MAY 2016

Filterwatch

Iranian Internet Infrastructure and Policy Report

A Small Media monthly report bringing you all the latest news on internet policy and online censorship direct from Iran.

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Introduction

Since the 1979 Revolution, the US has imposed a variety of punitive sanctions on Iran. However, the economic pressure on the Islamic Republic increased significantly during Ahmadinejad's tenure, due to more wide-ranging UN sanctions being imposed in 2006, followed by several rounds of what have been termed “increasingly comprehensive” EU sanctions from 2010. While the recent nuclear agreement removed many of these sanctions, foreign banks and other companies have been reluctant to enter the Iranian market due to lingering fears of running afoul of the US sanctions against Iran that remain in place.

In this month’s report, we take a look at the long-term impact of these tech sanctions on Iranian internet users and the growth of the tech sector. In particular, we’ll examine how sanctions have affected Iranians’ access to online platforms, services, and websites, and show how the measures may be undermining the privacy and digital security of Iranian citizens.

Also in May, the Iranian government made a number of further announcements relating to the regulation of messaging apps, including some troubling statements hinting at ongoing collaboration between the country’s ICT Ministry and the popular messaging app Telegram, and a new law mandating the relocation of messaging apps’ servers to Iran.
Executive Summary

Key Findings

- Tech sanctions have proven to be something of a double-edged sword for Iran’s tech sector. Although the sanctions have allowed Iranian tech companies to develop free from competition with global tech giants, they have also placed a number of significant barriers in the way of developers.

- The vast majority of Iranians we surveyed report that tech sanctions have had a series of impacts on their daily lives, ranging from accessing online services, through to enrolling in online courses and updating their software.

- Tech sanctions undermine the digital security of Iranian citizens by denying them access to the latest versions of antivirus software and other security-focused programmes.

- The impact of diaspora-based digital initiatives is substantially weakened as a result of tech companies’ restrictions on targeted geographical advertising.
Key Developments

**MAY 2**
Seyed Abolhasan Firouzabadi, Secretary of the Supreme Council of Cyberspace (SCC) said that Iran's policies relating to copyrighted content are lacking compared to many other countries. He stated that if Iran is hoping to develop into a knowledge-based economy, then it needs to improve its copyright system as a matter of priority. (Source)

**MAY 4**
Barari said that the economic contribution of Iranian provinces (excluding Tehran) to Iran's ICT sector is around 10%, although he hopes that this will increase in the near future. (Source)

**MAY 11**
Iran's parliament passed a law banning the advertisement of illegal and 'harmful' goods and services on social media. (Source)

**MAY 15**
ICT Minister Mahmoud Vaezi stated that Telegram has been working closely with the ICT Ministry to block all groups flagged for objectionable content by authorities. (Source)

**MAY 18**
Vaezi said he would prefer to use Russian-made software such as Telegram over US- or Israeli-made apps like Viber and WhatsApp. (Source)

**MAY 28**
The 29th meeting of the SCC was held, with President Hassan Rouhani in attendance. At the meeting, the SCC voted in favour of a measure requiring all messaging apps to move their servers to Iran within a year in order to continue operating. (Source)
The Ongoing Impact of Tech Sanctions

Since the 1979 Revolution, the US has imposed various sanctions on Iran. However, the economic pressure on the Islamic Republic increased significantly during Ahmadinejad’s tenure, due to more wide ranging UN sanctions imposed in 2006, followed by several rounds of increasingly comprehensive EU sanctions beginning in 2010.

While the recent nuclear agreement removed many of these sanctions, foreign banks and other companies have been reluctant to enter the Iranian market due to lingering fears of running afoul of the US sanctions against Iran that remain in place. This report looks briefly at the impact of these ongoing tech sanctions on Iranian users, and finds that they often serve to undermine freedom of expression, and inhibit the development of the Iranian tech sector.

**BACKGROUND**

In addition to these wide-ranging measures, additional sanctions have been implemented to target ICT-related trade directly. In 1997, President Clinton signed an executive order prohibiting American individuals or companies from selling “any goods, technology, or services to Iran.” This directive, notes Declan McCullah, “led to unintended consequences such as Utah-based Bluehost giving the boot to Iranian bloggers and opensource software site SourceForge.net denying access to Iranians.”

Over the past decade, foreign companies have imposed numerous restrictions on access for Iranians, likely due to the fear of violating a nebulous sanctions regime. In 2007, Yahoo and Microsoft removed Iran from their country lists, preventing Iranians from registering for Yahoo Mail and Outlook. More recently, Iranians have reported being unable to download apps from Apple’s App Store.
Hopes of liberalisation came in 2013 when the US lifted key high-tech sanctions against Iran, which resulted in Google Play finally becoming accessible in Iran (though only for free apps). But issues did not end there. In 2014, online education provider Coursera began blocking access to its online courses for students in Iran, Sudan, and Cuba due to confusion about whether or not they violated the sanctions against those countries. A discussion on a support forum on Coursera’s website suggests that Iranians are still struggling to access course materials and certificates in 2016.

So where does that leave us today? Which online services are available to Iranians and which ones are blocked? And how does lingering ambiguity about export controls affect Iranians at home and in the diaspora?

In order to attempt to engage with these questions, we sought input from three different sources. First, we conducted a survey of individuals living inside Iran, asking whether and how tech sanctions have impacted them in their daily life. We then asked two developers in Iran for their perspective, to get a sense of how these sanctions have impacted the tech industry in Iran. These individuals requested anonymity due to the sensitivity of the topic. Finally, we asked two diaspora-based Iranian researchers for their perspectives—one foreign policy analyst, and one member of a civil society organisation—in order to see what ramifications these sanctions have outside of Iran.

**METHODOLOGY**

Our approach to this research is meant to yield results that are indicative (rather than representative) of the impact tech sanctions have on Iranian users. The testimony and survey results discussed in this report are intended to offer a snapshot of a relatively small number of Iranians’ attitudes, concerns, and reactions to tech sanctions, and should not be taken to represent the views of Iranians more generally.

**SURVEY**

We sent out a short survey via a circumvention tools mailing list with over 200,000 subscribers asking respondents whether and in what ways they had been impacted by tech sanctions, receiving 403 responses. This survey is obviously not representative of Iranian internet users as a whole, but we think it provides a slightly broader view of the impact of tech sanctions than can be gleaned from the testimony of a few tech professionals. The results are presented and discussed below.
TOTAL RESPONSES: 433 INDIVIDUALS

**Question One:** Have tech sanctions affected you in your day-to-day life?

- **Yes** 83.1%
- **Not sure** 7.9%
- **No** 9%
**TOTAL RESPONSES: 433 INDIVIDUALS**

**Question Two:** In what ways have tech sanctions against Iran affected you [mark all that apply]?

- I have been blocked from accessing online services due to my country location (Iran). **78.3%**
- I have had trouble advertising or selling services on online platforms. **23.3%**
- I have been unable to access online educational platforms such as Coursera or Edx. **28.6%**
- I have had trouble purchasing web hosting services for a .ir website. **18.7%**
- I have been unable to use online payment services due to my country location. **67.6%**
- Other [please specify]: **12.8%**

Some responses:
- I cannot use many computer games and software because I live in Iran.
- I cannot download the latest versions of drivers for my OS.

