ARTICLE 19





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Introduction

Iran has been rocked by tempestuous times in the past few months. A winter of unrest, a precarious balance of power within the government, and aggressive policies, have seen crackdowns take a new turn from the start of the 1397 Persian new year (end of March 2018). The decision by the United States of America to withdraw from the nuclear deal of 2015 has further eroded an already unstable currency and economy. The financial strains on Iran's population have provoked volatile reactions: protests have taken place across the country, as have strikes by the country's infamous bazaar merchants whose protests have previously been harbingers of revolution, including the constitutional revolution at the turn of the century and the 1979 Islamic Revolution. As the turbulent and contentious government of moderate Hassan Rouhani sees out its sixth year with what is perceived as a failed nuclear deal and an economy on the verge of collapse, factional politics are raging and Iran is facing further instability.

Iran's information control space remains complicated. Much has changed within the past year: from the active filtering of Telegram, the country's most influential communication platform, to open debate about cutting off Virtual Private Networks (VPNs) (the latter has not been implemented). However, it is evident that the Internet remains "porous." There remain some opportunities for Iranians to freely access the Internet and express themselves. However, these opportunities for free access to the Internet and expression online are riddled with friction and fear. Hurdles restricting access to a free Internet have been strengthened by Rouhani's Minister of ICT, Mohammad Javad Azari Jahromi. Jahromi was elected into Rouhani's second cabinet in a round of parliamentary confirmations. Many analysts pointed to these confirmations as being coordinated between the administration and parliamentarians to ensure conservative Ministers, including Jahromi were appointed to the government.² At the helm of Internet policy, the Minister for ICT has steered Iran's course through, arguably, one of the most turbulent periods for Internet policy since the 2009

presidential elections.³ Jahromi's tenure, in the context of the nationwide economic and political turbulence, has meant his Ministry has instigated regressive policies and programmes that have undermined freedom of expression online. However, in terms of rhetoric they have sought to paint themselves as defenders of these values against hardline efforts bent on eroding the freedom online.

The Rouhani government's pursuit of progress and freedoms is often stymied by its own programmes or lack of action against aggression from hardliners, as well as being further limited by the actions of hardline institutions such as the judiciary. After six years of the Rouhani administration, worrisome policies continue to originate from the administration. Such policies include transparency efforts which nonetheless exclude the behaviours of individuals within the government⁴ alongside new policies for access to the Internet and data protection; initiating the rights eroding programme of the National Information Network which include aggressive policies to develop and entangle Iranian Internet users on insecure local messengers; promoting new policies to erode equal access to the Internet and a continued neglect to protect Internet users from intimidation and censorship. These initiatives further ensnare the Rouhani administration within the web of a disappointed electorate.5

¹Censored: Distraction and Diversion Inside China's Great Firewall, Margaret Roberts, Princeton University Press, 2018

²"Iranian Reformist MPs under fire for confirming conservative ministers," Al Monitor, 22 August 2017 https://bit.ly/2Q1xXP8

³ See pages 2-4 of Tightening the Net: A New Cabinet and New Attempts at Control, ARTICLE 19, September 2017 https://bit.ly/2EYkQfA

⁴See timeline for mobile phone crackdowns.

⁵ See timeline for outline of recent arrests.



13 FEB 17 / PLATFORMS

IRIB rolls out the Telegram alternative Soroush.

23 DEC 17 / CURRENCY

Iranian Bitcoin community reports a surge in 1000% more purchases in Bitcoin.

28 DEC 17 / PROTESTS

Winter protests start in Mashad and spread to the rest of the country.

30 DEC 17 / PLATFORMS

Telegram accepts government request to remove Amad News.

31 DEC 17 / PLATFORMS

Telegram and Instagram are blocked by a judicial order.

04 JAN 18 / PLATFORMS

Instagram is unfiltered after four days of being inaccessible.

07 JAN 18 / PROTESTS

Protests continue. A 23 year-old protester is killed in prison. IRGC blame protests on foreign influence campaigns, especially on Telegram.

08 JAN 18 / CURRENCY

News that Telegram will offer a cryptocurency circulates.

13 JAN 18 / PLATFORMS

Telegram is unfiltered in Iran after 13 days of being inaccessible.

12 MAR 18 / PLATFORMS

National Security Council and the Secretary of the Supreme Council of Cyberspace announce that Telegram will be blocked by the end of April.

03 APR 18 / CURRENCY

The Secretary of the Supreme Council of Cyberspace declares that Telegram's cryptocurrency "will ruin Iran's economy", and it "could be blocked at any moment".

16 APR 18 / PLATFORMS

President Rouhani's
Education Ministry bans the
use of all foreign social media
platforms and messaging
applications in all schools and
universities for the purpose of
communicating educational
information.

17 APR 18 / PLATFORMS

Strategic Management Centre issues a directive that all government offices must disable their Telegram accounts and channels and use only local messaging platforms.

18 APR 18 / PLATFORMS

Khamenei announces he is removing his Telegram channel and moving to local alternatives such Soroush, iGap, etc.

23 APR 18 / CURRENCY

Iran blocks access to all Currency Exchanges inside the country.

24 APR 18 / PERSECUTION

Reformist journalist, Amir Mohammad Hossein Miresmaili is arrested for disparaging a Shia imam in a tweet aimed at criticising an ultraconservative cleric.

26 APR 18 / PLATFORMS

Iran's Telecommunications Company terminates Telegram's license to run servers for public media content (Content Delivery Networks) inside of Iran.

26 APR 18 / PERSECUTION

Imam Ali's Popular Student Relief Society (IAPSRS) announces it suffered a series of cyberattacks, connected to a series of other attacks on Iranians inside the country and the diaspora that appeared to use the resources of the Telecommunications Infrastructure Company of

30 APR 18 / PLATFORMS

Iran starts rolling out the blocking of Telegram across ISPs.

1 MAY 18 / PLATFORMS

As the order blocking Telegram is implemented, other outages are seen on WhatsApp and other platforms.

MAY 18 / PERSECUTION

Tehran's Cyber Police (FATA) arrest a series of high profile Iranian Instagram users (Maedeh Hojabri; Elnar Ghasemi; Shadab Shakib; and Kami Yousefi).

7 MAY 18 / PLATFORMS

Six Iranian lawyers file a petition in the Court for Government Employees in Tehran to overturn the judicial order banning Telegram. As yet, there has been no response from the judiciary.

8 MAY 18 / FOREIGN US President Donald Trump announces withdrawal from the Iran nuclear deal as Iranians fear deeper currency crisis

15 MAY 18 / PLATFORMS

Minister of ICT Jahromi says the increase in use of VPNs after the blocking of Telegram has brought to light security concerns, and Iran is considering blocking all VPN use.

15 MAY 18 / PLATFORMS

The Deputy
Telecommunications
Minister announces that all
government agencies will be
required to use local search
engines by a decree that the
cabinet of Rouhani would
soon ratify.

18 MAY 18 / PLATFORMS

Minister of ICT, Jahromi, posts a chart on his Instagram announcing that Telegram users are back on a rise after the initial dip following censorship.

18 MAY 18 / PLATFORMS

Iran's Prosecutor General declares businesses must cease marketing their services on Telegram. The Minister of ICT shares on Soroush that a new regulation prohibits commercial activities on Telegram.

