Internet users in Moldova enjoy largely unfettered access despite the government's restrictive and increasingly authoritarian tendencies. Evidence of second- and third-generation controls is mounting. Although filtering does not occur at the backbone level, the majority of filtering and surveillance takes place at the sites where most Moldovans access the Internet:



Internet cafés and workplaces. Moldovan security forces have developed the capacity to monitor the Internet, and national legislation concerning "illegal activities" is strict.

Background

Moldova is a parliamentary republic with a president at the head of the state. A newly sovereign state as of the early 1990s, Moldova experienced both political and economic turmoil. Separatist movements erupted in the Transnistria region, which operates as an independent (albeit unrecognized) state with separate telecommunications and broadcasting networks.

RESULTS AT A GLANCE					
Filtering	No Evidence of Filtering	Suspected Filtering	Selective Filtering	Substantial Filtering	Pervasive Filtering
Political			•		
Social	•				
Conflict and security	•				
Internet tools	•				
Other Factors	Low	Medium	High	Not Applicable	
Transparency	•				
Consistency	•				

KEY INDICATORS					
GDP per capita, PPP (constant 2005 international dollars)	2,409				
Life expectancy at birth (years)	69				
Literacy rate (percent of people age 15+)	99				
Human development index (out of 179)	113				
Rule of law (out of 211)	148				
Voice and accountability (out of 209)	132				
Democracy index (out of 167)	62 (Flawed democracy)				
Digital opportunity index (out of 181)	111				
Internet users (percent of population)	16.2				

Source by indicator: World Bank 2009a, World Bank 2009a, World Bank 2009a, UNDP 2008, World Bank 2009b, World Bank 2009b, Economist Intelligence Unit 2008, ITU 2007, Miniwatts Marketing Group 2009.

Moldova has one of the lowest Internet development levels in Eastern Europe and ranks 93rd worldwide on the United Nations e-Readiness Survey of 2008.¹ The government has prioritized information and communication technology (ICT) as a means for national development and adopted a national ICT strategy designed to harmonize the sector with European standards by means of the European Union–sponsored Electronic South Eastern Europe initiative (eSEE). The telecommunications sector in Moldova is formally liberalized, but the government has faced problems privatizing the main operator. Privatization of the national operator is still under discussion.

Internet in Moldova

Internet penetration in Moldova has increased significantly in the past few years. According to the ITU, at the end of 2006 approximately 10.6 percent of the country's population had Internet access. By 2008, penetration rates had risen to 16.2 percent.² Despite this high rate of growth, development of the Internet has been constrained by a lack of quality infrastructure, low affordability, and the slow development of the fixed-line sector. In 2007, the number of subscribers to Internet access services at fixed locations increased by 33.2 percent, amounting to 110,200.³

More than 93 percent of ADSL access is provided by a single ISP, Moldtelecom.⁴ Broadband usage is increasing, driven by rising demand and falling prices.⁵ The cost for unlimited Internet ADSL access is approximately USD 11 a month (February 2009)⁶ compared to EUR 25 a month a couple of years earlier. Broadband subscriber penetration reached 3.23 percent, up 1.86 percent, with two-thirds of the subscriptions concentrated in the capital, Chisinau, where household penetration was 30.8 percent.

Ownership of personal computers is also increasing, with 15.3 percent penetration as of 2006.⁷ Most users are under 35 years.⁸ Nearly half access the Internet from their place of work, 33.6 percent use Internet at home, and 8.1 percent use public access

points. The Internet subscriber statistics follow news that the growth of fixed-line telephony penetration in the country dropped to 3 percent in 2008 while mobile penetration rose by 28.7 percent over the same period. ⁹ Nearly 85 percent of Internet access connections are mobile phone connections. In 2008, the Moldovan regulator reported that the number of mobile Internet connections rose by 115.4 percent to 1,437,000.¹⁰

Moldova has five tier-one providers: Moldtelecom, Telemedia Group,¹¹ Dynamic Network Technologies (DNT), Relsoft, and Riscom. A further 11 ISPs provide access to all regions of the country. The telecommunications market is dominated by Moldtelecom, which retains its near monopoly position in the market (98 percent). Market liberalization in Moldova started before 2004, partly as a result of pressure to join the WTO and harmonize its standards with the EU telecommunications legal framework. Most of the ISPs rent infrastructure from Moldtelecom. Almost all ISPs exchange traffic through an IXP controlled by Moldtelecom. Interdnestrcom is the only ISP offering services on a wide scale throughout the breakaway region, Transnistria.

