



	2014	2015
Internet Freedom Status	Not Free	Not Free
Obstacles to Access (0-25)	25	24
Limits on Content (0-35)	26	26
Violations of User Rights (0-40)	37	37
TOTAL* (0-100)	88	87

Population:	22 million	
Internet Penetration 2014:	28 percent	
Social Media/ICT Apps Blocked:	Yes	
Political/Social Content Blocked:	Yes	
Bloggers/ICT Users Arrested:	Yes	
Press Freedom 2015 Status:	Not Free	

Key Developments: June 2014 - May 2015

- The war has devastated telecommunications infrastructure and disconnected around two-thirds of the country from Syrian internet service providers. As a result, internet access has become highly decentralized with some relying on microwave links from Turkish cities or satellite connections serving cybercafes (See Availability and Ease of Access).
- At least 12 activists, bloggers, and citizen journalists were killed over the past year by both the regime and rebel forces, including the Islamic State. Blogger Assad Hanna left Syria following online threats stemming from his criticism of the regime, but was badly injured by knife-wielding assailants at his apartment in Turkey (see Intimidation and Violence).
- Hackers affiliated with or supportive of the Islamic State have stepped up cyberattacks of Syrian citizen journalists or groups documenting human rights abuses, while the progovernment Syrian Electronic Army continues to target Western media outlets (see Technical Attacks).

^{* 0=}most free, 100=least free

Introduction

Syriar remained one of the most repressive and dangerous environments for internet users in 2015. Syrian cyberspace remains fraught with conflict, often mirroring the brutality of the war on the ground. Authorities employ sophisticated technologies to filter political, social, and religious websites, and to conduct surveillance on citizens. Phishing, spear-phishing, malware, DDoS and other cyberattacks have grown dramatically over the past two years. This year, progovernment hackers have shifted tactics, now carrying out targeted attacks against Syrian opposition members or journalists, as well as operations against foreign websites. The aim of these attacks has been to gain sensitive information about opposition networks or reporters. Individuals are regularly detained and tortured for their online posts or digital activism, either by the Syrian government or by armed extremists such as the Islamic State of Iraq and the Levant (IS), whose power has increased over the past years. The situation for bloggers, journalists, and citizen journalists has only grown worse as a result; Syria recorded the highest number of deaths of citizen journalists in the world. Nonetheless, despite weak infrastructure, online restrictions, and harsh punishments for online activities, Syrians have made extensive use of social networks and online tools to document human rights abuses and mobilize protests.

The internet was first introduced to Syria in 2000, immediately after the transfer of power from Hafez al-Assad to his son, current president Bashar al-Assad. The internet came to portray the new president's ostensible emphasis on modernity and evolution. Inspired by regional events, a civic protest movement began in February 2011, calling for political reforms, the end of emergency rule, and basic freedoms. By early 2012, after brutal crackdowns on demonstrations in several cities, events descended into armed conflict. Authorities prevented foreign media from accessing the situation on the ground, prompting many ordinary Syrians to take up mobile phones and small cameras to cover the deteriorating situation and post videos on social media. These citizen journalists have become vital in the quest to document flagrant human rights abuses by all parties to the conflict.

Since the start of the conflict, government censorship and retaliation against internet users has intensified. Tactics have included periodic shutdowns of internet and mobile phone service, increased filtering of websites, sophisticated monitoring of users' online activities, as well as the confiscation of laptops, mobile phones, and other equipment used by citizen journalists. Shelling and sabotage have led to heavy damage to infrastructure, affecting internet and power connections in seven provinces. The poor state of internet service has led many opposition activists to use satellite connections, which can be tracked easily and have resulted in targeted bombings against media centers, as occurred in the 2012 death of journalist Marie Colvin.¹ Combined, these developments make Syria one of the worst countries for internet freedom in 2014-15.

Obstacles to Access

The war has devastated telecommunications infrastructure and disconnected around two-thirds of the country from Syrian internet service providers (ISPs). As a result, internet access has become highly decentralized with some relying on WiMax microwave links from Turkish cities or pooled satellite connections serving cybercafes.

¹ Trevor Timm and Jillian York, "Satphones, Syria, and Surveillance," *Deeplinks Blog*, Electronic Frontier Foundation, February 23, 2012, http://bit.ly/1b48FIi.

Availability and Ease of Access

Syria's telecommunications infrastructure is one of the least developed in the Middle East, with broadband connections among the most difficult and expensive to acquire.² This worsened after 2011, as inflation and electricity outages increased dramatically following public protests and the government's corresponding crackdown. Damage to the communications infrastructure was particularly bad in the cities of Der Azzor, Aleppo, and al-Hasakah, as they were subject to severe shelling by both the Syrian armed forces and the opposition. This has led to a decentralized telecommunications infrastructure, whereby each and every part of the country has a different gateway to access.

By the end of 2014, the International Telecommunication Union reported that 28 percent of Syrians had access to the internet, up from 17 percent in 2009.³ The number of fixed broadband subscribers remains small at 1.68 subscriptions per 100 inhabitants, while mobile phone penetration was 71 percent, up from 56 percent last year.

The price, speed, and availability of internet access vary depending on the region of the country. According to a pricelist published by the Ministry of Communication and Technology, the monthly cost for 1 Mbps connection was SYP 1400 (approximately US\$5) as of April 2015,⁴ in a country where monthly gross domestic product per capita was US\$274.⁵ While the Syrian lira (SYP) has lost a large amount of its value, prices have not changed dramatically over the conflict. However, around two-thirds of the country is disconnected from Syrian ISP networks, instead relying on a WiMax microwave link from Turkish cities⁶ or on satellite connections (VSAT).⁷ The former is prominent in Kurdish areas along the Turkish border, such as Qamishli, resulting in Wi-Fi connections of around US\$80 per month. Due to the prohibitive cost of VSAT connections, businesses in IS-controlled areas have established cybercafes where users split the cost of satellite infrastructure and purchase separate Wi-Fi connectivity. Based on Skype interviews with Syrians living under IS-controlled areas, the cost of buying a Wi-Fi access point is around SYP 5,000 (US\$17), granting 64Kbps speeds and data at SYP 400 (\$1.25) per 100 MB. IS recently required cybercafes to obtain a license in order to operate.⁸

Furthermore, in mid-2015, IS released a statement requiring these cybercafes to "remove Wi-Fi boosters in internet cafes as well as private wireless adapters, even for soldiers of the Islamic State." The move is an attempt to limit private internet access in Raqqa and Deir Ezzor to public locations that can be policed by the extremists in order to restrict reporting by activists as well as GPS-tracking of militants using the services. 10

² Kyle Wansink, *Syria - Telecoms, Mobile, Broadband and Forecasts*, BuddeComm, accessed March 8, 2012, http://bit.lv/10dycSD.