19-26 MAY 18 / PLATFORMS

Several Iranians report fake accounts were made in their names on the state platform Soroush.

21 MAY 18 / PLATFORMS

Six ministers and two MPs sign a letter to President Rouhani asking for the ban on Twitter to be lifted.

24 JUN 18 / PERSECUTION

Trial starts of Hamidreza Amini for allegedly insulting the Prophet Mohammad and Shia Muslim imams on his Telegram channel.

24 JUN 18 / PROTESTS

Protests break out in the cell phone market against the government's allocation in millions of dollars in fixed currency allocation for corrupt and thieving cellphone retailers to import phones into the country.

24 JUN 18 / PROTESTS

Jahromi launches a transparency campaign to "root out corruption and theft" in the wake of the protests. His Ministry dispersed 220 million euros in subsidies for dealers to import cell phones during the crisis, however only 72 million euros worth were imported.

25 JUN 18 / PROTESTS

Protests break out in Tehran's bazaar in response to the currency crisis, which started with the cell phone markets the day prior once the Rial hit 92000 to one USD.

26 JUN 18 / PERSECUTION

Reformist journalist Hengameh Shahidi is arrested for posting "criminal tweets" and insults to the judiciary and officials on social media.

03 JUL 18 / PERSECUTION

Iran's Prosecutor General declares Instagram is a hotbed of illicit activities by "Instagram celebrities" and fraudesters, and that the judiciary will filter it.

10 JUL 18 / PERSECUTION

In Isfahan, several administrators of cooking channels on Telegram are interrogated for using VPNs, and warned of imminent persecution if they do not delete their Telegram channels and use a national platform.

16 JUL 18 / PLATFORMS

Hormozgan's local police chief announces they have arrested 46 fashion workers, including eight models, who run their activities on Instagram pages.

25 JUL 18 / CURRENCY

Directorate for Scientific and Technological Affairs announces that it will soon launch an Iranian cryptocurrency.

28 JUL 18 / PLATFORMS

Minister of ICT, Jahromi, announces Iran's version of the EU GDPR, the Citizens' Personal Data Protection and Privacy Bill.

30 JUL 18 / PLATFORMS

The Telecommunication
Company of Iran (TCI) rerouts
Telegram's internet protocol
(IP) addresses to the TCI
instead of Telegram's servers
so that the application is
unusable even with censorship circumvention tools such
as VPNs.

14 AUG 18 / PLATFORMS

The Attorney General responds to Jahromi's letter with other ministers and MPs about unfiltering Twitter, refusing to allow it to be discussed in the CCDOC and underlining the plan to get Iranians to use national platforms.

27 AUG 18 / CURRENCY

The Central Bank of Iran confirms the development of a rial backed cryptocurrency. The Supreme Council for Cyberspace said they will remove the ban on cryptocurrencies by the end of September.

Censoring platforms

Permanent blocking of Telegram and its repercussions

In April 2018, after four years of debate and controversy, the popular messaging and social media application, Telegram, was blocked in Iran. The government's two-week ban of Telegram during the winter protests of January 2018 sparked concerns that initiatives for a more open internet, as had been promised by Rouhani, were being setback. One of the administration's greatest achievements in regard to the promotion of Internet freedom is demonstrated by efforts to keep Instagram and Telegram uncensored in the face of more conservative and hardline powers. However, given the recent ban on Telegram, it seems increasingly unlikely that the government will honour their Internet freedom commitments and unblock platforms such as Twitter (which has been blocked since 2009).

On 30 April 2018, the Iranian judiciary issued an order to block Telegram in Iran, requiring Iran's Internet Service Providers (ISPs) to ensure the application was inaccessible even with the use of circumvention tools. The order was issued on national security grounds, a decision which appears to have been motivated primarily by the perceived role played by the platform during the January 2018 protests. Other reasons given for the order included Telegram's failure to relocate its servers to Iran in compliance with Iranian law (i.e. potentially making the data of its Iranian users accessible to authorities) and its refusal to work with the Iranian authorities to regulate content on the platform.

As of 1 May, Telegram was inaccessible through any of the country's ISPs, both mobile and home connections. This is a considerable setback to freedom of expression and free access to the Internet. Serving an estimated 40 million Iranians, Telegram has become ubiquitous with Internet use in Iran since the application's rise in popularity in 2015. Providing both a personal messenger tool and a social media platform, its usage has become critical to communication and information flow in the country, with economic and social benefits, ranging from the operations of small businesses, to emergency health information

and services. Iranians have also reported inaccessibility of various other platforms such as the Apple App Store and WhatsApp as well as slower connections, disconnections from numerous circumvention tools, and throttling of encrypted traffic. These issues were confirmed by the Minister of ICT, Jahromi, on his Twitter account on 1 May 2018, despite Twitter being blocked in Iran since 2009.⁷ Later the same day, he announced the collateral disruptions that occurred during the implementation of the blocking order against Telegram's had been remedied, despite users reporting to the contrary.

Since the application's rise in popularity in 2015, various hardline Iranian authorities have called for the censorship of Telegram through the Committee Charged with Determining Offensive Content (CCDOC)8 (sometimes referred to as the Working Group to Determine Instances of Criminal Content, or the filtering committee). The CCDOC is a multi-agency body charged with determining which content is filtered in Iran. Half the committee is composed of members of the president's cabinet, with the other half from bodies over which the president has no authority. While the Rouhani cabinet has generally opposed censorship of Telegram, the government has previously requested that Telegram take down content on the platform. The CCDOC refrained from issuing orders to block or filter Telegram, even though the issue had come under frequent deliberation in the committee since 2015. This has been seen often as one of the Rouhani administration's achievements in regards to the protection of freedom of expression. The blocking of Telegram that occurred before April 2018 had been ordered by the Supreme National Security Council.

The judicial ban of 30 April was issued by the Culture and Media Office within Tehran's Prosecutor's Office. The order was adopted outside of normal procedures for determining censorship within the CCDOC in an unusual and unprecedented path. The Attorney General, Mohammad Jafar Montazeri, who has executive responsibility over prosecutions and case hearings, holds the power to overturn the Telegram ruling question April 2018 and should do so.

