Turkmenistan ranks among the most repressive and closed societies in the world. The Internet is heavily regulated and available only to a small fraction of the population. Among the countries of the CIS, it has the lowest penetration rate of Internet access and the highest degree of firstgeneration controls. Censorship is ubiquitous and extensive. Surveil-



lance is significant, and the few citizens who benefit from access to the Internet are closely monitored by state agencies.

Background

A Central Asian republic with a population of around 5 million and land area of 488,100 square kilometers,¹ Turkmenistan is a country rich in natural gas and oil resources.² The government has undertaken efforts to develop the gas and cotton industry but has failed to encourage development in other economic sectors.

Turkmenistan was a closed society under the proclaimed "President for Life," Saparmurat Niyazov.³ To nourish his personality cult, Niyazov—in power for 15 years—frequently rotated, dismissed, or brought charges against government officials and

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)	4,677				
Life expectancy at birth (years)	63				
Literacy rate (percent of people age 15+)	100				
Human development index (out of 179)	108				
Rule of law (out of 211)	195				
Voice and accountability (out of 209)	205				
Democracy index (out of 167)	165 (Authoritarian regime)				
Digital opportunity index (out of 181)	139				
Internet users (percent of population)	1.4				

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.

judicial representatives to create a situation of permanent instability in the society.⁴ The death of Niyazov in December 2006 brought about a glimmer of hope for those pining for reform.⁵ In February 2007, Gurbanguly Berdymukhamedov won the country's largely symbolic presidential elections. The post-Niyazov transition was surprisingly smooth, with Berdymukhamedov promptly securing support from the most important behind-the-scenes players, whom he then removed once becoming president. During the time of Niyazov, the president headed both the legislative and judicial branches of the state. Berdymukhamedov pledged to introduce democratic reforms and separation of powers. In September 2008, a new constitution entered into force that dissolved the People's Council (the highest representative body, which included parliament and cabinet members) and divided its powers between the president and the new 125-member parliament.

During Niyazov's rule, all opposition parties were banned. Dissenters were harassed or exiled, and a small and weakened opposition existed either underground or abroad. By contrast, the new constitution promotes multiparty politics, thus formally legalizing opposition. However, in the 2008 parliamentary elections, the Democratic Party—the current ruling party—was the only one registered to participate. The leaders of the main political opposition parties—the Social and Political Movement of Watan and the Turkmenistan Republican Party—continue to reside abroad to avoid potential repression.

The people of Turkmenistan were positive about some of the reforms promised by Berdymukhamedov, including reinstating the recently abolished ten-year mandatory period of education, reversing measures aimed at denying pensions for the elderly, and guaranteeing Internet access to all.⁷

The ethnic composition of the population is Turkmen (85 percent), Russian (7 percent), Uzbek (5 percent), and other minorities (3 percent).⁸ The largest percentage of

the population shares orthodox Turkmen and Islamic values (89 percent), although Muslim traditions have been, to some extent, modulated by local customs and the country's Soviet past. Important factors in determining one's position in the Turkmen society remain kinship, regional links, and tribal affiliation. The state traditionally marginalizes ethnic and religious groups. Except for officially recognized Sunni Muslim and Russian Orthodox denominations, religious activities are severely limited. Religious congregations are required to register with the government to gain legal status.⁹

Internet Infrastructure

The telecommunications sector in Turkmenistan is developing slowly, encumbered by heavy government subsidies of basic services, contradictory procedures for obtaining licenses, and low levels of foreign investment. In the late 1990s, two German companies, Siemens and Alcatel, were approved by the government to develop the telecommunications system. In addition, the TurkmenTelecom Company and the U.S.-based Verizon have agreed to provide Turkmenistan with direct access to the Internet. Chinese telecommunication companies, financially supported by the Chinese government, have also entered the market. According to the U.S. Embassy in Turkmenistan, prior to 2004 there were no broadband fixed wireless service providers in the country, and the difficulties involved in obtaining operating licenses from the Ministry of Communications made the involvement of foreign companies impossible.

Since the emergence of the Internet, the government has sought to establish complete control of the Internet to avoid any potential threat that unmonitored access may pose to the regime. In 2001, the largest ISP, Ariana, struggled to survive for months while appealing the revocation of its license. It continued to provide free Internet access to NGOs until the government finally closed it down. Thereafter, only the state-run provider, TurkmenTelecom, continued operations. Under the former administration, there was very little public Internet access. It was available only to those who could afford to pay USD 8 per hour at the few hotels catering to foreigners and less than ten public access points in the country, all sponsored by foreign aid programs. Private use was restricted to a few foreign-owned businesses that could acquire two-way satellites or the few USD 1,000 a month DSL lines, a few dozen universities and institutions connected through the NATO-established Virtual Silk Highway project, and a small number of local individuals and businesses that managed to acquire dial-up access accounts.¹³

There is only one legal provider of Internet in Turkmenistan, the official government body, TurkmenTelecom. All channels pass through TurkmenTelecom's central hub, and all are thoroughly monitored by the security services. TurkmenTelecom offers a small range of service connections for individuals and organizations, all of which are officially limited to the holder of the account. It remains illegal for a private organization,

for-profit or otherwise, to open an Internet café. Should an organization manage to acquire a dial-up account, it would be presented with a contract obligating it to use the account solely for private personal use and not to share it with anyone. Those in breach of the rules are sanctioned.