³ Internet World Stats, "Syria," Middle East, December 31, 2014, accessed August 7, 2015, http://bit.ly/1GR1cZN.

⁴ Ministry of Communication and Technology, "ADSL Services and price" [in Arabic], accessed April 07, 2015, http://bit.lv/lixLCwD.

⁵ World Bank Databank, "GDP per capita (current US\$)," 2008-12, accessed March 12, 2014, http://bit.ly/leRbn2E.

^{6 &}quot;Northern Syria, Internet cafes are everywhere in the North, Chatting, Smoking and Porn," [in Arabic], *Hunasaotak*, http://104ieIU.

^{7 &}quot;Internet through satellite and Turkish providers as an alternative of Al-Assad network in the countryside of Idlib," [in Arabic] Orient News, August 10, 2014, http://bit.ly/1PEllt8.

⁸ Interview with Abu Ibrahim Raqqawi of Raqqa Is Being Slaughtered Silently, Skype.

⁹ Erika Solomon, "Isis to cut private internet access in parts of Syria," Financial Times, July 20, 2015, http://on.ft.com/1M4z2ff.

^{10 &}quot;ISIL is shutting down Internet Cafes around Deir ez-Zor Airport," [in Arabic] *Al-Arabiya*, December 8, 2014, http://ara.tv/mhf43.

Restrictions on Connectivity

The country's connection to the international internet remains centralized and tightly controlled by the government. This centralization has contributed to connectivity problems, as the weak and overburdened infrastructure often results in slow speeds and periodic outages. In addition to its regulatory role, the Syrian Telecommunications Establishment (STE), also serves as an ISP.¹¹ Private ISPs like Aya, as well as mobile phone internet providers, are required to sign a memorandum of understanding to connect via the gateways controlled by the Syrian Information Organization (SIO).¹²

During late 2014 and early 2015, the Syrian government continued to obstruct connectivity through its control of key infrastructure, at times shutting down the internet and mobile phone networks entirely or at particular sites of unrest. Since January 2014, Syrians in Deir ez-Zor, Qamishli, and other cities faced a full internet blackout, mainly due to destroyed infrastructure. In other areas, many speculate outages are timed to coincide with a specific political or military purpose. In Two shutdowns occurred in November and December 2012. More localized, but longer lasting cut-offs were reported in seven provinces all across the country. This includes, for example, a full shutdown in Aleppo on August 11, 2012.

ICT Market

The total number of Syrian ISPs was at 14 as of 2012. Independent satellite connections are prohibited, although in reality, they are heavily employed due to the unreliability of government ICT infrastructure. ISPs and cybercafes must obtain approval from the STE and pass security vetting by the Ministry of Interior and other security services. Moreover, cybercafe owners are required to monitor visitors and record their activities. There are two main mobile phone providers in Syria: Syriatel—owned by Rami Makhlouf, a cousin of President Bashar al-Assad—and MTN Syria, a subsidiary of the South African company.

Regulatory Bodies

Syria's ICT market and internet policy is regulated by the SIO and the state-owned STE, which owns

- 11 Syrian Telecom, "Intelligent Network Project," http://www.in-ste.gov.sy/inindex_en.html.
- 12 Jaber Baker, "Internet in Syria: experimental goods and a field of a new control," White and Black Magazine, posted on Marmarita website, August 10, 2008, http://www.dai3tna.com/nuke/modules.php?name=News&file=article&sid=6019. (no longer available)
- 13 "Qamishli, VSAT and Turkish communication services as an alternative to the Syrian network," [in Arabic] ARA News Network, July 11, 2014, http://bit.ly/1J0wpsX.
- 14 Lorenzo Franceschi-Bicchierai, "Syria Suffers Yet Another Internet Blackout," *Mashable*, May 15, 2013, http://on.mash.
- 15 Darren Anstee, "Syria goes dark," The Arbor Networks IT Security Blog, November 29, 2012, http://bit.ly/1K8J0ex .
- 16 Darren Anstee, "Snapshot: Syria's Internet drops, returns," *The Arbor Networks IT Security Blog*, December 12, 2012, http://bit.ly/1JUFZ28.
- 17 "News From the Ground," [in Arabic], Telecomix: Syria, August 13, 2012, http://syria.telecomix.org/ (no longer available) Can this work: Andy Greenberg, "Web vigilantes," Forbes, January 3, 2012, http://onforb.es/1NPaU6u.
- 18 "Online Syria, Offline Syrians," One Social Network with a Rebellious Message, The Initiative or an Open Arab Internet, accessed March 8, 2012, http://bit.ly/1NSCAHQ.
- 19 Ayham Saleh, "Internet, Media and Future in Syria" [in Arabic], The Syrian Center for Media and Free Expression, November 14, 2006, http://bit.ly/lhfdwWl.

all fixed-line infrastructures. The STE is a government body established in 1975 as part of the Ministry of Telecommunications and Technology.²⁰

Limits on Content

The Syrian government engages in extensive filtering of websites related to politics, minorities, human rights, and foreign affairs. Self-censorship is highly prevalent, particularly in areas under government control. Despite these limitations, citizen journalists continue to make use of video-uploading sites and social networks to spread information about human rights abuses and the atrocities of war. Their role has become particularly important at a time when traditional journalists operate in highly unsafe conditions and foreign press visas are difficult to obtain.