⁶"Iran's judiciary bans use of Telegram messaging app - state TV", Reuters, 30 April 2018, https://reut.rs/2xSlLru

See Minister Azari Jahromi's Tweet about service disruptions, 1 May 2018 https://bit.ly/20JresU

⁸The CCDOC is composed of 13 members including the Attorney General (head of the judiciary, and consequently the head of the committee), Minister of Intelligence and National Security, Minister of Culture and Islamic Guidance, Minister of Justice, Minister of Information and Communications Technology, Minister of Education, Minister of Research and Science, the Chief of Police, an expert on ICT chosen by Parliament, a member of Parliament's legal committee (as chosen by this committee and approved by parliament), the head of the Islamic Development Organization, the head of the IRIB, and a representative of the council of Islamic Revolution. An introduction to the Committee is available on the website of the Supreme Council of Cyberspace, https://bit.ly/20ly/0b0

⁹ Islamic Republic of Iran: Computer Crimes Law, ARTICLE 19, 2012 https://bit.ly/1RecP6R

While President Rouhani has indicated he opposes the order, he has taken no action to reflect this position. The President's administration can appeal the decision through Article 114 of the Criminal Procedures, ¹¹ Article 570 of the Penal Code¹² or Article 9 of the Constitution. ¹³ The ban on Telegram also contradicts Article 26 of President Rouhani's new Charter of Citizens Rights, which guarantees individuals freedom of expression "using any means of communication." ¹⁴

Despite these efforts, a number of different indicators suggest Iranians are continuing to use Telegram in high numbers. On 18 May, Jahromi, posted statistics on social media about the use of Persian language Telegram channels after the filtering of the platform, gathered through the social labs of the University of Tehran (Image 1). They show, after an initial drop, usage returning to its original, pre-ban levels. This has also been confirmed by Telegram's return as the top application downloaded on the Google Play Store inside Iran one month after the start of filtering, after having dropped to 15th place in the week that filtering started (see images 2–4).¹⁵

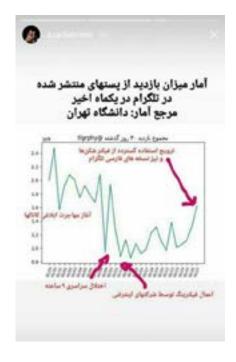


Image 1:

Minister Jahromi created an Instagram story of the upswing in views on Persian Telegram channels since the the blocking of Telegram.

- ¹² Article 570 of the Penal Code: "Any official and agent associated with state agencies and institutions who unlawfully strips members of the public of their personal freedom or deprives them from their rights provided in the IRI [Islamic Republic of Iran's] Constitution, shall be sentenced to two months to three years' imprisonment, in addition to dismissal from the service and prohibition of employment in state offices for one to five years." https://bit.ly/1nRuftq
- ¹³ Article 9 of the constitution: "[N]o authority has the right to abrogate legitimate freedoms, not even by enacting laws and regulations for that purpose, under the pretext of preserving the independence and territorial integrity of the country." https://bit.ly/2iOlpyW
- ¹⁴ Article 26 of the Charter of Citizens Rights: "Every citizen has a right to freedom of speech and expression. This right shall be exercised within the limits prescribed by law. Citizens have the right to freely seek, receive and publish views and information pertaining to various issues, using any means of communication. The Government shall, according to the law, guarantee freedom of speech and expression, especially in the mass media, cyber space, including in newspapers, magazines, books, cinemas, radio and television, social networks and the likes." https://bit.ly/2NCHgrS

¹⁵ Screen captures of top downloads in Iran on the Google Play store for 23 April, 7 May, and 31 May 2018 from App Annie. https://www.appannie.com



Image 2:

Top 15 downloads on Iran's Google Play store, on April 23 2018, a week before Telegram's censorship. Telegram was at number one. Image from App Annie.

¹⁰"The responsibility of the filtering of Telegram lies within the Judiciary, and does not need the deliberation of the Leader," ISNA, 8 May 2018 https://bit.ly/2K4hvux

¹¹ Article 114 of the Criminal Procedures: "Prevention of services and activities in commercial, agricultural and industrial sectors is prohibited unless there is firm and reasonable evidence of criminal actions that are a threat to society's health and security and public order. In such cases, the assistant prosecutor is required to inform the prosecutor of the reasons why the presumed criminal activities should be stopped. Such decisions can be challenged in court within five days after they are issued." https://bit.ly/2JoFXql



Image 3:

One week after the ban, Telegram goes from the most downloaded to the 15th most downloaded in Iran. Image from App Annie.



Image 4:

One month after the filtering, Telegram returns to the top as the most downloaded Android app from the Google Play store in Iran.

Uncertainty of filtering and the rule of law

Upon his appointment to the position of Minister of ICT, the first issue Jahromi tackled was the unblocking of Twitter. The platform has increasingly become a sphere for Iranian officials to communicate to Iranians and a global audiences, on all sides of the factional divide. Jahromi announced he would work on the national security concerns that led to its filtering in 2009, and enter into negotiations with Twitter in August 2017¹⁶. Despite regressive initiatives such as the blocking of Telegram, the pursuit for Twitter's unfiltering continued. However, on 14 August 2018, the Attorney General, Mohammad Jafar Montazeri, announced the ban on Twitter would not be lifted.¹⁷ The decision appears to have been issued in response to a letter written by Minister of ICT, Jahromi, and six other Ministers from the Rouhani cabinet to the Prosecutor's office, asking them to take the matter of banning Twitter to deliberation by the CCDOC. In his response, the Attorney General not only rejected the Ministers' request but also criticised those who contested the blocking of Twitter, highlighting disregard for the processes set in place by the Computer Crimes Law. The Computer Crimes Law¹⁸ makes such decisions the responsibility of multi-agency bodies, including members of the elected government in the CCDOC.19

Attorney General Montazeri on Internet policy

"When we close down these networks within the Committee Charged with Determining Offensive Content and then filter them, we see some gentlemen raise their voices and we had six Ministers write me a letter and want me to set up sessions within the Committee to remove the filter, which I did not go along with as I do not want to be a partner in crime.

¹⁶ Tightening the Net: A New Cabinet and New Attempts at Control September 2017 https://bit.ly/2QlphOE

¹⁷"Montazeri's response to the request of Ministers to unfilter social networks," ISNA, 15 August 2018 https://bit.ly/2nEZcD9

¹⁸ See Article 21 of the law, where the CCDOC is referred as the "filtering committee": Access Service Providers (ISPs) are obligated to filter the criminal content which is regulated within the framework of laws, whether resulted from or used to commit computer crimes, based on the technical criteria and the list provided by the Filtering Committee subject to the following article. The ISP shall be liquidated, In case of willful refusal of filtering criminal content, and punished by a fine of 20,000,000 to 100,000,000 Rials, for the first time, by a fine of 100,000,000 to 1,000,000,000 Rials, for the second time, and by a three year temporary closure, for the third time, in case of carelessly or negligently causing access to the illegal content. https://bit.ly/2OeasoT

The Supreme Council of Cyberspace has come into existence with a lot of effort, but have we used these important resources to the best of their abilities to manage cyberspace? I think we have not done enough. And I know Dr. Firoozabadi²⁰ is doing a lot, but only a small portion of this work falls under his oversight. There must be a strong will to organise cyberspace, and there is not. Just look at the troubles that Telegram and Instagram have brought us. We are not a backwards country, we are a strong people who lead with our own knowledge in the world. I want people to realize that these domestic platforms will aid in public order. We have the tools but certain people disagree with us. I ask Dr. Firoozabadi to take the necessary steps as the leader.

The majority of this nation has stood by the Islamic Republic, some have lost their dear ones in the path of religion, one of the results of this is, despite the economic pressures they have withstood, even with the efforts of the enemy to bring many to the streets, they failed.

With all of these hardships, people continue to stand by the system, yet they criticize me, but I am not the regime. This is the demand of the people, and indeed those who are responsible are working to fulfil the demands of the people and the will of the leadership.

We were supposed to launch internal messengers by the end of last year [March 2018] which did not happen, and it was postponed until to the beginning of Khordad [end of May], and today is 24 of Mordad [15 August] and it has not been launched, and now they are saying, inshallah till mid Shahrivar [beginning of September]."

