Foreign Aid and ICT Policy in Central Asia

Erica Johnson
Ph.D. Candidate
Department of Political Science
University of Washington
ejj3@u.washington.edu

Eric McGlinchey
Assistant Professor
Department of Public and
International Affairs
George Mason University
emcglinc@gmu.edu

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Authoritarian governments devote considerable resources to controlling the media. Though critical to the smooth functioning of democracies, free information flows can also lead to instability, protest, and even revolution in authoritarian settings. Rustavi-2's widely watched television reports of Georgia's November 2003 sham parliamentary elections, for example, emboldened thousands to take to the streets in Georgia's Rose Revolution (Economist 2003). One year later, in Ukraine, journalists from the 1+1 television station declared in an evening broadcast that they would no longer report "distorted information ... under the direction of various political forces," indicating to the hundreds of thousands of protestors in Kiev's Independence Square that President Kuchma's authoritarian powers had crumbled (Strauss 2004). Indeed, 1+1 confirmed what some Ukrainians had learned the previous night when the sign linguist for the state-run UT1 news signed, "Don't believe this. It's all lies. Yushchenko is our president" (Ibid.). And during the March 2005 political upheaval in Kyrgyzstan, the Internet and other media played an instrumental role in the organization of protests that led to the ousting of President Askar Akayev.

As the recent clamp down on media freedoms in Uzbekistan and Kazakhstan demonstrates, the remaining Central Asian presidents well understand the lessons of their fallen authoritarian colleagues—information outlets must be managed lest small protests expand into country-wide oppositionist mobilization. And, in contrast to their deposed Ukrainian, Georgian, and Kyrgyz counterparts, Central Asia's autocrats have been more successful in controlling their domestic media. All five Central Asian states have consistently ranked among the most oppressive of all media environments in Freedom House's annual *Freedom of the Press* surveys. Indeed, in recent years Central Asia's presidents have pursued similar strategies in controlling the media, nationalizing printing presses, radio and television broadcast channels, hamstringing the few independent media outlets that do exist with endless court cases, and restricting the information and communication environment.

Oddly, however, Central Asian leaderships have differed in their policies toward what is potentially the most politically destabilizing of all media outlets—the Internet. For example, while it regularly padlocked the offices of independent print newspapers, the Akayev regime in Kyrgyzstan maintained an open regulatory environment for the country's Internet-based media. In neighboring Kazakhstan and Uzbekistan, in contrast, the state closely controls both the traditional and electronic media. In this paper, we explore these variations in government Internet policy. Specifically, we ask why Central Asian governments, though equally repressive of their traditional media, pursue diverging policies toward the Internet. Ultimately we find Internet regulatory policy in the Central Asian states varies according to who provides the financial capital for new information and communications technology (ICT) and infrastructure and financing for development

of legislative policies. Where international NGOs provide capital and assistance in drafting legislation, such as in Kyrgyzstan and, to a lesser extent, in Uzbekistan, the formal regulatory environment is more open, clearly articulated, and permissive of electronic media. In contrast, where domestic actors fund the development of ICT infrastructure, as in Kazakhstan, Tajikistan, and Turkmenistan, regulation is vague and government control and interference more extensive. In short, in contrast to other studies that have found international aid to produce, at best, mixed outcomes in political and economic liberalization (World Bank 2002) our study suggests that, at least with regards to the electronic media, international partnerships in the initial stages of ICT development can lead to islands of openness in otherwise authoritarian states.

Our discussion proceeds in three parts. In section one we review the literature on ICT in developing countries. This literature is comparatively new and, while scholars have studied the links between economics and ICT development, less understood are the political factors that shape ICT development and the potentially regime-destabilizing consequences that emerge as a result of variations in ICT development. In section two, we turn our attention to the political causes behind varying outcomes in Kazakhstan's, Tajikistan's, Uzbekistan's and Kyrgyzstan's ICT policy. Here we demonstrate how international partnerships in ICT development, in contrast to what is often the case with other forms of international aid, does produce more liberal regulatory regimes. In conclusion, we explore the potential consequences of these variations. Ultimately, we find that, although the current influence of Internet media is less than more traditional print, radio, and television outlets, Internet accessibility and usage is rapidly increasing,

particularly among younger generations. As a result, seemingly inconsequential policy variations today may have profound effects on authoritarian stability in the near future.

ICT Regulation and Authoritarian Regimes

A number of studies have begun to investigate the diffusion and adoption of Internet capabilities in developing countries, but these works generally deal with issues of e-readiness, the implications of ICT for development (ICT4D), and the prospects for bridging the international digital divide between developed and developing countries (See, for example, World Internet Report 2004; Harvard Center for International Development). While these studies provide an important assessment of variables critical for widespread use of ICTs in developing countries, they focus on issues of infrastructure penetration and the status of human capital rather than on government regulation of the information technologies themselves. Other studies have examined the relationship between economic development and ICT, yet these studies too neglect the role of government regulation (For a critique, see Wallsten 2003). Moreover, studies of e-readiness in developing countries generally exclude the Central Asian region.

Another, perhaps overly optimistic, line of research studies the relationship between the introduction of advanced ICTs and the breakdown of authoritarian political control (Arterton 1987; Kedzie 1997; Lerner 1958; McLean 1989; Pitroda 1993). Here the expectation is that the Internet will allow increased communication among the political opposition, thereby limiting an authoritarian regime's ability to maintain uncontested rule (Pye 1990; Knei-Paz 1995). A key component of this argument is that

the accessible and empowering nature of new ICTs undermines traditional instruments of authoritarian control.

Critics of technological determinism have noted, however, that governments are often the main, if not only, proponents of technological advancement in developing countries (Kalathil and Boas 2003; Kapur 2002; Rodan 1998). These scholars provide a helpful warning by demonstrating that Internet and ICT advancement and political liberalization often do not proceed simultaneously. That is, while some uses of the Internet may pose political challenges, others reinforce authoritarian rule. Indeed, many authoritarian regimes promote ICT development to further narrow, state interests rather than those of broader society. Gary Rodan (1998) for example, convincingly describes such a process in his analysis of Singapore's ICT sector. In Singapore the central government has developed both one of the world's most wired societies and one of the world's most strictly regulated and self-censored societies. Kalathil and Boas (2003) demonstrate similar processes in China, Cuba, Southeast Asia, and the Middle East. These authors underscore the critical role that existing government regulation of other media and telecommunications play in either the liberal or illiberal development of ICT.