Fixed-line remains underdeveloped compared to other European nations, much like Internet and broadband penetration. However, communications have recorded solid growth, reaching more than 10 percent of the country's GDP in 2007 (9.11 percent in 2008). ¹² International Internet bandwidth in the country is currently 4,500 Mbps. ¹³ Between 2004 and 2007, mobile phone ownership increased from to 790,000 (23.2 percent) to 1,880,000 (55 percent). ¹⁴ There are more than 14 operators providing VoIP services on the international voice market, although Moldtelecom has retained the largest share. ¹⁵ The taxes on VoIP operators were reduced several times in recent years. Operators need to obtain a license in order to offer IP services.

Approximately 5,000 domain names are registered in the ".md" domain, some of which are foreign Web sites. ¹⁶ The most popular languages accessed by Internet users are Romanian, Russian, and English. The most-visited local Web sites are local media sites, forums, and advertising sites. The most-used local search engines are google.md, ournet.md, super.md, and mail.ru. The main purposes for accessing the Internet, according to respondents to a local survey, are sending and receiving e-mails, reading political news, and looking up educational information. ¹⁷

Opposition groups have recognized the importance of the Internet. Most Moldovan political parties have a solid online presence and frequently update their Web sites. ¹⁸ The government has invested in the Internet and actively supports an effort to ensure that ministries and other public bodies maintain Web sites in order to bring more transparency to their operation. More than 40.6 percent of Internet users report that they frequently access government Web sites. ¹⁹

Legal and Regulatory Frameworks

In order to meet requirements for WTO and the EU accession, the telecommunications market has been liberalized and no exclusive rights remain.²⁰ Moldtelecom—the

incumbent telecom operator—decreased its tariffs, allowing other providers into the market. However, low computer penetration rates and inconsistent government policy remain major impediments to Internet growth.

The state has officially committed to developing Moldova as an information society, although many of its policies undermine this objective. Moldtelecom, which is also the major national ISP, remains under state control despite large-scale criticism and four failed privatization attempts. Moldtelecom also controls Unite, one of the four mobile operators created in 2007. At present, ISPs are forced to rent access from Moldtelecom's well-developed infrastructure, a necessity which increases their costs and diminishes their competitiveness. Moldtelecom provides the nondiscriminatory Reference Interconnection Offer, the last version having been approved by the regulator after much delay in December 2007. Even though some interconnection agreements are now agreed between the incumbent and IP and data transmission operators, some new entrants have complained about insufficient access to Moldtelecom's network leading to inefficient usage of infrastructure.²¹ In April 2009, the Moldovan regulator introduced new guidelines on interconnection tariffs. The regulation addresses the issues of obligations imposed on operators, with emphasis on transparency and nondiscriminatory stances toward competitors.²² It remains to be seen in practice how the new guideline will be applied by Moldtelecom.

The Ministry of Information Development is the main policymaker in the field of information and communications and was drafting new Policy Strategy 2009–2011. The ministry's objective is to implement the National Strategy and Program on establishing "e- Moldova."

The main law regulating the Internet is the 2007 Law on Electronic Communication. The law established the National Agency for Telecommunications and Information Regulation (NATIR) as the telecommunications regulator in Moldova. This law mandates the government to harmonize national legislation with European standards. The law is intended to give NATIR full autonomy over the sector and replaces the licensing regime. Internet service providers can now start operating immediately after notifying NATIR.²³

This agency is responsible for monitoring ISPs' compliance with the law and keeping the Public Register of Electronic Communications Network and Service Providers. The law specifically provides for the possibility of introducing anticompetitive restrictions on service providers. The agency can demand that ISPs provide additional accounting information, can make them change to cost-oriented tariffs, and can introduce other measures in order to stimulate efficient market competition; and NATIR also regulates the management of the country's highest-level Internet domain (".md"). The National Security Doctrine of Moldova as of 1995 did not include the Internet. The Supreme Security Council (SSC), which oversees implementation of the president's decrees related to national security, monitors ministries' and state agencies' various activities to ensure

national security. The Ministry of Information Development carries out government policies related to information and communications and encourages collaboration between state and private organizations. The Moldovan legislation does not provide for comprehensive regulation of information security. Rather, the National Security and Information Service is endowed with broad authority to monitor and gather information on Internet usage and data transmission related to national security issues.