The Attorney General called for "proportionate" measures to battle what he perceived as "disruptive" elements of cyberspace, as "there is much good to be done in cyberspace if it is properly organised."

The statement from the Attorney General reveals a number of ambiguities that have remained within Iranian law in which state institutions are the final arbiters of Internet policy. Notions of "unfiltering," from the Rouhani administration, which the Attorney General is admonishing, first became

part of mainstream Iranian discourse with the start of the Presidency of Rouhani and the "unfiltering" of Facebook first became a topic of debate in late 2013. The topic was tossed back and forth within the CCDOC. The CCDOC is chaired by the judiciary, and ambiguity over its processes has left the judiciary as the final arbiter of both deciding what can be filtered, and what can be considered for unfiltering.

The Attorney General's explanation that he is carrying out simultaneously the will of the Supreme Leader and of the people in his 14 August statement seems to dismiss the notion that the government of Hassan Rouhani, whom he is arguing against, was elected by a majority of the people after campaigning on a progressive platform that included more freedom online. His disappointment at the absence of internal messaging platforms also contradicts the efforts the Rouhani government has put into launching a number of different internal platforms, and creating policies of mandatory membership of these platforms, often to the detriment of freedom of expression.

Messaging applications post Telegram censorship

While the Attorney General may be reluctant to acknowledge that national messaging services have long been a staple of the Iranian digital ecosystem, these messaging platforms have been easily avoided and widely distrusted by many Iranians. Bisphone, a mobile messenger for example, was released to Iranian users in early 2015, but widely acknowledged for a reckless approach to user data while maintaining associations with the country's intelligence bodies.²¹ In early 2017, the Ministry of ICT launched incentives for software developers to create local messaging services to rival Telegram, with a view to realise its promises to encourage innovation and ICT growth. Grants of approximately \$260,000 USD were provided for every one million users²² a platform attained, as long as the platform complied with Iran's regulations for messaging services.²³ Incentives to create successful messaging platforms, to rival popular foreign platforms that were deemed as uncooperative with local data policies, went into overdrive in 2017. Aggressive subsidies started in late 2017, whereby accessing local applications and websites would incur a fraction of the cost of accessing foreign platforms.²⁴ ARTICLE 19 has called out this process for its flagrant violation of international standards on net neutrality.

 $^{^{\}rm 20} The$ Secretary of the Supreme Council of Cyberspace.

²¹ "Why Bisphone," Kevin Miston, 1 Dec 2015 https://bit.ly/2MPoY6z

²² "Million Dollar Incentives for Local Messaging Apps in Iran," TechRasa, 25 February 2017 https://bit.ly/2x1IRMN

²² See Supreme Council of Cyberspace social media guidelines in Tightening the Net: A New Cabinet and New Attempts at Control, ARTICLE 19, September 2017. https://bit.ly/2EYkQfA

²⁴Tightening the Net: Internet Controls During and After a Protest, ARTICLE 19, March 2018 https://bit.ly/2Nt11Tx

Furthermore, the government has compromised the digital security of administrators of well-known Telegram channels who refuse to relocate onto a national alternative by sharing their data with intelligence and policing authorities. In July 2018, in Isfahan, a number of administrators of food channels on Telegram were called in for questioning by the authorities and threatened with fines for using VPNs to access Telegram, and further prosecution, if they did not move their channels onto a national alternative, such as Soroush, an imitation of Telegram.²⁵ The channel administrators had previously been forced by the Supreme Council of Cyberspace to register their channels on a government website run by the Ministry of Culture and Islamic Guidance (as part of a regulation implemented in 2016)²⁶ in order to receive benefits from the government for their cultural work, according to their lawyers. The information provided as part of the registration process was subsequently used to target and threaten them. This registration procedure is now closed, as all channels are expected to move onto national platforms.27

In addition to concerns regarding violations of net neutrality and threats of arrest to incentivise the use of national platforms, there are also serious privacy and security concerns. Soroush is owned by the Islamic Republic of Iran Broadcasting (IRIB). If platforms follow the policies set in place by the SCC,²⁸ encryption would be banned and all the data on the platform would be accessible to authorities. Initial assessments of Soroush unveiled worrisome features, such as the an ability to show the personal details of channel administrators, including phone numbers and details of their membership of other channels.²⁹

Other concerns have arisen over the fact that Iranians can only register their Soroush accounts to their Iranian SIM cards (users with SIM cards registered outside of Iran are blocked from using the platform). In 2015, the Communications Regulatory Authority established a policy that all SIM cards in Iran must be registered to a national ID and residential address, making anonymity impossible for any activity that requires sim registration.³⁰ Throughout May, many Iranian users, including software engineer Mehdi Ranjibar (Image 5),³¹ reported that their registration and identifying photos were registered and time stamped with activity on Soroush, despite never having registered themselves.

Image 5:

The software engineer Mehdi Ranjbar tweeted upon being surprised he had an account on Soroush: "I didn't even know what Soroush's logo was, but my friend sent me this screenshot that shows I'm a member, and I'm even



online! If you message me I'll likely even answer you :))) I think they've just casually made all of us members now that they claim 25 million members!"

Other concerns emerged such as the recirculating of questionable news on mock or imposter channels on Soroush. On 29 May 2018, a BBC Persian journalist notified her followers on Twitter that she had become aware of imposter BBC Persian channels, and assured Iranians that these were false as the BBC was not a member of Soroush.³² Further, diaspora media networks cannot register on the platform as they do not have access to Iranian SIM cards. However, Soroush is not the only national platform that has emerged in Iran. Overleaf is an overview of the leading messaging platforms, including three of the most popular foreign platforms as a point of comparison.

²⁵ "A number of cooking Telegram administrators were summoned," BBC Persia, 19 July 2018 https://bbc.in/2DjeF6a

²⁶"For Telegram Users, Iran's Registration Requirement Boosts State Snooping Powers," Advox, 11 January 2017 https://bit.ly/2xxvnJc

²⁷ Samandehi.ir was the website where users were to register. While the portal for registration remains online, the instructions asked for registration before 19 February 2017. See more on Jame e Jam online: https://bit.ly/2NwUigW

²⁸ See 'Policies and actions regarding organizing social media messaging app' in Tightening the Net: A New Cabinet and New Attempts at Control, ARTICLE 19, September 2017 https://bit.ly/2EYkQfA

²⁹ A mobile application developer on Twitter shared how he can openly access the user data of the Minister of ICT, Jahromi, including his telephone number: https://bit.ly/2zreiCl

³⁰ "Iran disables more unregistered SIM cards," Financial Tribune, 20 February 2017, https://bit.ly/2lb204a