Blocking and Filtering

In recent years, censorship has expanded; the blocking of websites related to government opposition, human rights groups, the Muslim Brotherhood, and activism on behalf of the Kurdish minority is very common.²¹ A range of websites related to regional politics are also inaccessible, including the prominent London-based news outlets *Al-Quds al-Arabi* and *Asharq al-Awsat*, as well as several Lebanese online newspapers and other websites campaigning to end Syrian influence in Lebanon. Access to the entire Israeli top-level domain ".il" was also restricted. However, the websites of most international news sources and human rights groups have remained accessible.

Censorship is implemented by the STE and private ISPs with the use of various commercially available software programs. Independent reports in recent years pointed to the use of ThunderCache software, which is capable of "monitoring and controlling a user's dynamic web-based activities as well as conducting deep packet inspection."²² In 2011, evidence emerged that the Syrian authorities were also using technology provided by the Italian company Area SpA to improve their censorship and surveillance abilities. The contract with Area SpA included software and hardware manufactured by companies such as Blue Coat Systems, NetApp, and Sophos. Blue Coat had reportedly sold 14 devices to an intermediary in Dubai which then sent them to Area SpA, ostensibly with Blue Coat believing that the equipment would be given to the Iraqi government; however, logs obtained by the hacktivist group Telecomix in August 2011 revealed evidence of their use in Syria instead.²³ In October of that year, Blue Coat acknowledged that 13 of the 14 devices had been redirected to the Syrian government, an inadvertent violation of a U.S. trade embargo, and that the company was cooperating with the relevant investigations.²⁴ Analysis of the exposed Blue Coat logs revealed that censorship and surveillance were particularly focused on social-networking and video-sharing websites.²⁵ The *Wall Street Journal* identified efforts to block or monitor tens of thousands of opposition

²⁰ Ministry of Communication and Technology, "Overview," [in Arabic], http://www.moct.gov.sy/moct/?q=ar/node/21.

²¹ Reporters Without Borders, Internet Enemies, March 2011, http://bit.ly/eLXGvi.

²² Reporters Without Borders, "Syria," Enemies of the Internet: Countries under surveillance, March 12, 2010, http://bit.ly/10CZ0cS.

Platinum, Inc., "ThunderCache Overview," accessed August 14, 2012, http://www.platinum.sy/index.php?m=91.

²³ Andy Greenberg, "Meet Telecomix, The Hackers Bent on Exposing Those Who Censor and Surveil The Internet," *Forbes*, December 26, 2011, http://onforb.es/1BultQx.

²⁴ Blue Coat, "Update on Blue Coat Devices in Syria," news release, December 15, 2011, http://bit.ly/1FzFd8X.

^{25 &}quot;Blue Coat device logs indicate the levels of censorship in Syria," *Arturo Filasto*, accessed August 14, 2012, http://bit.ly/1LZDZJ3.

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websites or online forums covering the uprising. Out of a sample of 2,500 attempts to visit Facebook, the logs revealed that three-fifths were blocked and two-fifths were permitted but recorded.²⁶

The Syrian government also engages in filtering mobile phone text messages. Beginning in February 2011, such censorship was periodically reported around dates of planned protests. In February 2012, the news service Bloomberg reported that a series of interviews and leaked documents revealed that a special government unit known as Branch 225 had ordered Syriatel and MTN Syria to block text messages containing key words like "revolution" or "demonstration." The providers reportedly implemented the directives with the help of technology purchased from two separate Irish firms several years earlier for the alleged purpose of restricting spam.²⁷

The government continues to block circumvention tools, internet security software, and applications that enable anonymous communications. By enabling deep packet inspection (DPI) filtering on the Syrian network, authorities were able to block secure communications tools such as OpenVPN, Later 2 Tunneling Protocol (L2TP), and Internet Protocol Security (IPsec) in August 2011.²⁸ Websites used to mobilize people for protests or resistance against the regime, including pages linked to the network of Local Coordination Committees (LCCs)—groups that have formed since the revolution to organize the opposition—continue to be blocked.²⁹ Websites that document human rights violations, such as the Violations Documentation Center, remain blocked,³⁰ as does the Mondaseh website, an online initiative to gather information and raise public awareness.³¹ Authorities have repeatedly blocked the website and key search terms of *SouriaLi*, an internet radio station started by a group of pluralistic young Syrians.³²

Facebook remains accessible in Syria after the government lifted a four-year block on the social-networking site in February 2011. Nonetheless, according to one Damascus-based activist, Facebook pages sometimes do not load correctly and display a Transmissions Control Protocol (TCP) error message. The video-sharing website YouTube was also unblocked, although it was not usable from mobile phone devices due to limits on data speeds.³³ Some activists suspected, however, that rather than a sign of openness, the regime's motive for unblocking the sites was to track citizens' online activities and identities. As of March 2012, both were within the top-five most visited websites in the country. More recently, neither of the sites appear in the Top 25, perhaps due to users employing proxies that change their IP address to another country.³⁴ Other social media platforms like Twitter are freely available, although the presence of Syrian users on them is minimal.

Despite the free access to Facebook and YouTube, a range of other social media applications remain inaccessible in Syria. The Voice over Internet Protocol (VoIP) service Skype often suffers from disruptions either due to low speeds or intermittent blocking by the authorities. In February 2012, the gov-

²⁶ Jennifer Valentino-Devries, Paul Sonne, and Nour Malas, "U.S. Firm Acknowledges Syria Uses Its Gear to Block Web," *Wall Street Journal*, October 29, 2011, http://on.wsi.com/t6YI3W.

²⁷ Ben Elgin and Vernon Silver, "Syria Disrupts Text Messages of Protesters With Dublin-Made Equipment," *BloombergBusiness*, February 14, 2012, http://bloom.bg/1i0TOEU.