1 If respondents answered “no” or “not sure” to question one, they were instructed to leave question two blank.
DISCUSSION
A clear majority of respondents reported that they were affected by tech sanctions. Restrictions on online services appear to be the most common effect, impacting three quarters of respondents. This was followed closely by restrictions on online payment platforms, which affected around 67% of respondents.

Around 23% of respondents reported problems with advertising services online or accessing educational platforms, while just under 19% of respondents reported issues purchasing a .ir domain name.

IMPACT ON THE INDUSTRY
While sanctions have had some positive implications for Iran’s tech sector - such as shielding Iranian companies from competition with global giants - they have also wrought havoc on the domestic ICT industry. Mahmoud Pargoo offers a tidy summary of the negative impacts of sanctions on Iran’s tech scene:

In relation to the supply chain, they made it difficult for manufacturers to purchase necessary components. Hence, manufacturers had to pay higher prices, with longer production lead times — which ultimately resulted in higher production costs. On the sales end, the sanctions caused a shrinking of exports and lack of interest in long-term contracts on the part of foreign companies. Furthermore, the high-tech sector was stripped of highly talented technicians — a trend that continues, notwithstanding the mild improvements during the past two years.

So how do things stand today? Is any of this improving as a result of the nuclear agreement? To find out, we asked two Iranians working in the software development industry for their take on how sanctions affect the tech sector.
Testimonial #1
An Iranian web developer

The main goal of the international sanctions was to target the government but it has had an impact on Iranians as well. For instance, various tech companies such as Google, Adobe, Bitbucket, and Nvidia have blocked Iranian IPs in order to prevent Iranians from using their services.

**Hardware:** With regard to hardware, some companies such as Nvidia and Advanced Micro Devices (AMD) have blocked Iranian IPs, which has prevented Iranians from downloading the latest version of drivers for their hardware. As a consequence, Iranians have been forced to use circumvention tools or VPNs to change their IPs in order to keep their software updated, or otherwise just settle for using outdated versions.

**Software:** Adobe and Google have both caused trouble for Iranians by obstructing their access to software, especially for ordinary users and developers. Because of tech sanctions, it has become nearly impossible for Iranians to use the latest technology such as Google Analytics, Google Firebase, and Android’s documents and repositories. For instance, using Google Analytics’ Software Development Kit (SDK) and Google Code in an Android apps is meaningless, because when we go to check the results on Google Analytics we can only see a 403 error.

The error message displayed when Iranians try to visit developers.google.com

403. That’s an error.

Your client does not have permission to get URL
/identity/sign-in/android/backend-auth from this server.
That’s all we know.
Also, some websites such as Adobe (Flash), and Oracle (MySQL)—which do not require any financial transactions—also block access to Iranians.

In the end, the tech sanctions imposed against Iranians have been more useful for the government, because they have kept Iranians away from the latest technology, and have prevented them from updating their devices. Thus, Iranian citizens are placed at a greater risk of hacks and surveillance, even putting aside the issues of internet censorship and slow connections.

ANALYSIS

It is interesting to note that this user reported issues with some of Google's products, given that Google Play became available in Iran in 2013. There are a couple of reasons for this; in addition to Google's server-side blocking (which poses a number of barriers to app development and tech support), users are unable to submit apps to Google Play without entering card details. This means that Iranians are dependent upon having someone based outside of Iran who can submit their apps using valid card details.

Moreover, the limitations on downloading updated drivers suggests that some Iranians will have to rely on outdated software, potentially exposing them to security vulnerabilities.
Testimonial #2
Director of mobile app development at an Iranian tech company

Iranians have suffered from Internet censorship by the government and also the “Reverse Censorship” by the Western companies due to international sanctions. Tech companies have blocked access to the majority of Google’s services, Oracle (especially downloads/uploads of Java), Adobe, updates for anti-virus software such as Symantec, McAfee, AVG, Avast, and ESET, along with Nvidia drivers, cPanel, some Microsoft services, and many more. This situation has forced users to download software updates from unofficial websites, which increases security risks.

These conditions became more complex and challenging for web and app developers because a range of fundamental app and web development services are blocked because of these sanctions. As a result, Iranian developers must use circumvention tools or VPNs to bypass these embargos. This might not seem like a big deal, but it creates serious issues because a developer requires access to a high-speed internet connection. The usual speed is 10 Mbps, which drops sharply to around 1 Mbps after connecting via circumvention tools, making it difficult for the developer to do their job properly.

It might be funny for the rest of the world but one of the main problems for big tech companies in Iran—with tens of millions of dollars worth of contracts—is finding good circumvention tools. Circumvention tools are a permanent fixture in their weekly meetings, even among company directors.

As a developer, these kinds of sanctions have forced me to give up some of my activities, which has caused me to lose part of my income. For example, the creative community website Envato made the decision to expand its operations from Australia to the US in 2015. As a result, this website has closed all accounts of Iranian freelance developers on all sub-services such as Themeforest and Codecanyon due to US sanctions. Many Iranian developers have lost their income as a result.

Another example is the free software Android Studio. Despite this, developers cannot download content directly from Google—they have to download it from an Iranian clone website such as P30download. But this isn't the end of the story, because sometimes we need access to a series of libraries which the software tries to download automatically, but which are blocked as a result of sanctions. Thus, the developers must download each library separately, which takes a lot of time. As a result, development time can be increased from an hour to a day or more. We also need to factor in the
availability of circumvention tools and VPNs in our development timelines as well. Moreover, Android documentation, Google Console, and even Google Code Jam—which contains Iran in its country list—are not made available for Iranian IPs, and users must use circumvention tools in order to get access.

Also, Iranians cannot use .ir domains with some hosting companies, such as Hostmonster, Bluehost and Hostgator. Hostmonster removed 5-6 .ir domains from my panel without any notifications.

In conclusion, these tech sanctions have targeted private and freelance developers/companies because governmental organisations have more resources to circumvent them, for example by using special VPNs which use specific ports that remain accessible even when most VPN traffic is throttled. Also, it causes Iranians to believe that Western companies are opposed to them, restricting their access to services and platforms.