³¹Tweets by Mehdi Ranjbar regarding Soroush, 24 May 2018: https://bit.ly/2xQign4

³² Tweet by Rana Rahimpour on Soroush, 29 May 2018: https://bit.ly/2QSJfq9

Comparison of the leading messaging platforms

Application	Association	Concerns	Reported Number of Users	Rank for Downloads on Google Play Store in Iran as of August 31 ³³	Rank on Iran's Cafe Bazaar ³⁴ as of August 31
Telegram (foreign)	Russian expatriates, CEO Pavel Durov	Criticisms of security protocols and implementation of end-to-end encryption. Might disclose IP address of individual if provided with "government court order" naming a person as a terror suspect ³⁵ .	Iran: Under 40 million. 36 According to a survey, 62% of respondents still use Telegram after its filtering 37 – Global: 200 million	Rank: 5 Installs via Google Play: over 100 million	Removed by Iran's CCDOC
WhatsApp (foreign)	Facebook	Lack of clarity how Facebook uses individuals' metadata, however it is end-to-end encryption by default and has generally been well-received.	Iran: unknown numbers, but 64% of 3,707 surveyed in Iran said they were users. ³⁸ – Global: 1.5 Billion	Rank: 3 Installs via Google Play: Over 1 Billion	Rank: 6 ³⁹ Installs via CB: over 18 million
imo (foreign)	Owned by Pagebites, Palo Alto, USA	No end-to-end encryption.	N/A	Rank in Iran: 22 – Installs globally via Google Play: over 500 million	Rank: 9 Installs via CB: over 9 million
Wispi (foreign, but disputed)	Owned by Hong Kong-based company, SG Atlantic Limited. There are rumours that the company was acquired by an Iranian entity and still uses its Hong Kong association to build its reputation inside Iran. Many consider it linked with the Iranian ISP Shatel, however they claim to only provide CDN servers to Wispi ⁴⁰ .	Many suspect Wispi is owned or controlled by the Iranian government or an entity close to it. The platform was filtered in March 2017, and many suspect the reason is because either the servers were relocated inside Iran or because an entity close to the Iranian government owns it while still maintaining its registration in Hong Kong (or both) ⁴¹ . Glowing reviews of its "security protocols" by hardline news agencies such as Tabnak during the January 2018 protests have also further intensified this suspicion. 42	N/A	N/A in rankings or installs	Rank: Not in the top 50. Installs via CB: over 200,000
Soroush (Iranian)	Soroush was developed by the Soroush Resaneh Institute in August 2017. The institute is run by Meysam Seyed Salehi, previously the CEO of Fan Ava Data Centre, a high-speed internet provider. Several months before the official launch of Soroush, reports emerged indicating that the state broadcaster, IRIB, was a stakeholder in the institute and provided technical support to the application.	Distrust about how the government-owned platform is processing user data; the creation of fake accounts; possibilities for censorship; lack of implementation of proper privacy.	On 14 April 2018, Soroush announced they have five million users ⁴³ . BBC Monitoring reports they have over 12 million users ⁴⁴ . In May 2018 Soroush directors boasted they have 25 million users. However, many fake profiles were reported at the same time. ⁴⁵	Not ranked.	Rank: 22 Installs via CB: over 3 million

³³ Number of installs is a global figure

³⁴Cafe Bazaar is a locally developed mobile application store that works with the government.

 $^{^{35}}$ Section 8.3 of who your personal data might be shared with. $\underline{\text{https://telegram.org/privacy}}$

³⁶ It was reported at around 40 million before the ban, but dropped and steadily resumed users in the weeks following the ban. https://bit.ly/2kgm5uD

³⁷ According to a survey published on 4 August 2018 by the state affiliated Iranian Students Thinking Center (ISPA), 64% of respondents used Telegram; 32.2% use Instagram; 25% use WhatsApp; 3.6% use Facebook; 2.7% use Twitter; and 13.5% use Soroush. https://bit.ly/2Cj5cv9

^{38 &}quot;WhatsApp Usage Statistics in Iran," TechRasa, 16 July 2018 https://bit.ly/2Q5zuob

³⁹ Cafe Bazaar lists the past week's most popular applications using an algorithm based on total downloads of the application from Cafe Bazaar, as well as total number of downloads of the application in the past week. Explanation comes from communications with the Cafe Bazaar team.

⁴⁰"What relations does the messaging app "Wispi" have with Shatel?"Tasnim news, 31 February 2018 https://bit.ly/2NjPeFm

⁴¹ "The fever of messaging apps in Iran," TechRasa, 10 April 2017 https://bit.ly/2Q4Mjz2

⁴² "Confirmation in the trust in the data security of Wispi messaging," Tabnak, 13 January 2018 https://bit.ly/2wLRJ9c 10 42

⁴³ "Soroush reaches 5 million," Soroush, 14 April 2018. https://bit.ly/2PBDSKA

⁴⁴ Ibid.

⁴⁵"The strange claim of Soroush users and the response by Soroush management," ISNA, 29 May 2018 https://bit.ly/2LDndoW

Application	Association	Concerns	Reported Number of Users	Rank for Downloads on Google Play Store in Iran as of August 31 ³³	Rank on Iran's Cafe Bazaar ³⁴ as of August 31
iGap (Iranian)	Rooye Khat Media Company owned by Mohammad Rasoul Kazemi. In an interview with the hardline Tasnim news agency, part of the Islamic Revolution Guards Corps (IRGC), Kazemi said that iGap signed a contract with a group of companies affiliated to the IRGC, such as the largest mobile operator Hamrahe Aval, as well as two private banks, Parsian and Pasargad.	Affiliation with the IRGC, one of the largest intelligence gathering bodies that routinely persecutes Iranian users for exercising their freedom of expression.	650,000 users ⁴⁶	N/A in rankings or installs	Rank: Not in the top 50. – Installs via CB: 200,000
Bisphone Plus (Iranian)	Owned by Tarashe Sabz Tehran, a leading Internet company, active since 1999.	Initial audits of Bisphone revealed connections with the Iranian authorities, and the sharing of data with the Telecommunications Company of Iran (TCI) ⁴⁷ . Its loose connections with authorities still remain murky.	600,000 users ⁴⁸	N/A in rankings or installs	Rank: Not in the top 50. – Installs via CB: over 50,000
Baleh (Iranian)	Sponsored by a state-owned commercial retail bank, Bank Melli and owned through the Data Warehousing Company.	Your account is linked with your banking information in Iran, ⁴⁹ so all of your information is associated to your state-identified identity. Some users have reported the application has become unavoidable, as Bank Melli requires you to queue for services using the application. ⁵⁰ Many users and researchers have argued the platform is known to violate the privacy of its users through misuse of their data. However, Baleh argue that since Google Play has accepted them, they have passed security standards ⁵¹ .	Over two million ⁵²	Rank: 260 – Installs via Google Play: over 100,000	Rank: Not in the top 50. – Installs via CB: 500,000
Eitaa (Iranian)	Owned by Andishehyavaran Tamaddon Emruz. The Culture Ministry's Digital Media Organisation was mentioned on social media and some websites as the sponsor of the application. ⁵³	Assessments of the platform have demonstrated it is just a duplication of the features of Telegram from the open source API Telegram has available, but that it lacks things such as two-factor authentication, or any encrypted chat functionalities. All user data is stored in plaintext on their servers.	One million ⁵⁴	N/A in rankings or installs	Rank: Not in the top 50. – Installs via CB: over one million
Gap Messenger (Iranian)	Owned by Towsee Saman Information Technology Company. The company specialises in web solutions, e-commerce, games, and information technology. The company is based in Mashhad and also has a UK office in Hove, Sussex.	Mahdi Anjidani, the founder and CEO of Gap, said that the application offers several services, including flight tickets, hotel bookings and utility payments. The application has no encrypted chat option, meaning all data is stored in plaintext on their servers. User statuses will always be shared with contacts. ⁵⁵	600,000 users	N/A in rankings or installs	Rank: Not in the top 50. – Installs via CB: 500, 000