In order to receive Internet access, users must register with TurkmenTelecom by submitting a declaration and their passport. In addition, TurkmenTelecom warns users on its Web site that the Internet is not a "place for unconsidered behavior." Accordingly, users have to refrain from undertaking a wide array of broadly defined activities when they are online—for example, posting materials containing foul language, showing "inappropriate behavior" online, posting information that conflicts with the standard norms of behavior and legislation, and uploading pornographic materials. The contract signed by the operator and user contains even more restrictions, such as a ban on accessing Web sites that contain violent content and Web sites that disseminate "untruthful and defamatory information" (a definition that includes opposition Web sites). If, after a warning, a user insists on accessing forbidden Web sites, the operator shuts down his or her Internet service. Users are liable for any actions that might cause damage to the government or "anyone else."

Foreign aid organizations and expensive hotels continue to provide Internet access, though there is consensus among users that the speed of connections provided by TurkmenTelecom has declined over the last two years. These organizations and hotels, as a self-imposed measure, filter some opposition and freedom-of-expression Web sites. They defend such policies as necessary in order for them to continue providing Internet services. Their activities, as well as those of their patrons, continue to be monitored by the authorities.

Similar self-censorship behavior has been observed in schools. After Niyazov's death, the new president promised to install Internet access in every school and demanded that no new school or kindergarten be opened without Internet access. ¹⁵ This massive state computerization program led to the purchase of thousands of computers for the country's schools. However, lack of training in ICT among teachers and remaining fears among administrators that access to the Internet may lead to repression have left many of the computer rooms locked.

The results of the computerization program have been far more modest than the rhetoric behind it, and the country has largely failed to implement policies guaranteeing free and accessible Internet. The president legalized Internet cafés in 2007, but they continue to number only a few, are not advanced technologically, and are closely monitored by the state security service. Since February 2007, 15 TurkmenTelecomoperated Internet cafés have been opened in the country's six largest cities. Their hours of operation were limited to normal government business hours, and the price in 2007 was set at about USD 4 per hour (at this time the average salary in Turkmenistan was less than USD 100 a month). Rall Internet café users are required

to present a passport, and their activities are recorded and logs are sent to a government server.

Nearly two years after the transition several of the 15 official access points were closed, and all have suffered repeated service outages and closures. In 2007, President Berdymukhamedov reprimanded the minister of communications for the high prices at Internet cafés. As a consequence, access prices dropped by more than 60 percent, and Internet access at Internet cafés now costs around USD 2. Aside from the obvious submission to monitoring inherent in presenting one's passport, Internet cafés are staffed mostly by youth; furthermore, anyone who uses an Internet café is mindful of what he or she accesses. Nevertheless, administrators report that most Internet cafés receive only up to ten visitors a day.

Contact with the outside world is still difficult in Turkmenistan. Prices for home access to the Internet are steep, creating an additional economic barrier to widespread Internet use. Thus, the Internet largely remains a privilege to those working for foreign companies, the government, and, in a small number of cases, those studying or working at universities. International organizations are trying to improve the local climate by providing regional centers and administrations with modern computer equipment and Internet access, as well as establishing satellite connections of Turkmen science centers to the worldwide network.²⁰

In March 2008, the official government Web site Turkmenistan.ru announced that TurkmenTelecom was finally offering dial-up home Internet connection to the public. The rates were set at USD 42 to open an account, a flat USD 5 per month fee, and USD 4 per hour for browsing, with speeds of 45 Kbps.²¹ These rates are unaffordable for the vast majority of the population and more than six times higher than in neighboring Uzbekistan. New leased lines were also to be connected starting immediately, at high monthly rates of USD 1,000–USD 2,000.

Internet use in the CIS region has increased significantly in the last several years in all countries except for Turkmenistan. Various attempts at measuring Internet penetration have posited that between 0.17 and 4 percent of the population use the Internet, with ITU estimates being 1.4 percent.²² Notwithstanding the low level of penetration, the number of users has increased significantly since the offer of home Internet access. Fixed-line penetration is less than 10 percent, with negligible broadband. Permission has now been given for broadband national WiMAX frequencies. There are fewer than 500 Web sites hosted in the country under the top-level domain ".tm," more than half by a foreign-funded development project. The rest consist almost entirely of official Web sites of government entities. Nearly 95 percent of regular Internet users are in the capital, Ashgabat.