In July 2008, a Moldovan court ordered the seizure of the PCs of 12 young Internet users for posting critical comments online against the governing party. The suspects were accused of illegally inciting people "to overthrow the constitutional order" and "threaten the stability and territorial integrity of the Republic of Moldova." It is unknown how the authorities obtained the names of the people, but some suggest that an ISP provided them with the IP addresses of the users.²⁴

Even though Moldova is one of the poorest countries in Europe, Internet and cell phones are used extensively by opposition and civil society groups to organize protests and voice their opinion. After the parliamentary elections on April 5, 2009, thousands of Moldovans attempted to gather in Chisinau's main square to protest the results. The protesters set the Parliament and president's offices on fire, images of which were broadcast around the world. As the guarantees for press freedom are still weak, Moldovan state television continued to show regular TV programming rather than broadcasting events occurring in the capital.²⁵ The authorities disconnected cell phone coverage in the main square. More than 10,000 Moldovans joined in on Twitter (some with GPRS technology on their mobiles) to share their opinions and spread the news of Chisinau's political protests. The authorities attempted to shut down a number of Web sites for a few days, demonstrating a resolute hand in dealing with protesters. This incident, like others that have transpired in the region (e.g., the Ukrainian Orange Revolution), reveals the growing role of the social media in Eastern Europe as a tool for organizing protests and diffusing them online.²⁶ At the same time, it creates the concern that governments in the region, aware of the increasing importance of social media, might attempt to close down free speech outlets anytime they feel threatened.

Surveillance

The National Security and Information Service is authorized to monitor the Internet and collect any information necessary to prevent infringements of the laws. Surveillance in Moldova is permitted only after obtaining a court order. There is no special legal act providing for Internet surveillance per se. Nevertheless, surveillance may effectively be carried out on the provider level or at companies. The Parliament is deliberating on legislative proposals, including changes to the Law on Operative-Investigative Activities and the Law on Telecommunications that would allow government agencies to carry out surveillance on telephone and electronic communications. The law is

still under consideration, but if it is approved, it is expected that it might follow the Russian Law on Surveillance (SORM).

Moldova has established two departments responsible for overseeing the activities of participants in the ICT sector. The first structure, within the Ministry of Internal Affairs, is charged with prevention of interregional and informational infringements. The other body, within the Center on Prevention of Economic Crimes and Corruption, has special powers to prevent infringements in the IT and other fields.

Moldova also possesses a comprehensive centralized database of information on all its citizens. This system, called *registru* (registry), has been heavily criticized by human rights groups for being too comprehensive and lacking oversight. Privacy rights are poorly developed in Moldova, and not yet defined in law. The information held by registru is extremely comprehensive and brings together data collected by all state agencies. Consequently, human rights groups fear that it represents unwarranted and unprecedented surveillance. The system has proven highly successful, and it is a model for governments in the CIS. It has been exported to several other countries in the region. The current Moldovan president, a former internal ministry general, supports registru—in part because it was originally developed within the Ministry of Internal Affairs.

ONI Testing Results

In 2007 and 2008, the OpenNet Initiative carried out testing on three first-tier ISPs in Moldova: Moldtelecom, Telemedia, and DNT SunCommunications. Results did not reveal any filtering carried out on the Internet backbone.

In Internet cafés, access is limited more by surveillance than by direct filtering. Specific content is prohibited, and, if it is accessed, the user is fined. Approximately 56 percent of Internet cafés' administrators surveyed by ONI admitted to filtering and surveillance activities in 2006. Other administrators stated that they noted that some Web sites were inaccessible, but would not confirm that they used any specific filtering system in the Internet cafés.

Conclusion

Moldovan authorities have recognized the political and social importance of the Internet. State authorities have interfered with mobile and Internet connections in an attempt to silence protestors and influence the results of elections. Generally, the Internet remains largely unfettered. Previous research by ONI revealed that at "edge" locations, such as Internet cafés and some enterprises, monitoring or filtering of certain content and services occasionally occurs. Research also suggests that Moldovan security forces have developed mechanisms to monitor Internet content. Given the low

implementation of the laws protecting citizen's rights and privacy, as well as the insufficient independence of the regulator and the courts with regard to the state-owned Moldtelecom, there are few checks and balances in place to prevent authorities from taking a more aggressive stance on policing Internet content or from hindering new entrants on the market.

