While the Burmese military junta is interested in expanding and exploiting information and communication technologies (ICTs) for business and propaganda purposes, it makes aggressive attempts to regulate access to the internet and digital media, control content, and punish citizens for any online activity that is seen as detrimental to regime security. The government uses a wide range of means to restrict internet freedom, including legal and regulatory barriers, infrastructural and technical constraints, and coercive measures such as intimidation and lengthy prison sentences. Although the authorities lack the capacity to pervasively enforce all restrictions, the impact of sporadic implementation and the ensuing chilling effect is profound.

There has been gradual improvement in access to ICTs over the past three years, but the junta has also aggressively targeted users who are involved in antigovernment activities or have contact with foreign news media. Since its crackdown on a wave of September 2007 protests led by Buddhist monks, the military regime has more strictly enforced licensing rules that require the owners of cybercafes, where most Burmese users obtain access, to monitor users’ screens and cooperate with criminal investigations. Both online and offline censorship and information controls were increased surrounding the November 7, 2010 national elections,¹ which secured a sweeping victory for the military-backed party and were

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widely condemned as flawed. Censorship was further reinforced after the release of pro-democracy leader Aung San Suu Kyi from house arrest on November 13.

The state-owned Myanmar Post and Telecommunications (MPT) company launched the first official e-mail service in November 1997. The 2002 establishment of the first private internet-service provider (ISP), Bagan Cybertech, helped to increase the number of users in the country, though the company was later taken over by the junta. By 2010, there were over 520 registered cybercafes in Burma, located mainly in a few major cities. The government’s first attempt to restrict internet freedom was the 1996 Myanmar Computer Science Development Law, which made possession of an unregistered computer modem and connection to unauthorized computer networks punishable by up to 15 years in prison. Other laws and actions since then have furthered the government’s efforts to clamp down on unsupervised internet use.

Obstacles to Access

Internet access and usage are extremely limited due to government restrictions, lack of infrastructure, and widespread poverty. The number of internet users is difficult to ascertain, as independent surveys are not available, and the government offers little credible reporting on these statistics. According to the International Telecommunication Union, there were 110,000 internet users as of 2009, amounting to 0.2 percent of the population. MPT reports that there are 400,000 internet users in Burma.

The price of a private internet connection is prohibitively expensive in a country where an estimated 32 percent of the population lives below the poverty line, though there is significant regional variation. According to the International Monetary Fund, the gross

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3 Author’s interview with a weekly journal editor who oversees internet-related reporting and asked to remain anonymous, December 29, 2010.

4 In June 1989, the military junta changed the English rendering of the country’s name from Burma to Myanmar. Democracy activists and their foreign supporters, including the U.S. government, have continued using Burma.


10 For example, Chin State has the highest level of poverty, at more than 70 percent. These figures are likely to be conservative, as they are based on data collected before significant increases in fuel prices in October 2005 and August 2007, and an inflationary public-sector salary hike in April 2006. Charles Petrie, End of Mission Report: UN Resident and Humanitarian
domestic product per capita was US$469 for 2010.\textsuperscript{11} By comparison, the installation cost for household broadband access is approximately US$1,500, while the monthly fee for service ranges from US$45 to US$130. Other high-speed internet services recently introduced cost somewhat less (approximately US$900 for installation), but remain beyond the reach of most Burmese.\textsuperscript{12} In addition, as part of the process for registering an internet connection, consumers must present their national ID, as well proof of police clearance, and a personal affidavit affirming they are not involved in political activities. Because of such barriers, a majority of users rely on cybercafes, where access typically costs about 300 to 600 kyats (US$0.30 to US$0.60) per hour. The shops usually charge an extra 100 kyats (US$0.10) per hour if a power outage occurs and they must rely on generators, which is very common in Burma due to a general lack of electricity. In some cities, the access price may be 1,000 to 1,500 kyats (US$1 to US$2) per hour. The government pledged to extend ADSL broadband coverage to every township by 2006, but implementation has been limited, with service reaching Pyinmana, adjacent to the new administrative capital of Naypyidaw, only in 2007.\textsuperscript{13}

In 2008, MPT announced that ADSL service was available in 36 cities across Burma.\textsuperscript{14} Despite such expansion, internet access has not grown dramatically in practice because of high price and power shortages.