There are two mobile operators in the country. Atlyn Asyr is wholly controlled by the state, with roughly 160,000 subscribers. In November 2007, MTS, a Russian mobile service provider (100 percent privately owned), began offering GPRS/EDGE service to

its corporate clients in Turkmenistan. In May 2008, the same service was offered to individual users for USD 50/Mbit plus a one-time fee of USD 5. As of 2008, MTS had around 500,000 users in Turkmenistan.²³ The service provided by MTS is considerably cheaper than TurkmenTelecom's: it costs USD 5 to connect (one-time fee); 1 MB is 58 cents (day) and 29 cents (night). For users who live in rural areas where fixed lines are not modernized, MTS remains the only option to connect to the Internet. Interestingly, MTS's introduction of GPRS Internet seems not to have been supported by the government, and the service was never announced in official media. The price is still quite high for most users, the service slow and unreliable, and Internet traffic still monitored and filtered through TurkmenTelecom. Focusing on GPRS, however, would herald a leap forward in public access to the Internet, bypassing the high-cost infrastructure of land and telephone lines. If the state does not encourage the establishment of independent networks, however, the service could remain slow, expensive, and unreliable, and will most likely remain filtered.²⁴

Turkmenistan recently sold the rights of administration of top-level ".tm" domains to a U.S.-based contractor. Foreign companies are willing to pay high prices for ".tm" domain names because the abbreviation evokes the term "trademark." The vast majority of Turkmenistan-based Web sites are within second-level domains of international or official government bureaus, such as ".gov.tm" or ".edu.tm."

Legal and Regulatory Frameworks

The president and the Cabinet of Ministers are the policymakers in the communications sector. The Ministry of Communications implements policy; it is the sector's regulator, issuing licenses to operators, approving tariffs, and carrying out investigations to ensure that operators conform to all laws and regulations. The ministry supervises eight bodies in the post and telecommunications sectors: TurkmenTelecom (fixed operator), Ashgabat City Network, Altyn Asyr (GSM), TV Radio/TV Broadcasting, Spectrum Administration, Turkmenistan Post, Special Delivery service (Postal), and Training Center. The deputy chairman of the Cabinet of Ministers oversees the work of the ministry and the minister of communications reports directly to him.²⁵

The role of the sector minister in controlling the state operator is de facto marginal as the general director of TurkmenTelecom reports directly to the Cabinet of Ministers without referring to the minister. The Internet market is strictly controlled by the Cabinet of Ministers, and receiving an Internet license entails close monitoring of all providers' commercial activities. Each license is for a period of three years, and there are more than 30 different license types in the communications sector. It is anticipated that revisions will be introduced to the Law on Communications (2000), which would provide easier conditions for new technologies to enter the market. President Berdymu-

khamedov has encouraged some liberalization in the market by allowing alternative Internet operators to apply for licenses. In fact, by law, the state operator does not enjoy exclusive rights. Nonetheless, TurkmenTelecom remains the only ISP in the market with a valid license to operate. The tariffs are set by the operators themselves, while the ministry reviews the tariff proposals when granting the license.

According to existing rules, when an alternative ISP or broadband provider expresses an interest in using an incumbent operator's network, an inspection commission is formed to investigate the operator's proposal. However, as yet, no alternative provider is known to have applied to provide such services.²⁶

Although both the old and the new constitutions guarantee freedom of expression and free dissemination of information, the government largely controls all media outlets (television, press, and radio). The Turkmen television is state-owned and provides four channels. Channel One, or ORT, broadcasts of Russian television are restricted to only two hours per day and rarely broadcast live. Any reference related to the Soviet past, erotic topics, prostitution, alcoholism, or drug addiction is removed from movies and soap operas.²⁷ Foreign television stations and radio are accessible only to the handful of people who have satellite dishes or shortwave radios. The press is controlled by the government, and even the nominally independent newspapers *Adalat* and *Galkynysh* were created by decrees of the former president. Other government-approved newspapers are *Turkmenistan* (published in Turkmen) and *Neutral Turkmenistan* (in Russian).

Publishing houses and photocopying establishments have to receive registration licenses from the government before starting their operations.²⁸ State media employees cannot establish contacts freely with foreign media.