²⁸ Dlshad Othman, "Bypassing censorship by using obfsproxy and openVPN, SSH Tunnel," *Dlshad*, June 22, 2013, http://bit.ly/1KH3KjZ.

²⁹ Local Coordination Committees, "Home,": http://www.lccsyria.org/en/.

^{30 &}quot;Leaked list of all blocked websites in Syria," Arab Crunch, May 19, 2013, http://bit.ly/1KGFPBm.

^{31 &}quot;Home," the-syrian, http://english.the-syrian.com/.

³² Syria Untold, "Syrian Creativity: Radio SouriaLi Broadcasts over the Internet," *Global Voices*, June 7, 2013, http://bit.lv/1EOI2ZS.

³³ Interview with activist requesting anonymity, December 2011, Syria.

³⁴ Alexa, "Top Sites in SY," accessed August 14, 2012, http://www.alexa.com/topsites/countries/SY.

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ernment also began restricting access to certain applications for mobile phone devices that activists had been using to circumvent other blocks. Additionally, other applications reportedly blocked were the live video-streaming service Bambuser,³⁵ and WhatsApp, an application that allows users to send mobile phone text messages via the internet.³⁶ Instant messenger services such as eBuddy, Nimbuzz, and mig33 have been disabled by blocking the SMS that users must receive in order to activate their accounts. In other cases, certain online services—such as Google Maps or the photo-sharing tool Picasa—have been rendered inaccessible from Syria by their U.S.-based service providers due to restrictions related to economic sanctions against the country.³⁷ More applications, such as anti-virus software and updates to operating systems, remain blocked by sanctions, pushing many U.S.-based activists to ask for a reevaluation of the sanctions strategy.³⁸

Decisions surrounding online censorship lack transparency and ISPs do not publicize the details of how blocking is implemented or which websites are banned, though government officials have publicly admitted engaging in internet censorship. When a user seeks to access a blocked website, an error message appears implying a technical problem rather than deliberate government restriction. Decisions on which websites or keywords should be censored are made by parts of the security apparatus, including Branch 225, or by the executive branch.

Content Removal

Controversially, both Facebook and YouTube have removed content related to the Syrian uprising under the justification that content posted to certain users' accounts promotes violence or contains graphic content. According to digital security NGO SecDev, dozens of opposition pages, media centers, and independent NGOs have been closed by Facebook. These include numerous pages of LCCs and the London-based Syrian Network for Human Rights. Activists believe that Facebook users sympathetic to President Assad may be reporting the pages as violating user guidelines en masse, thereby provoking Facebook into action. One activist, Razan Zaitouneh of the Violations Documentation Center, shared a letter urging Facebook to keep the sites open, stating that "Facebook pages are the only outlet that allows Syrians and media activists to convey the events and atrocities to the world." Representatives from Facebook have cited the difficulties in discerning between objective reporting and propaganda, particularly since many armed extremists have taken to using the site.³⁹

Media, Diversity, and Content Manipulation

In an environment of extreme violence and arbitrary "red lines," self-censorship is widespread. Sensitive topics include criticizing President Assad, his late father, the military, or the ruling Baath party. Publicizing problems faced by religious and ethnic minorities or corruption allegations related to

^{35 &}quot;Bambuser now blocked in Syria," Bambuser, February 17, 2012, http://bit.ly/xu2HpI.

³⁶ Stuart Thomas, "Syrian government blocks access to WhatsApp," Memeburn, March 3, 2012, http://bit.ly/1EQlpDy.

³⁷ On May 23, 2012, Google announced that it made Google Earth, Picasa and Chrome available for download in Syria. Yet, Google said that "As a U.S. company, we remain committed to full compliance with U.S. export controls and sanctions." Activists and internet users in Syria describe Google's step as insufficient, saying that there are tens of Google services still blocked in Syria including the entire Google Play App store on Android phones. See "Software downloads in Syria," *Google Official Blog*, May 23, 2012, http://bit.ly/1gc8tMp.

³⁸ Mike Rispoli, "Access joins open letter to tech industry addressing overcompliance with U.S. sanctions," Access, June 28, 2012, http://bit.ly/li0XdDM.

³⁹ Michael Pizzi, "The Syrian Opposition Is Disappearing From Facebook," *The Atlantic*, February 4, 2014, http://theatln.tc/laojZAO.

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the ruling family, such as those of Assad's cousin Rami Makhlouf, are also off limits. Most Syrian users are careful not only to avoid such sensitive topics when writing online, but also to avoid visiting blocked websites. However, the period of May 2012 to April 2013 witnessed a large number of local Syrian users expressing opposition to Assad, his father, Makhlouf, the Baath party, and certain ethnic or sectarian groups. In 2014, users living in areas under control of IS or other extremist groups have stepped up their self-censorship in order to avoid criticizing the militants or Islam.

Pro-regime forces have employed a range of tactics to manipulate online content and discredit news reports or those posting them, though it is often difficult to directly link those who are carrying out these activities with the government. Most notable has been the emergence of the Syrian Electronic Army (SEA), a progovernment hacktivist group that targets the websites of opposition forces, human rights websites, and even Western media outlets (see "Technical Attacks"). For news websites and other online forums based in the country, it is common for writers to receive phone calls from government officials offering "directions" on how to cover particular events. The Syrian government also pursues a policy of supporting and promoting websites that publish progovernment materials in an attempt to popularize the state's version of events. These sites typically cite the reporting of the official state news agency SANA, with the same exact wording often evident across multiple websites. Interestingly, in 2012, the progovernment website Aksalser changed its stance to support the opposition and was subsequently blocked by the government. Since early 2011, this approach has also been used to promote the government's perspective about the uprising and subsequent military campaign. The support the opposition and was subsequently blocked by the government about the uprising and subsequent military campaign.