ANALYSIS
This contribution illustrates the issues tech sanctions can impose on the software development industry, including: restrictions on freelance work with American websites, difficulties acquiring development tools, and challenges related to the accessibility of security software. In addition to echoing many of the concerns raised in testimonial #1, this contributor also highlights the challenges of registering .ir domain names, as well as the speed issues imposed by the constant requirement to use VPNs to acquire software updates and access to other forbidden services.
**Testimonial #3**
Political analyst Nima Rashedan

*The tech sector in Iran was born out of tech sanctions and the lack of copyrights in the country. Most software on the Iranian market is pirated, and looking at the high level of mobile and internet penetration, it is not clear why people talk about the tech sector while other industries face bankruptcy as a result of the Iranian government's policies. The tech sector is in a good place compared with other industries.*

*Also, the IRGC owns a big chunk of the tech sector in Iran* [including a controlling stake in the Telecommunications Company of Iran—a major ISP and cellular operator]. *The IRGC is on the terrorist list due to human rights violations and its activities in other countries in the region (including Syria). In the end, sanctions against the IRGC should be intensified in order to support and protect Iranian citizens. The government and the Iranian people must find a way to push the IRGC out of the market. Advanced technology in the hands of the IRGC is dangerous, and Iranians will be the first to suffer.*

**ANALYSIS**
This contribution underlines an important point: the effects of tech sanctions on Iran's IT sector are not exclusively negative. Indeed, one major benefit of the tech sanctions for Iranian tech companies is that they are shielded from having to compete with global giants like Google and Amazon, which has given the country's nascent startup scene ample space to develop.

Rashedan also notes that the IRGC's presence in the tech sector may serve to undermine human rights in Iran, and suggests that targeted sanctions should be intensified in order to drive the organisation out of the tech market. Although the IRGC's role in the sector is worth noting, we would be somewhat more skeptical of the ability of additional tech sanctions to feasibly restrict the group's online activities. Indeed, as previous contributors have noted, an intensification of tech sanctions is likely to have only negative impacts upon freedom of expression and digital security for Iranian developers and tech consumers.

Indeed, we would contend that tech sanctions have actually strengthened the position of state-backed and IRGC-affiliated initiatives by driving so many international competitors out of the market, and allowing state-linked companies to corner the market.
TECH SANCTIONS AND THE IRANIAN DIASPORA
To get a sense of how tech sanctions impact Iranians living and working outside Iran, we spoke to Amir Rashidi, Internet Access Researcher at the International Campaign for Human Rights in Iran:

In recent years, there has been an increase in the Iranian users’ utilization of social networks with the aim of creating political and human rights-focused campaigns. Over the past two years, we witnessed users’ efforts to create ‘Twitter storms’ to this end. As an example, there was a Twitter storm to protest the Iranian government’s ban on stadium access for women. Unfortunately, because Twitter does not support geographic trends inside Iran, many of these activities are either never seen, or they are not as effective as the civil and human rights activists hope. Additionally, sanctions on technology also indirectly have an impact on Iranian users’ freedom of speech.

Because some of the tools the sanctions have banned for Iranian users are tools that would ensure their security, users feel unsafe carrying out their activities. For example, I received reports in some cases from users saying that they were barred from accessing applications such as Google Authenticator or Avast antivirus software. This leads to a loss of security and a fear of being identified which would indirectly impact the users’ freedom of expression. In one example, I was contacted by a reporter whose Google account had been hacked. After helping him to get his account back, I suggested he utilize two-stage identification, but unfortunately Google had blocked downloads of this application in Iran. As sending and receiving codes through text messages lacks security, I was able to install the application for him after a great deal of difficulty, just so he could work more securely.

Sanctions in the field of technology—particularly on financial channels used by these services—must be lifted. Although these sanctions have practically been lifted by the Iranian General License D-1, many IT companies have refused to implement it. Even access to open source services in many cases remains banned for Iranian users.

ANALYSIS
A few points are worth noting here. First, Rashidi notes the often overlooked point that Twitter’s lack of support for geographic trends inside Iran limit the advocacy efforts of those using social media as a campaigning platform. Second, the blocks on the Google Authenticator app and Avast anti-virus software highlight the security risks that such sanctions can impose—however unintentionally—on Iranian internet users.
TWITTER REACTIONS TO #TECHSANCTIONS

In recent months, Iranian Twitter users have created a hashtag campaign to vent their grievances with implications of tech sanctions against Iranians: #فناتحریم (#TechSanctions). A number of tweets on this topic are listed below.

https://twitter.com/bkhezry/status/732437333098831872
Are they kidding us? I have checked with AsiaTech Internet! It's not working again!
#TechSanctions
You try, too!

شوخی شون گرفته؟ با اینترنت آسیا تک چک کردم! باز بسته شده که #فناتحریم
شما هم یه چک بکنید
Android disabled my Google account when it [found] itself in Iran. Google complains [about] Chinese censorship, but [it bans] countries too!

https://twitter.com/andreysitnik/status/724953733587722241

Android disabled my Google account when it find itself in Iran. Google complains to Chinese censorship, but ban countries too.

RETWEETS  LIKES
43          102

2:30 PM - 26 Apr 2016

I went to register for a webinar, but it seems their website is Google-based, and so because of sanctions I end up at this familiar page.

#TechSanctions

https://twitter.com/ghanemzadeh/status/721187127682162688

اومدم توى یه ویبینار ثبتنام کنم، گویا سایتش روی گوگل بود و بخاطر تحریم این صفحه‌ای آشنای اومد:

#فناتحریم

5:03 AM - 16 Apr 2016
https://twitter.com/mahdi/status/72523233448601600
I’ll most likely switch from @Bitbucket to @GitHub as @Bitbucket is insisting on blocking requests from Iranian IPs. #fail

A group of Iranian Twitter users have also banded together to create this comprehensive reference document showing the online services currently suffering from some form of sanctions-related service restrictions.
ICLAB CENSORSHIP MEASUREMENT

In this report, we've heard from people who are impacted by tech sanctions recount their experiences. We'd now like to test how these sanctions are being implemented. With help from our friends at ICLab, we've conducted an experiment testing whether a series of Western internet services (such as Google Analytics or Netflix) are accessible in Iran, using 4 different vantage points in the country.

In cases where the websites in question are not accessible, we've sought to determine whether the blocking was being implemented on the server side (i.e. by the companies themselves, likely due to sanctions) or by the Iranian authorities.

The table below illustrates the accessibility of each URL we tested, and if applicable, whether the blocking was implemented by the tech companies’ servers (“serverside”), or by the Iranian authorities (“local”).

