

Iran

| | 2015 | 2016 | | |
|----------------------------------|-----------------|-----------------|--|---------------------|
| Internet Freedom Status | Not Free | Not Free | Population: | 79.1 million |
| Obstacles to Access (0-25) | 20 | 19 | Internet Penetration 2015 (ITU): | 44 percent |
| Limits on Content (0-35) | 31 | 31 | Social Media/ICT Apps Blocked: | Yes |
| Violations of User Rights (0-40) | 36 | 37 | Political/Social Content Blocked: | Yes |
| TOTAL* (0-100) | 87 | 87 | Bloggers/ICT Users Arrested: | Yes |
| | | | Press Freedom 2016 Status: | Not Free |

* 0=most free, 100=least free

Key Developments: June 2015 – May 2016

- Internet access improved in Iran, mainly on the back of higher internet speeds and the expansion of mobile internet (See **Availability and Ease of Access**).
- Telegram, the instant messaging app used by an estimated 20 million Iranians, came under pressure from the authorities to cooperate in censorship or face blocking (see **Blocking and Filtering and Content Removal**).
- Cartoonist Hadi Heidari spent around eight months in prison for posting a cartoon on Facebook in which he expressed sympathy with the French after the November 2015 terrorist attacks in Paris (see **Prosecution and Detentions for Online Activities**).
- Internet freedom activist Nizar Zakka and tech entrepreneur Arash Zad were arrested in September and July 2015, respectively, while visiting the country from abroad. Both remained in pretrial detention on murky charges. Canadian resident Saeed Malekpour has been imprisoned in similar circumstances since 2008 (see **Prosecution and Detentions for Online Activities**).
- Hossein Ronaghi Maleki, Vahid Asghari, and five Facebook users secured early releases from lengthy prison sentences amid mixed displays of clemency and repression in the country (see **Prosecution and Detentions for Online Activities**).
- The Supreme Council on Cyberspace gave foreign messaging companies like Telegram one year to store data on Iranian users within the country in a move to increase monitoring and censorship (see **Surveillance, Privacy, and Anonymity**).

Introduction

In Iran, greater access was offset by lengthy prison sentences and arbitrary detentions, keeping the country's internet one of the least free in the world.

The implementation of the Joint Comprehensive Plan of Action, commonly referred to as the Iran nuclear deal, brought hope of a more free and open internet. Indeed, the internet has become faster and more widely available in recent years given the government's investment in technology and regulatory moves to increase competition. However, President Hassan Rouhani's promises to introduce greater personal and social freedoms have been checked by more conservative factions within the state, principally the judiciary and Islamic Revolutionary Guards Corps (IRGC), whose leaders control most companies in the ICT sector. News websites on all sides of the political spectrum have been censored for failing to adhere to strict guidelines on how to cover political events, such as the nuclear deal.

Tensions between so-called reformists and conservatives regularly play out on the digital sphere, often with devastating consequences for innocent users. Conservatives have fought against all manner of liberalization, opposing everything from higher mobile internet speeds to the messaging app Telegram. Fretful that the nuclear deal will lead to the "infiltration" of Iranian society by Western ideas,¹ conservatives have cracked down on group chat administrators, tech entrepreneurs, and even Instagram models. Several security agencies aggressively monitor social media for anything perceived as insulting to public leaders or contrary to conservative religious values. Indeed, authorities regularly spread fear among users by announcing intentions to step up surveillance, such as in preparation for the February 2016 elections to the parliament (*Majlis*) and Assembly of Experts—the body that will eventually appoint a replacement for the ageing supreme leader, Ayatollah Ali Khamenei.

Despite these limitations, the internet remains a vital resource for Iranian citizens. Access to information is improving through the use of virtual private networks (VPNs) and other circumvention tools that allow access to blocked content. Iranians are also communicating with each other at unprecedented levels. Encrypted messaging apps afford some degree of privacy to average users, although authorities are constantly attempting to undermine privacy through spyware and data localization laws. In many ways, internet use in Iran remains a cat-and-mouse game in which tech savvy individuals try to push red lines and circumvent the harsh restrictions imposed on them by state security.

Obstacles to Access

Most improvements to internet freedom that have come under the presidency of Hassan Rouhani relate to access and the ICT market. The ICT ministry's budget reached its highest level in history, reflecting increasing investments in both internet infrastructure and censorship tools. Internet speeds remain slow, although a significant rise was noted over the past year.

¹ See for example, "IRGC blocks the enemy's infiltration," Speech by Ayatollah Khamenei on September 16, 2015, <http://english.khamenei.ir/news/2155/IRGC-blocks-the-enemy-s-infiltration>, and "Negotiation with US 'very fact of infiltration,'" Mehr News Agency, November 2, 2015, <http://en.mehrnews.com/news/111595/Negotiation-with-US-very-fact-of-infiltration>.

Availability and Ease of Access

Internet penetration statistics in Iran are notoriously contested and unreliable. According to Morteza Mousavian, head of the Digital Media and Information Technology Center (SARAMAD), internet penetration in Iran was at 53 percent by 2015. This would mean 40 million people are connected to the internet in the country, including 11 million people accessing the internet on their mobile devices.² However official statistics covering the first quarter of the Iranian year 1394 (March 21- June 21, 2015) place the figure at 82.12 percent.³ Meanwhile, a report from the Internet Society argued that Iran's internet penetration rate was only 31.4 percent, ranking it 112th internationally behind Thailand, Algeria, Indonesia and India.⁴

Internet prices are high, particularly relative to the low quality of service provided. This is partially due to the fact that the state-owned Telecommunications Infrastructure Company (TIC) holds an effective monopoly on bandwidth in the country, which they sell on to internet service providers (ISPs) at a considerable markup. In addition, the demand for bandwidth far outstrips what is available.⁵

Despite constant promises to improve the speed and quality of internet connectivity, poor service persists. In October 2015, Deputy ICT Minister Nasrollah Jahangard acknowledged that the actual speed of an internet connection advertised at 2 Mbps is only 100 Kbps.⁶ According to Akamai, the leading global content delivery network, Iran had one of the Middle East's lowest average peak connection speeds in early 2016.⁷ However, average speeds improved by 44 percent over 12 months.