As our study demonstrates, however, preexisting government regulations can change. Importantly, while government elites may identify adoption of ICT as critical to economic growth, not all states have the financial and intellectual capital necessary to develop and use these modern technologies. In the post-Soviet Central Asian successor states, governments have had to turn to outside actors for ICT equipment and know-how. And, as we illustrate in the following case studies, it matters *how* a state engages international actors in its pursuit of ICT technology. Where states can purchase ICT

hardware outright or have otherwise had little interaction with foreign donors, authoritarian regimes have succeeded in maintaining control over new electronic media. In contrast, where governments have had to rely on foreign aid to purchase new technologies, states have markedly less authority over the use and application of ICTss.

Overview of the Cases

Kyrgyzstan, Uzbekistan, Tajikistan, and Kazakhstan provide compelling illustrations of variation in ICT regulation and the role of foreign aid. With the assistance of foreign donors, Kyrgyzstan has drafted liberal and explicit policies for Internet use and regulation. Although the existence of formal written laws does not always reflect practice, the Kyrgyz case demonstrates how social users and Internet service providers have applied formal legislation to defend their newly acquired ICT rights. Likewise, although Uzbekistan is one of the region's more closed regimes and the international community condemns the Karimov regime as an "enemy of the Internet" (Machleder 2002; Reporters sans Frontiers 2004), in 2002, foreign donors induced Uzbekistan to change its rigid control of the ISP market as a condition for the provision of technology and equipment. By contrast, Kazakhstan, which has benefited from direct foreign investment in oil and natural gas, has been able to purchase ICT equipment outright and, as a result, has seen markedly less interference from foreign donors in the formation and implementation of ICT policies. Although the poorest of the regional states, a five-year civil war delayed the inflow of foreign assistance to Tajikistan's ICT sector. While foreign aid has begun to help create ICT infrastructure and training, early patterns of strict government control prove difficult to break. As the following case studies suggest,

states that depend on international NGOs to fund ICTs have less control over ICT policies. As we note in conclusion, these findings have important implications for the downstream effects of foreign funding and political liberalization in developing countries.

Kyrgyzstan

Starting in 1993–94, international donor and development organizations made significant contributions to the adoption of ICT in the Kyrgyz Republic. These development organizations purchased large amounts of computer, peripheral, and network equipment and substantial quantities of hardware and software for the Kyrgyz government (Nusurov 2002). Indeed, the international community took an early and active role not only in the provision of ICT infrastructure, equipment, and know-how in Kyrgyzstan, but also in the implementation of appropriate legislation (Mikosz 2004).

As early as 1995, Kyrgyzstan created a national ICT plan, but shortage of funds delayed implementation (Perraton 2004: 55). Because of early financial constraints, Kyrgyzstan's leadership quickly welcomed input from the international community. USAID, UNDP, and the Soros Foundation, among others, take credit for the formation of Kyrgyzstan's national ICT policies, and UNDP considers the work done in Kyrgyzstan as best practice for the developing world (Perraton 2004: 55; Mikosz 2004). With expertise of foreign agencies, Kyrgyzstan prepared legislation on telecommunications that approaches western standards.

Because of the early move to develop telecommunication policies, the ICT regulatory environment in Kyrgyzstan is more straightforward than in the other Central

Asian counterparts. The Law on Communications, the Law on Licensing, and the Law on Informatization regulate activities of companies in the field of ICT. According to national legislation, the Ministry of Transport and Communications is the primary body for state management and regulation in the sphere of informatization. In addition, Kyrgyz officials, in consultation with foreign aid agencies, created the Council for Information and Communication Technologies on June 18, 2001, to elaborate and adopt a strategy of IT development in Kyrgyzstan. The council includes the president, the secretary of defense, directors of the biggest educational institutions (Technical University and Kyrgyz-American telecom faculty of State University), and minister of transport, education, and others.

In law, Kyrgyzstan does not impose any restrictions on the right to use the Internet. Nevertheless, some dispute remains about whether the Internet is a form of mass media and subject to the Mass Media Law or a part of telecommunications sector, and specific Internet-related legislation are still under consideration. Further regulatory development of Kyrgyzstan's Internet sector will require laws aimed specifically at regulating the relationships of trade networks and commerce and financial operations.

As part of the first telecommunication project funded by the World Bank and the EBRD, Kyrgyztelecom, a joint-stock company, was granted exclusive control of long-distance and international telephone service, but within the framework of this same project, the World Bank required the non-participation of Kyrgyztelecom in communication sectors other than telephony (Kyrgyzstan Development Gateway 2001). With this agreement, Kyrgyztelecom was to provide a network for private operators, and inter-operator tariff agreements were to be concluded on a commercial basis, approved by

the State Communication Agency, and subject to antimonopoly regulation. Nevertheless, Kyrgyztelecom received a license to offer Internet access on a national basis with a uniform tariff in 2002. Private ISPs, under the auspices of the Internet Club Public Union, protested this change as unfair and unconstitutional competition, since Kyrgyztelecom did not charge long distance fees to its customers when using dial-up Internet access (Nusurov 2002; BISNIS 2003a).

There are now 10–15 ISPs operating in the Kyrgyz Republic, and the number increases each year. During the last several years, a range of Internet centers, Internet-cafes, business centers, etc., also opened to provide public access to Internet services. In addition, NATO financing developed a project to provide ICT and satellite equipment to enable free Internet access for educational institutions, libraries, and hospitals around the country (*Ukrainian Times* 2003). The Kyrgyzstani state has even provided Internet access to women's prisons in the country (BBC Monitoring 2004a). In addition, the state has made efforts to open free Internet centers in rural areas, where more than half of the country's population lives. The government has also mandated that state ministries and departments develop their own web sites, a policy intended to make state bodies more transparent and accessible. As evidence of a fairly decentralized regulatory environment, a private ISP, Asia-Info, is authorized to register "KG" zone domains (Kyrgyzstan Development Gateway 2001: 26). Despite the presence of a number of private ISPs, their service quality is often characterized as poor. Moreover, in addition to competition from the state monopoly, one private ISPs, Elcat, is owned by Akayev's family. As a result, other private ISPs experience difficulty competing.