<table>
<thead>
<tr>
<th>URL</th>
<th>VPS-1</th>
<th>VPS-2</th>
<th>VPS-3</th>
<th>VPS-4</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="https://developers.google.com/">https://developers.google.com/</a></td>
<td>Serverside</td>
<td>Serverside</td>
<td>Serverside</td>
<td>Serverside</td>
</tr>
<tr>
<td><a href="https://get.adobe.com/flashplayer/">https://get.adobe.com/flashplayer/</a></td>
<td>Local (RST)</td>
<td>OK</td>
<td>OK</td>
<td>Local (RST)</td>
</tr>
<tr>
<td><a href="https://analytics.google.com/">https://analytics.google.com/</a></td>
<td>Serverside</td>
<td>Serverside</td>
<td>Serverside</td>
<td>Serverside</td>
</tr>
<tr>
<td><a href="https://code.google.com/codejam">https://code.google.com/codejam</a></td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td><a href="https://github.com/">https://github.com/</a></td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td><a href="https://azure.microsoft.com">https://azure.microsoft.com</a></td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td><a href="https://aws.amazon.com/ec2/">https://aws.amazon.com/ec2/</a></td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td><a href="https://www.dropbox.com/">https://www.dropbox.com/</a></td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td><a href="https://www.netflix.com/">https://www.netflix.com/</a></td>
<td>OK</td>
<td>Local (DNS)</td>
<td>Local (RST)</td>
<td>OK</td>
</tr>
<tr>
<td><a href="https://www.bitbucket.org">https://www.bitbucket.org</a></td>
<td>Local (RST)</td>
<td>Local (RST)</td>
<td>Local (RST)</td>
<td>Local (RST)</td>
</tr>
</tbody>
</table>

Notes:

**RST** indicates that a website was blocked by the Iranian authorities via packet injection.

**DNS** indicates that a website was blocked by the Iranian authorities via DNS tampering.

Refer to last month’s report for detailed descriptions of each of these methods.
CONCLUSION

While this report only offers a brief snapshot of the impact of sanctions, we think a few interesting results stand out. As this report was limited in scope and not intended to be representative, findings should be viewed as tentative indications rather than definitive conclusions.

It bears repeating that tech sanctions have produced benefits for Iran’s tech industry, notably by shielding domestic tech companies from competition with global industry giants. In addition, the easing of sanctions following the implementation of the Iran deal has raised hopes of a more liberal climate for the accessibility of foreign internet services.

Yet it appears that despite the formal easing of sanctions, a number of restrictions still circumscribe the online freedoms of Iranian users. As we have seen, developers inside the country often struggle to access popular platforms like Google Analytics, whereas Iranians in the diaspora are prevented from using Facebook and Twitter ads to target users inside the country.

Such restrictions, it should be noted, constitute a series of de facto information controls that are layered on top of Iran’s pervasive censorship system. Put another way, both the Iranian government and foreign tech companies restrict Iranians’ access to information; the former as a matter of course and the latter due to attempts to comply with sanctions regulations.

While many of the issues discussed in this report are likely not intended consequences of sanctions, they nonetheless should begin to factor into the considerations of policy makers dealing with sanctions policy. In order to support the free flow of information in Iran, it is imperative that rules are clarified so that tech companies know where they stand vis-a-vis sanctions law, and that tech companies are willing to fight for their products and services to be accessible in Iran. As the world enters the implementation phase of the Iranian nuclear agreement, it will be interesting to see whether Iranians’ access to non-Iranian internet services improves.
2

Content Filtering and Blocked Sites

• **May 4:** Abadeh’s police chief Esmaiel Zeratian announced that the police arrested nine users responsible for creating a WhatsApp group called 18+, and sharing pornographic content to other users. He noted that their group used to send pornographic content on a daily basis, and that it had 200 members in total. ([Source](#))

• **May 11:** According to IT Salam, the Iranian PayPal analogue ZarinPal has been blocked in Iran, and is not longer available for users. ([Source](#))

• **May 17:** According to various websites, Aftab News has been blocked and is no longer available for users inside Iran. ([Source](#))
3

Statements from Ministries and Politicians

- **May 1:** A number of appointments were announced by the new board of the Telecommunication Company of Iran (TCI):
  - Chairman — Barat Ghanbari (notably, he also currently serves as Deputy ICT Minister)
  - Vice Chairman — Mozafar Pour Ranjbar
  - CEO — Rasoul Saraiean

  A ceremony was held in the presence of ICT Minister Mahmoud Vaezi, and other officials from the TCI and ICT Ministry. At the same time, Vaezi mentioned that the TCI tariff is too low, and announced that the ICT Ministry is considering an increase in the price of various tariffs. In the past, Vaezi has repeatedly denied that tariffs would be increased, and it is unclear what has triggered the change in government policy. The government owns 40% of shares in the TCI. ([Source](#))

- **May 1:** The Director of Iran’s Passive Defence Organisation (IPDO), Gholamreza Jalali said that the electronic payment company Shaparak has been using US-built software without permission. Jalali stated that the IPDO will follow the matter closely, and take action as soon as possible. Jalali mentioned that payments and transactions is a core service in the Iranian economy, and asked that all Iranian banks and financial companies refrain from employing Western-built software prior to testing and approval from the IPDO. ([Source](#))
• **May 1:** Kambiz Ismaili, Chief of Kerman Province's Cyber Police (FATA) said that the police is not opposed to the use of social media. He mentioned that most cybercrime on social media takes place via Telegram and Instagram, adding that Telegram has 14 million users in Iran. ([Source](#))

• **May 1:** Hossein Samimi, the ICT Ministry's Secretary of Funds announced the establishment of a new 15 billion IRR (492,000 USD) fund for computer game developers. ([Source](#))

• **May 1:** TCI Deputy Director Davood Zareian announced that various South Korean companies are eager to invest in Iran's ICT sector, noting that the TCI is currently engaged in negotiations with a number of them. He also mentioned that over the past year, Iran and South Korean private companies have been collaborating on a project to develop a ‘Smart City’ in Qom. He hopes that the signing of an agreement between Iran and South Korea will speed up the development of this ‘Smart City’ project as well. ([Source](#))

• **May 2:** Mohammad Nouri Amiri, Director-General of Education and Research at the Ministry of Industry, Mines and Trade announced that the ministry will provide additional assistance for startups to help them engage in international projects (including tax exemptions for software companies), in accordance with the government's ‘Resistance Economy’ plan. Previously, Iran's Supreme leader Seyyed Ali Khamenei called for the development of a ‘Resistance Economy’, which mandates a shift towards a knowledge-based economy. ([Source](#))

• **May 2:** Electronic payment company Shaparak denied signing a contract with a US software company to purchase the business intelligence software SAS, and disputed claims that their system suffered a security breach. In a public statement, they noted that SAS is a simple (and entirely secure) statistical analysis program used to undertake general modeling. Shaparak also added that they purchased the software from an Iranian company. On May 1 the Director of the IPDO announced that Shaparak lacked permission to use US-developed software in Iran’s banking system. ([Source](#))

