MAY 2017

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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Executive Summary

Ever since the intensification of information controls in Iran after the tumultuous 2009 elections, the greatest perceptions of threat have generally been rooted in fears of the filtering of online content, and of the throttling of internet speeds as key moments of national importance (such as elections).

Looking at the recent experience of the 2017 presidential elections, one might be forgiven for feeling a sense of relief at the apparent evaporation of authoritarian instincts in Iranian internet policy implementation – excluding the arrest of 12 reformist Telegram channel administrators in March 2017, the election went off without any mass detentions, service disruptions or the filtering of any additional major social media channels. So are things looking up for internet freedom in Iran?

We would suggest instead that the methods are just becoming far less overt, and that the current programme of information controls could be characterised as a form of ‘nudge censorship’ by providing significant economic disincentives to citizens seeking to access international content, and to those seeking to circumvent state filtering practices.

Although the dialling down of content filtering and the absence of service disruptions during the election campaign should be welcomed, recent developments relating to net neutrality pose a grave and immediate threat to free expression, privacy, and media diversity, and could even spell the end of widespread circumvention tool usage in Iran.
This month’s feature explores the significance of the recent separation of international and domestic traffic, and of the government’s recent requirements for ISPs to offer discounted tariffs for users accessing domestically-hosted content.

Elsewhere, we’ve gathered all the latest news in the field of internet policy and infrastructure development from the past month, including more on the final twists and turns of the election campaign, the disastrous effects of the WannaCry ransomware, and the announcement of a fresh $750m being pumped into Iran’s fibre optic networks.
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The End of Net Neutrality in Iran

In recent years, the development of Iran’s National Information Network (SHOMA) has facilitated the mass expansion of internet access across the country (the government states that 72,000 villages have been connected since 2013), and leaps in average speeds. Under the SHOMA programme, domestic and international traffic have also been separated – although such a move has legitimate justifications (increasing service quality, optimising connectivity and reducing transmission costs) Iranian authorities have recently introduced a number of regulations that will formally unravel network neutrality in Iran, and could potentially dissuade users from accessing content from the global web.

In this month’s feature, we offer an in-depth assessment of the new regulations, and explain how fresh measures supposedly designed to expand access and cut tariff costs may end up driving people away from global content, and even slash usage rates of circumvention tools such as VPNs. There exists the real possibility that Iran’s new wave of ‘nudge censorship’ could prove to be the most effective one yet.

**TARIFF DIFFERENTIATION – A THREAT TO INTERNET FREEDOM**

At a June 12 meeting with government officials, Supreme Leader Ayatollah Seyyed Ali Khamenei delivered a speech outlining his vision for the future development of the internet in Iran.

“This control does not mean that we should deprive our nation access to cyberspace. This is not what I am saying. Today, an avalanche of correct and false information is engulfing our internet users. They are giving false and harmful information to them. Well, these things are engulfing our internet users like an avalanche. Why should we allow this to happen? Why should we allow things which are against our values, against our well-established principles, and against the main constituents of our national identity to be developed inside the country by the people who bear malice against us? This should not be allowed.
You should do something to help everyone benefit from the advantages and good aspects of cyberspace. You can also increase internet speeds. These necessary tasks can be carried out, but the things which are to your disadvantage, and to the disadvantage of your youth and public opinion in the country should be controlled. This is a very important point. This task should be accomplished. Therefore, the issue of the National Information Network is very important.”

No other recent development in Iranian cyber policy has embodied Khamenei’s vision of the internet as much as the recent announcement of price differentiation for Iranian internet users. In February 2015 it was announced that as a result of the National Information Network’s (SHOMA’s) development, operators and ISPs must cut the cost of browsing content hosted inside Iran by 50%. In an interview with the Mehr News Agency on May 5, Hossein Fallah-Joushghani from Iran’s Communications Regulatory Authority (CRA) announced that most Iranian ISPs, with the exception of HiWeb and the Telecommunication Company of Iran (TCI) had complied with the new regulation, but that Rightel was the only mobile provider that had so far done the same. According to Fallah-Joushghani, the CRA had sent formal warnings to the other two Iranian mobile phone operators IranCell and MCI.

This significant slashing of internet tariffs has been celebrated by officials, particularly Rouhani’s administration. It has been highlighted by officials as a triumph for the National Information Network (SHOMA) and a measure which will vastly benefit Iranian entrepreneurs, academic and average internet users.

However, a closer look at the details of the policy and its implementation reveals that far from being a benefit to Iranian internet users, innovators and academics, the tariff changes represent an assault on internet freedom in Iran. The new system damages media diversity and economic innovation by sacrificing users’ privacy, and by placing an unprecedented amount of power in the hands of internet providers without consumer oversight.

**BARRIERS TO MEDIA DIVERSITY AND INNOVATION**

On April 4, Iranian mobile phone operator MTN Irancell announced that in accordance with the policies of the ‘Resistance Economy’ and with the aim of supporting the creation of local content it has halved its pay-as-you-go tariffs for accessing domestic content. At first glance, while violating the principle of net neutrality, Iran may just be passing savings to consumers that choose to browse domestic content. However, a closer
look at the proposal reveals that in practice the policy may disadvantage new innovators and seriously harm media plurality in Iran. While the vast majority of Iranian websites are hosted inside Iran, authorities have announced a selected list of over 500 websites which they claim are the most popular domestic sites.

The list is a mixture of cultural news, governmental and private sector websites. In terms of culture and news agencies the list demonstrates a clear discrimination against newspapers published in Iran, and favours governmental or semi-official news agencies by giving consumers a 50% discount for browsing them. For example, sharghdaily.ir\(^1\), according to Alexa, is the 526th\(^2\) most popular website in Iran and eghtesadnews.com\(^3\) is 75th, but neither of these websites are included in the list of top 500 websites according to Iranian authorities. However, other websites such as ttbank.ir, which is ranked at 1,181th, are listed. Similarly, snapp.ir\(^4\) does not appear on the list despite being ranked higher than ttbank.ir at 1,068th on Alexa.

