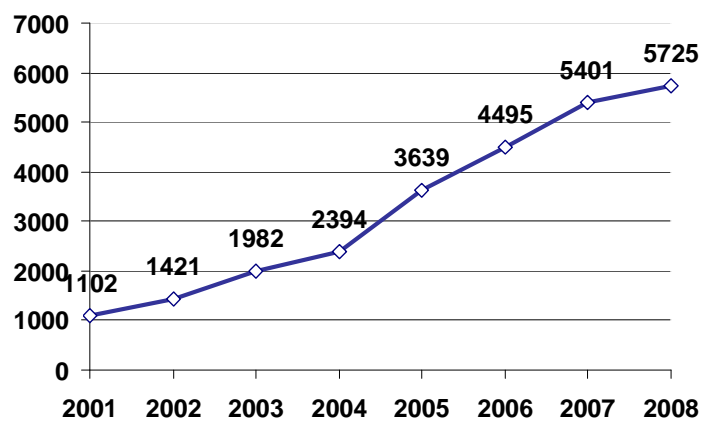
\$1 = 12,5 MDL

ICT expenditures by economic activities, mln MDL

Indicator	Year					Total	
	2004	2005	2006	2007	2008	mln MDL	%
Total expenditures, inclusive:	306,1	407,6	608,0	715,7	832,9	2594,8	100
Agriculture, hunting and forestry	1,7	2,0	1,6	2,5	2,0	9,7	0,38
Fishing	0,008	0	0,07	0,003	0,003	0,09	0,00
Industry	49,0	35,4	607,5	725,0	733,4	291,0	11,22
Construction	1,7	1,8	3,2	289,2	2,7	122,7	0,47
Wholesale and retail trade	20,2	24,6	30,1	466,3	502,4	171,7	6,62
Hotels and restaurants	0,8	1,2	1,0	200,5	1,0	5,9	0,23
Transport and communications	57,0	86,3	183,7	194,2	289,5	810,7	31,24
Financial intermediation	88,1	87,3	124,8	130,2	194,7	625,1	24,09
Real estate, renting and business services	32,1	41,4	95,1	100,2	928,0	361,7	13,94
Public administration	33,8	98,8	650,4	101,5	718,8	370,9	14,30
Education	16,0	19,2	23,4	36,3	306,7	125,7	4,84
Health and social work	3,2	4,2	7,5	9,2	112,1	352,9	1,36
Other communal, social and personal service activities	2,5	5,4	11,7	15,5	128,4	480,36	1,85