Since independence, Kyrgyzstan's media have enjoyed greater freedom than their regional counterparts. Nevertheless, they were subject to increasing pressure in recent years (BBC 2004). Large fines resulting from legal actions for slander create financial burdens for opposition and private media outlets (Reporters Without Borders), and editorial content is influenced by informal government censorship and self-censorship among journalists (Internews). Indeed, reports also indicated that few media outlets wereable operate stably in Kyrgyzstan (BBC Monitoring 2003c). In addition, as foreign financing for projects ends, the Akayev government was been seen as less committed to the maintenance of open ICT environment. For example, when a Soros Foundation program on use of the Internet in the Central Asia region ended, Internet access in Kyrgyzstan reportedly became considerably more difficult (Perraton 2004: 53).

Interestingly, even as the Akayev regime moved toward authoritarian practices, private ISPs and Internet cafes relied on Kyrgyzstan's liberal ICT regulatory environment to protect their rights. For example, in 2003, the Union of Internet Clubs (UIC) protested the State Communications Agency to illegally ban access to some subscription-based sites (IP telephony sites) (BBC Monitoring 2003). Indeed, as awareness grew that foreign aid to the country was increasingly used to shore up political support for the authoritarian Akayev regime, information and communications technologies and operators played a critical role in popular mobilization.

Since 2000, the Kyrgyzstani government has planned to privatize a 51 percent share of the state telecommunications company Kyrgyztelecom. Three international tenders were completed, but there is still no foreign owner. The first two winners, the Swiss consortium Swedtel and the Russian long-distance provider Rostelecom, defaulted

during the second phase of the tender. Even as a third winner, the German company

Detacom, was announced in summer 2004, there was speculation that the privatization

plan would not be completed. Indeed, both houses of Kyrgyzstan's parliament voted to

suspended privatization on the grounds that the tender process violated national laws.

The parliament also justified this decision because the tender offers were lower than

desired and because of the loss of revenue to the government from selling the profitable

company. There may also have been political motives behind the suspension of

privatization, as the Kyrgyzstani government would lose monopoly control of telephone

and electronic communications if Kyrgyztelecom were privatized. It remains to be seen

how Kurmanbek Bakiev, elected to the Kyrgyz presidency in July 2005, will regulate the

ICT sector.

As the 2005 parliamentary elections approached, concern over media freedom

increased. Opposition groups cited restrictions on the Internet as a factor in

disseminating displeasure at February's inconclusive parliamentary election (Open Net

Initative 2005). During the unrest that preceded the ousting of President Akayev on

March 24, Kyrgyzstan's Internet was described as a "battleground" as two leading ISPs

suffered an alleged hacker attack and were pressured to remove information reporting on

the growing instability in the country. Some opposition leaders seized on the attacks,

claiming that the government had launched an online censorship campaign. In addition,

mobile phones were a critical means of mobilizing protestors and disseminating

information during the March "tulip revolution." The seriousness with which the ISPs,

mobile phone providers, the government, and the opposition are treating this matter

suggests that the Internet and other ICTs are increasingly important new political arenas in Kyrgyzstan.

Uzbekistan

Well known for oppression of opposition groups, Islam Karimov's authoritarian regime exercises tight control over the flow of information in Uzbekistan. The international community has influenced Uzbekistan's ICT policies through the provision of equipment but has played less of a role in drafting Uzbekistan's legislation. Although specific policies regulating Internet operations have not been developed, laws concerning censorship and control of information extend to media coverage on the Internet. While Uzbekistan's constitution guarantees freedom of speech, freedom of information, and prohibition of censorship (Articles 29, 65, and 67), the government nevertheless pursues a semi-official policy of direct and indirect content controls on mass media outlets in the country. Similarly, Uzbekistan does not have a specific law permitting government control and filtering of Internet content, but the government finds reasons to block certain web sties. Freedom House investigators have suggested that Uzbekistan's restrictions on Internet content are less severe than controls over print and broadcast media (Sussman 2001). Nevertheless, Reporters Without Borders labeled the Uzbekistan government an "enemy of the Internet" in October 2004 (Reporters sans Frontiers 2004).

A complex network of rules and regulatory bodies govern the media and ICT sphere, creating complicated and, at times, contradictory legislation and enforcement requirements. The primary government agencies responsible for censorship of the media are the National Security Service and the Ministry of Defense. In addition, regulation of

internet services providers and other electronic media also fall under the jurisdiction of the Uzbek Agency of Communications and Informatization and the Cabinet of Ministers, among others. More than 15 laws, including the Constitution, the Civil and the Taxation Codes, and the Administrative Liability Code regulate activity in the ICT sector (UNDP 2003). As each of these various government institutions creates legislation and rules for ICT operation assessing which governing bodies and which rules have the greatest impact on individual operators in the ICT sector is difficult.

Despite a lack of clear policies, government control of the Internet has been clearly evident. Although foreign agencies, such as UNDP, USAID, the Open Society Institute, and others, began helping Uzbekistan develop ICT capabilities in 1996, these efforts were small scale and involved equipment provision rather than legislative assistance. By 1999, Uzbekistan's politicians began to view the internet as politically threatening and increased government control over the related technologies. On February 5, 1999, Resolution 52 gave the state-controlled UzPak exclusive monopoly rights as an ISP. As a result, access to external information channels was only possible through the network of the national provider UzPak.[2] In addition, other ISPs were also required to apply for licenses from and comply with regulations of the Agency of Post and Telecommunications. According to official rhetoric, these policies created a secure data network to filter Internet content and combat terrorism. In reality, however, the shift created a monopoly benefiting government officials and kept access charges high. The creation of the state ISP monopoly received criticism from the international community,

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[2] This model has also been used by Singapore and China (among others) as a way to maintain state control of what some have deemed a medium that defies regulation (Kalathil and Boas 2003; Rodan 1998).

and several foreign agencies, including the Open Society Institute and USAID, withdrew support from ICT development in the country (Perraton 2004).

UNDP remained active in Uzbekistan during the period of state monopoly control and conducted an e-readiness assessment of Uzbekistan in 2001. The study, which reflected the status of ICT development in the country before the beginning of large-scale foreign interventions, indicated that Uzbekistan had low level of ICT development and had fallen drastically behind many developing countries with which it had shared a comparable level of ICT development just a few years earlier (UNDP 2003: 1). Shortly after these findings became public, Uzbekistan's leadership changed course in the regulation of the Internet and other electronic media to benefit from a greater role of foreign inputs in the ICT sector.