There were 0.90 mobile-phone subscriptions per 100 inhabitants in 2009,\textsuperscript{15} and 1.62 fixed telephone lines per 100 inhabitants.\textsuperscript{16} Phones are concentrated in large cities like Rangoon and Mandalay, whereas the vast majority of the population lives in underserved rural areas.\textsuperscript{17} In 2010, mobile-phone service using the CDMA standard was introduced in Rangoon, Mandalay, and Naypyidaw at a rate of 500,000 kyats (US$500). Cheaper prepaid GSM mobile SIM cards (US$20) were available beginning in 2009, but the buyer was required to present identification documents, and the seller to retain copies. As many SIM card vendors avoided such regulations, in early November 2010, the authorities ordered an end to the sale of unregistered SIM cards.\textsuperscript{18} By late November 2010, such sales had generally ceased, though a $50 CDMA pre-paid card remained on the market at year’s end.


\textsuperscript{17} Telecommunications Research Project, Burma (Myanmar) (Hong Kong: University of Hong Kong, October 2007), http://www.trp.trpc.hk/publications/myanmar.pdf.

The government exerts control over the internet infrastructure in two ways: total shutdowns, and temporary reductions in bandwidth to slow the flow of information. During the 2007 street protests, the junta completely shut down internet connectivity from September 29 to October 4. From October 4 to 15, the government introduced a “regulated shutdown,” meaning connectivity was available only on one ISP, or during late-night curfew hours. According to ICT experts in Burma, the state-controlled ISPs occasionally apply bandwidth caps to prevent the sharing of video and image files, particularly during politically sensitive events, or whenever the junta perceives a risk of damaging information flowing out of the country. For instance, the junta has disabled the mobile-phone network in areas where protests or bomb blasts have taken place. Most recently, internet connections met with interruption between late October and the end of December 2010, surrounding the November elections. Users found networks running at a slow speed and intermittently being completely unavailable. During the week prior to the polls and on election day itself, users reported being completely unable to upload image or video files. In provincial areas, connectivity was worse than in Rangoon. The Myanmar teleport attributed some of the interference to external cyber attacks.

The junta sporadically blocks access to Yahoo! Mail, MSN Mail, Gmail, the video-sharing site YouTube, the messaging feature of the social-networking site Facebook, Google’s Blogspot, and the microblogging service Twitter. Several users reported difficulties accessing their Gmail accounts in the run-up to the November elections. However, Voice over Internet Protocol (VoIP) systems including Skype are available. The catalysts for blocks on such applications are not always clear, as censorship policies are generally erratic and opaque. In October 2010, the regime launched the Yatanarpon Teleport (YTP) web portal, which was set to offer e-mail and messenger services, a social-networking platform, a blog-hosting application, discussion forums, and online shopping and banking. By attracting users to this system of domestic services, which in many ways resembles a national intranet, the regime apparently aims to reduce reliance on well-known international services such as Yahoo! Mail, Google’s Gmail, and various free blog-hosting sites and discussion forums.

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20 Author’s interviews with a weekly journal editor who oversees internet-related reporting and an information-technology engineer working in the private sector, September 23 and 25, 2010.
21 Author’s interview with a local journalist from Rangoon, September 22, 2010.
22 Author’s interview with two cybercafe owners, five regular internet users and three journalists in Rangoon, Mandalay, and Bassein who requested to remain anonymous, December 29, 30, 2010, and January 2 and 3, 2011.
24 Author’s interview with three cybercafe owners and eight regular internet users in Rangoon, Mandalay, Bassein, Taunggyi, Naypyidaw, and Myitkyina who requested to remain anonymous, July 11, 19, 25, and 28, 2010.
Internet regulations ban circumvention methods, and Burmese ISPs block many bypass and proxy websites, but they lack the technology to block circumvention software like Your Freedom, UltraSurf, and Tor. In many cybercafes, the staff can view the screens of customers, allowing them to detect any attempts at circumvention, which they are encouraged by the authorities to do. However, most staff members offer proxy addresses as a way to attract and retain customers.