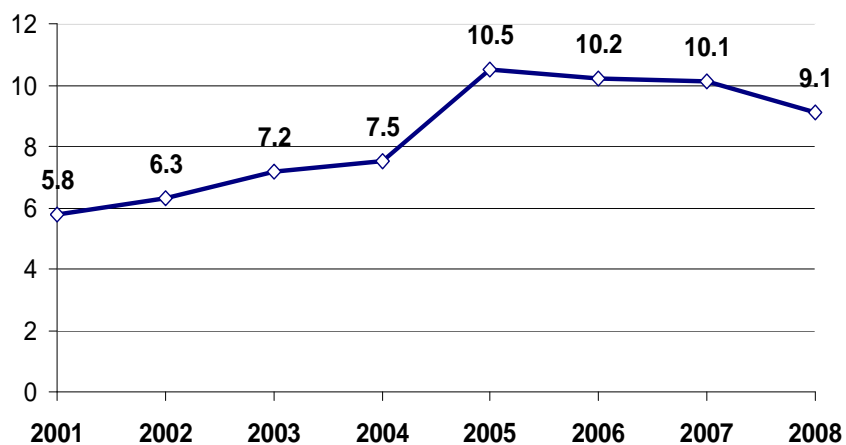
\$1 = 12,5 MDL

ICT sector services' outcome, mln MDL



\$1 = 12.5 MDL

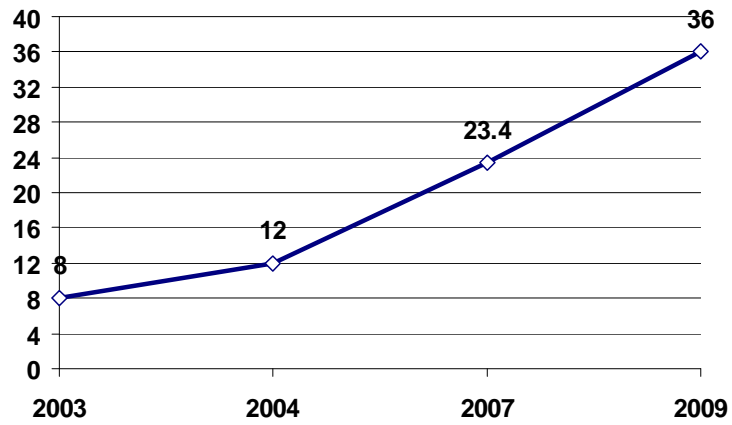
The evolution of ICT sector's contribution to GDP, %



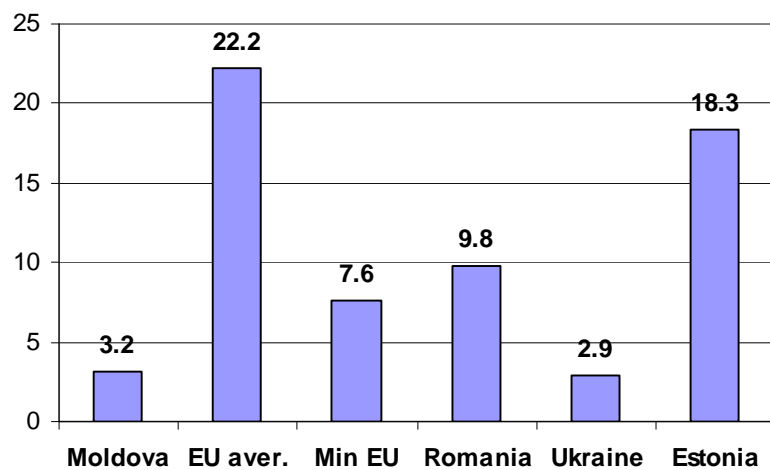
The evolution of some ICT sector services' weight, % of total outcome

ICT sector	1990	2007
Post	27,9	3,04
Telegraph	5,8	0,01
Fixed telephony	48,5	44,57
Mobile telephony	0,0	45,17
Data transport	0,0	4,30
Radio and TV	17,8	2,91

Internet users per 100 inhabitants



Broadband access penetration



Networked Readiness Index

	2006-2007 (122 countries)		2007-2008 (127 countries)		2008-2009 (134 countries)	
	NRI	rank	NRI	rank	NRI	rank
Moldova	3.13	92	3.21	96	3.30	99
Max World	5.71	1	5.78	1	5.85	1
Min EU	3.53	72	3.71	68	3.80	69
Romania	3.80	55	3.86	61	3.97	58
Ukraine	3.46	75	3.69	70	3.88	62
Estonia	5.02	20	5.12	20	5.19	18

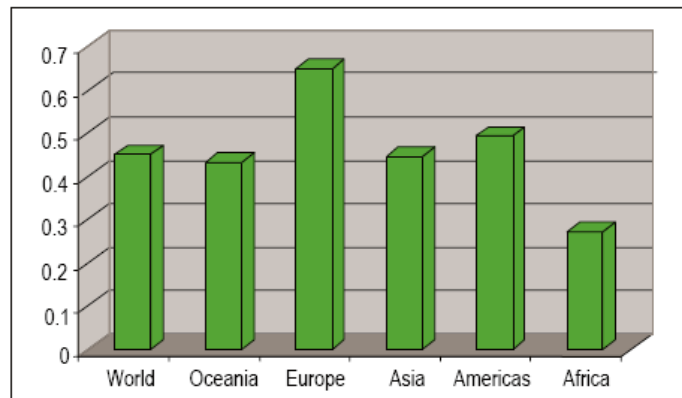
Source: World Economic Forum

ICT Development Index (IDI)

	2002 (154 countries)		2007 (154 countries)	
	IDI	rank	IDI	rank
Moldova	2.13	74	3.31	68
World top	6.05	1	7.50	1
World average	2.48	60	3.40	66
Min EU	3.17	43	4.16	46
Romania	2.48	60	4.16	46
Ukraine	2.50	59	3.80	51
Estonia	3.93	31	5.97	26