The lack of mechanisms guaranteeing media freedom, the extensive provisions sanctioning libel and defamation in the Criminal Code, and the broad provisions related to terrorist activities in the Law on Terrorism²⁹ have imposed total self-censorship on Turkmen society under the former and current governments. Article 132 of the Criminal Code makes libel by way of channels of mass information punishable by fines, up to two years of forced labor, or up to one year in prison. Article 133 of the Criminal Code provides for similar sanctions for certain insults against government agents (who are defined as anyone who permanently or temporarily represents a branch of the government). Article 176 of the Criminal Code seeks to protect the president. Under part 1, any attempts on the life or health of the president are punishable by imprisonment for life or death. Part 2 of this article provides for a prison term of up to five years for libel directed against the president. No specific mention is made of mass media—libel in any form can lead to charges.³⁰ Libel charges are usually used to arrest journalists, and there is always a danger of false charges being laid for crimes such as embezzlement.

As reported by Radio Free Europe, during the previous regime most of the trials of journalists, government opponents, or any person who was considered a "threat" to the regime were held in secrecy.³¹ Under Niyazov, repression of dissenters in Turkmenistan often involved beatings, threats, and arrests.³² The current president has granted amnesty to many dissidents and journalists who were jailed by the Niyazov regime.³³ However, in spite of the few positive steps taken by President Berdymukhamedov, media groups continue to place Turkmenistan among the "ten worst countries to be a blogger" because of the lack of guarantees for freedom of expression.³⁴

Surveillance

In Turkmenistan, few users with access to the Internet are able to read English. Accordingly, only information in Russian disseminated on the Internet might raise serious concerns for the regime. Nonetheless, the preferred method of limiting information on the Internet is simply blocking undesirable content. Such a policy, documented during Niyazov's reign, is still in place.

Reporters Without Borders has declared Turkmenistan, along with Belarus and Uzbekistan, an "Enemy of the Internet," because of a combination of monitoring Internet browsing, filtering Web content, imprisonment, harassment, and the prevention of the posting of political materials.³⁵

The Turkmen government maintains tight control on the flow of information through the official mass media. Any dissident criticizing the lack of expression and tight censorship is likely to be included in the government-held blacklist, which can restrict the right to travel abroad.³⁶ Authorities remain hostile to religious sects, and unregistered religious groups are still not allowed to perform religious activities. The government is also engaged in a long-standing practice of deporting citizens belonging to different religious sects.³⁷ There has been no stark change in the monitoring and interception of communications over the last two years. Sensitive issues such as discrimination against women, terrorism, religious extremism, and separatism are still censored by the government. Because of the overall restrictive climate, people commit themselves to broad self-censorship.

There are reports that Turkmenistan's security services have put into place a system for Internet surveillance of all ISPs throughout the country. The OpenNet Initiative suspects that an automatic Internet surveillance and filtering system based on deeppacket-inspection technology has been installed on TurkmenTelecom routers. Since all incoming and outgoing information passes through TurkmenTelecom systems, Internet traffic can easily be intercepted. Any traffic can be monitored by authorities, and certain preselected Web sites containing information that could be harmful to the regime are filtered. Other reports confirm that users can be identified if they send encrypted messages and materials containing certain keywords, such as the president's name. The system is a system for Internet surveillance and filtering system based on deeppacket-inspection routers. Since all incoming and outgoing information passes through TurkmenTelecom routers. Since all incoming and outgoing information passes through TurkmenTelecom systems, Internet traffic can easily be intercepted. Any traffic can be monitored by authorities, and certain preselected Web sites containing information that could be harmful to the regime are filtered. Other reports confirm that users can be identified if they send encrypted messages and materials containing certain keywords, such as the president's name.

ONI Testing Results

In 2008, OpenNet Initiative testing was conducted in Turkmenistan on a direct land-line connection to TurkmenTelecom. The tests detected substantial filtering of local and regional media and freedom-of-expression Web sites. Significantly, Azeri media sites, including a popular multimedia site with an ".az" extension and an Azeri Web site targeting corrupt officials, were blocked. The ONI revealed targeted filtering on a number of other Web sites including those covering local and international women's rights, human rights, and narcotics, and one Web site containing information about religious beliefs. An environmental site and a P2P site were also blocked. In addition, a number of pornographic and gambling sites were blocked. The ONI also observed reverse filtering of U.S. military domains.⁴⁰

Conclusion

The former Turkmen president exercised strict control over Turkmen society and media, and restricted any information inconsistent with his widely propagandized policies. The current president has pledged to seek a more lenient approach to leading the country, but much still remains to be done. The scope of sensitive issues in Turkmenistan continues to be broad and may involve any criticism of the regime or independent opinion. Few citizens have access to the Internet, and most continue to fear censorship and other unpredictable centralized methods of control. Until liberalization of the Internet market occurs, such measures will continue to be a concern for most Internet users in the country. The few international organizations providing Internet access practice self-censorship in order to protect their staff and their diplomatic position. With so few users of the Internet and the massive risks facing any advocates of freedom of speech, the government continues to hold the future of the Internet in Turkmenistan entirely in its hands.

Notes

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