There are two main internet-service providers in Burma: MPT and Yatanarpon.\textsuperscript{26} In December 2007, the government opened the Yatanarpon Cyber City, where YTP is based.\textsuperscript{27} The telecommunications hub is reportedly run by a teenage grandson of Senior General Than Shwe, the regime’s top leader. According to several recent reports, the government restructured the ISP system in October 2010, dividing it into two main networks: the MPT ISP, and a newly-created Ministry of Defense (MoD) ISP.\textsuperscript{28} Under the new arrangement, the Yatanarpon Teleport ISP (serving civilian users) and a newly-established Naypyitaw ISP (serving most government ministries) connect to the international internet via MPT. Meanwhile, the MoD ISP solely serves users from the Ministry of Defense. Such architecture enables the junta to cut off access for civilians, including government employees, at times of political turmoil, while keeping the military’s connection intact. According to Reporters Without Borders, the arrangement may also facilitate monitoring of users and hacking of private accounts, as MITM (Man in the Middle) attacks and DNS spoofing can be targeted at the civilian user network without risking security breaches for military accounts.\textsuperscript{29}

There are a number of official institutions tasked with ICT development and management, including the Myanmar Computer Science Development Council, the e-National Task Force (e-NTF), the Myanmar Computer Federation (MCF), and three associations—the Myanmar Computer Professionals’ Association (MCPA), the Myanmar Computer Industry Association (MCIA), and the Myanmar Computer Enthusiasts’ Association (MCEA). However, these entities are not particularly active, or exist only on paper. In practice, the regime uses intelligence agencies and the Information Ministry to implement its generally arbitrary and ad hoc censorship decisions.


\textsuperscript{29} Ibid.
The government blocks political websites and media sites run by the Burmese exile community that are critical of the regime and its activities. The government attempts to block most sites containing words it considers suspicious, such as “Burma,” “drugs,” “military government,” “democracy,” “student movement,” “8888” (a reference to the protest movement that began on August 8, 1988), and “human rights.” YTP blocks almost all Burmese exile and foreign Burmese-language media outlets and blogs, as well as the sites of dozens of foreign newspapers and television networks. It also blocks the websites of international human rights groups. Often, sites are temporarily available only to be blocked again later, and the strength of enforcement apparently varies over time and among the ISPs. According to an engineer from MPT’s data and communication department, the company receives lists of URLs, updated weekly, from an army major responsible for web censorship. Following Aung San Suu Kyi’s release from house arrest in November 2010, the authorities issued orders barring the publication of interviews with her in print or online.

For blogs whose links are not blocked, the regime has been known to intimidate bloggers to remove certain content. For instance, blogger Win Zaw Naing, was ordered by police to remove certain photographs and articles related to the September 2007 protests, although his blog remained accessible in Burma throughout 2008 and 2009. In addition, the Press Scrutiny Board is known to order news outlets to delete from their websites articles that have been barred from publication in their hard copy versions. However, the government does not appear to have issued any instructions for websites to censor the comment sections beneath articles, one of the main spaces in the online sphere where open and critical discussions take place.

In 2009, after several internal documents, photographs, and video material—including footage showing the construction of underground tunnels and a top general’s secret trip to North Korea—were leaked to exile news media, the junta prohibited civil servants in key government ministries from using the internet without authorization from a director-level officer. The government also instructed at least two deputy ministers to head inspection teams that have since launched surprise checks for any unauthorized

downloads of government data at ministries in Naypyidaw. All computers at ministry offices have been password protected, and staff members must make official records whenever they use a computer. Applications that are not necessary for work-related activity were removed from the ministries’ computers, reportedly leaving many machines as little more than word processors.

The junta also set up a “Blog Supervising Committee” in every government ministry in late 2007, and instructed civil servants to write pro-government blogs to counter outside bloggers and foreign or exile media, and to attack democracy activists like Aung San Suu Kyi with abusive language. Implementation of the initiative has been inconsistent, but as of December 2010, several such pro-junta blogs remained active.

Harsh prison terms and the selective enforcement of laws such as the Electronic Transactions Law encourage self-censorship, which is common among most internet users, although expression in online comment features where posters can remain anonymous is relatively free. Negative reporting about top military leaders and their family members, or about China (for instance, the news of a jailed Chinese dissident winning the Nobel Peace Prize), are particularly sensitive topics on which users routinely exercise self-censorship.

Prior to the September 2007 protest movement, most ordinary bloggers in Burma focused on personal matters and living conditions. After the protests, however, many grew more explicitly political and funneled news and visual content to foreign and exile media. There are now over 10,000 blogs in Burma’s blogosphere. According to an October 2010 survey conducted inside Burma by interviewing 5,076 respondents, blogging was the fastest growing aspect of Burmese internet use in 2010, registering a 25 percent increase from 2009. According to another survey conducted by blogger Nyi Lynn Seck in 2009, about 52 percent of Burmese bloggers write from Burma and 48 percent write from abroad. Some 35 percent of bloggers are 26 to 30 years old, and 29 percent are 21 to 25 years old. About 80 percent blog in Burmese, while 8 percent blog in English and 10 percent write in both

36 Confirmed in interview with staff member at the Myanmar Port Authority, December 2010.
languages. The rest use ethnic minority languages such as Kachin, Karen, and Chin. In addition to blogs focusing on personal issues, politics, and entertainment, a number address religion, technology and the internet, and literature, among other topics. The blogging platforms they use include Blogspot (77 percent), WordPress (20 percent), Xanga, Ning, Tumblr, and others. These platforms are banned in Burma, but the use of proxy servers and other circumvention tools is reportedly common.