 $^{^{46}}$ According to BBC Monitoring, 23 July 2018: $\underline{\text{https://bit.ly/2Cmtip2}}$

⁴⁷"Why Bisphone," Kevin Miston, 1 December 2015 https://bit.ly/2MPoY6z

⁴⁸ According to BBC Monitoring, 23 July 2018: https://bit.ly/2Cmtip2

⁴⁹ "All about Bale messenger," Al Alam News, 18 April 2018 https://bit.ly/2CknJYf

^{50&}quot;Queing with Bank Melli now only possible with Bale," Rasane Bank, 6 May 2018. https://bit.ly/2Q741IA

^{51&}quot;An explanation on the notion that Bale misuses its user's data," ISNA, 20 February 2019 https://bit.ly/2NKg2M6

^{52 &}quot;The number of Bale users has just exceeded 2 million users," Techrato, 20 July 2018 https://bit.ly/2NPIJZi

⁵³ Ibid.

 $^{^{54}\}text{According to BBC Monitoring, 23 Jul 2018.} \ \underline{\text{https://bit.ly/2Cmtip2}}$

⁵⁵"Gap App review: Messaging for Iranians," Digitato, 4 February 2017 https://bit.ly/2NPOUv6

Application	Association	Concerns	Reported Number of Users	Rank for Downloads on Google Play Store in Iran as of August 31 ³³	Rank on Iran's Cafe Bazaar ³⁴ as of August 31
Telegram Talaee (Iranian)	Produced by the Iranian company Rahkar Sarzamin Hooshmand (Smart Land Strategy) using Telegram's open source code and servers (same producers as Talaee).	Security analysis has pointed out that all traffic on this fork is sent to a private server in plain text using http. The authorities have spoken out against both popular forks, however have yet to block them creating concern that the plaintext nature of the platform has become a monitoring source for authorities. The platforms are subject of factional infighting, with the head of Iran's Passive Defense Forces accusing the Minister of ICT of harbouring the servers inside of his Ministry. A spokesperson for the Ministry of Intelligence has announced the platform belongs to the government, however this has not been verified. Previously users have proven Telegram channels appear censored.	Over 25 million (with Hotgram) ⁵⁹	Rank: 16 – Installs via Google Play: over 100,000	Rank: 2 – Installs via CB: over 14 million
Hotgram (Iranian)	Same producer as above.	Same as above.	Same as above.	Rank: 36 – Installs via Google Play: over 500,000	Rank: 8 – Installs via CB: over five million

Four points of concern regarding the development of national messengers

It's clear from Table 1, that national platforms are yet to reach the usage levels that WhatsApp and Telegram enjoy in Iran. As they struggle to acquire users, they also seem to lack transparency about their affiliations and privacy policies. Particular concerns worthy of highlighting are:

- 1) The government is making membership on some messaging platforms mandatory
 User accounts on some of these national platforms are mandatory. University students and government officials must have user accounts for platforms such as Soroush in order to share and follow channels.⁶⁰ Those queuing at the Bank Melli (and affiliate branches) must be users of the Iranian Bale messaging and banking application.
- 2) The government is forcing administrators to move their channels to government-controlled applications Arrests and interrogations of Telegram channel administrators and ultimatums to move to platforms such as Soroush signal a push to move Iranians from foreign platforms and onto national ones.

3) The government is in control and the mastermind of certain messaging applications

It has always been transparent that Soroush is a project of the Islamic Republic of Iran Broadcasting (IRIB). Similarly, Bale is known to be a project of the Central Bank. Eitaa discreetly lists on its website connections to the government through sponsorship from the Ministry of Culture and Islamic Culture.

4) There are a number of applications where it is unclear whether or not they are government-controlled. Bisphone has not often been forthcoming regarding its connection to authorities. However, research has shown its data is stored with the Telecommunication Company of Iran, which is known to be partly owned by the Revolutionary Guards. ⁶¹ The semi-official government news media, Fars News, reported that the government has "possibly" invested \$21 million USD into the development of Wispi, including moving its servers to Iran; ⁶² Minister of ICT, Jahromi, has denied these claims. ⁶³

APIs:

 $String\ str = \text{``http://tempuri.org/GetChannels''}; String\ str = \text{``http://tempuri.org/GetUpdateInfo''};$

 $String\ str2 = \text{"$\underline{http://tempuri.org/NewComment"}$; String\ str = \text{"$\underline{http://tempuri.org/GetLastZangoolehld"}$;}$

String str3 = "http://tempuri.org/NewCommentWithNumber"; String str = "http://tempuri.org/ZangoolehList";

⁵⁶The API's of both Hotgram and Telegram Talaee:

^{57 &}quot;Azari Jahromi's response to the Passive Defense Forces," ILNA, 16 July 2018 https://bit.ly/2Mqz3lu

^{58 &}quot;The Ministry of Intelligence says Telegram Talaee is connected with the Islamic Republic of Iran," Radio Farda, 9 June 2018 https://bit.ly/209AKFv

⁵⁹Telegram Gold and Hotgram: The aghazade we must doubt," Hassan Saeedy, 23 June 2018 https://bit.ly/2Ngs8jg

^{60&}quot;The prohibition to use foreign messengers in government institutions" ISNA, 18 April 2018 https://bit.ly/2qFt8Qw

⁶¹ "Revolutionary Guards take 51% stake in telecommunication company of Iran," Guardian, 7 October 2009 https://bit.lv/2Ds32Kg

 $^{^{62}}$ "The probability that the government is negotiating with a Chinese messenger," Fars News, 8 April 2017. https://bit.ly/2xdgRGm

⁶³ "The fever of messaging apps in Iran," TechRasa, 10 April 2017 https://bit.ly/2Q4Mjz2

Conflicting messages from authorities have also appeared regarding the forks⁶⁴ of Telegram messenger, such as Telegram Talaee and Hotgram (both of which appear to be from the same source). These forks access the Telegram platform through use of its open source Application Programming Interface (API). Conflicting messages have come from various sources within the government concerning its involvement, with sources from the Ministry of Intelligence confirming that is behind the platforms, while the Ministry of ICT has attempted to distance itself (see Table 1). Meanwhile, instances of censorship on both Telegram Talaee and Hotgram point toward association with the government: Iranian users who follow the Persian media outlet Radio Farda reported that this channel was censored only when they accessed it through Talaee or Hotgram (see Image 6).

The danger, however, does not lie in Iranians being cut off entirely from foreign applications. Under contemporary censorship theory, which tries to reason existing patterns within authoritarian, or "controlled" communications systems, Iran is maintaining its "porous censorship" model, 65 in that Iranians still access Telegram through VPNs. Despite talks to block VPNs, they still remain accessible 66. Indeed, the costs and incentives to use government promoted platforms are there, through "information friction" such as when it is cheaper to use a government platform over a foreign one, or when accessing blocked platforms requires overcoming obstacles to install and activate a VPN.