The Rouhani administration has demonstrated a consistent commitment to developing SHOMA, the national information network. In addition to frequent statements declaring SHOMA a top priority, the government has devoted a considerable share of the ICT budget to SHOMA. Iran's overall ICT budget for 2016-17 is higher than it has ever been, and funding for SHOMA is up 44 percent from last year.⁸

While SHOMA increases bandwidth and improves browsing speeds when accessing government approved websites,⁹ it also enables the authorities to strengthen their grip over the flow of internet traffic in the country. Moreover, it gives the government the ability to throttle connection speeds during politically sensitive periods without crippling critical services. However, it may be a while before SHOMA has any significant impact on internet access in Iran, as the implementation period for SHOMA has recently been extended to March 2020.¹⁰

2 Small Media, *Iranian Internet Infrastructure and Policy Report: October 2015*, <https://smallmedia.org.uk/news/iiep-october-2015>.

3 Small Media, *Iranian Internet Infrastructure and Policy Report: November 2015*, <https://smallmedia.org.uk/news/iiep-november-2015>.

4 See "Global Internet Maps," Internet Society, accessed October 2016, <http://bit.ly/2fCoeg5>.

5 "Check the price and quality of Internet access in Iran," Iran's Majlis research Center, <http://rc.majlis.ir/fa/report/show/879513>.

6 See <http://bit.ly/2fRaUt3>.

7 Akamai, *State of Internet: Q1 2016 Report*, <https://www.akamai.com/uk/en/multimedia/documents/state-of-the-internet/akamai-state-of-the-internet-report-q1-2016.pdf>.

8 Small Media, *Iranian Internet Infrastructure and Policy Report: January 2016*, <https://smallmedia.org.uk/news/iiep-january-2016>.

9 "Minimum speed on SHOMA reportedly 2mbps," [Farsi] Mehr News Agency, <http://bit.ly/2eSXVSz>.

10 "Minimum speed on SHOMA reportedly 2mbps," [Farsi] Mehr News Agency, <http://bit.ly/2eSXVSz>.

Restrictions on Connectivity

The Telecommunications Infrastructure Company (TIC) retains a monopoly on internet traffic flowing in and out of Iran.¹¹ The TIC is a state-owned enterprise under the ICT ministry. The arrangement affords the Iranian authorities with total control over the internet backbone, as well as the ability to limit access or throttle speeds during sensitive political moments, which last occurred in the lead-up to the 2013 presidential elections. The heavy influence of the TCI in the ICT market also grants the security apparatus the ability to control third-party ISPs and to monitor online activities, since the TCI's majority shareholder is the Islamic Revolutionary Guard Corps (IRGC).¹²

ICT Market

The telecommunications industry in Iran is tightly controlled by the government or related entities. In recent years, the role of the IRGC—a politically important branch of the security forces that also controls large sections of the economy—in the ICT sector has notably increased.¹³ In September 2009, for example, the IRGC purchased a controlling stake in the Telecommunications Company of Iran (TCI), the country's main provider of internet and mobile phone services. Other providers must purchase bandwidth from the Data and Communication Company (DCC). Direct access to the internet via satellite is only permitted for certain institutes and is prohibited for personal use.

The mobile phone market is under similar state influence. MTN IranCell, the second largest mobile operator behind the TCI, is owned in part by a web of proxy companies controlled by the government and IRGC.¹⁴ According to statistics released by the ICT ministry in November 2015, MTN IranCell and the TCI controlled a combined 97 percent of the mobile market in Iran.¹⁵

Yet even this quasi-duopoly indicates an improvement. Last year, the ICT Ministry did not renew an exclusive 3G contract issued to IRGC-affiliated mobile provider RighTel, allowing other carriers to enter the mobile market.¹⁶

Regulatory Bodies

There is no independent regulatory body for ICTs in Iran. The Communications Regulatory Authority (CRA), which falls under the ICT Ministry, is responsible for telecommunications licensing. Its head is appointed by the ICT minister.¹⁷ The CRA has taken several actions to improve quality of service and reduce prices for Iranian users. For example, the CRA awarded licenses that allowed new ISPs to enter the market, thereby increasing consumer choice.¹⁸ Furthermore, in December 2015, the CRA

11 Small Media, *Iranian Internet Infrastructure and Policy Report: July 2015*, https://smallmedia.org.uk/media/articles/files/IIIP_Jul15.pdf#page=9, pg. 9-11.

12 Sreberny and Khiabany, *Blogistan: The Internet and Politics in Iran*, (London: IB Tauris, 2010), pg. 5.

13 "The Revolutionary Guards is entering the IT market," [Farsi] *Digarban*, December 12, 2011, <http://www.digarban.com/node/3715>.

14 Steve Stecklow, "Exclusive: Iranian cell-phone carrier obtained banned U.S. tech," Reuters, June 4, 2012, <http://www.reuters.com/article/us-iran-mtn-sanctions-idUSBRE8530SO20120604>.

15 "72 million mobile phones in the hands of Iranians," [Farsi] Mehr News, <http://bit.ly/2fR6Qcm>.

16 "Iran ranks first in the Middle East for hosting information," [Farsi] Mehr News, <http://bit.ly/2f848Pj>.

17 Communications Regulatory Commission of Iran, official website, accessed July 31, 2012, <http://bit.ly/1Lum12y>.

18 "The entry of new operators into the internet market from September," [Farsi] Mehr News, <http://bit.ly/2eRXs3Y>.

compelled ISPs to implement quality control measurements on the services they offer to customers.¹⁹ The CRA has also pushed for internet infrastructure development, including increasing the number of IP addresses available in Iran²⁰ and pushing to expand internet access to thousands of rural villages.²¹

The country's top internet policy body, however, is the Supreme Council of Cyberspace (SCC). The SCC was established by decree of the Supreme Leader Khamenei in March 2012. It is intended to provide a centralized focal point for policymaking and the regulation of Iran's virtual space, effectively minimizing the roles of the executive, legislative, and judicial branches of the government and bringing internet policy under Khamenei's direct control. Observers believe this reflected Khamenei's dwindling trust in former president Mahmood Ahmadinejad to lead such an important area of policy.