Notes

- 1. United Nations, *United Nations e-Government Survey 2008*, http://unpan1.un.org/intradoc/groups/public/documents/un/unpan028607.pdf.
- 2. Miniwatts Marketing Group, "Internet World Statistics: Moldova," 2009, http://www.internetworldstats.com/europa2.htm#md.
- 3. Of those, about 63,000 were dial-up subscribers and 47,200 were broadband Internet users. The number of dial-up users increased by only 3.4 percent in 2007, with a 23 percent rise outside the capital and a 9 percent decrease in Chisinau resulting from competition from broadband service providers. At the same time, broadband access grew from 36,000 to about 47,200 (80 percent, ADSL access; 15.9 percent, FTTH/LAN; and 6 percent, cable TV Internet).
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- 5. Moldtelecom has cut cross-subsidies on its services in an effort to rebalance its tariffs.
- 6. Moldtelecom National Operator, "MaxDSL," http://www.moldtelecom.md/ru/persons/internet/maxdsl/.
- 7. Ministry of Information Development, "Computer Utilization," 2007, http://www.mdi.gov.md/stat10_en/stat10_3_en/.
- 8. Center of Sociological, Politological and Psychological Analysis and Investigations (CIVIS), *Role of the Internet in Internet Users' Lives*, 2005, http://www.mdi.gov.md/img/pdf/3 ICT en.pdf.
- 9. IHS Global Insight, "Annual Fixed-Line Growth in Moldova Drops to 3 Percent on Continued Mobile Growth," March 12, 2009, http://www.globalinsight.com/.
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- 11. At the end of 2008, the French GSM company acquired the Moldovan mobile and Internet service provider Telemedia. Telemedia Group has its own fiber-optic network, developed radio network, main radio-relay TV channel, and information center for network control and monitoring.
- 12. National Regulatory Agency for Electronic Communications and Information Technology, Report on Activity and Developments of the Electronic Communications Market in 2007; Ancerti, Report on Activity and Developments of the Electronic Communications Market in 2008, 2008, http://en.anrceti.md/files/filefield/RAPORT_anual_2008_engl_fin_publ.pdf.

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- 14. National Regulatory Agency for Electronic Communications and Information Technology, Report on Activity and Developments of Electronic Communications Market in 2007.
- 15. Ibid.
- 16. Ournet, "Moldova Internet Resources," http://www.ournet.md/en.html.
- 17. Ministry of Information Development, "Computer Utilization," 2007, http://www.mdi.gov.md/stat10 en/stat10 3 en/.
- 18. "Partide Politice şi Alte Organizacii Social-politice din Republica Moldova" [Political Parties and Other Political Organizations of Moldova], http://www.parties.e-democracy.md/.
- 19. Center of Sociological, Politological and Psychological Analysis and Investigations (CIVIS), *Role of the Internet in Internet Users' Lives*, 2005, http://www.mdi.gov.md/img/pdf/3_ICT_en.pdf.
- 20. National data have been liberalized since 1993, international data since 1998, local fixed voice since 2001, domestic and long-distance fixed voice since 2004.
- 21. European Bank for Reconstruction and Development, *Comparative Assessment of the Telecommunications Sector in the Transition Countries*, http://www.ebrd.com/country/sector/law/telecoms/assess/moldova.pdf.
- 22. IHS Global Insight, "New Interconnection Regulation Instituted in Moldova," 2009, http://www.globalinsight.com/.
- 23. "The notification shall contain a minimum of information necessary for the Agency to keep the Public Register of electronic communications network and service providers and shall have attached a card containing an abstract description of the network and/or service, which shall be an integral part of the notification." See. Article 23 (3) of the Electronic Communications Act of November 15, 2007 at http://www.anrti.md.
- 24. *Curaj.net*, "Young People from Republic of Moldova Are Accused by Prosecutors of Expressing 'Dangerose' Opinions on the Web," June 11, 2008, http://www.curaj.net/?p=3945; Sami Ben Gharbia, "Moldavia: Sequestration of Personal Computers of 12 Young People for Posting Critical Comments Online," *Global Voices Advocacy*, June 13, 2008, http://advocacy.globalvoicesonline.org/2008/06/13/moldavia-destruction-of-personal-computers/.
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