In order to secure external funding for ICT equipment upgrades from foreign donors, Uzbekistan revoked Decree 52 in October 2002. Decree 352, issued on Oct 10, 2002, decentralized access to international computer networks, and Internet access oversight and control reverted to government agencies with no direct commercial interests. The Agency of Post and Telecommunication was then reconfigured into the Agency for Communication and Informatization. These moves were intended to publicize the government's efforts to nurture ICT development, and a special complex on ICT development in the Cabinet of Ministers was created to reinforce this message.

ICT development in Uzbekistan is now proceeding with the active participation of donor support countries such as Great Britain, Germany, the United States, Switzerland, Japan, and Spain. ICTs in Uzbekistan are also being developed with the direct support of UNDP, World Bank, EBRD, ADB, the European Union, USAID, the Soros Foundation

(until it was ousted from the country in March 2004), and other international donor organizations. Intensification of international donor support is seen as crucial for a successful implementation of the National ICT Development Strategy in Uzbekistan, but foreign supplied equipment and intellectual capital does not prevent a rigid regulatory environment. Moreover, while telecommunications has been one of the leading sectors for foreign direct investment over the previous decade (Mavlany 2003), telecommunications, like other leading sectors of the Uzbekistan economy, is in a period of stagnation. This trend has increased throughout 2005, as the Karimov government became increasingly defensive against western promotion of anti-government "colored revolutions" in other regional states.

Indeed, the development of a liberalized ICT sector in Uzbekistan is a mixed story. Although estimates vary, some observers suggest that Uzbekistan now has as many as 263 registered ISPs, but only 35-40 of these may actually be operating. Most ISPs operate in the capital city Tashkent and only 12 are seen to have a significant market share (Gidaspov 2001; U.S. Embassy Tashkent 2001). Only a handful of these have connections to international channels independent of the UzPAK network. In reality, Uzbekistan's ISP market is divided between UzPAK and the private company Naitov, which together control approximately 80–85 percent of the market (Avdeeva and Jalilov 2002). In addition, only these two companies cover nearly the entire territory of the country. Outside of the country's capital, there are one to seven ISPs in each regional center, but many of these are subsidiaries of UzPak or have been established under education or other foreign funding, such as UzSciNet under UNDP auspices and IREX with funding from USAID. These networks, however, do not offer services to all

segments of the population and cannot, therefore, be considered part of the public ISP market.

In order to gain independent and direct access to international networks, several domestic providers are working on agreements to access the Internet through the services of foreign ISPs. For example, in June 2001 the ISP Sarkor officially received the first international fiber-optic channel through ChinaNet (Avdeeva and Jalilov 2002). The ChinaNet channel, however, restricts access to more than 2000 sites banned by the Chinese government. Sarkor fills this blank through the UzPAK channel, and, thus, is not completely independent. Other local ISPs are trying to acquire private satellite dishes to gain independent international connections. Nevertheless, administrative regulations prohibit the use of independent satellite channels, and the Uzbek Agency of Communication and Informatization closed at least one ISP, Eastlink, for accessing international networks through a provider outside of Uzbekistan (Yakovleva 2002).

Although foreign donors intended the shift from UzPAK monopoly to ease Internet access for ISPs and reduce formal governmental controls over Internet connectivity, UzPAK provides nearly all Internet access in Uzbekistan and is allegedly responsible for tracking web sites that should be blocked. Despite the requirement to end the state monopoly on ISPs, UzPAK continues to operate the national data-transmission network and controls international Internet traffic and Internet access fees (Interview with Shaukat Valitov 2003). Independent ISPs connect to international networks only through UzPAK on the basis of special licenses, which the Uzbek Agency of Post and Telecommunications allocates according to the decision of an interdepartmental coordination commission "for improvement and increase of the effectiveness of

information activity and data transfer." This measure evidently pursues two goals: 1) stimulate the development of a national operator of data transfer with privileged rights; and 2) centralize access to the Internet for maintained control on informational content (Avdeeva and Jalilov 2002). Thus, while the number of emerging ISPs has grown enormously in recent years, the majority of these providers must continue to use the broadband channels of UzPak.

In addition to control of access to international channels, government efforts also restrict ISP operations and access to certain web sites and sources of information (BBC Monitoring 2003). ISPs must sign agreement to block sites in the following categories: pornography, terrorism, weapons/violence, anti-constitutional material, extremist content, or fundamentalist religious groups, calls for change of constitutional system, war propaganda, religious and national dissension, infringement of human honor and dignity, and other information. The agreement is confidential and all ISPs to date have kept it secret. In addition, because there is no fixed list, blocked URLs differ among ISPs and between dial-up and broadband customers.

Public officials enforce compliance through monitoring and threats of mandatory closure. In cases of non-compliance, the license for service is revoked and the ISPs must cease activities or dispute revocation in court. The government's filtering activities include restricting access to certain kinds of content such as opposition groups' news and announcements or information related to activities of banned Islamic movements, or by selectively banning pages of information web sites to prevent access. Since late 1990s, it has been impossible to access opposition web sites within country. Moreover, a Muslim web site in the country reported that Uzbekistan's secret service used dissidents' email

accounts to send abusive messages to opposition supporters (BBC Monitoring 2005). In addition, Internet cafes display signs stating that accessing anti-government sites is against the law and forbidden, and there have been reports of cases in which National Security Services (former KGB) officers posing as customers at Internet cafes view forbidden sites to determine if café staff respond appropriately (Rotar 2003). Furthermore, as in other authoritarian regimes in Asia, Internet users likely enforce self-censorship to avoid problems with the government. Almost all websites containing information that is likely to fall under censorship and content control are hosted abroad.

Although the international community has played some role in provision of ICT equipment that resulted in opening of Uzbekistan's ISP market, these foreign agencies have had less influence in drafting the laws that actually regulate the market. As a result, Uzbekistan's leadership has persisted in repressing the use of the Internet and related technologies. In addition to helping to draft laws allowing for more liberal operation of the ICT sector, the international community might tie future contributions of equipment and training with legislation that encourages greater competition in the ICT market, simplification of licensing procedures for ISPs, and restructuring and privatization of state-controlled Uzbektelecom. Even as new agreements to expand Uzbekistan's ICT market were signed in summer 2005 (Kimmage 2005a), foreign aid to the country drew criticism in light of the Uzbek governments response to the June unrest in Andijon (Kimmage 2005b).