U.S. sanctions have resulted in the blocking of paid online services, making it difficult for Syrians to purchase a domain or host their websites in places like the United States or Europe. Restrictions on importing funds into Syria have had a significant impact on the ability to publish content. For instance, recently, the website of the Syrian magazine *Syrian Oxygen* attempted to buy SSL certificates for their website. However, they were not able to obtain the certificates from U.S. providers as the domain syrianoxygen.com has the word Syria in it.

Digital Activism

Online tools have proven crucial for Syrians in and outside the country seeking to document human rights abuses, campaign for the release of imprisoned activists, and disseminate news from the front lines of the conflict. Syrians are very active on Facebook, using it as a platform to share news, discuss events, release statements, and coordinate both online and offline activities.⁴⁵ A Facebook petition for the release of Youssef Abdelke, initiated by a group of Syrian intellectuals and artists, was signed by over 2,500 users.⁴⁶ Abdelke, an illustrator and painter who has often expressed political dissent through his art, was arrested in July 2013 after he signed a declaration, posted online, which called

⁴⁰ Email communication from a Syrian blogger. Name was hidden.

⁴¹ Interview with a Syrian activist, November 2012, Damascus, November 2012.

⁴² Guy Taylor, "After the Damascus Spring: Syrians search for freedom online," *Reason*, February 2007, http://theatln.tc/laojZAO.

⁴³ The Syrian "Aksalser website with the revolution," [in Arabic] *the-syrian*, August 28, 2012, http://the-syrian.com/archives/86170.

⁴⁴ Guy Taylor, "After the Damascus Spring: Syrians search for freedom online," *Reason, February 2007*, http://theatln.tc/laoiZAO.

⁴⁵ Judith Dublin, "Syrian Fight Fire with Facebook," Vocativ, September 23, 2013, http://voc.tv/1UJqcIP.

⁴⁶ Clara Olshansky, "The Web Petitions to Free Syrian Artist Youssef Abdelke," Artfcity, August 1, 2013, http://bit.ly/1VQezSS.

for a democratic transition and the stepping down of President Assad.⁴⁷ He was released one month later.⁴⁸

In addition, one observer has called the conflict in Syria the first "YouTube War" due to the extraordinarily high coverage of human rights violations, military battles, and post-conflict devastation that is contained in videos posted to the site.⁴⁹ Indeed, as the Syrian government shifted to the use of heavy arms and missiles against opposition fighters, the role of citizen journalists has shifted from live event coverage to documenting the bloody aftermath of an attack. Hundreds of thousands of videos have been posted to YouTube by citizen journalists, rebel groups, and civil society groups, mostly documenting attacks. A Syrian group categorizing YouTube videos and sharing them via the platform OnSyria had posted almost 200,000 videos in 2013.⁵⁰ Although many obstacles stand in the way of media coverage, citizen journalists have designed techniques to ensure media coverage of remote and conflict areas. "Local Media Offices" ensure that local journalists cover limited geographic areas, and then use a social network as a platform to collect, verify, and publish news stories.

Violations of User Rights

Syria's constitution provides for freedom of opinion and expression, but these are severely restricted in practice, both online and offline. Furthermore, a handful of laws are used to prosecute online users who express their opposition to the government. Citizen journalists and YouTube users are detained and often tortured by both government forces and, increasingly, fighters linked to extremist groups such Islamic State. Surveillance tools are used to identify and harass those who oppose the Assad government, often through targeted malware attacks against their computer systems and online accounts. Finally, the websites of opposition groups and human rights organizations are consistently targeted with cyberattacks from hackers linked to the government.

Legal Environment

Laws such as the penal code, the 1963 State of Emergency Law, and the 2001 Press Law are used to control traditional media and arrest journalists or internet users based on vaguely worded terms such as threatening "national unity" or "publishing false news that may weaken national sentiment." Defamation offenses are punishable by up to one year in prison if comments target the president and up to six months in prison for libel against other government officials, including judges, the military, or civil servants. In addition, Syria's cybercrime law allows prison sentences of up to three years and fines of up to SYP 250,000 (US\$ 1,500) for anyone who incites or promotes crime through computer networks. The judiciary lacks independence and its decisions are often arbitrary. Some civilians have been tried before military courts.

^{47 &}quot;Déclaration pour Syrie democratique" [Declaration for a Democratic Syria], *Babelmed*, accessed March 14, 2014, http://bit.ly/lizKKHU.

⁴⁸ Khalil Sweileh and Omar al-Sheikh, "Syria: Youssef Abdelke Free, Resolved to Stay in Damascus," *Al-Akhbar*, August 23, 2013, http://bit.ly/1XQaLmi.

⁴⁹ Christophe Koettl, "The YouTube War: Citizen Videos Revolutionize Human Rights Monitoring in Syria," *Mediashift* (blog), *PBS*, February 18, 2014, http://bit.ly/1Nkfnw9.

⁵⁰ The platform, http://onsyria.org/, is now offline and the related Facebook page has not been updated since 2013: Onsyria, Facebook Page, http://on.fb.me/1GnVymR.

⁵¹ Syrian Penal Code, art. 285, 286, 287.

⁵² Syrian Penal Code, art. 378.

⁵³ Global Resource and Information Directory, "Legislation," in "Syria," http://www.fosigrid.org/middle-east/syria.