Over the past year, the SCC has been routinely criticized for being disorganized,²² not holding enough meetings,²³ and has even been rebuked by Ayatollah Khamenei for not doing enough to encourage Iranians to use the Internet in a "clean" and Islamic fashion.²⁴ In September 2015, Supreme Leader Khamenei consolidated the SCC's power over internet policy and made some personnel changes to the council. In April, the SCC dissolved and assumed the powers of the High Council of Informatics, the Supreme Council of Information, and the Supreme National Security Council of Information Exchange (AFTA).²⁵

Limits on Content

Significant restrictions on content have been in place since 2009. Platforms like Facebook and Twitter remain blocked, although newer social media and communication apps such as Telegram and Instagram are generally accessible. Censorship decisions remain highly politicized, with both conservative and reformist news sites censored for failing to adhere to strict guidelines on how to report on sensitive political, social, and international issues. Self-censorship remains pervasive and overt digital activism is limited.

Blocking and Filtering

The Iranian authorities continued to restrict access to tens of thousands of websites, particularly those of international news sources, the opposition, ethnic and religious minorities, and human rights groups.²⁶ Websites are also filtered if they differ from the official doctrine of the state's Islam or its chosen narrative on domestic or international politics, such as relations between Iranian political institutions or the nuclear deal. Internet censorship is highly politicized in the country, often reflecting tensions between conservatives and reformists in the country. Days before the February

19 "Launch of control system for operators of internet usage," [Farsi], Itmen, <http://www.itmen.ir/index.aspx?pid=99&articleId=88741>.

20 "Internet access is provided in the aircraft, Fiber optic network modernization" [Farsi] Mehr News, <http://bit.ly/2eMxFL2>.

21 "Start of Internet Directory to 37,000 village," [Farsi] Mehr News, <http://bit.ly/2eRX2L2>.

22 "Labor system remained pending at the Supreme Council of Cyberspace," [Farsi] Mehr News, <http://bit.ly/2ebyRGm>.

23 "Zarghami criticized the lack of meetings of the Supreme Council of Cyberspace," [Farsi] Itmen, <http://itmen.ir/index.aspx?pid=99&articleId=85338>.

24 "The Supreme Leader complains about the Supreme Council of Cyberspace and Communications Ministry," [Farsi] Alef, <http://alef.ir/vdcamwnea49nmu1.k5k4.html?350258>.

25 See <http://bit.ly/2eKimUk>.

26 Small Media, "April 2016," *Filterwatch*, https://smallmedia.org.uk/media/articles/files/IIIP_APRIL16.pdf.

26, 2016 elections, List-e Omid (The Hope List), a website promoting reformist candidates backed by President Rouhani, was blocked.²⁷

Facebook and Twitter remained blocked in the country. Despite apparently being used by a number of prominent officials, including the offices of the president, foreign minister, and supreme leader, these platforms have not been available without circumvention tools since 2009. After authorities blocked Viber, Telegram became the most widely used instant messaging app in the country with an estimated 20 million users, surpassing even Facebook.²⁸ Following last year's tense standoff between Rouhani's ICT ministry and the Committee to Determine Instances of Criminal Content (CDICC) over proposals to block WhatsApp, Telegram seems to have created a new venue for conflict.

In October 2015, Telegram CEO Pavel Durov claimed that the ICT Ministry demanded the company provide them with "spying and censorship tools." After Telegram refused, users reported temporary disruptions to the app.²⁹ The CDICC voted against blocking the app—likely over the public outcry the decision would create—but Telegram has reportedly agreed to cooperate in removing accounts belong to Islamic State (IS) fighters from the site, and in one case, also removed a channel which advocated boycotting the February 2016 elections.³⁰ There were also reports of brief disruptions to Instagram access in mid-2015, apparently due to technical errors in the country's "intelligent filtering" system.³¹

Websites are also filtered on an ad hoc basis, often with no explanation. For example, authorities blocked "Kheft Giri," a crowdsourcing website designed to map crime incidents in Tehran, just two days after its official launch in November 2015. This move forced the founders to shut down the site.³² Similarly, authorities blocked Gershad, a mobile app used to crowdsource the location of the so-called morality police and to notify users in real-time.³³

Since taking office, the administration of President Hassan Rouhani has sought to assume more direct control over ICT policy in Iran. However, such moves have been met with fierce opposition from hardliners such as Sadeq Larijani, head of Iran's judiciary. Larijani has emphasized that the main decision-maker regarding internet censorship in Iran is the CDICC, not the government, and highlighted that the law determines which websites and services must be blocked.³⁴ The Computer Crimes Law (CCL) of 2009 specifies violations that might result in a website being marked for filtering. These are

27 "New App Lets Iranians Download Information Via Satellite and Bypass State's Internet Censorship," International Campaign for Human Rights in Iran, March 18, 2016, <https://www.iranhumanrights.org/2016/03/toosheh-mehdi-yahyanejad/>.

28 Saeed Kamali Dehghan, "Telegram: the instant messaging app freeing up Iranians' conversations," *The Guardian*, February 8, 2016, <https://www.theguardian.com/world/2016/feb/08/telegram-the-instant-messaging-app-freeing-up-iranians-conversations>.

29 BBC Persian, "Telegram temporarily blocked after lack of cooperation with Iran," [Farsi] October 2015, http://www.bbc.com/persian/iran/2015/10/151019_u04_telegram_iran.

30 Amir-Esmaeil Bozorgzadeh, "Updated; Telegram's Troubled Times in the Middle East," *Tech Crunch*, January 12, 2016, <https://techcrunch.com/2016/01/12/telegrams-troubled-times-in-the-middle-east/>.

31 "A New Round of Intimidation, Arrests, and Prosecution of Social Media Users in Iran," International Campaign for Human Rights in Iran, June 14, 2015, <https://www.iranhumanrights.org/2015/06/intimidation-arrests-social-media-users/>.

32 See [Farsi] <http://bit.ly/2eMzHL4>.

33 Shima Shahrabi, "Morality Police App Blocked Hours after Launch," *Iran Wire*, February 10, 2016, <https://en.iranwire.com/features/7076/>.