Tajikistan

Tajikistan's information and communications systems are the least developed of all the Central Asian countries. The communications network provides service to a subscriber base representing a teledensity of less than 4 percent in early 2005, and, of particular concern, less than 10 percent of the Tajikistan network is digital. Moreover, a 2002 UNDP report states that the poor state of telephone networks would hinder the development of primary Internet providers in the country in the near future (Asia Pulse 2003).

Despite the fact that Tajikistan is the poorest of the post-Soviet states, there has been less foreign aid toward developing ICT infrastructure and drafting regulatory policies in the country than in Kyrgyzstan or even Uzbekistan. Unlike Kazakhstan, Tajikistan does not have an indigenous source of wealth to overcome development hurdles. Civil war from 1993–1997 distracted from developing the ICT sector and deterred early foreign involvement, which has been slow since. Tajikistan's government made some progress on its own but lack of foreign input contributes to poor infrastructure and equipment, erratic policy enforcement, and halting development of the ICT sector.

Having inherited a telecommunications system that was near total collapse, the government started the task of bringing it up to modern standards immediately upon independence. In early legislative efforts, the Law on Press and Other Mass Media was passed in December 1990 and the Law on Television and Radio Broadcasting was adopted in 1996. Nevertheless, laws related to information and communication technologies are out of date and routinely violated by civil servants charged with overseeing them (MSI 2004: 252). For example, since its inception in 1990, the Law on

the Press has undergone 30 changes, which makes interpretation and use of the law challenging (OSCE 2002: 73).

Moreover, although Article 30 of Tajikistan's constitution guarantees freedom of speech and mass media, protects the freedom to use sources of mass media, and bans censorship and persecution based on criticism, further provisions of the law make it clear that persecution of a media outlet or journalists can occur not only for publication of libelous facts, but also for subjective analysis, including ideological or political opinions. The legislation makes no distinction as to determining whether the disseminated information represents the truth or is intentionally false (OSCE 2002: 72). As a result, self-censorship is a primary means of survival for traditional and new ICT media. In addition, access to official information is strictly controlled. Almost all printing presses are government owned and electronic media faces serious problems with procuring licenses, poorly developed professional skills, and drastic need to upgrade technical facilities. Moreover, as discussed below, since mid-2004 communication outlets face frequent government interference in editorial policies (IREX 2004: 252).

Whereas foreign actors have played a role in providing technologies and infrastructure and influencing the development of ICT regulation in Kyrgyzstan and Uzbekistan, foreign efforts have been less concentrated in Tajikistan. Among the earliest foreign efforts, Soros Foundation and the Eurasia Foundation cooperated with PERDCA and the Central Asian Development Agency (CADA) to open a free, public email site in Dushanbe in July 1995. In addition, the Soros Foundation, USAID, and other international organizations work to provide Internet access in remote regions and at educational institutions. By early 2005, the Connectivity Project, funded by the U.S.

State Department and implemented by Relief International/Schools Online, had opened

24 Internet Learning Centers throughout Tajikistan (US Fed News 2005). These efforts,

however, have had limited effects on Tajikistan's ICT policies.

Increasing access to information and training for journalists has been international

donors' greatest focus on developing Tajikistan's ICT sector. For example, much foreign

assistance to Tajikistan's ICT sector goes to addressing media outlets' needs for

computers, mobile phones, and modern recording equipment (IREX 2004: 257).

International donors, including OSI, USAID, OSCE, Eurasia Foundation, and others,

have provided technical support to 20 independent television and radio stations to receive

up-to-date equipment (OSCE 2002: 63; Avesta 2005a). Funded by OSI and USAID,

Internews-Tajikistan runs the only non-state educational center for journalists, and in

2004 OSCE opened a center offering free Internet and legal advice for journalists in

Dushanbe (Asia-Plus 2004).

Despite this progress, regular Internet use is still too expensive for journalists and

the general population alike, and slow connection speeds exacerbate the problems of cost.

The cost at Internet cafes varies from one to five dollars per hour depending on the time

of day, which is about double the rate in Tashkent (Asia-Plus 2003a; Tajikistan

Development Gateway 2005). Interestingly, while chat rooms, email, and network games

are frequent uses of the Internet, "the Internet is seldom used for getting information",

"for marketing products inside and outside the country", or "for [finding] business

partners" (Asia Pulse 2005). Among the new communication technologies, the most

popular web service in Tajikistan is IP-telephony for communicating with relatives

working in Russia (Ibid.).

Estimates vary on the number of Internet users in Tajikistan. For example, Asomiddin Atoyev, consultant of the Civil Initiative in the Internet Policy Foundation, believes that about 60,000 people in Tajikistan use the Internet at least once a week, and the average connection lasts two hours a day (Asia Pulse 2005). Another estimate puts the number of regular users as high as 80,000 (Borisov 2004). It is probably correct that only 1-2 percent of Tajikistan's 7 million citizens use the Internet and the majority of users in the country are personnel of international businesses and NGOs located in Dushanbe and other regional centers. Of these users, 80 percent use the Internet at work (Asia Pulse 2005).

Since 1999, 4-10 Internet service providers have opened and are working to spread their services to the remote, often barely accessible regions and 50-100 Internet cafes have opened across the country (Asia Pulse 2005; Borisov 2004; Great Game Travel Company 2003; Herbison Consulting 2004; IREX 2004: 255). Government regulations give the state-owned Internet service provider privileged access to the Internet market. In addition, however, Tajikistan's ISP market also includes several private providers, one provider that exclusively serves the country's banking sector, and a non-commercial provider launched by NATO's Partnership for Peace program with the goal of providing Internet services to universities and academic institutions. There are reports that the government also allowed a handful of additional ISPs to begin operating in 2002-2003, but it is not clear how many of those companies continue operations. The ISPs provide Internet access through both dial-up and broadband dedicated channels, but broadband access remains underdeveloped.

