Broadband Development in the Republic of Moldova

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# TABLE OF CONTENTS

## Legal Framework and Broadband Regulation
- Legal framework
- Digital Moldova 2020 Strategy
- Access Market Regulation

## Broadband Statistics
- Electronic Communication market
- Broadband subscriptions
- Broadband speed
- Number of Internet Users

## Quality of Broadband services from the consumers perspective
- Survey: use of electronic communication services
- Survey: consumer satisfaction
- Conclusion
Law on electronic communications nr. 241/2007

It transposes into the national legislation the provisions of the regulatory framework for electronic communications networks and services, adopted by the European Union in 2002:

- Directive 21/2002/EC
- Directive 19/2002/EC
- Directive 20/2002/EC
- Directive 22/2002/EC
- Commission guidelines on market analysis
- Recommendation 2003/311/EC
- Recommendation 2007/879/EC
- NGA Recommendation 2010/572/EU

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Draft Infrastructure Law - developed by the Ministry of ICT is pending approval

http://www.mtic.gov.md/utilizarea_retelei_rom/
Regulation of non-discriminatory access to infrastructure
Relevant Markets Related to Broadband

**Market 4** - Wholesale network infrastructure access (including shared or fully unbundled access) at a fixed location.

**Market 5** - Wholesale broadband access.

**Market 6** - Wholesale terminating segments of leased lines, irrespective of the technology used to provide leased or dedicated capacity.

**Market 8** - Wholesale trunk segments of leased lines.

*Remedies on infrastructure access market*

- **to provide** non-discriminatory access to all suitable ducts and related infrastructure
- **to apply** cost oriented (LRIC+) access prices
- **to publish** procedures and conditions applicable to the access
- **to answer** any (viable) access request in 10 working days (max)
- **to offer** access at a location in 6 months maximum time (where capacity needs to be increased)
Infrastructure is a prerequisite for provision of Broadband services

Benefits

- Encouraging shared use and co-investments
- Encouraging the use of alternative infrastructures for fiber deployment
- Mandating equal access to SMP’s infrastructure
- Access to fiber loops of the SMPs
- Access to FTTx loops as bit-stream
Goal of the project – is creation of favorable conditions for development and large-scale use of ICT potential by public institutions, business and citizens through minimal intervention of state, but having a maximal effect.

3 main areas (pillars):
I. Infrastructure and access
II. Digital content and electronic services
III. Capacities and use
Measurable results
at least 60% of households connected to broadband Internet

- 75% of citizens become Internet users
- **broadband access to a minimum speed of 30Mb/s**
- 100% of electronic public services become available online
- at least 80% of citizens become satisfied with the quality of provided services
- 70% of the population use electronic services
- 60% of the population use digital signature
- at least 20% of the population shop online
- 100% of the population have access to digital TV
### Electronic Communications Market

<table>
<thead>
<tr>
<th>Service</th>
<th>Penetration * (%)</th>
<th>Revenue (mil.EUR)</th>
<th>ARPU * (EUR)</th>
<th>Other*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile telephony</td>
<td>122,8</td>
<td>181,8</td>
<td>3,4</td>
<td>211 (MoU)</td>
</tr>
<tr>
<td>Fixed telephony</td>
<td>34,2</td>
<td>52,8</td>
<td>3,6</td>
<td>250 (MoU)</td>
</tr>
<tr>
<td>Fixed broadband</td>
<td>14,3</td>
<td>48,8</td>
<td>8,45</td>
<td>127Mb</td>
</tr>
<tr>
<td>Pay TV</td>
<td>7,7</td>
<td>19,5</td>
<td>2,54</td>
<td></td>
</tr>
<tr>
<td>Mobile broadband (dedicated)</td>
<td>8,4</td>
<td>15,3</td>
<td>4,6</td>
<td>8 Gb (AUPU)</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>318,3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Basically, broadband is available to all citizens in the Republic of Moldova

- 99% is the coverage for 3G services and 94% for fixed broadband
- The coverage for 4G services as per December 2014, was almost 33%
- 1/3 of population have Mobile BB subscriptions
- About 3/4 of households have Fixed BB subscriptions (in which over a half are NGA subscriptions – FTTB/FTTH or DOCSIS 3.0)
## Fast and Ultrafast Broadband

### Average speeds of fixed and mobile broadband access

<table>
<thead>
<tr>
<th></th>
<th>Internet access at fix location</th>
<th>Mobile Internet access</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>download (Mpbs)</td>
<td>upload (Mpbs)</td>
</tr>
<tr>
<td>Republic of Moldova</td>
<td>41,5</td>
<td>35,3</td>
</tr>
<tr>
<td>Global</td>
<td>22,6</td>
<td>10,2</td>
</tr>
<tr>
<td>UE</td>
<td>28,9</td>
<td>9,9</td>
</tr>
</tbody>
</table>

www.netindex.com

- Fast broadband (>30 Mbps) is getting popular, while ultrafast broadband (>100 Mbps) is still rare.

- About 18% of households subscribe to fast and ultrafast broadband.
Internet users/household profile

- About 3/4 of households are connected to Internet;
- Over one half of total connections are connected by PC;
- 1/3 of voice mobile users have smartphones (or about 1/4 of citizens of Moldova);
- 80% of Internet users use Internet daily;

**Voice mobile users, possession of smartphones**

<table>
<thead>
<tr>
<th>Have smartphone</th>
<th>Don't have smartphone</th>
</tr>
</thead>
<tbody>
<tr>
<td>34%</td>
<td>66%</td>
</tr>
</tbody>
</table>

**Household connection to Internet (%), type of device**

- PC: 51%
- Notebook: 41%
- Tablet: 8%
- No: 28%
- Yes: 72%

**Usage of broadband**

- Communication (by Skype,...): 82%
- Social media: 81%
- News: 67%
- Weather: 63%
- Searching information: 61%
- Online video: 58%
- Online music: 58%
- Email: 51%
- Translate text: 37%
- Download soft and games: 29%
- Online games: 29%
QUALITY STANDARDS
FROM THE CONSUMERS’ PERSPECTIVE
Survey: use of electronic communication services

Survey - more than 1200 respondents questioned about the use of electronic communication services and their satisfaction

**Survey objectives:**

- research the level of service use
- *assess of consumers’ satisfaction and experience in using services*
- evaluate the commercial offers of providers
Survey: consumer satisfaction

Evaluation of consumer’ satisfaction by 5-point scale:

- Fixed broadband – 4
- Dedicated mobile broadband – 3.6

Most frequent causes of dissatisfaction with broadband services:

- Unstable connection
- Unstable/low speed
- No connection
Conclusions:

- 76% of respondents are satisfied with fixed and dedicated mobile broadband services
- 61% of respondents use several types of services in a single subscription
- About 18% of those who do not have Internet connection consider that it is too expensive for them
- And only, about 4% said that there is no possibility to get connected to the service at their residential area
THANK YOU FOR ATTENTION!
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