34 "Larijani criticizes Rouhani over Internet policies," [in Farsi] *BBC Persian*, accessed March 29, 2015, <http://bbc.in/1OwuSn1>.

defined very broadly and range from insulting religious figures and government officials to distributing pornographic content and the use of illegal circumvention tools.³⁵

In an effort to show that content filtering is based on a legal framework, institutions have been created to oversee internet filtering. The Committee for Determining Instances of Criminal Content (CDICC) is empowered to identify sites that carry forbidden content and report such information to the TCI and other major ISPs for blocking. The committee is headed by the prosecutor general, and its members are representatives from 12 governmental bodies. Little information is available about the inner workings of the committee, and censorship decisions are often arbitrary and nontransparent.

Internet filtering, which began toward the end of the Khatami presidency in 2005, has become more severe since the disputed presidential election in June 2009. Iranian authorities currently employ a centralized filtering system that can effectively block a website within a few hours across the entire network in Iran. However, ICT Minister Mahmoud Vaezi recently suggested that Iran may restore censorship power to ISPs in the future.³⁶ Private ISPs are forced to either use the bandwidth provided by the government or route traffic containing site-visit requests through government-issued filtering boxes developed by software companies inside Iran. The filtering boxes inspect unencrypted HTTP requests looking for banned text strings—either keywords or domain names—in the URL requests submitted by users, and block access accordingly.

Officials continue to call for an “intelligent filtering” system, using deep-packet inspection (DPI) to allow for the blocking of specific pages within a site rather than blocking the entire site. However, blocking individuals pages sent over an encrypted connection (HTTPS) will be technically very resource intensive, if not impossible. For instance, after the ICT minister announced that intelligent filtering had been successfully applied to Instagram, Instagram enabled a default SSL encryption on its entire platform, resulting in blocked pages becoming available again. As it stands today, Instagram pages cannot be blocked individually, due to the platform’s default use of SSL. However some images might not be available because they are hosted on Facebook’s servers, which are blocked in the country.

These developments have not gone unnoticed by some authorities. CDICC Secretary Abdolsamad Khoramabadi noted in September 2015 that the “intelligent filtering” program had failed in light of developments in web encryption.³⁷ This has done little to dampen the Rouhani government’s enthusiasm for intelligent filtering, with ICT Minister Mahmood Vaezi announcing a further investment of US\$66 million into the program in the past year alone.³⁸

Content Removal

Aside from filtering, Iran also employs administrative measures to remove unwanted content from the web. Website owners must register their sites with the Ministry of Culture and are then subject to requests to remove particular posts deemed unacceptable by the government. The 2009 Comput-

35 “Islamic Republic of Iran: Computer Crimes Law,” Article 19, 2012, [https://www.article19.org/data/files/medialibrary/2921/12-01-30-FINAL-iran-WEB\[4\].pdf](https://www.article19.org/data/files/medialibrary/2921/12-01-30-FINAL-iran-WEB[4].pdf), and “12 members of Committee in Charge of Determining Unauthorized Sites,” [in Farsi] *Weblognews*, December 16, 2009, <http://bit.ly/1Owwpcu>.

36 “Launch of the National Information Network in 1395,” [Farsi] Mehr News, <http://bit.ly/1ROD4Ot>.

37 “Intelligent filtering of Instagram failed,” [Farsi] Fars News Agency, <http://www.farsnews.com/newstext.php?nn=13940616000464>.

38 “200 million dollars allocated for smart filtering,” [Farsi] Mehr News, <http://bit.ly/2eGWJ5o>.

er Crime Law (CCL) makes service providers, such as blogging platforms, responsible for any content that appears on their sites. This has led to the suspension of blogs or shuttering of news websites hosted on platforms inside Iran, under orders from government officials. News websites are consistently warned how to cover controversial political or social topics, such as Iran's nuclear deal³⁹ or former reformist president Mohammad Khatami.⁴⁰ The website of state-owned Iranian Labor News Agency was blocked for two days in June 2015 and five journalists lost their jobs for refusing to censor coverage of labor protests.⁴¹

In a recent operation dubbed "Spider II," police reportedly identified 170 models, photographers, and make-up artists involved in posting pictures of women not wearing a headscarf. Many of the targeted individuals had their Facebook or Instagram pages removed or were pressured into closing the pages themselves.⁴² Telegram has also agreed to cooperate with the government in taking down IS channels from the messaging app, although in at least one case, political channels were also reportedly removed (See "Blocking and Filtering" for more on Telegram).

Media, Diversity, and Content Manipulation

Self-censorship is extensive, particularly on political matters. Widespread arrests and harsh sentences meted out to journalists, activists, and ordinary citizens, as well as perceptions of pervasive surveillance, have increased fear. Many online journalists and bloggers abandoned their online activities or used pseudonyms after the 2009 crackdown, resulting in a palpable drop in the amount of original content produced by users based inside the country. The situation slightly improved after Rouhani assumed the presidency, especially among reformist journalists. Nevertheless, the same restrictions remain in place, and journalists continue to be prosecuted.

In addition to filtering, censorship, and intimidation, the state counters critical content and online organizing efforts by extending regime propaganda into the digital sphere. The government has backed numerous initiatives to promote blogging among its supporters and members of the Basij paramilitary group.⁴³

Furthermore, the majority of independent content producers lack the financial resources to operate in such a hostile environment. The online advertising market in Iran is exclusively limited to apolitical and pro-government websites. Even businesses based outside Iran avoid political websites to maintain trading relationships with the country. Although the United States adjusted its sanctions against Iran to enable American internet companies to provide services to Iranian users, Google Advertising

39 See "11.08.2015 – Conservative weekly closed for third time," in *Press freedom violations recounted in real time January-December 2015*, Reporters Without Borders, <https://rsf.org/en/news/press-freedom-violations-recounted-real-time-january-december-2015>.

40 Rick Gladstone, "Iran Editor Is Charged With Defying Ban on Covering Ex-President," *The New York Times*, December 8, 2015, <http://www.nytimes.com/2015/12/09/world/middleeast/iran-editor-is-charged-with-defying-ban-on-covering-ex-president.html>.

41 See "24.06.2015-State news agency fires five journalists for covering strike," in *Press freedom violations recounted in real time January-December 2015*, Reporters Without Borders, <https://rsf.org/en/news/press-freedom-violations-recounted-real-time-january-december-2015>.