The population of Tajikistan also seeks to develop the mobile phone market because of the dire lack of land lines. In 2005, UMTS, a new standard of cellular network, was launched in Tajikistan, making Tajikistan the first CIS country to use a communication network of this standard (RIA OREANDA 2005). Despite this advance, the mobile communication market in Tajikistan remains poorly developed. The country's penetration level reached 2.6 percent at the end of 2004). Six cellular operators compete against each other in Tajikistan and a U.S. firm may join the fray (Borisov 2004).

As a participating OSCE state, Tajikistan has exhibited commitment to subscribe to international media commitments (OSCE 2002: 69). Nevertheless, Tajik law overrides international treaties on communication, despite constitutional provisions stating the opposite. Thus there are distinct inconsistencies in legislation, which might be overcome with additional foreign assistance. Importantly, the Institute for War and Peace Reporting (IWPR) and CIMERA provide training and work on media-law reform (MSI, 2004: 261). At the same time, however, foreign observers see significant need for communication policy reform in Tajikistan. For example, US Ambassador Richard Hoagland said Tajikistan should revise its laws on the media to enable the independent media to report freely on corruption. "The existence of the law banning the media from allegedly insulting the honor and dignity of officials will have fatal consequences," Hoagland said (Asia-Plus 2004).

Despite observations of greater personal liberties, media freedoms, religious openness, and a flourishing political opposition since the late 1990s (see, for example, Beeman 2004; BBC Monitoring 2004b; ITAR-TASS 2004a), the situation changed for the worse in 2004 (Avesta 2004; Khovar 2005; Asia-Plus 2005). The Rakhmonov

administration openly increased pressure on print and broadcast media and ICT providers and services in preparation for parliamentary elections in early 2005. Two major factors are blamed for this outcome: insufficiencies in legislation regulating media and increased withholding of information by public institutions despite being banned by the constitution (IREX 2004: 251). Indeed, in May 2004 Rakhmonov secretly introduced a new protocol on Information Security, and in late 2004, the president issued a decree giving the national news agency Khovar exclusive distribution rights for official information (BBC Monitoring 2004b).

Rakhmonov increasingly maintains a tight grip on Tajikistan's tradition and new media, showing little tolerance for dissent. In recent years, media have been shut down after critical stories, and journalists have suffered intimidation including police raids or forced military recruitment (Asia Plus 2004b; Associated Press 2003). For example, the National Association of Independent Media of Tajikistan (NAIMT) registered over 204 cases of violation of the laws protecting the rights of journalists and the media in Tajikistan in 2004. (Avesta 2005c). As a result, "Tajik journalists are afraid of telling the truth and writing about problems in the public and socio-political life of the country," the chairman of the Union of Journalists of Tajikistan, Hayot Davlatov, has told Avesta in an interview (Avesta 2005c). In addition, government-run printing presses forced several independent newspapers, including Neru-i Sukhan newspaper (Power of Word), Ruz-i Nav (New Day), and Najot, out of print, and closed the Jiyonkhon printing house, in 2004 and 2005 for criticism of Tajikistan's leaders (Associated Press 2004; Avesta 2005c; Agence France Press 2005).

Moreover, it has recently become particularly difficult to register an independent media outlet. For example, reports indicate that the Ministry of Justice repeatedly returns licensing documents on ridiculous pretexts. Estimates suggest that about 30 newspapers cannot get registration at the Culture Ministry. Despite these hardships, local journalists see the possibility that international organizations might help create more liberal media policies. "The Freedom House organization could provide us with such an opportunity, but the organization was also denied registration. Something may change noticeably if international organizations raise these issues," one Tajik journalist pointed out (Avesta 2005c).

In addition to creating obstacles to obtaining operating licenses, Tajikistan's authorities also employ various other forms of limiting journalists' access to information and use of communication technologies. These limitations include direct or indirect refusals of state officials to give information, ungrounded refusals to give accreditation, favoritism and privileges in giving information to the state media rather than to the independent and opposition media. The authorities also limit access to information on the Internet. According to Rustam Buriev, director of Mavdji Ozod T, the "authorities have direct and hidden ways of limiting access to information" (quoted in MSI 2004: 258). For two years the website of the opposition newspaper *Charogi Ruz* and the news site *Times Ru* have been blocked to users in Tajikistan. Moreover, the state not only control access to information, but also prevents some data and information from being transmitted. For example, Lidia Isamova, director of IWPR in Tajikistan, said, "I am well aware of the fact that messages sent or received through a local provider can be intercepted," (quoted in MSI, 2004: 261).

Foreign actors are not silent about these crackdowns on freedom of the ICT sector. The U.S. Embassy in Dushanbe, for example, has "urged the Tajik government to take 'significant efforts' to encourage press freedom" (Associated Press 2004). Moreover, the OSCE described the closure of the Jiyonkhon printing house as "a worrying backward step" (Ibid), and Reporters Sans Frontieres (RSF) wrote a letter to President Rakhmonov expressing concern about the increase in the number of Tajikistan's journalists and independent media that are being harassed (Reporters Sans Frontieres 2005).

With support of these foreign actors, Tajikistan's journalists and general public have made some small strides toward defending journalists' rights and increasing the accessibility of ICTs. In 2002, the foreign-led Global Internet Policy Initiative (GIPI) and Tajikistan's local Internet service providers association won a battle to keep the Internet affordable in Tajikistan (Khadivi 2002). Advocacy by the two groups convinced the Ministry of Communication to stop an order that would have charged commercial providers for every incoming call, which would have forced providers to pass on the extra costs to their clients and would likely have caused a decrease in the number of Internet users. Thus foreign involvement helped the limited Internet market remain accessible to the Tajik population.

In addition, USAID is supporting the efforts of the NAIMT, the Public Association Journalists in Kyrgyzstan, the International Foundation for the Defence of Freedom of Speech, the Adil Soz (The Just Word), in Kazakhstan, and the Internews organization in Uzbekistan to implement a project aimed at developing open civil society, protecting the right to receive comprehensive and unbiased information, and

comprehensively strengthening democratic principles of freedom of speech in Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan (Asia-Plus 2004c). IREX is also assisting Tajikistan's NGOs' work on free speech and media support and providing journalists with free Internet access, training, and other services (MSI, 2004: 261). Foreign consultation also led the heads of Tajikistan's non-state media to criticize a draft regulation on licensing in the broadcasts sphere (Avesta 2005c). During the detailed discussion of the draft, participants in the meeting proposed to remove about 50 percent of the articles from the document because they violated the country's constitution, legislation, and Tajikistan's international commitments, or because they duplicated the existing laws and codes in the country. Participants also proposed eliminating a clause including the Internet as a way of disseminating information that requires a license.