• **May 2:** Seyed Abolhasan Firouzabadi, Secretary of the Supreme Council of Cyberspace (SCC) said that Iran's policies relating to copyrighted content are lacking compared to many other countries. He mentioned that Iran's world ranking for copyright is 111 out of the 131 countries ranked. Firouzabadi stated that if Iran is hoping to develop into a knowledge-based economy, then it needs to improve its copyright system as a matter of priority. He was speaking at the ‘Literary and Artistic Property Rights in Cyberspace’ conference in Tehran. ([Source](#))
May 2: Justice Minister Mostafa Pourmohammadi suggested that Iran should pass new copyright laws in order to prevent the loss of scientists and content producers to emigration. Pourmohammadi added that each student that leaves the country costs Iran a great deal, with Iran losing around 300,000 USD for each emigrating masters student. (Source)

May 2: Payam Kabiri, Director of the Centre for the Development and Coordination of Information and Scientific Publications at the Ministry of Health and Medical Education announced that the US benefits the most from Iranian scientific articles. He stated that that the US benefits from 17% of Iran’s publications, China 11%, the UK 5%, India 4% and Brazil 3%. (Source)

May 2: The Mobile Telecommunication Company of Iran (MCI) announced that 4G SIM cards will be available from 11,000 shops located across Iran. The MCI added that full 4G network coverage for cities has almost been achieved, and that the government aims to increase the number of 4G and 3G sites to 20,000 by end of 1395 (March 2016 - March 2017). (Source)

May 2: South Korean ICT company DigiFi will invest in Iran to provide 11,000 villages with high-speed internet access. He added that within a year and a half 18,000 villages will be connected to the internet with speeds of 3.5 to 4 Gbps. Han Man Gi also mentioned that most investment for this project will come from the TCI. (Source)

May 3: TCI Director Barat Ghanbari announced that the organisation has signed an agreement with the KT Corporation, a South Korean telecommunications giant, to collaborate in the development of telecommunications services, network design, and technological modernisation. Ghanbari added that Iran’s current network capacity is 4 Tbps, but stated that the TCI aims to increase this figure to 120 Tbps in the future (though no timescale was specified). (Source)

May 3: At the first meeting of the new board of the MCI, a number of new appointments were made:
- Chairman — Ali Baghaei
- Vice Chairman — Mojtaba Jafari
- Director — Vahid Sadoughi (Source)
May 3: Iran's Foreign Ministry launched a video channel on the leading Iranian video sharing platform Aparat. As Youtube is filtered in Iran, the Iranian government and officials have been attempting to coax users onto domestically-produced platforms. The Foreign Ministry is late to the game—a number of other Ministries have already signed up to the platform, including the Ministry of Petroleum and the Ministry of Youth Affairs and Sports. (Source)

May 3: Vaezi announced that the ICT Ministry will host a special committee to follow up on concerns recently expressed by the Supreme Leader about the impact of the internet upon the next generation of Iranian children. Vaezi said that the committee will be made up of a combination of experts from the Ministry of Education and the ICT Ministry. (Source)

May 3: Shahram Hayshad, Head of New Services in Iran Post announced the launch of eBazar, a new online platform set up to sell products to Iranian consumers. Hayshad added that the website will provide a space for small businesses and other online stores to sell their products. He mentioned that sellers can now purchase subscriptions for Iran Post's new services. (Source)

May 3: Deputy ICT Minister Morteza Barari predicted that by the end of Iran's Sixth Five-Year Plan (2016 - 2021) the value of the country's ICT sector will be 900 trillion IRR (29.5 billion USD). He added that the telecommunication sector currently has a 60% share of the ICT sector, with IT accounting for 40%, although he projected that this could shift in the near future to 20% for telecommunications and 80% for IT. Barari also mentioned that the value of telecommunications in the mobile sector increased from 700 billion IRR (22 million USD) to 2 trillion IRR (65 million USD) in 1394 (March 2015 - March 2016). (Source)

May 3: Hassan Rezvani, Head of Universal Service Obligations (USO) at the Communications Regulatory Authority (CRA) has announced that SIM cards and modems are ready to provide internet access to villages in five provinces including: West Azerbaijan, Sistan and Baluchestan, Isfahan, Ardabil, and Gilan. He added that 7,500 users have registered for SIM cards and modems and that these should be delivered as a priority. Rezvani stated that users can register for USO internet service here. (Source)

May 3: Vaezi traveled to Geneva to attend the World Summit on the Information Society Forum 2016, where he planned to meet other ICT ministers from around the world. (Source)

May 3: Mohammad Reza Farnaghizad, Head of the ICT Ministry's Office of Public Relations and Information asked mobile users to check their details on the new CRA website to avoid any misuse of
their details on registered SIM cards. He mentioned that users are able to check whether any SIM cards are registered under their name. Farnaghizad said that users can report any misuse to CRA through this system. (Source)

- **May 4:** Hossein Madani Pour, Director-General for Coordination & Network Management at the CRA said that Iraq received the highest number of calls from Iran in 1394 (March 2015 - March 2016), followed by the United Arab Emirates, and Turkey. (Source)

- **May 4:** Deputy ICT Minister Ali Asghar Amidian announced that the TCI aims to make use of higher tariffs to expand the company's operations. Amidian said that currently the TCI is unable to operate sustainably even with 7 million landline subscriptions. Until the start of May, the ICT Ministry and Vaezi had consistently opposed increases in TCI service tariffs. (Source)

- **May 4:** Barari said that the economic contribution of Iranian provinces (excluding Tehran) to Iran’s ICT sector is around 10%, although he hopes that this will increase in the near future. He added that Tehran Province makes by far the largest contribution to Iran’s ICT sector owing to the fact that most ICT companies are located in the capital. Barari noted that almost 100% of citizens in Iran’s provinces are making use of ICT, but they do not create any products or develop online content. (Source)

- **May 4:** Former TCI Director Seyed Mostafa Hashemi denied that the TCI failed to invest in Iran’s ICT sector after undergoing privatisation, contending that it has invested 200 trillion IRR (6 billion USD) in Iran’s ICT sector since being privatised. He also noted that the number of SIM card subscriptions has increased from 14 million prior to privatisation, to a current total of 78 million. (Source)

- **May 7:** Amidian said that Iran’s internet services are among the cheapest in the world. Amidian mentioned that the CRA might set minimum internet prices in order to incentivise cheap access to fixed line connections, thereby providing support to ADSL service providers. (Source)