42 "Iran arrests female models for posing without hijabs," *Al Jazeera*, May 16, 2016, <http://www.aljazeera.com/news/2016/05/iran-arrests-fashion-girls-posing-hijabs-160516131844774.html>.

43 "Computer Crimes in Iran: Risky Online Behaviour," Article 19, 2015, <https://www.article19.org/data/files/medialibrary/38039/Risky-Online-Behaviour--final-English.pdf>.

still does not allow an ad campaign to target Iran as a country,⁴⁴ disadvantaging domestic content producers as well as content producers in the diaspora seeking to cultivate an audience inside Iran. Any Iranian-linked company or individual who wishes to use Google AdSense must apply for a specific license, which is not a convenient process for the majority of Iranian content producers.

Iranian authorities actively support Iranian social networks and mobile app developers by offering free bandwidth and hosting, with the aim of attracting Iranian users to these platforms over those based outside of Iran. In the past year, a number of Iranian apps have been launched.⁴⁵ In addition, the Iranian government has launched several domestic search engines, and has agreed to collaborate with Russia to establish other domestic platforms.⁴⁶

Digital Activism

Despite ongoing blocks on Facebook and Twitter, Iranians use social media to communicate, raise awareness of societal issues, and even campaign in elections, particularly on the app Telegram. Younger candidates took to the messaging app to reach potential voters and share candidate lists ahead of the February 2016 elections.⁴⁷ Prominent blogger “Vahid Online” runs a Telegram group with some 20,000 followers that was called “must follow for journalists, media workers and anyone interested in news and information about Iran’s political and social events.” Vahid Online won Deutsche Welle’s People’s Choice Award for Citizen Journalism.⁴⁸

Gershad, an app that uses crowd-sourced information to alert Iranians of the whereabouts of the moral police, won the Jury’s Prize in the “Tech for Good” category. Finally, one recent Twitter campaign gave Iranians the opportunity to discuss how they have been affected by sanctions on online platforms and services, using the hashtag #محرسانف (#TechSanctions).⁴⁹

Violations of User Rights

Despite hopes that the nuclear agreement might lead to a more open climate for internet users, hardliners have responded to the deal by cracking down on criticism and Western “infiltration.” Authorities have upped their monitoring of social media and technical attacks against opposition voices. There have been some positive steps, such as the early release of several activists and journalists, but user rights remain perilous in Iran today.

Legal Environment

Iran continues to be an extremely dangerous environment for internet users. Iranian laws heavily restrict what is acceptable speech online and specify harsh punishments for those who deliberately

44 “Google Traffic is here but what does it mean for Iran?” Techrasa, December 26, 2015, <http://techrasa.com/2015/12/26/google-traffic-mean-iran/>.

45 “Viber and WhatsApp messenger rival Iran’s Saina,” [Farsi] Fars News Agency, <http://www.farsnews.com/newstext.php?nn=13931115001225>.

46 “Russian search engine’s launch,” [Farsi] Mehr News, <http://bit.ly/2ebyN9t>.

47 Christopher Miller, “Messaging app Telegram is shaking up Iran’s elections,” February 25, 2016, *Mashable*, <http://mashable.com/2016/02/25/iran-elections-telegram-app/#8UCotmNtqkq6>.

48 “Best of Online Activism,” Deutsche Welle, 2016, https://thebobs.com/english/category/2016/?only_winners=true.

49 See Twitter hashtag, <http://bit.ly/2fYG7K7>.

flout restrictions, as well as those who have inadvertently drawn the ire of authorities. The constitution provides for limited freedom of opinion and expression, but numerous, haphazardly enforced laws restrict these rights in practice. The 2000 Press Law, for example, forbids the publication of ideas that are contrary to Islamic principles or detrimental to public rights, none of which are clearly defined. The government and judiciary regularly invoke this and other vaguely worded legislation to criminalize critical opinions.

The 2009 CCL outlines punishments for spying, hacking, piracy, phishing, libel, and publishing materials deemed to damage “public morality” or to be a “dissemination of lies.” Punishments are severe and include the death penalty for offenses against public morality and chastity, as well as long prison sentences, draconian fines, and penalties for service providers who fail to enforce government content restrictions.⁵⁰

Prosecutions and Detentions for Online Activities

Amid domestic political tensions between reformists and conservatives, hardliners within the judiciary and IRGC have conducted a campaign against the country’s “infiltration” by Western ideas, individuals, and companies. Numerous dual citizens active in journalism, human rights, or ICT development work have been jailed by the authorities, often with little explanation.⁵¹

Nizar Zakka, a Lebanese citizen with permanent residency in the U.S., was detained in September 2015 after giving a talk at a state-sponsored conference in Tehran, for which he received an official invitation.⁵² Zakka heads the Arab internet freedom organization IJMA3, which has received hundreds of thousands of dollars of funding from the U.S. State Department and USAID for projects in support of internet freedom.⁵³ One year after his arrest, he was sentenced to 10 years in prison and fined US\$4.2 million.⁵⁴ Iranian state television claimed he had “deep ties to the U.S. intelligence and military establishment.”

In July 2015, tech entrepreneur and blogger Arash Zad (editor and contributor at *Weblogina*, *Arashzad*, and *Ladybug*) was arrested. Phishing emails were reportedly sent out to his contacts while he was in custody.⁵⁵ In September, human rights blogger Mohsen Sadeghinia (*Openeyes*) was arrested. Both of their blogs were also blocked.⁵⁶

In February 2016, a court ruled to confirm long prison sentences issued to four individuals working for the technology review website *Narenji based in the city of Kerman*. Ali Asghar Honarmand, Hossien Nozari, Ehsan Paknejad, and Abass Vahedi were sentenced to 11, 7, 5, and 2.5 years respec-

50 Islamic Republic of Iran: Computer Crimes Law Article 19, January 30, 2012, [www.article19.org/data/files/medialibrary/2921/12-01-30-FINAL-iran-WEB\[4\].pdf](http://www.article19.org/data/files/medialibrary/2921/12-01-30-FINAL-iran-WEB[4].pdf).