Prosecutions and Detentions for Online Activities

Since antigovernment protests broke out in February 2011, the authorities have detained hundreds of internet users, including several well-known bloggers and citizen journalists. While it is very difficult to obtain information on recent arrests, 17 netizens remain in prison according to Reporters Without Borders. ⁵⁴ Many of those targeted are not known for their political activism, so the reason for their arrest is often unclear. This arbitrariness has raised fears that users could be arrested at any time for even the simplest online activities—posting on a blog, tweeting, commenting on Facebook, sharing a photo, or uploading a video—if it is perceived to threaten the regime's control. Veteran blogger Ahmad Abu al-Khair was taken into custody in February 2011 while traveling from Damascus to Banias and was later released, though he has remained in hiding. ⁵⁵ More recently, in an effort to pressure al-Khair to turn himself in, security forces have twice detained his brother, once for a period of 60 days. ⁵⁶ Bassel Khartabil, an open source activist and recipient of the 2013 Index on Censorship Digital Freedom Award, remains in prison after he was taken by authorities without explanation in March 2012. ⁵⁷

Human rights activists who work online are also targeted by the government and the rebels. Four members of the Violations Documentation Center (VDC) were kidnapped by an unknown group from a rebel-controlled area in December 2013.⁵⁸ Authorities raided the offices of the Syrian Center for Media and Freedom of Expression (SCM) in February 2012, arresting 14 employees.⁵⁹ One SCM member and civil rights blogger, Razan Ghazzawi,⁶⁰ was detained for 22 days.⁶¹ Three others remain in prison and face up to 15 years for "publicizing terrorist acts" due to their role in documenting human rights violations by the Syrian regime.⁶² The organization's founder and director, Mazen Darwish, was reportedly released in August 2015 after three years in pretrial detention.⁶³ His hearing had been rescheduled 24 times since 2013.⁶⁴

Surveillance, Privacy, and Anonymity

Surveillance is rampant on Syrian internet service providers, which are tightly aligned with security forces. Meanwhile, in IS-controlled territory, there are reports that militants have conducted unannounced raids at cybercafes in which they force users to leave their machines, going through their open web browsing sessions and social media accounts to ensure users are not viewing or writing impermissible content.⁶⁵

- 54 Reporters Without Borders, "Netizens Imprisoned," 2014-2015, http://bit.ly/1GuFfiv.
- 55 Anas Qtiesh, "Syrian Blogger Ahmad Abu al-Khair Arrested This Morning," *Global Voice Advocacy*, February 20, 2011, http://bit.ly/1vxJk5g.
- 56 Email communication with activist who wished to remain anonymous, April 2012, Syria.
- 57 William Echikson, "Supporting freedom of expression in all forms," *Google Policy Europe*, March 23, 2013, http://bit.lv/1UEwiPS.
- 58 Hania Mourtada, "'She Was My Mandela' Famous Syrian Activist Gets Abducted," *Time*, December 11, 2013, http://ti.me/1KcXrTc.
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- 60 Jared Malsin, "Portrait of an Activist: Razan Ghazzawi, the Syrian Blogger Turned Exile," *Time*, April 2, 2013, http://ti.me/1Q46vKi.
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- 63 Prominent Syrian activist Mazen Darwish freed" SKeyes, August 10, 2015, http://bit.ly/1GgvGK5.
- 64 Free Syria's Silenced Voices "Mazen Darwish," May 2015, http://free-syrian-voices.org/mazen-darwich/.
- 65 Interview with Abu Ibrahim Raggawi of Ragga Is Being Slaughtered Silently, Skype.

Syria

The Law for the Regulation of Network Communication against Cyber Crime, passed in February 2012, requires websites to clearly publish the names and details of the owners and administrators.⁶⁶ The owner of a website or online platform is also required "to save a copy of their content and traffic data to allow verification of the identity of persons who contribute content on the network" for a period of time to be determined by the government.⁶⁷ Failure to comply may cause the website to be blocked and is punishable by a fine of SYP 100,000 to 500,000 (US\$1,700 to \$8,600). If the violation is found to have been deliberate, the website owner or administrator may face punishment of three months to two years imprisonment as well as a fine of SYP 200,000 to 1 million (US\$1,500 to \$7,500).⁶⁸ In early 2014, however, the authorities were not vigorously enforcing these regulations.

In early November 2011, Bloomberg reported that in 2009 the Syrian government had contracted Area SpA to equip them with an upgraded system that would enable interception, scanning, and cataloging of all email, internet, and mobile phone communication flowing in and out of the country. According to the report, throughout 2011, employees of Area SpA had visited Syria and began setting up the system to monitor user communications in near real-time, alongside graphics mapping users' contacts. ⁶⁹ The exposé sparked protests in Italy and, a few weeks after the revelations, Area SpA announced that it would not be completing the project. ⁷⁰ No update is available on the project's status or whether any of the equipment is now operational.

One indication that the Syrian authorities were potentially seeking an alternative to the incomplete Italian-made surveillance system were reports of sophisticated phishing and malware attacks targeting online activists that emerged in February 2012.⁷¹ The U.S.-based Electronic Frontier Foundation (EFF) reported that malware called "Darkcomet RAT" (Remote Access Tool) and "Xtreme RAT" had been found on activists' computers and were capable of capturing webcam activity, logging keystrokes, stealing passwords, and more. Both applications sent the data back to the same IP address in Syria and were circulated via email and instant messaging programs.⁷² Later, EFF reported the appearance of a fake YouTube channel carrying Syrian opposition videos that requested users' login information and prompted them to download an update to Adobe Flash, which was in fact a malware program that enabled data to be stolen from their computer. Upon its discovery, the fake site was taken down.⁷³ Due to the prevailing need for circumvention and encryption tools among activists and other opposition members, Syrian authorities have developed fake Skype encryption tools and a fake VPN application, both containing harmful Trojans.⁷⁴

A report from Kaspersky Labs, published in August 2014, revealed that some 10,000 victims' computers had been infected with RATs in Syria, as well as in other Middle Eastern countries and the

^{66 &}quot;Law of the rulers to communicate on the network and the fight against cyber crime" art. 5-12. Informal English translation: https://telecomix.ceops.eu/material/testimonials/2012-02-08-Assad-new-law-on-Internet-regulation.html.

^{67 &}quot;Law of the rulers to communicate on the network and the fight against cyber crime" art. art. 2.

^{68 &}quot;Law of the rulers to communicate on the network and the fight against cyber crime" art. art. 8.

⁶⁹ Ben Elgin and Vernon Silver, "Syria Crackdown Gets Italy Firm's Aid With U.S.-Europe Spy Gear," *Bloomberg Business*, November 3, 2011, http://bloom.bg/1VQij6R.

⁷⁰ Vernon Silver, "Italian Firm Said Exits Syrian Monitoring Project, Repubblica Says," *Bloomberg Business*, November 28, 2011, http://bloom.bg/ligDnoL.