Users regularly share information on useful proxies and other technical knowledge, and have organized gatherings, such as BarCamp, with the permission of the regime. As noted above, some cybercafes provide assistance on how to access banned services like Gmail, and they often ignore users who visit exile media sites. There are now 26 computer universities dedicated to professional education in ICT fields, providing another source of technical expertise.

In the run-up to the November 2010 elections, bloggers reportedly held meetings to discuss various ways to bypass the junta’s internet restrictions, with some planning to use a group blog to report on election-related developments to make it more difficult for the authorities to trace the source of information. In the aftermath of the elections, local weeklies were barred from covering the views of losing candidates, a gap filled by exile websites and radio stations. In addition, Aung San Suu Kyi’s release shortly after the elections generated intense discussions over Twitter, blogs, Facebook, and other social media. Both before and after her release, Suu Kyi expressed her intention to use ICTs and applications like Twitter to connect with the younger generation after years of isolation, and to create what she termed a “people’s network” to bring about democratic change; her comments generated considerable interest among the blogging community. Also in 2010, Burma’s exile community used ICTs to create a “Citizen of Burma Award” and confer it on a respected movie star–turned–social worker who had founded the Free Funeral Services Society and Hospice despite harassment from the junta. The honoree was selected through an online nomination and voting system.

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42 Ibid.


46 Author’s interview with three young bloggers in Rangoon. December 29, 2010 and January 2, 2011.

47 The Citizen of Burma Award website is located at http://2011.citizenofburma.org/.
VIOLATIONS OF USER RIGHTS

The military junta ruled the country without a constitution for two decades after 1988, when it took power in a coup and crushed a prodemocracy uprising. The new constitution, drafted by the junta and approved in a flawed 2008 referendum, does not guarantee internet freedom. It simply states that every citizen may exercise the rights “to express and publish their convictions and opinions” if they are “not contrary to the laws, enacted for Union security, prevalence of law and order, community peace and tranquility, or public order and morality.”48 The regime has promulgated three laws regarding ICTs: the Computer Science Development Law (1996), the Wide Area Network Order (2002), and the Electronic Transactions Law (2004).49 The Printers and Publishers Registration Act (1962) is used to censor the media. All of this legislation and related regulations are broadly worded and open to arbitrary or selective interpretation and enforcement, generating a climate of fear.

In April 2010, an official from the government’s Cyber Crime Department reportedly warned that the state would impose harsh punishment for any online activities related to politics.50 Under Section 33 of the Electronic Transactions Law, internet users face prison terms of 7 to 15 years, and possible fines for “any act detrimental to”—and specifically “receiving or sending and distributing any information relating to”—state security, law and order, community peace and tranquility, national solidarity, the national economy, or national culture.51 The Television and Video Law (1996) penalizes anyone who possesses a television set, satellite dish, or videocassette recorder and who uses such technology to copy, distribute, sell, or exhibit video recordings without authorization from the state censorship board. Violators face three years in prison or a heavy fine.52

The junta makes judicial appointments and interferes with the decisions of judges. Trials for bloggers and other online activists are grossly unfair, lacking due process and typically held in special closed courts. Most defendants are denied access to legal counsel or adequate time to prepare a defense.53 Like other political prisoners in Burma, individuals

detained on internet-related charges are at risk of torture and medical neglect in custody. Lawyers who take on free expression cases have themselves faced punishment. In late October and early November 2008, two defense lawyers, Nyi Nyi Htwe and Khin Maung Shein, were imprisoned for six and four months, respectively, for contempt of court after taking seemingly innocuous actions on behalf of their clients. Four more defense lawyers—Kyaw Hoe, Maung Maung Latt, Myint Thaung, and Khin Htay Kyew—were barred from representing their clients, including members of the 88 Generation Students group, who were charged under the Electronic Transactions Law and other statutes for their use of the internet and “unlawful” e-mail correspondence.54