- **May 7:** Ghanbari said that the TCI controls between 65-70% of Iran’s ICT market, amounting to around 150 trillion IRR (4.9 billion USD). Ghanbari mentioned that of the TCI’s entire market value, 90 trillion IRR (2.96 billion USD) consists of shares in the MCI, and 50 trillion IRR (1.6 billion USD) comes from landline subscriptions, which constitute 1.5% of Iran’s gross domestic product (GDP). He added that the market value of Irancell is 70 trillion IRR (2.3 billion USD). Ghanbari proposed that by the end of the Sixth Five Year Plan (2016-2021), Iran should invest 1.1 quadrillion IRR (36 billion USD) in the ICT sector, of which 600 trillion IRR (19 billion
USD) would be spent on expanding and modernising Iran’s communications infrastructure. (Source)

- **May 7:** A project named Tavana (National Data Transfer Network) will be launched in the near future to fully exploit the capabilities of domestic manufacturers in the development of technical equipment and integrated network management. Tavana will make use of 10,000 km of fiber optic infrastructure owned by the Telecommunication Infrastructure Company (TIC). (Source)

- **May 7:** In collaboration with the Information Technology Organisation of Iran (ITO) the TIC has successfully tested Internet Protocol version 6 (IPv6) on Iran’s second mobile operator MTN Irancell. (Source)

- **May 7:** Deputy ICT Minister for Technology and Innovation Amir Hossein Davaie said that the government should only be responsible for the development of infrastructure, digital security, and human resources for the Internet of Things. The promotion of the Internet of Things, along with product development and cultural development should be a responsibility of the private sector. (Source)

- **May 8:** Vaezi said that the number of fixed line internet users has risen from 4 million to 10 million since the beginning of Rouhani’s presidency. The number of mobile internet users has risen from 200,000 to 20 million users in the same period. Vaezi also discussed social media platforms, describing them as both an opportunity and a threat. He conceded that life and work was now near-impossible without them, but warned that they could cause moral degradation within families. He added that said Iran’s internet bandwidth had increased to 4 Tbps over the past two years. (Source)

- **May 8:** The ICT Ministry’s Office of Public Relations and Information said that 60% of customers are happy with its response systems. Last year, the ICT Ministry launched a response system that allowed users to make complaints about mobile operators. According to the ICT Ministry, 836,000 calls were made to the system in 1394 (March 2015 - March 2016). The TCI was received most favourably for both its landline and mobile services, with 57% of customers reporting satisfaction. RighTel received 50% satisfaction, and MTN Irancell 44%. (Source)

- **May 8:** Hassan Ashtari, Head of Iran’s Police noted that cyberspace poses a number of socio-political and national security challenges. He added the police should be more involved in cyberspace, as it was becoming an area of growing concern. (Source)
• **May 9**: Deputy ICT Minister Nasrollah Jahangard announced that within a year the entirety of Iran will have access to mobile networks and WiFi. ([Source](#)).

• **May 9**: The MP and member of the Parliamentary Cultural Commission Nasrollah Pejmanfar accused Rouhani’s government of benefiting from social media, and of purposefully failing to launch the National Information Network (SHOMA) owing to their ‘political objectives’. ([Source](#)).

• **May 9**: The Director of the Iranian National Space Agency (INSA) Manouchehr Manteghi stated that the organisation will work to fully exploit the academic resources of Iran's universities in order to design a national scientific satellite. He added that most countries have at least three basic satellites and one national scientific satellite. ([Source](#)).

• **May 9**: The TCI announced plans to launch a 24/7 helpline to provide assistance to its commercial customers in both Persian and English. According to the TCI, it takes an average of 4 hours to fix technical problems once reported. ([Source](#)).

• **May 9**: The CRA’s Deputy Director Mohammad Ali Arianian announced that the organisation aims to provide 20 Mbps broadband internet access to 80% of Iranian households, while improving transit capacity and Iran’s international communication network. Arianian mentioned that these CRA initiatives were being rolled out in compliance with plans for the development of the ‘Resistance Economy’. Arianian also noted that action would be taken on digital security initiatives, and the development of a next-generation broadband network, ‘Broadband 2’. ([Source](#)).

• **May 9**: Vaezi announced that the ICT Ministry is planning to complete the following: Provide 20 Mbps internet access on Iran’s SHOMA network.
  - Support the development of a ‘content distribution network’.
  - Develop a remote sensing satellite and domestic communications satellite.
  - Constructing ‘ICT corridors’ to coordinate ICT at a provincial level.
  - Double the production of domestically produced content, with the support of digital business and national resources.
  - May 9: Hossein Fallah Joshaghani was appointed as the Regulatory Oversight & Enforcement Deputy at the CRA. Previously, Hassan Rezvani and Gholamreza Dadashzadeh occupied this role. ([Source](#)).
  - projects as components of Iran's ‘Resistance Economy’ plans. ([Source](#))
• **May 10:** The Telecommunications Regulatory Commission announced a series of new acts compelling the TCI to allow other private ICT companies access to its infrastructure. The TCI is also required to allow other telecommunication companies to install equipment on TCI towers. *(Source)*

• **May 10:** Seyed Morteza Mousavian, Head of the Digital Media and Information Technology Center (SARAMAD) at the Ministry of Culture and Islamic Guidance announced that his organisation is the only one responsible for developing digital content. He stated that other organisations developing digital content should coordinate their activities with the SARAMAD. Previously, some experts suggested that Iran’s National Foundation of Computer Games and the SARAMAD were engaged in parallel activities. *(Source)*

• **May 10:** Ali Chegini, Director-General of Consular Affairs in the Foreign Ministry announced that a Country Signing Certificate Authority (CSCA) will soon be operational and utilised by a number of Iranian embassies. *(Source)*

• **May 10:** Vice President for Science and Technology Sorena Sattari suggested that the private sector should seek greater involvement in Iran’s space program, adding that the government should not perceive the space program as a state program. Sattari also announced that Iran was able to improve its world ranking in nanotechnology from 7th to 6th place in the past year. He added that 70% of research programme funding is currently provided by the private sector. *(Source)*

• **May 10:** Mohsen Bahrami, Director of the Iranian Space Agency (ISA) announced that the Mesbah satellite will be ready for launch shortly. He mentioned that the Mesbah satellite has been held in Italy since 2006 because of international sanctions. Negotiations are ongoing to ensure its release. In another statement, Bahrami
noted that the ISA is undertaking preparations to launch a number of other satellites, including: Mesbah II, Nahid I, Amirkabir, Zafar and Doosti. (Source)

• **May 10:** RighTel CEO Majid Sadri stated that his company supports the idea of setting fixed minimum internet prices for mobile operators, insisting that the measures would be beneficial for operators and users. Illustrating this, he suggested that the cost of downloading a one hour-long film would cost 10,000 IRR (0.03 USD) with a RighTel SIM card. Sadri also indicated that RighTel is ready to negotiate with Mobile Virtual Network Operators (MVNO) to grant them access to their network infrastructure. (Source)