Source: ITU

Regional Average of UN 2008 e-Government Readiness Index



Moldova 0,451

Source: UN

Top 10 in UN 2008 e-Government Readiness Index

Rank	Country	E-Government Readiness Index
1	Sweden	0.9157
2	Denmark	0.9134
3	Norway	0.8921
4	United States	0.8644
5	Netherlands	0.8631
6	Republic of Korea	0.8317
7	Canada	0.8172
8	Australia	0.8108
9	France	0.8038
10	United Kingdom	0.7872

Moldova – 93, Romania - 51, Ukraine – 41, Estonia – 13,

Source: UN

The main barriers for development:

- Low affordability of internet connectivity (5 -10 times higher than in CIS countries in per capita affordability terms);
- Non-shared facilities of telecom companies (including ducts, masts, etc.) is increasing the costs and hampering development;
- While some fiscal exceptions for software companies established, the costs of doing business in the ICT sector is generating competitive disadvantages for Moldovan companies;
- Low ICT sector visibility and non-functional strategies: ICT in Moldova still is perceived as separate from other components of the “knowledge economy”, such as high education and Research & Development activities.

Source: Draft ICT Sector Strategy and The White Book

CRISIS: New Challenge or an Opportunity?

**ICT sector in Moldova is affected by crisis: in Q1 of 2009
compared to Q1 2008*:**

the total turnover decreased

- for the mobile services by 3.17%,
- for the fixed services – by 17.5%.

From the other hand:

- the number of fixed telephony users increased by 3.4%,
- the number of mobile users increased by 23,3%.
- the number of subscribers to Internet services at fixed points increased by 143.5%

WHAT THIS MEANS?

Even in the crisis time there is space for the development!

** Source: ANRCETI*

CRISIS: New Challenge or an Opportunity?

The European Council reached an agreement on the Community part of the **European Economic Recovery Plan**, in support of projects in the field of energy and **broadband internet** as well as CAP Health Check related measures

In the **Strategy for ICT R&D and Innovation in Europe: *Raising the Game*** (*):

- The worldwide ICT market **€2 000bn** and is currently growing at **4% per year**.
- Europe represents **34% of this**; however, the value added of its ICT sector amounts to only 23% of the total. The sector represents 4.5% of European GDP and even more if the value added of ICT in other sectors is also accounted for.
- ICT provides essential infrastructures and tools for knowledge creation, sharing and diffusion. ITC boosts the innovation capacity of all sectors and contributes to more than 40% of the overall productivity growth.
- ICT is also essential to address Europe's societal challenges. It brings unique responses e.g. to the growing needs for sustainable healthcare and ageing well, for better security and privacy, for a lower carbon economy and for intelligent transport.
- The importance of ICT is reflected in R&D budgets across Europe, where ICT typically represents more than 30% of the total.

(*A Strategy for ICT R&D and Innovation in Europe: Raising the Game, COM (2009) 116 http://ec.europa.eu/information_society/itl/research/documents/ict-rdi-strategy.pdf

Conclusions

- The economic and financial crisis is affecting World ICT sector and Moldova is not isolated and protected against crisis consequences;
- The ITU and European Union are adopting special programs and Plans to overpass the crisis in ICT and Broadband Internet development is included as a priority action in these programs;
- Moldova is lagging substantially behind EU countries in ICT development, especially in Broadband Internet and e-Services and this is a challenge and an opportunity;
- Based on ITU and EU anti-crisis papers Moldova shall develop its own anti-crisis program, or include special anti-crisis actions in the ICT sector Strategy and e-Moldova revised Strategy, **and Broadband development should be a priority action!**
- A stable and predictable legislative, regulatory, fiscal and juridical environment is necessary to succeed thus providing a strong incentive to invest in NGNs (New Generation Networks) for any market player;
- The Public-private partnership being established to implement the new Strategy provisions and White Book recommendations will create a favourable environment for e-development of Moldova to transform ICT sector in an engine for all economic sectors.

Thank you for your attention!

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