⁷¹ Ben Brumfield, "Computer spyware is newest weapon in Syrian conflict," CNN, February 17, 2012, http://cnn.it/1LZPQXn.

⁷² Eva Galperin and Morgan Marquis-Boire, "How to Find and Protect Yourself Against the Pro-Syrian-Government Malware on Your Computer," Electronic Frontier Foundation, March 5, 2012, http://bit.ly/xsbmXy.

⁷³ Eva Galperin and Morgan Marquis-Boire, "Fake YouTube Site Targets Syrian Activists With Malware," Electronic Frontier Foundation, March 15, 2012, http://bit.ly/1XQhHzX.

^{74 &}quot;Syrian Malware" Up-to-date website collecting the malware http://syrianmalware.com/.

Syria

United States. ⁷⁵ The attackers sent messages via Skype, Facebook, and YouTube to dupe victims into downloading surveillance malware. One file was disguised as a spreadsheet listing names of activists and "wanted" individuals.

Anonymous communication is possible online but increasingly restricted. Registration is required to purchase a cell phone, though over the past years, activists have begun using the SIM cards of friends and colleagues killed in clashes with security forces in order to shield their identities. Cell phones from neighboring countries like Turkey and Lebanon have been widely used since 2012, notably by Free Syrian Army fighters. However, civilians in Syria are now also using these foreign cell phones due to the lack of cell service in the country. Meanwhile, activists and bloggers released from custody report being pressured by security agents to provide the passwords of their Facebook, Gmail, Skype, and other online accounts.⁷⁶

Intimidation and Violence

Once in custody, citizen journalists, bloggers, and other detainees reportedly suffered severe torture on behalf of government authorities. Although the precise number is unknown, it is estimated that dozens of individuals have been tortured to death for filming protests or abuses and then uploading them to YouTube.⁷⁷ In some cases around the country, the Syrian army appeared to deliberately target online activists and photographers. In response to such brutality, hundreds of activists have gone into hiding and dozens have fled the country, fearing that arrest may not only mean prison, but also death under torture.⁷⁸ Blogger Assad Hanna left Syria following online threats stemming from his criticism of the regime, but was badly injured by knife-wielding assailants at his apartment in Turkey.⁷⁹

Attacks on activists and citizen journalists were not limited to Syrian government forces. The Free Syrian Army (FSA), the opposition armed movement, have committed many attacks on videographers and citizen journalists, mainly in the suburbs of Aleppo. Since the "liberation" of Aleppo province, some activists and photographers have complained of being targeted by FSA fighters more than they were targeted by the Syrian government, according to one anonymous source in the region. Further, the Al Nusra Front (*Jabhat al Nusra*), a group of armed extremists, have arrested tens of young citizen journalists for weeks at a time, and in one incident, opened fire on those filming a protest in Bostan al Qaser in Aleppo. 81

According to Reporters Without Borders, at least 12 netizens and citizen journalists were killed between June 2014 and May 2015.82 IS executed two Syrian activists, Bashar Abul Azzem and Faysal Abulhalim, and accused them of spying in mid-2015. Bashar and Faysal were undercover reporters for the website and citizen group Raqqa Is Being Slaughtered Silently (also known as RSS), and they

⁷⁵ Kaspersky Lab Global Research and Analysis Team, Syrian Malware, the evolving threat, August 2014, http://bit.ly/1pCJ0gK.

⁷⁶ Interviews with released bloggers, names were hidden.

⁷⁷ Interview A.A, Human Rights Lawyer, December 12, 2011, Damascus, Skype.

⁷⁸ Interviews with two photographers who have taken refuge in Turkey, December 2011.

⁷⁹ Amira al Hussaini, "Syrian Blogger Stabbed in His Istanbul Home After Receiving Threats Online," *Global Voices Advocacy*, April 21, 2015, http://bit.ly/1jS03fb.

⁸⁰ Interview with activist, January 2013, Aleppo, Skype.

⁸¹ Interview with lawyer from Aleppo, January 2013, Istanbul, Turkey.

⁸² Reporters Without Borders, "2014: Netizens and Citizen Journalists Killed: Syria," *Press Freedom Barometer*, http://bit.ly/lnlmuK.

were documenting IS's crimes.⁸³ Al-Moutaz Bellah Ibrahim of *Shaam News Network* was killed in Ragga in May 2014.⁸⁴

International journalists, including those whose work is mainly featured online, also risk being targeted by Syrian militant groups, as three harrowing cases caught global media attention during the coverage period:

- o In August 2014, James Foley, online journalist for the Global Post, was executed by IS.85
- In August or September 2014, freelance journalist, Steven Sotloff, for Foreign Policy, The Media Line and Time, was beheaded by IS.⁸⁶
- In January 2015, a video surfaced showing the beheading Kenji Goto, a veteran Japanese reporter who founded the website *Independent Press* to cover humanitarian issues in 1996.⁸⁷

In one case from December 2013, IS militants killed 50 prisoners, including many journalists and media activists such as Syrian journalist Sultan al-Shami.⁸⁸ Abdulwahab Mulla, a Syrian journalist known for his satirical YouTube comedy show "3-Star Revolution," was kidnapped by masked gunmen on October 8, 2013. He was taken from his home in rebel-controlled areas of Aleppo. Many have hypothesized that extremist militants, such as IS, are behind the kidnappings.⁸⁹ Many citizen journalists have lost their lives while documenting clashes. On May 21, 2013, 14-year-old citizen journalist Omar Qatifaan was killed while covering a battle between government forces and the Free Syrian Army near the city of Daraa in southern Syria, near the Jordanian border.⁹⁰

Technical Attacks

After the growth of IS in the region, many anti-IS media outlets have come under different types of attacks.