• **May 11:** Vaezi appointed Mohammad Javad Azari Jahromi as Director and Chairman of the Board of the TIC and as Deputy ICT Minister. Previously, Mahmoud Khosravi held this position for six years. Vaezi also asked Azari Jahromi to prioritise six major duties:
  - Providing fiber optic networks to all of 170 Iran’s cities.
  - Improving ICT services and lowering costs.
  - Increasing the technical knowledge of young people.
  - Providing fundamental services (including Internet Protocol Television (IPTV)).
  - Developing SHOMA.
  - Implementing e-government initiatives. (Source)

• **May 11:** Iran’s parliament passed a law banning the advertisement of illegal and ‘harmful’ goods and services on social media. (Source)

• **May 13:** Barari said that the ICT Ministry would support the development of a number of accelerators to provide support to ICT businesses and tech startups operating in Iran’s provinces. He also spoke about Iran’s Sixth Five Year Plan (2016 – 2021), noting that
20% of ICT sector profit should come from value-added services (services excluding voice calls). Barari added that profit from mobile value-added services increased to 7 trillion IRR (232 million USD) in 1394 (March 2015 – March 2016), compared to 500 billion IRR (16.5 millions) in 1390 (March 2011 – March 2012). (Source)

- **May 15:** MTN Irancell announced that they have successfully completed all preparatory work for Iran’s Mobile Number Portability (MNP) system, and that they are awaiting launch by the CRA. (Source)

- **May 15:** Iran’s national domestic e-government gateway has been launched. According to Mehr News Agency, the first phase of the roll-out will see 200 services provided by 60 different governmental organisations. The National Information Centre and a National Internet Exchange (NIX) were also launched. (Source I, Source II)

- **May 15:** Vaezi announced that first phase of SHOMA will be launched early in the second half of this year (roughly September 2016). Vaezi insisted that SHOMA would not impose any additional restrictions on users. (Source)

- **May 15:** Vaezi held a press conference to provide a summary of the latest developments in the ICT sector. Key announcements are listed below:
  - The ICT Ministry is doing what it can to decrease internet tariffs, but it cannot promise that prices will fall in the near future. Previously, Vaezi stated that internet prices would fall in early May 2016.
  - Landline tariffs remain unchanged, and the ICT Ministry has made no decisions about adjustments.
  - The ICT Ministry is working towards the fixing of minimum prices for mobile operators.
  - Mobile Number Portability (MNP) is ready, and will be launched in late May 2016.
  - Telegram has been working closely with the ICT Ministry to block all groups flagged for objectionable content by authorities. Vaezi continued to insist that the government would prefer for a domestic app to be developed with a data centre located inside Iran.
  - The quality of internet access has improved dramatically since the start of the Rouhani administration.
  - Foreign operators will be responsible for developing Iran’s fiber optic infrastructure. (Source)

- **May 15:** Firouzabadi said that aggressive criticisms were not constructive, and would not speed up completion of SHOMA. He suggested that the success of the project required engagement
from the three branches of government — the legislature, judiciary, and executive. Previously, some Iranian officials and MPs accused the ICT Ministry of purposefully delaying the launch of SHOMA for political purposes. (Source)

- **May 15:** Ghanbari spoke about the role of the telecoms sector in the Iranian economy, noting that it currently makes up 1.5% of Iranian GDP. He stated that the ICT Ministry aims to increase this to 6% over the course of the the Sixth Five-Year Plan (2016 – 2021). He mentioned 15 billion USD will be invested in Iran's telecoms sector over the next five years. (Source)

- **May 16:** The ICT Ministry and the Ministry of Education are collaborating with an Iranian-Japanese consortium to teach app development to 12.2 million school students. The project aims to support the development of mobile applications, boost students' technical skills, and stimulate domestic content production. (Source)

- **May 17:** Vaezi was interviewed by state broadcaster IRIB. During the programme, he made a number of interesting statements:
  - He stated that the internet is incredibly useful for people who are seeking scientific and ‘moral’ content, but he insisted that ‘immoral’ content should not be available online.
  - Vaezi stated that the government is continuing to work on developing an ‘Intelligent Filtering’ project to identify and block immoral content.
  - Vaezi also announced that 85% of the infrastructure for SHOMA has been completed, stating that the first phase of the project will be launched in September 2016.
  - Vaezi suggested that 95% of users make use of social media for ‘legitimate’ reasons.
  - Vaezi stated that Iran has built a bot to identify pornography or immoral content on Telegram, and that authorities will soon send a list to Telegram, who will then impose the blocks. (Source I – Source II)

- **May 18:** Vaezi said he would prefer to use Russian-made software such as Telegram over US- or Israeli-made apps like Viber and WhatsApp. (Source)

- **May 18:** The TIC has announced that they have signed an agreement with Afghanistan to provide 10 Gbps bandwidth in the country, worth 1.2 million USD. (Source)

- **May 18:** Azari Jahromi announced that the TCI had decided to decrease the tariff on inter-provincial communications within the next month (June 2016). (Source)
• **May 20:** Barari announced that the ICT Ministry will be collaborating with Iran’s mobile operators to open content production centres at universities across the country. He mentioned that content production centres had already been launched at the Sharif University of Technology and Shahid Beheshti University. According to Barari, additional centres will soon be launched at the University of Isfahan, Shiraz University, and universities in Khuzestan Province. Barari added that the Sixth Five-Year Plan (2016 – 2021) would see the value of the ICT market increase to 900 trillion IRR (29 billion USD). (Source)

• **May 20:** TCI Deputy Director Seyed Ali Malek Jafarian stated that between 2009 and 2015, the number of internet ports in operation has increased from 98,000 to 4.8 million. He added that the number of ADSL users has grown to 4,800,000, while the company currently has 30 million landline users. Jafarian also stated that the TCI has 72 million mobile users, noting that 96.5% of Iran's population is covered by the TCI network. He also described how the TCI has invested 14.5 trillion IRR (4.6 billion USD) in Iran's ICT sector since 2009. (Source)

• **May 21:** Azari Jahromi said that the completion of SHOMA is the TIC's first priority. He stated that a series of data exchange centres (components of SHOMA) would be launched in Shiraz, Tabriz and Mashhad on June 20 2016. (Source)

• **May 23:** Vaezi appointed Behzad Akbari Nodozaghi as a new member of the TIC's board of directors. Akbari Nodozaghi is a faculty member and doctoral graduate of Tehran's Tarbiat Modares University. (Source)