51 “Former BBC Persian journalist ‘detained in Iran,’” BBC News, February 4, 2016, <http://www.bbc.co.uk/news/world-middle-east-35492065>.

52 Associated Press, “Iranian state TV claims US resident in custody is a spy,” *The Guardian*, November 3, 2015, <http://www.theguardian.com/world/2015/nov/03/iran-state-tv-american-spy-nizar-zakka>.

53 Mahsa Alimardani, “Reality, Conspiracy and the US ‘Internet Freedom’ Agenda: Deconstructing Iran’s Case Against Nizar Zakka,” *Global Voices*, October 10, 2016, <https://advox.globalvoices.org/2016/10/10/reality-conspiracy-and-the-us-internet-freedom-agenda-deconstructing-irans-case-against-nizar-zakka/>.

54 Associated Press, “Iran sentences US resident to 10 years in jail over spying claims,” *The Guardian*, September 20, 2016, <https://www.theguardian.com/world/2016/sep/20/iran-sentences-us-resident-to-10-years-in-jail-after-spying-claims>.

55 Mahsa Alimardani, “The Arrest of Arash Zad, Iran’s Start-Up Kid,” *Global Voices*, September 23, 2015, <https://advox.globalvoices.org/2015/09/23/the-arrest-of-arash-zad-irans-start-up-kid/>.

56 See “16.09.2015 - Two bloggers arrested,” in *Press freedom violations recounted in real time January-December 2015*, Reporters Without Borders, <https://rsf.org/en/news/press-freedom-violations-recounted-real-time-january-december-2015>.

tively on charges of “designing sites, websites, and creating content for media hostile to the regime” according to one report. They had been initially arrested in December 2013 along with 10 colleagues, seven of which received suspended sentences.⁵⁷

Saeed Malekpour, a permanent resident of Canada, has been in prison since 2008 for writing open source software that third parties had used for sharing pornographic photos. He was sentenced to death on charges of “threatening the nation’s Islamic ideals and national security via propaganda against the system,” allegedly tortured, and forced to publicly confess.⁵⁸

On June 8, 2015, the IRGC arrested “several individuals” for social media activity deemed as “against national security.” As Reporters Without Borders (RSF) noted, the individuals included internet activists Mahmud Moussavifarand and Shayan Akbarpour, who ran the Facebook page “Rahian” and a blog called Rahi.⁵⁹

Several women were arrested on suspicions of not adhering to conservative dressing guidelines. Eight women were arrested in May 2016 for not wearing headscarves in modeling photos posted to Instagram. The woman who manages “Persian Blog,” a publishing tool, was also detained. Some were made to go on live television and repent.⁶⁰ After winning a seat in the February elections, reformist parliamentarian Minoo Kaleghi was banned from holding office by the judiciary after a picture emerged of her on social media without her headscarf. A few days earlier, the Telegram group admin who posted the photos—which Kaleghi claimed are fake—was arrested.⁶¹

Artist Hadi Heidari was arrested in November 2015 after he posted his cartoon on Facebook expressing sympathy after the Paris attacks. He was not released until April 2016, when he celebrated by posting another cartoon to Instagram.⁶² In October 2015, Hassan Shikhaghahi, the editor of news site *Ruwange*, was arrested and kept in prison until December 2015, when he was released pending trial.⁶³ In February 2016, journalist Bahman Daroshafaei was arrested by authorities, who then took over his Telegram account and sent phishing messages his contacts in a bid to reveal sensitive information. A researcher with the ICHRI contacted Telegram to have his account disabled. A similar situation occurred with Issa Saharkhiz in November 2015.⁶⁴

Journalist and blogger Mohammad Reza Fathi was sentenced to 444 lashes in April 2016. Fathi had

57 See “18.02.2016 – Four Narenji website employees returned to prison,” in “Press freedom violations recounted in real time January 2016,” Reporters Without Borders, <https://rsf.org/en/news/press-freedom-violations-recounted-real-time-january-2016>, and “Technology Website Staffers Rushed to Prison Before Appeals Court Verdict,” International Campaign for Human Rights in Iran, February 18, 2016, <https://www.iranhumanrights.org/2016/02/four-it-professionals-imprisoned-in-kerman/>.

58 Mahsa Alimardani, “Help End the Imprisonment of Iranian Web Developer Saeed Malekpour,” Global Voices, October 3, 2016, <https://advox.globalvoices.org/2016/10/03/help-end-the-imprisonment-of-iranian-web-developer-saeed-malekpour/>.

59 “Revolutionary Guards target Internet activists,” Reporters Without Borders, June 22, 2015, <http://en.rsf.org/iran-revolutionary-guards-target-22-06-2015.48020.html>.

60 Thomas Erdbrink, “Iran’s Hard-Liners Crack Down on Models Not Wearing Head Scarves,” *The New York Times*, May 16, 2016, http://www.nytimes.com/2016/05/17/world/middleeast/irans-hard-liners-crack-down-on-models-not-wearing-head-scarves.html?_r=0.

61 Thomas Erdbrink, “She Won a Seat in Iran’s Parliament, but Hard-Liners Had Other Plans,” *The New York Times*, May 11, 2016, <http://www.nytimes.com/2016/05/12/world/middleeast/iran-parliament-minoo-khaleghi.html>.

62 Tori Egherman, “Imprisoned Iranian Cartoonist Hadi Heidari Goes Free,” Global Voices, April 27, 2016, <https://advox.globalvoices.org/2016/04/27/imprisoned-iranian-cartoonist-hadi-heidari-goes-free/>.

63 See “29.03.2016 - Two journalists freed pending trial.” “Press freedom violations recounted in real time January 2016,” Reporters Without Borders, <https://rsf.org/en/news/press-freedom-violations-recounted-real-time-january-2016>.