The general trend of national platforms is that there are no rigid privacy protocols to protect users, leaving Iranians vulnerable to how the government will use their data. The dangers of what data these applications can be collecting is very real, as there is a significant precedent for this kind of behaviour from Iranian authorities, in a context where data from communications has previously been used to oppress or persecute users. Examples range from the collection of information on whether users had banned applications on their phones as seen through the application Snapp⁶⁸ to more

serious examples from 2009, when intelligence authorities used mobile phone tracking technology to locate and arrest Isa Saharkhiz, a journalist covering the post-election protests of 2009.⁶⁹



Image 6:

An Iranian user reports to Radio Farda that they see this image on their Telegram channel through Hotgram. The Persian reads "This channel was blocked due to the publication of illegal content."



Image 7:

Another Iranian user reports to Radio Farda that they see this block on their Telegram channel through Telegram Talaee. The Persian reads "access to this active channel is not possible."

⁶⁴ Because Telegram's API is open, third party developers have used the API to access and use the platform with new features. The people behind Telegram Talaee and Hotgram forked the API to allow users in Iran to bypass the filter in the country.

⁶⁵ Censored: Distraction and Diversion Inside China's Great Firewall, Margaret Roberts, Princeton University Press. 2018

⁶⁶ Discussing the rise of malicious VPNs, and those from "enemy countries" after the filtering of Telegram, Minister of Jahromi suggested they would deliberate on blocking access to all VPNs inside the country. "Iran starts blocking Internet circumvention tools," 16 May 2018. https://bit.ly/2L9ic72

⁶⁷ Fear, Friction, and Flooding: Methods of Online Information Control, Margaret Roberts, Doctoral dissertation, Harvard University, 2014 http://nrs.harvard.edu/urn-3:HUL.InstRepos:12274299

^{68 &}quot;Iran's Snapp Taxi App Violates User Privacy Rights by Spying on Users' Phone Data," Centre for Human Rights (CHRI), 22 November 2017 https://bit.ly/2pwyj52

^{69&}quot;Jailed Iranian journalist takes Nokia-Siemens to court," Radio Free Europe 17 August 2010 https://bit.ly/2Nez9g6

New laws on censorship, data and privacy

Equal access to the Internet

It is well-known that government bodies, such as Ministries, institutions such as the Islamic Republic of Iran Broadcasting (IRIB), and international institutions such as the United Nations buildings in Tehran receive unfiltered connections to the Internet. This widens inequality that exists within the context of Iran's use and distribution of Internet laws and policies.⁷⁰

On 29 October 2017, in a speech at the 23rd Press Fair in Tehran, the Minister of ICT explained that the CCDOC intended to allow uncensored Internet access for news agencies and journalists. He explained the Ministry of Culture and Islamic Guidance, which oversees the regulations of Iran's press and media, will be implementing the policy. However, he promised that the Ministry of ICT will provide the logistical infrastructure to enable such access.⁷¹

The government has yet to announce the criteria for such an undertaking. The Minister of ICT, Jahromi, has indicated that any opening up of information is at the discretion of the Ministry of Culture and Islamic Guidance, who follow similar procedures for press and publishing licenses. The CCDOC, which, as previously mentioned, is predominantly occupied by members of the Rouhani administration, approved this ambiguous process of granting licenses for a free Internet to journalists. As of 4 April 2018, 100 journalists were registered for filter-free Internet access. The US-based NGO, Centre for Human Rights in Iran (CHRI), has noted concern that such a license to journalists is meant to incentivise positive reporting towards the government instead of enabling access opportunities.

Iran's GDPR: The Preservation and Protection of Personal Data Bill

Upon the entry into force of the European Union's General Data Protection Regulation (GDPR) on 25 May 2018, the Minister of ICT Azari Jahromi welcomed the regulation and promised to implement something similar. However, the Minister did not pay much heed to the portions of the GDPR that protect freedom of expression online, specifically to protect journalism, academia, the arts, and literature. On 28 July 2018, the Minister announced Iran's version of the GDPR, titled the Preservation and Protection of Personal Data Bill.

While an in-depth legal analysis of the Bill is needed, an initial response can be developed at this point. Despite forgoing any specific section on freedom of expression, the Bill indicates that "sensitive data" of Iranian citizens should be protected, including their opinions, religious, and ethnic affiliations (Article 1).⁷⁸ This is a welcome development, especially in a country known for violating freedom of religion, rights of minorities, and freedom of opinion. It is unclear how these protections will be implemented in cases of political prisoners, where national security laws override such rights.⁷⁹

Article 38 further exacerbates the social media policies released by the Supreme Council of Cyberspace in 2017, which aim to nationalise the Iranian Internet, especially in efforts to move all data centres containing the information of Iranian citizens to Iran.⁸⁰

⁷⁰While VPN use is often seen as ubiquitous, it is often associated with the well-educated middle and upper classes. Some socioeconomic groups are known not to have the resources to overcome censorship and thus are more likely to use government mandated platforms and resources.

⁷¹ Minister Jahromi's speech at the Press Fair on 29 October 2017. Available from: https://www.mehrnews.com/news/4128129. Accessed 18 November 2017.

^{72 &}quot;Which journalists can access an Internet without filtering?" YJC News 10 June 2018 https://bit.ly/2xih4lS

^{73 &}quot;Journalists can access 'Internet without filter," Mehr News, 4 April 2018 https://bit.ly/2QxAnX1

^{74&}quot;Iran's Telecommunications Minister Says He's Looking Into Lifting the State Ban on Twitter," CHRI," 12 November 2017 https://www.iranhumanrights.org/2017/11/iran-telecommunications-minister-says-hes-looking-into-lifting-the-state-ban-on-twitter/

⁷⁵Azari Jahromi's Tweet welcoming the EU GDPR, 25 May 2018: https://bit.ly/2PTjvc7

⁷⁶ Article 85 of the GDPR: Processing of freedom of expression and information https://bit.ly/2MLN3Gz

^{77&}quot;The Preservation and Protection of Personal Data Bill," via the Ministry of ICT website, 28 July 2018 https://bit.

⁷⁸ Ibid.

⁷⁹ See previous privacy violations in the cases of the dual nationals Nazanin Zaghari-Ratcliff and Kavous Seyed Emami. https://bit.ly/2pfQV9C

⁸⁰ See Appendix 1 of Tightening the Net: A New Cabinet and New Attempts at Control, 18 September 2017 https://bit.ly/2QlphOE

Article 38 of the new Bill states:

Regarding the processing of personal data of Iranian nationals, the following conditions are required:

- a) Data can be only stored in data centres located in the territory of the Islamic Republic of Iran or foreign data centers approved by competent authorities
- b) All hardware and software processors are licensed to the appropriate authority
- c) Relocate data onto secure networks.
- d) The competence of controllers and processors approved by the relevant authorities
- e) Transboundary processing will be allowed on the basis of prescribed criteria

This Article serves efforts to aggressively transfer Iranian users from foreign platforms onto national ones, which are often a security risk. Mention of "secure" networks is never clarified and it is unclear if user data is "secure" from government surveillance. As outlined in Table 1, many of the government promoted platforms store user data in plaintext on local servers because they fail to provide end-to-end encryption.