• **May 23:** Seyed Mohammad Sahebkar Khorsani, Secretary of the ‘Working Group on Assessing the Competence of Knowledge-Based Companies (or Startups)’ announced that knowledge-based companies will receive customs exemptions on the importation of equipment, and will be offered land for development. Khorsani also
Statements from Ministries and Politicians

stated that his working group is negotiating with IRIB to provide commercial advertising to promote knowledge-based companies and their products. (Source)

• **May 23:** Islamic Azad University will launch a new social network to help students and professors share technical and scientific knowledge. Details of this new social network are still unclear. (Source)

• **May 24:** Iran Post Director Hossein Mehri said that Iran should have additional private postal companies by the end of this Iranian year (March 2017). (Source)

• **May 24:** Ayatollah Haeri Shirazi said the internet risks taking children to Hell, but insisted that users should instead make use of it to ensure their children go to Heaven. He also stated that the internet was developed to separate parents from their children. (Source)

• **May 24:** At the sixth ‘Congress of Directors of the Iran Post Bank’, Vaezi said that 17% of students are graduates in ICT, adding that it is Iran’s national responsibility to create jobs for young graduates. He also said all villages containing at least ten households now have access to landlines. Vaezi reiterated that the ICT Ministry is undertaking work to provide all villages with internet access, as well. (Source)

• **May 27:** Jahangard said that 3G and 4G networks have transformed Iran’s ICT market. He added that Iranian app developers have developed 70,000 Persian-language applications over the past two years. Jahangard suggested that mobile programming languages should be taught more actively in Iran’s universities. (Source)

• **May 28:** Vaezi said that the ICT Ministry had identified a European origin for an IP address linked to a recent hack attempt on an Iranian government website. No further details were made available. (Source)

• **May 28:** The 29th meeting of the SCC was held, with President Hassan Rouhani in attendance. At the meeting, the SCC voted in favour of a measure requiring all messaging apps to move their servers to Iran within a year in order to continue operating. (Source)

• **May 29:** FATA Chief Seyed Kamal Hadianfard said that the May 24 attacks on Iran’s central government website originated in Saudi Arabia. He added that two attacks came from inside Iran, whereas the rest originated from outside. Hadianfard mentioned that the hacker had no connections with the Saudi government. Hadianfard also stated that 35% of cybercrimes take place on Telegram, constituting a 47% increase on the previous year. (Source)

• **May 29:** CRA Deputy Director Sadegh Abbasi Shahkoo announced
that 16 MVNO licences have been issued, adding that a number of companies will likely be able to provide services by the end of March 2017. Shahkoo stated that companies now have to negotiate with Iran’s operators in order to use their infrastructure and networks. He added that they only have six months to finalize their agreement with mobile operators. (Source)

- **May 30:** The Interior Ministry thanked the TIC, TCI, and MCI for their preparatory work ahead of Iran's 10th parliamentary and Assembly of Experts elections in February 2016, and for the lack of service interruptions. (Source)

- **May 31:** SCC Member and former ICT Minister Reza Taghipour said there are six domestic messaging apps currently in operation, with user bases ranging from 200,000 to 2 million users. He said that between 20% to 40% of Iran's international internet bandwidth is being used by Telegram. Taghipour insisted that non-Iranian messaging apps should be forced to host their servers inside Iran, while also conforming to national rules and regulations on the use of messaging apps. (Source)
4

Statements from Civil Society & Professional Organisations

- **May 3:** Farhang Fasihi, Director of the 5th Tehran Innovation and Technology Exhibition (INOTEX 2016) said that 11 countries will participate in the exhibition. He said the exhibition aims to facilitate collaboration in ICT infrastructure development between Iran and other countries. ([Source](#))

- **May 4:** The Internet Protocol Television (IPTV) company Aseman announced that they were able to secure an IPTV licence from Islamic Republic of Iran Broadcasting (IRIB), for experimental broadcasts of IRIB’s TV channels. Previously, the ICT Ministry and IRIB were involved in a dispute over the issuing of IPTV licences. ([Source](#))

- **May 8:** An Iranian app developer launched the communication app Anar (Pomegranate). Users can use the app to send messages, share files, and share their location with other users. ([Source](#))

- **May 8:** Hossein Mohammad Pourzandi, Director of the City Bank of Iran said that Iranian citizens will gain access to Visa debit and credit cards within the next three months (by September 2016). Pourzandi was speaking at a press conference at the Tehran International Book Fair, where the City Bank of Iran was a key financial sponsor. ([Source](#))

- **May 17:** The first ‘Conference on Security on Social Networks and Messaging Apps’ was held at the IT Cultural Centre in Tehran. The conference will bring together experts to discuss the importance of security when using mobile messaging apps such as Telegram, Instagram, or imo. ([Source](#))

- **May 18:** Mehr News agency has published an overview of the status of Iran’s ICT sector. The key points are listed below:
  - At the end of 1394 (March 2015 - March 2016), Iran’s mobile penetration rate was 95%, with 21 million internet users.
  - On 21 January 2016, Iran’s fibre optic network was 56,616 kilometers long.
  - Iran’s network capacity is 2,670 Gbps.
  - Iran’s domestic bandwidth totalled 2,400 Gbps at the end of 2015.
- Iran’s international bandwidth totals 280 Gbps at the end of 2015.
- Only 30% of online content accessed is domestically produced, with 70% of content accessed being internationally produced.
- Iran’s ICT sector is worth 35 billion EUR (roughly 40 billion USD).
- Iran’s ICT sector accounts for 2.7% of national GDP.
- On average, 200,000 ICT students graduate from Iranian universities each year.
- Iran is ranked 91st in the Global ICT Development Index (IDI).
- Based on the IDI, Iran ranked 80th in the world and 14th in the region for ICT accessibility.
- Iranian citizens own 24 million smartphones.
- Tehran, Semnan, Mazandaran, Yazd, and Qom are the most developed provinces in terms of ICT infrastructure.
- Lorestan, North Khorasan, and Sistan & Baluchestan have the lowest levels of ICT development.
- Iran is ranked 96th in the world and 15th in the region on the Networked Readiness Index (NRI). According to the NRI, Israel is the highest-ranked country in the region.
- Iran is ranked 13th in the region and 94th in the world on knowledge-based economy measures.
- Iran is ranked 9th in the region and 70th in the world for communication infrastructure and IT.
- Iran is ranked 3rd in the region and 7th in the world for the price of ICT tools.
- Iran is ranked 2nd in the region and 20th in the world for fixed broadband internet prices.
- Iran is ranked 18th in the region and 105th in the world on the e-government index. (Source)

- **May 25:** Tehran Official Traffic Map — a free app to monitor traffic in Tehran — was launched. The app works both online and offline, and obtains the latest updates from Tehran Traffic Control Company. Google recently launched Tehran traffic updates on Google Maps. (Source)