64 Lorenzo Franceschi-Bicchierai, “Iran Appears to Have Taken Over an Arrested Journalist’s Telegram Account,” *Motherboard*, February 5, 2016, <https://motherboard.vice.com/read/iran-telegram-account-bbc-journalist>.

posted an article critical of the Saveh municipal government on his blog⁶⁵ and was convicted of “defamation and publishing false information.” He was arrested in August 2012 and subsequently released on bail, although his trial did not begin until April 2015.⁶⁶

Authorities have also targeted individuals for running popular groups on chat apps. In June 2015, cyber police announced the arrest of an individual they claim managed 23 WhatsApp and Line groups that allegedly published false and immoral content.⁶⁷ Five months later, the IRGC announced it had arrested more than 20 Telegram group admins for sharing “immoral content... insulting to Iranian officials” as well as “satire and sexual advice.” Telegram has an estimated 20 million users in the country.⁶⁸

There have been some positive developments from over the past year. In June 2016, five activists who had been serving lengthy prison terms were released early. Amir Gholestani, Fariborz Kardarfar, Masoud Ghasemkhani, Seyyed Masoud, Seyyed Talebi, and Amin (Faride) Akramipour will still have to perform monthly visits to the authorities as part of their five-year suspended sentences. All five had been arrested in September 2013 due to posting about human rights abuses on Facebook and, along with three others, were convicted of “insulting what is sacred” and “insulting the Supreme Leader of the Revolution.”⁶⁹ Two of those three others were released previously, while a third, Roya Saberi Negad Nobakht, remained in prison.

Cartoonist Atena Farghadani, who in August 2015 had been sentenced to 12 years in prison, was released in May 2016 after spending 18 months in detention. Earlier, an appeals court had acquitted her of “assembly and collusion against the state” and suspended her sentence for “insulting the supreme leader.”⁷⁰ She had been originally arrested on charges of insulting state officials and spreading propaganda for posting an image of a parliamentary vote on reproductive rights, in which she depicted members of parliament as animals. She was released in December 2015, only to be rearrested one month later after uploading a video describing the abuse she faced at the hands of prison guards.⁷¹

Hossein Ronaghi Maleki, a blogger arrested in December 2009 for helping Iranians circumvent censorship, was released on bail in May 2016 after a hunger strike protesting his 15-year imprisonment for “spreading propaganda against the regime,” “membership of the Internet group Iran Proxy, and “insulting the Iranian supreme leader and the president.”⁷² Observers are concerned he may be called back to prison unless charges are dropped.

65 See <http://www.pooria6.blogfa.com/>

66 See “22.08.2016 – Court upholds decision to flog blogger.” “Press freedom violations recounted in real time January 2016,” Reporters Without Borders, <https://rsf.org/en/news/press-freedom-violations-recounted-real-time-january-2016>

67 “A New Round of Intimidation, Arrests, and Prosecution of Social Media Users in Iran,” International Campaign for Human Rights in Iran, June 14, 2015, <https://www.iranhumanrights.org/2015/06/intimidation-arrests-social-media-users/>.

68 Bozorgmehr Sharafedin and Sam Wilkin, “Iran’s Revolutionary Guards target popular messaging app in widening crackdown,” Reuters, November 15, 2015, <http://www.reuters.com/article/us-iran-rights-socialmedia-idUSKCN0T40MU20151115>.

69 See “15.06.2016 – Five Internet activists freed conditionally,” in “Press freedom violations recounted in real time January 2016,” Reporters Without Borders, <https://rsf.org/en/news/press-freedom-violations-recounted-real-time-january-2016>.

70 “Young Artist Who Lamped Iranian MPs Released From Prison, International Campaign for Human Rights in Iran, May 4, 2016, <https://www.iranhumanrights.org/2016/05/atenafarghadani-released/>.

71 International Campaign for Human Rights in Iran, “Iran Sentences Atena Faraghdani to 12.5 Years for Cartoons,” *Global Voices*, June 3, 2015, <http://bit.ly/1ANI5IH>.

72 Netizen Report Team, “Netizen Report: Facebook and Twitter Disappear in Uganda Amid Election Tensions,” May 12, 2016, <https://advoc.globalvoices.org/2016/05/12/netizen-report-facebook-and-twitter-disappear-in-uganda-amid-election-tensions/>.

Citizen journalist Vahid Asghari was released on April 4, 2016 after he had originally been given a death sentence for “publishing false information with the aim of stirring up public opinion,” “activities threatening national security,” and “hosting anti-Islamic and counter-revolutionary websites and collaborating with foreign media.” After an international outcry, his sentence had twice been reduced.⁷³

Soheil Arabi had his death sentence overturned by the Supreme Court, but was sentenced to 7.5 years for “insulting the Prophet” on Facebook in June 2015. He was originally arrested in November 2013 by the IRGC. According to a source, Soheil “must read 13 books on theology and religious awareness” and make monthly presentations to the court on the topic as part of his sentence. He is also serving a three-year sentence for “insulting the Supreme Leader” and “waging propaganda against the state.”⁷⁴

Surveillance, Privacy, and Anonymity

The online sphere is heavily monitored by the state in Iran. In preparation for elections to the legislature and Assembly of Experts, Iran’s deputy interior minister for security announced a new “Elections Security Headquarters” would be established “to monitor cyberspace.”⁷⁵ Similarly, the IRGC launched a military exercise named “Eghtedare Sarallah” in September 2015, which included the monitoring of social media activities.⁷⁶ In June 2015, Iran’s Cyber Police (FATA) created a new unit for monitoring computer games.⁷⁷

It remains unclear how the authorities can technically monitor the content of messages on foreign social networks, given that some apps encrypt their messages. However, all platforms and content hosted in Iran are subject to arbitrary requests by various authorities to provide more information on their users. Local equivalents of international platforms do not guarantee an adequate level of protection for users, which may explain users’ hesitancy to adopt domestic platforms. An August 2015 survey of 904 Iranian internet users found that they felt less comfortable using Iranian social networks.⁷⁸

In a troubling development, the Supreme Council on Cyberspace announced in May 2016 that all foreign messaging apps must move all data on Iranian users to servers located within the country.⁷⁹ The order seemed targeted at Telegram, used by some 20 million Iranians, which has been under increased pressure by the authorities over the past year. Storing data on local servers would make it easier for the authorities to compel the company to hand over data on government critics and censor unfavorable views.⁸⁰

73 “07.04.2016 - Two journalists freed,” in “Press freedom violations recounted in real time January 2016,” Reporters Without Borders, <https://rsf.org/en/news/press-freedom-violations-recounted-real-time-january-2016>.