According to Amnesty International, the number of political prisoners as of March 2010 was over 2,200,55 an increase of nearly 80 percent from the period before the 2007 protests. Many of these prisoners—including monks, student activists, bloggers, and online journalists—were charged under ICT-related laws, and sentenced to lengthy prison terms, with some ordered to spend decades behind bars.56 Sentences for individuals contributing articles or images to exile media are particularly harsh. In 2010, Reporters Without Borders counted at least 15 journalists and two internet activists in detention.57 One of the latter was Nay Phone Latt, a blogger and owner of three cybercafes, who was sentenced to 20 years and six months in prison in November 2008 for posting a cartoon of Than Shwe on his blog. The proceedings were held in a closed court, the defendant’s mother was not allowed to attend the trial, and he was not represented by his defense lawyer, Aung Thein, who had received a four-month jail term for contempt of court.58

Blogger Win Zaw Naing, whose arrest was reported in November 2009 after he had been in detention for several weeks, faced up to 15 years in prison for posting pictures and reports about the September 2007 protests.59 No news of his sentencing was available as of December 2010. In September 2009, freelance reporter Hla Hla Win was arrested and ultimately given a 27-year prison term, including 20 years for violating the Electronic Transactions Law. She worked for the exile broadcast station Democratic Voice of Burma,
recording video interviews in Burma and sending them to the Norway-based outlet mostly via the internet. Her associate, Myint Naing, received a total of 32 years in prison.60

In January 2010, a former military officer and a foreign affairs official were sentenced to death, and another foreign affairs official was sentenced to 15 years in prison, for the leak, mentioned above, of information and photographs about military tunnels and a general’s trip to North Korea. As of December 2010, the executions had not been carried out.61 Also in January 2010, journalist Ngwe Soe Lin was sentenced to 13 years in prison for working for an exile media outlet. He had been arrested in a cybercafe in Rangoon in June 2009.62 In July 2010, activist Than Myint Aung received a 10-year prison sentence for violating Section 33(a) of the Electronic Transactions Law by using the internet to disseminate information that was “detrimental to the security of the state.” This came on top of a two-year jail term and a three-year jail term for violations of Section 17(1) of the Unlawful Association Act and Section 13(a) of the Immigration (Emergency Provisions) Act, respectively.63 Most recently, in late December 2010, photographer Sithu Zeya was sentenced to eight years in prison for taking pictures in the aftermath of an April 2010 bomb blast in Rangoon, and for his affiliation with an exiled media outlet.64

The record of harsh punishments against critical internet users has fostered self-censorship and an impression of pervasive surveillance. In reality, however, surveillance is generally spotty due to the limited competence or capacity of the authorities, and corruption on the part of local officials. In many criminal cases, including the trials of members of the 88 Generation Students group and of comedian and blogger Zarganar, the military has used materials such as online chat records and e-mail messages as evidence in court. The authorities either monitor internet activity before arrest, or abuse detainees during interrogation to obtain their passwords and electronic documents.


Cybercafe owners are required by law to keep records on their customers’ activities, and police have free access to them upon request. Many owners do not systematically enforce monitoring of their users, however, often assisting them in circumventing censorship instead. In an effort to close these gaps, since May 2010, the government has increased surprise inspections of cybercafes in Rangoon and instructed owners to post signs warning users not to visit political or pornographic websites. In November 2010, the authorities also instructed cybercafes to install CCTV cameras and assign at least four security staff to monitor users.

In addition to registering their identity when purchasing a mobile phone, individuals are required to register their computers with MPT and obtain the company’s permission to create a webpage. These measures are selectively enforced, with authorities especially targeting those suspected of engaging in political activism or transmitting information to exile or foreign media outlets.

The junta is believed to attack opposition websites based abroad. From May to July 2010, the popular site Photayokeking.org, edited by a Burmese army deserter, was hacked, leaving it inaccessible and inoperative. Many leading exile websites—including the Irrawaddy, Mizzima, Democratic Voice of Burma, and New Era Journal—have been temporarily shut down by hackers since 2008. All of the attacks to date have been distributed denial-of-service (DDoS) attacks. Military sources inside Burma say that the junta has dispatched officers to Singapore, Russia, and North Korea for information-technology training, and that these officers are assigned to monitor e-mail messages and telephone conversations, and to hack opposition websites. China also provides training and assistance, according to the Committee to Protect Journalists. The Irrawaddy, based in Thailand, and the Democratic Voice of Burma claim to have traced cyberattacks to addresses in China and Russia, though they could not identify the culprits.