Despite clearly stated law allowing journalists access to information, media employees do not exercise their rights. Media employees may not be knowledgable of laws and rights and do not think to appeal to authorities and may think that judicial channels are too connected to the executive (OSCE 2002: 75). The improved freedom of Tajikistan's ICT sector seems to hinge on efforts of international actors to increase the awareness of existing legislation, influence the drafting of new liberal legislation, and support journalists and other individuals in holding the government to those laws.

In addition to cooperation with western governments, foreign donors, and organizations, Tajikistan has also identified bilateral cooperation with neighboring countries, such as Iran and China, as a critical means to develop its ICT infrastructure (Asia-Plus 2004; Asia-Plus 2003b). For example, Rahmonov has said that the development of the communication sector is a priority in cooperation with Afghanistan

(Financial Times 2003) and Kyrgyzstan (ITAR-TASS 2005). Given the lack of domestic resources in Tajikistan, foreign aid has the potential to have an important impact in Tajikistan. It remains to be seen, however, how such aid will be realized and what influence the unrest in neighboring Kyrgyzstan and Uzbekistan will have on Tajikistan's ICT and other sectors.

Kazakhstan

In contrast to the Kyrygz government, the Nazarbaev regime in Kazakhstan has maintained strict authority over the Internet. Here, the government's desire for monopoly power is matched by real state capacity to ensure unrivalled control. The Nazarbaev government, awash in oil money, is the richest in Central Asia. During its first decade of post-Soviet independence, Kazakhstan received as much foreign direct investment as did Russia, a country with a population ten times the size (World Bank WDI). And unlike his Kyrgyz counterpart's dependence on international aid and grants, President Nazarbaev effectively applies oil revenues to dictate the course of ICT development in Kazakhstan.

Whereas Kyrgyzstan's international dependence constrained the central government, Kazakhstan's oil wealth affords the Nazarbaev government influence over both the principals and the policies of ICT infrastructure. Two government-owned telecommunication companies, Kazakhtelecom and Nursat, control the Internet market in Kazakhstan. Throughout the 1990s, these government monopolies were sufficient to ensure new ICT media did not threaten Kazakhstan's authoritarian government. Kazakhtelecom, for example, controls about 70 percent of the internet access market

(Johnson 2003). Although the Kazakhtelecom and Nursat monopolies persist today, the Nazarbaev government has begun to develop new, regulatory strategies of control. Kazakhstan, like many post-Soviet states, covets membership in international organizations such as the WTO. And should Nazarbaev discover WTO membership is conditional on breaking the Kazakhtelecom and Nursat monopolies, the state's new ICT regulations will ensure that Kazakh government maintains control over electronic communications.

That the Kazakh government maintains monopoly control over Internet service providers does not mean that it has entirely eschewed foreign ICT investment. As in other Central Asian states, Kazakhstan's ICT industry is in its infancy and, as a result, Kazakhtelecom and Nursat have had to contract with outside companies such as Seimens, WorldCom, Nortel, Cisco, and Lucent Technologies to provide fiber optics and digital switching equipment. Most international companies have been content simply to provide hardware and leave Internet and telecommunications provision to the Kazakh monopolies. A few, however, have attempted to enter Kazakhstan's ICT provider market. The ease with which the Nazarbaev government has thus far dismissed these attempts demonstrates the advantages oil wealth conveys to authoritarian governments confronted with potentially destabilizing new technologies.

The Nazarbaev regime has employed multiple strategies to limit foreign acquisitions of and influence over the Kazakh ICT market. One effective policy has been to stall negotiations and to refuse contract guarantees to foreign investors. In 1996, for example, Deutsche Telekom sought to acquire a 49% stake in Kazakhtelecom. In return for capital investment, the German company would gain control of the Kazakh monopoly

for six years. Deutsche Telekom was ultimately scared away, however, when the

Nazarbaev government refused to commit to new tariff hikes and to a clearly defined

foreign operator license (Williamson 1998).

Another strategy has been simply to deny foreign companies the chance to acquire

shares in the Kazakh ICT majors. In September 2000, for example, the Kazakh

government denied Moscow-based Golden Telecom's attempt to buy a 10% stake in

Nursat. The Kazakh Transport and Communications Minister, Karim Masimov, justified

his government's rejection of the Russian company's bid by appealing to national

defense: "I think it would be wrong if a company which provides the government with

communications was controlled by a private company…. We are talking about national

security" (Interfax-Kazakhstan 2000).

Security indeed is an overriding concern of the Kazakh political elite. It is likely

their own security, however, more than that of the nation, about which they are most

worried. The Kazakh opposition has attempted and occasionally succeeded in using the

internet as a tool to mobilize opposition against the Nazarbaev regime. Thus, through

websites such as Eurasia.org.ru and the online newspapers, *Navigator* and *Assandi-Times*,

the Kazakh opposition has repeatedly exposed corruption and graft in the presidential

administration. Such exposés have unnerved the governing elite. Information, Culture

and Public Consent Minister Altynbek Sarsenbayev, for example, fretted that some of

these new websites have a readership that "outstripped Kazakh media in terms of the

daily readers" (Agence France Presse 2001).

Monopoly control, importantly, allows the Nazarbaev government to block

Kazakh citizens' access to what is deemed offensive online papers. Initially,

Kazakhtelecom and Nursat officials denied that the government had instructed them to block oppositionist websites, claiming instead that access problems were due to "technical" problems with the sites themselves (IPR 2000). More recently, however, the Kazakh government has hobbled opposition websites by subjecting them to the same draconian media laws it had long been applying to newspapers and broadcast journalism.[3] The popular internet paper, *Navigator*, to take one prominent example, was fined \$32,000 in January 2003 for allegedly libeling President Nazarbaev's son-in-law in 2003 (IPR 2003). And, further tightening the screws on the electronic media, in July 2003 the Nazarbaev government created a new policing body, the Kazakh Agency for Information Technology and Communications, "to implement state policy on information technology and communications" (Interfax-Kazakhstan 2003). Throughout spring and summer 2005, Nazarbayev reportedly barred coverage of the upheaval in Kyrgyzstsan and Uzbekistan from Internet, television, and radio coverage and the government has drafted a new law that introduced greater restrictions on Internet uses (Schwartz 2005; Navi 2005). Thus, on the threshold of the December presidential elections, the Kazakh government has built a regulatory regime that effectively stifles free press in the electronic media—a regime that will persist even if WTO accession does force the end of the Kazakhtelecom and Nursat ISP monopolies.