- Al-Hal, a Syrian news website, claimed it came under a DDoS attack by pro-IS hackers in December 2014, bringing the website offline for 24 hours.⁹¹
- In December 2014, the University of Toronto's Citizen Lab released a report entitled, "Malware Attack Targeting Syrian ISIS Critics," focusing on groups such as Raqqa is Being Slaughtered Silently (RSS), which documents IS human rights abuses committed by IS. Citizen Lab

^{83 &}quot;ISIL released a video for a new execution for 2 young Syrians using a new way" [in Arabic], *Elbilad*, July 6th, 2015, http://bit.ly/1UELyMD.

⁸⁴ Committee to Protect Journalists, "Al-Moutaz Bellah Ibrahim," 2014, https://cpj.org/killed/2014/al-moutaz-bellah-ibrahim. php.

⁸⁵ Committee to Protect Journalists, "James Foley," Journalists Killed/Syria, 2014, https://cpj.org/killed/2014/james-foley.php.

⁸⁶ Committee to Protect Journalists, "Steven Sotloff," *Journalists Killed/Syria*, 2014, https://cpj.org/killed/2014/steven-sotloff, php.

⁸⁷ Committee to Protect Journalists, "Kenji Goto," *Journalists Killed/Syria*, 2015, https://cpj.org/killed/2015/kenji-goto.php; I-fan Lin, "Hate Is Not What Humans Should Do: Slain Journalist Kenji Goto's Words Live On Online," *Global Voices*, February 7, 2015, https://bit.ly/1MyBlt1.

 ^{88 &}quot;Al Qaeda Affiliate ISIL kills 50 hostages including media activists," Zaman Alwasel, January 7, 2014, http://bit.ly/1MeqQyO.
 89 Nour Al Ali, "Syrian Journalist Abdulwahab Mulla Kidnapped in Liberated Aleppo," Global Voices, November 10, 2013, http://bit.ly/1LZQLXR.

⁹⁰ Rami Alhames, "14-year-old Citizen Journalist Killed Covering Clashes in Syria," *Global Voices*, May 22, 2013, http://bit.lv/103UMh8.

⁹¹ Al-Hal, Facebook post showing DDoS attack , December 12, 2014, http://on.fb.me/1EYVtph. The website is https://7al.me.

believes the malware was developed by IS or pro-IS hackers in order to discover more information about the nonviolent group.⁹²

Another media group, Souritna, was hacked by pro-IS hackers in January 2015. Its website
was hacked due to Souritna's statement of solidarity with the victims of the Charlie Hebdo
attacks in Paris. The attackers were able to log into a File Transfer Protocol (FTP) service and
delete the content of the website while uploading a new index page with the logo of IS.

At the same time, the Syrian Electronic Army (SEA) continues to target Syrian opposition websites and Facebook accounts, as well as Western or other news websites perceived as hostile to the regime. A huge shift in the level of hacking operations happened at the end of 2013, when the SEA was able to hack the *New York Times* website, 93 the U.S. Marines website, 94 Facebook, 95 and many others. Most of the attacks occurred on the DNS level, which involved redirecting requests for the domain name to another server. The Twitter account of Barack Obama, run by staff from Organizing for Action (OFA), was briefly hacked by the SEA, resulting in the account posting shortened links to SEA sites. 96 The hackers had gained access to the Gmail account of an OFA staffer. On March 17, 2013, the SEA hacked the website and Twitter feed of Human Rights Watch, redirecting visitors to the SEA homepage. 97 These tactics continued with the high-profile hacking of *Forbes* in February 2014 and the *Washington Post* in May 2015. 99

Though the hacktivist group's precise relationship to the regime is unclear, evidence exists of government links or at least tacit support. These include the SEA registering its domain in May 2011 on servers maintained by the Assad-linked Syrian Computer Society; ¹⁰⁰ a June 2011 speech in which the president explicitly praised the SEA and its members; ¹⁰¹ and positive coverage of the group's actions in state-run media. ¹⁰²

⁹² John Scott-Railton and Seth Hardy, *Malware Attack Targeting Syrian ISIS Critics*, CitizenLab, December 18, 2014, http://bit.ly/1JbRwMW.

⁹³ Christine Haughney and Nicole Perlroth, "Times Site Is Disrupted in Attack by Hackers," *New York Times*, August 27, 2013, http://nyti.ms/17krXEO.

⁹⁴ Julian E. Barnes, "Syrian Electronic Army Hacks Marines Website," *The Wall Street Journal*, September 2, 2013, http://on.wsj.com/1KGVnFf.

⁹⁵ Adario Strange, "Syrian Electronic Army Hacks Facebook's Domain Record," *Mashable*, February 5, 2014, http://on.mash.to/1EOuHPY.

⁹⁶ Gregory Ferenstein, "The Syrian Electronic Army Hacked Obama's Twitter Links And Campaign Emails," *Tech Crunch*, October 28, 2013, http://tcrn.ch/1Xi62bV.

⁹⁷ Max Fisher, "Syria's pro-Assad hackers infiltrate Human Rights Watch Web site and Twitter feed," *Washington Post*, March 17, 2013. http://wapo.st/1eU9nKI.

⁹⁸ Andy Greenberg, "How the Syrian Electronic Army Hacked Us: A Detailed Timeline," Forbes, February 20, 2014, http://onforb.es/MEWYig.

⁹⁹ Brian Fung, "The Syrian Electronic Army just hacked the Washington Post (again)," Washington Post, May 14, 2015, http://wapo.st/1jS0eY7.

¹⁰⁰ The Syrian Electronic Army, http://sea.sy/index/en.

Haroon Siddique and Paul Owen, "Syria: Army retakes Damascus suburbs-Monday 30 January," *The Guardian*, January 30, 2012, http://bit.ly/1LZSDQA; Voltaire Network, "Speech by President Bashar al-Assad at Damascus University on the situation in Syria," June 20, 2011, http://bit.ly/1FzOUEp.

^{102 &}quot;The Syrian Electronic Army Fights Rumors and Gives the True Picture of the Incident," [in Arabic], Wehda, May 17, 2011, http://bit.ly/10fOsCp.