Banking and Internet policy: Bitcoin and Blockchain censorship

Telegram's ubiquity in Iran long posed a threat to the government's control over Iran's communications and information. With the announcement of Telegram's cryptocurrency authorities immediately saw it as a further disruption, this time for Iran's banking sector. During the early days of the Telegram ban, news started to circulate that Telegram would offer its own cryptocurrency, known as Telegram Open Network (TON), through its chat functionality.⁸¹ In Iran, this currency could potentially find a user base of over 40 million people who had integrated the platform into their daily lives. Some were using Telegram for financial matters already.⁸² As further momentum was generated over Telegram's initial coin offering (ICO), or investment rounds, in March, discussions about Telegram's

censorship also started to get heated amongst authorities in Iran (see *Timeline* for more information). While false correlation should not be inferred from Telegram's cryptocurrency efforts and Iran's efforts at information control, the secretary of Iran's Supreme Council of Cyberspace confirmed the relationship between the two events when on 3 April 2018 he declared Telegram's cryptocurrency would "ruin Iran's economy," and would be "blocked at any moment."

The government's sensitivity towards cryptocurrencies surfaced with the continued deterioration of the economy and currency crisis. The power and promise of cryptocurrency were demonstrable at the onset of this year's winter protests as the economic crisis raged on. During the week of 23 December 2017, when the protests began, there was a 1000% increase in bitcoin trading in the country.84 By May 2018, this drastic depletion of financial transactions from the state controlled national currency was met with censorship of all cryptocurrency exchanges. On 8 May 2018, the Iranian economy began a further decline following the announcement of the withdrawal of the United States from the nuclear deal, and the reintroduction of sanctions. 85 News soon emerged that the government would counter the crisis and the high rates of inflation through the development of a national cryptocurrency. On 27 August 2018, the Central Bank of Iran confirmed they are developing a Rial-backed national cryptocurrency. The Supreme Council of Cyberspace confirmed this decision by announcing that they would likely lift the ban on cryptocurrencies, such as Bitcoin, by the end of September 2018.86

The national cryptocurrency has already been likened to Venezuela's project Petro, which was also used to counter massive inflation in the country, though it has been largely seen as a failure.⁸⁷ It seems government policies to allow access to cryptocurrencies are very much tied to the control they can exert over the space, which might serve to undermine their stated project of aiding the economy, and ultimately merely keep track of the nation's monetary traffic rather than strengthen it.

^{81 &}quot;Telegram plans multi-billion dollar ICO for chat cryptocurrency," TechCrunch, 8 January 2018 https://tcrn.ch/2FgjXfF

^{82 &}quot;Iran Lives on This App," New York Times, 15 April 2018 https://nyti.ms/2H1ESYF [paywall]

^{83 &}quot;The secretary of Supreme Council of Cyberspace: cyberspace must be nationalized by the year 1398/Telegram is a bandit," Arz Digital, 3 April 2018, https://bit.ly/2H8wUd5

^{84&}quot;Bitcoin Adoption Grows Amidst Protests Despite Online Censorship of Networks," <u>Bitcoin.com</u>, 5 January 2018 https://bit.ly/2CwsZ6t

^{85&}quot;Trump Announces Withdrawal from the Iran Deal," Radio Free Europe, 8 May 2018 https://bit.ly/2PRAv2l

⁸⁶"Iran is Preparing National Rial-Backed Cryptocurrency to Evade US Sanctions," BTC News, 29 August 2018 https://bit.ly/2N9wLM1

^{87 &}quot;Inside the bluster and lies of Petro, Venezuela's cryptocurrency scam," Wire, 22 August 2018 https://bit.ly/2xyYbRy

ARTICLE 19 recommendations

To the Supreme Council of Cyberspace:

- Delete all data held on Telegram channel registrants from 2016. Refrain from prosecuting Telegram channel administrators for not deleting their channels after the blocking of the platform;
- Allow cryptocurrency exchange and lift the ban on cryptocurrencies, regardless of the launch or adoption of a national cryptocurrency;
- Invalidate the social media guidelines of 2017 that aim to nationalise the Iranian Internet and which promote the aggressive drive towards national platforms.

To the judiciary:

- Lift the ban on Telegram and stop the prosecution of expression and use of the platform;
- Refrain from unilateral orders to censor messaging and social media platforms; allow for arbitration over filtering by the multi-agency body of the CCDOC;

To the Rouhani administration:

- Be transparent about how journalists are granted access to an unfiltered Internet;
- Reconsider policies where only certain institutions and organisations are granted access to an open Internet which impact negatively on equal access to the Internet;
- Withdraw the problematic elements of the "Preservation and Protection of Personal Data Bill" including Article 38;

- The Ministry of ICT should seek advice from the European Union on the drafting of their Personal Data Protection regulations, especially in the realm of freedom of expression, as the Ministry has indicated it was inspired by the work of the EU GDPR;
- Refrain from making account ownership on national messaging applications such as Soroush mandatory within government offices and ministries; repeal regulations that make Telegram use illegal within government offices and educational institutions; refrain from making messaging platforms such as Bale necessary for the everyday lives of Iranians;
- Be transparent about the connections of government or any state entity to all applications the government or state promote; refrain from making false claims that applications such as Soroush protect the privacy of users;
- Continue open opposition to the Telegram ban and attempt to overturn it based on provisions in both the Penal Code, the Criminal Procedures Regulations and the Constitution.

To Telegram:

- Block forks of Telegram such as Telegram Talaee and Hotgram which flagrantly violate privacy and online freedoms;
- Work to provide secure and trusted versions of Telegram that can bypass Iranian firewalls;
- Enable end-to-end encryption by default.

To the developers of national platforms:

- Soroush directors must be held accountable for the violation of identity and rights seen during the period of fake accounts registered to real people and their phone numbers, and must ensure this will no longer occur;
- Soroush administrators must publish clear Terms of Services, with transparent documentation of their privacy features, how data is stored in their servers, and who can access this data;
- The owners of Wispi should publish clear Terms of Services, with transparent documentation of their privacy features, how data is stored in their servers, where their servers are located, and who can access this data;
- The owners of Wispi should transparently document their affiliations with and investments from the Iranian government;
- The administrators of all platforms must commit to enabling end-to-end encryption for messaging between users, providing open source documentation and auditing of their security protocols. They must stop storing data in plaintext on their servers;
- Apply appropriate Terms of Services and transparency processes, including for the national applications Bale; Bisphone; Eitaa; iGap; and Gap messenger.

To Iranian users:

- Use trusted VPNs, that you can research and gather reviews for online;
- Be vary of forks of Telegram. Remember it is always a better option to connect to a trusted VPN and access Telegram directly rather than via any third-party application;
- If you need to connect to local messengers, such as Sorush and Bale for work, education, or day-to-day administrative work, try to acquire an affiliated sim card, and/or set it up on a separate mobile device without any of your information;
- If you find you have no other choice but to set up a
 national platform on your device, try to restrict the
 application from as much information as possible. For
 example, in iPhones, you can restrict the application from
 accessing your contact list, photos and location in your
 privacy settings;
- Do not use national platforms for sharing any sensitive information.

DEFENDING FREEDOM OF EXPRESSION AND INFORMATION

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