Nursultan Nazarbaev is likely the envy of Central Asia's other authoritarian leaders. He enjoys the best of both worlds—in the space of fifteen years, he has built a modern ICT infrastructure while, at the same time, through his regime's monopoly control over ISP providers, he has limited the regime-destabilizing effects that often

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[3] In April 2001, the Kazakh parliament passed a new media law making websites subject to the same libel laws as are print and broadcast media. See, for example, "Parliament Passes Strict Media Law," IPR

accompany ICT modernization. Whereas the Kyrgyz government was forced to concede

a significant degree of control over electronic media in return for international aid in

developing the ICT sector, the Kazakh state was able to apply its oil wealth to buy a

modern telecommunications infrastructure outright, no strings attached. Paradoxically, at

least in the Central Asia cases, it is poverty rather than wealth that leads to a more

competitive, vibrant, and free telecommunications and electronic media environment.

Conclusion

Our research demonstrates that the relationship between new ICTs and politics

need not be a liberalizing one. President Reagan's prediction, alas, has not proven true;

"the Goliath of totalitarianism" has not succumbed so easily to "the David of the

microchip" (Kalathil and Boas 2003).   Indeed, the spread of new information and

communications technology, rather than encouraging democratization, can have

decidedly illiberal effects on governance. When authoritarian governments have the

economic wherewithal to purchase ICT hardware, as the oil rich Kazakh government

does, new technologies further autocratic control. Importantly though, where

governments are forced to turn to international donors and businesses to fund ICT

acquisition, as has been the case in Kyrgyzstan and, to a lesser degree, in Uzbekistan,

authoritarian control is less assured and electronic media can have dramatic political

effects. Tajikistan is, by contrast, an intermediary case, where foreign aid has not yet

filled in for insufficient domestic resources and government control of ICTs prevails. In

short, foreign aid and conditionality, while it often fails to promote reform in other

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Strategic Business Information Database, April 22, 2001.

spheres of governance (Knack 2004; Remmer 2004; McGlinchey 2003), can lead to more open ICT environments.

Critically, while the liberalizing effect of these more open ICT environments is by no means certain, recent uprisings in Central Asia do offer insights into what, in conclusion, we suggest may be the changing nature of social mobilization, protest, and revolution. Social science scholars instruct that mass uprisings are rare events, so rare that scholars have all but conceded a theory of revolution is unlikely. Indeed, rather than delineating those conditions which lead to social upheaval, scholars have instead concentrated attention on why societies are so seemingly willing to tolerate repressive rule (Skocpol 1979, Olson 2000).

While we do not offer a new theory of revolution, we do believe, that recent uprisings in authoritarian Uzbekistan and Kyrgyzstan, as well as mass protest movements elsewhere in the authoritarian world, demand a rethinking of long standing assumptions in the social mobilization literature. Most scholars of protest and opposition employ a mixture of structural and rational choice logics in their explanations of why societies more often than not are docile in the face of authoritarian rule. From the structural side, revolutions are thought to occur only in those rare occasions when state institutions prove insufficient to contain or repress societal demands (Huntington 1968, Skocpol 1979). Similarly, from the rational choice end, mass uprisings materialize during rare periods when individuals perceive that protest will produce policy or regime change, rather than leading to personal harm, (Kuran 1991). Though structural explanations begin with the state whereas rational choice narratives emphasize the individual, the causal mechanism

is the same—repressive state capacity ensures individuals rarely surmount the collective action challenges necessary for mass uprising or revolution.

Jail, torture, and death indeed have proven to be strong disincentives to protest. Yet, in other contexts, people are willing to accept terrible risks in the pursuit of strongly held beliefs—soldiers enter battles knowing the chance for injury or death is high. Similarly, health and aid workers volunteer in war zones, well knowing that personal safety and financial remuneration may be far greater at home. Why should risk calculations differ in these examples than in the cases of popular protest?

The explanation lies in the value of socially constructed meaning. In order to perceive the efficacy of individual action, indeed for there to be efficacy in individual action—people must believe their behavior will affect others. The soldier goes to battle because she sees the value in her contribution to the battalion and the greater war effort. Likewise, the health worker enters war zones because he can see the improvement in the welfare of his patients. Until now, however, the oppositionist and would be revolutionary in the vast majority of cases could see protest leading only to anonymous suffering at the hands of an authoritarian state. What use is protest if state control is such that opposition goes unnoticed by one's neighbors?

In the past, repressive regimes could disappear activists, regimes could deprive protest of social content by rigidly controlling information networks. Today, however, even the Uzbek regime—among the world's most authoritarian—cannot hide its repression. Whereas in the past fears of unrecognized—and thus, meaningless—repression acted as a check on political opposition, the rise of new and difficult to control ICTs encourages protest even in states where all other forms of repressive capacity remains strong.

In short, while we cannot pinpoint when and in which authoritarian states uprisings will occur, we can predict that, given the nature of new ICTs, the incidence of uprisings and, as a result, political instability will be greater than it has ever been in the past. As such, understanding what causes variations in ICT regulatory regimes in otherwise similarly authoritarian states is ever more critical to theorizing about the (in)stability of non-democratic states. Of course, this would not be the first time innovations in technology forced social scientists to adjust theories of political change. Print capitalism gave rise to standardized language and, in turn, the imagined identity of the nation (Anderson 1991). Similarly, new ICTS—cell phones and the internet in particular—give immediate meaning to what, in the past, would have been unrecognized acts of individual opposition. In the process, today's innovative ICTs have enabled a new language of popular protest. Encouragingly, in some cases instability and protest may lead to revolutionary political reform. Here, the role of foreign aid and its liberalizing effects on ICT regulation is undeniably positive. The past fifteen years of post-Soviet Central Asian instability and uprising, though, serve as a sober reminder that political instability and the overthrow of one authoritarian regime does not preclude the rise of new forms of illiberal rule. New communication technology aids proponents of political reform; however ICT alone cannot guarantee future democratization.

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