74 “Facebook Activist Sentenced to Seven Years in Prison for ‘Insulting the Prophet,’” International Campaign for Human Rights in Iran, October 1, 2015, <https://www.iranhumanrights.org/2015/10/soheil-arabi-4/>.

75 “A New Round of Intimidation, Arrests, and Prosecution of Social Media Users in Iran,” International Campaign for Human Rights in Iran, June 14, 2015, <https://www.iranhumanrights.org/2015/06/intimidation-arrests-social-media-users/>.

76 “Cyber army exercises held,” [Farsi] Itmen, <http://www.itmen.ir/index.aspx?pid=99&articleid=82120>.

77 “Cyber Police launches gaming unit,” [Farsi] Mehr News, <http://bit.ly/2dXpvAe>.

78 Small Media, *Iranian Internet Infrastructure and Policy Report: July 2015*, https://smallmedia.org.uk/media/articles/files/IIIP_Aug15.pdf.

79 “Iran orders social media sites to store data inside country,” Reuters, May 29, 2016, <http://www.reuters.com/article/internet-iran-idusl8n18q0in>.

80 Adario Strange, “Iran’s new data policy could mean end of local access to Telegram app,” Mashable, May 31, 2016, <http://mashable.com/2016/05/31/iran-telegram-app/#k3nf4Sy43mqY>.

The legal status of encryption in Iran is somewhat murky. Chapter 2, Article 10 of the Computer Crimes Law prohibits “concealing data, changing passwords, and/or encoding data that could deny access of authorized individuals to data, computer and telecommunication systems.”⁸¹ This could be understood to prohibit encryption, but enforcement is not common. Nonetheless, the Iranian authorities have periodically blocked encrypted traffic from entering the country through international gateways, particularly during contentious moments such as elections.⁸²

Meanwhile, the Iranian government has continued its cat-and-mouse game against the use of circumvention tools, the legal status of which is also relatively opaque. The use of VPNs does not appear to be criminalized, unlike the selling or promoting of VPN use. For example, several individuals were arrested in late 2015 for promoting, selling, or training individuals to use circumvention tools.⁸³

Intimidation and Violence

Extralegal intimidation and violence by state authorities is prevalent in Iran. In 2012, blogger Sattar Beheshti was killed while in prison. More recently, groups such as the IRGC have pressured or coerced detained activists into giving up login details to their social media accounts, which the authorities have then used for surveillance and phishing attacks. For example, after the arrest of former BBC Persian journalist Bahman Daroshafaei, Iranian activists living in the diaspora reported receiving suspicious messages from his Telegram account.⁸⁴ This appears to be part of a broader pattern, as a number of activists have reported phishing attempts that appear to have been sponsored by the Iranian government.⁸⁵

Technical Attacks

Over the past year, Iran has launched a series of attacks including phishing emails aimed at internet freedom activists⁸⁶ and cyberattacks targeting US government officials. In the latter case, the *New York Times* noted that “Iranian hackers identified individual State Department officials who focus on Iran and the Middle East, and broke into their email and social media accounts, according to diplomatic and law enforcement officials familiar with the investigation.” In some cases, the victims were only made aware of the state-sponsored attacks after Facebook had alerted them.⁸⁷ In August 2015, the Citizen Lab uncovered a sophisticated phishing campaign aimed at Iranian activists in the diaspora, which sought to circumvent the protections offered by two-step authentication in Gmail.⁸⁸

81 <https://www.article19.org/data/files/medialibrary/2921/12-01-30-FINAL-iran-WEB%5B4%5D.pdf>

82 “April 2016,” *Filterwatch*, Small Media, https://smallmedia.org.uk/media/articles/files/IIIP_APRIL16.pdf, pg. 7-9.

83 See “Individual arrested for “teaching circumvention,” [Farsi] Radio Zamaneh, <http://www.radiozamaneh.com/251407> and “Administrators arrested for sale of proxy sites in Ahvaz,” Khoorna, <http://bit.ly/2fgn8ue>.

84 Lorenzo Franceschi-Bicchierai, “Iran Appears to Have Taken Over an Arrested Journalist’s Telegram Account,” *Motherboard*, February 5, 2016, <http://motherboard.vice.com/read/iran-telegram-account-bbc-journalist>.

85 Lorenzo Franceschi-Bicchierai, “The Iranian Hacking Campaign to Break into Activists’ Gmail Accounts,” *Motherboard*, August 27, 2015, <http://motherboard.vice.com/read/inside-the-iranian-hackers-campaign-to-break-into-activists-gmail-accounts>.

86 Lorenzo Franceschi-Bicchierai, “The Iranian Hacking Campaign to Break into Activists’ Gmail Accounts,” *Motherboard*, August 27, 2015, <http://motherboard.vice.com/read/inside-the-iranian-hackers-campaign-to-break-into-activists-gmail-accounts>.

87 David E. Sanger and Nicole Perlroth, “Iranian Hackers Attack State Dept. via Social Media Accounts,” *The New York Times*, November 24, 2015, http://www.nytimes.com/2015/11/25/world/middleeast/iran-hackers-cyberespionage-state-department-social-media.html?_r=0.

88 John Scott-Railton and Katie Kleemola, “London Calling: Two-Factor Authentication Phishing from Iran,” Citizen Lab, August 27, 2015, https://citizenlab.org/2015/08/iran_two_factor_phishing/.

In addition, a 2015 report by Cylance uncovered an Iranian state-sponsored hacking campaign targeting sensitive material from government agencies and critical infrastructure companies in a number of countries, including England, France, Germany, and the United States.⁸⁹ Moreover, a report by Checkpoint found evidence that an Iranian cyber espionage group known as “Rocket Kitten” has been engaged in a series of spear-phishing and targeted-malware attacks against Iranian dissidents.⁹⁰

89 *Operation Cleaver*, Cylance, accessed October 2016, http://cdn2.hubspot.net/hubfs/270968/assets/Cleaver/Cylance_Operation_Cleaver_Report.pdf.

90 *Rocket Kitten: A Campaign with 9 Lives*, Check Point Software Technologies, November 2015, <https://blog.checkpoint.com/wp-content/uploads/2015/11/rocket-kitten-report.pdf>.