Some internet providers have added different websites to their low-tariff list, for example Shatel has included websites such as tablet.ir\(^5\) (2438th according to Alexa), despite them not appearing on the official list issued by the CRA.

This arbitrary classification creates a fundamentally uneven playing field for Iran’s online ecosystem, and systematically favours government agencies over independent media outlets. While the policy is celebrated by officials as a measure to boost local innovation and support new businesses, by making it more expensive to access new Iranian websites and apps than government-affiliated websites or large domestic companies, Iran is putting local entrepreneurs at a serious disadvantage.

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\(^1\) Hosted inside Iran \url{http://whatismyipaddress.com/ip/185.4.1.174}
\(^2\) Many of the top 500 visited websites by Iranians are not Iranian websites.
\(^3\) Hosted inside Iran \url{http://whatismyipaddress.com/ip/178.216.248.205}
\(^4\) Hosted inside Iran \url{http://whatismyipaddress.com/ip/79.175.139.77}
THE END OF VPNS?
In May 2017, Irancell announced that consumers using Virtual Private Networks (VPNs) to access websites, either to bypass restrictions, or to browse locally hosted websites anonymously, will not receive a 50% discount when visiting domestic websites. This announcement was made by Irancell after a tide of fury from consumers who bought discounted packages in the hope of discounts applying even when browsing the internet using VPNs.

According to Iranian Cyber Crime Laws, using VPNs is not a crime, and Iranian users are allowed to use VPNs. However, this policy will price out many Iranian internet users from accessing the web using VPNs.

The effect of price differentiation on VPN users is so unclear that even Parliament sought clarification on the matter from Irancell. On May 7, pro-reform member of the Iranian parliament Ramazanali Sobhanifar stated that “based on talks with officials at Irancell, it has been made clear that this discount will be given to only those that are using the local internet, and wherever a domestic IP address is not used, the discount will not be awarded.”

ISPS – THE NEW POLICYMAKERS?
The examples above illustrate the diversity of opinion among ISPs and the lists of local websites with the 50% discount included. The confusion caused by Irancell’s policy toward VPNS demonstrates the dangerous power allocated to ISPs and mobile operators with the implementation of this policy.

It is also unclear how other ISPs have tailored their policy or pricing to reflect this reduction in tariff charges. While some ISPs such as Shatel have publicised their new prices, many ISPs have not made any public announcement regarding the changes which Communications Regulatory Authority believes it will be reflected in consumers bills. For example it is unclear how ADSL service providers ASRE Telecom and Sepanta will adjust their prices to reflect this new policy.

The unscrutinised power of ISPs and internet providers is a particularly important issue in Iran as many are supposedly privately owned and motivated by market factors, but in reality have deep links with security forces such as the Islamic Revolutionary Guard Corps (see this report), or financial intuitions close to Iran’s Supreme Leader. This policy has opened the door for ISPs to play a greater role in the governance of the internet
in Iran without being governed by democratic institutions or with the oversight of consumer rights groups.

It is also unclear if ISPs will be allowed to raise the price of non-discounted traffic. The current guidelines appears to only request that operators only halve the domestic tariff, and it has not barred them from regaining the financial loss by increasing prices for accessing non-domestic content and other services.

**THE MAKING OF AN UNEQUAL INTERNET**

As demonstrated above, the policy of price differentiation has proven not to be beneficial for Iranian cyberspace and instead worsens the effects on net neutrality in the country.

Iranian authorities are not the first to attempt to tighten their control on the free flow of information by offering free or discounted internet to the users. When Facebook was set to reach an agreement with Indian authorities to provide free access to a selective few corners of the internet through their ‘Free Basic’ internet, a grassroots campaign opposed the move as it was seen to give unnecessary power to Facebook and the Indian authorities in redefining what the internet is. The move to provide limited internet to a section of society based on their financial ability was criticised widely by Vijay Shekhar Sharma, founder of payments app PayTM, claiming “it’s poor internet for poor people.”

This policy is even more damning taking into account the expansion of the internet to areas of Iran with less disposable income. Many urban users may not give up their right to browse a diverse range of online sources, or their right to use VPNs. However, with the expansion of internet connections to more than 27,000 villages under President Rouhani, it is important that newly connected Iranians are not offered a second-class service. The current system of tariffs will create a two-tiered of internet users in Iran, thereby threatening the cohesion of Iranian society as a whole.

As it stands this policy will not create a more favourable environment for innovation, national cultural diversity or greater access to the internet. Instead it empowers government-backed news and media agencies, closes a section of Iranian internet users to new and upcoming startups, and will give even greater power to ISPs and mobile phone operators without any form of democratic oversight.
Opposition to this policy must be viewed as part of the global fight for net neutrality. Small Media remains committed to the values of net neutrality, and we are clear for the need to provide affordable and far-reaching internet access without sacrificing net neutrality, or unreasonably empowering ISPs without putting rigorous and effective regulations in place.
Policy Documentation

PRESIDENTIAL ELECTIONS

Internet policy and SHOMA heavily featured in presidential campaigns of both Rouhani and his hardline competitors. Rouhani fought a campaign in which he proudly boasted of his achievements in ICT and expansion of internet access across Iran. In contrast, hardliner candidate Raisi called for further crackdowns on the internet freedom in Iran. More information is available about the candidates’ divergent stances on internet freedom in our April 2017 report.

- **3 May:** ICT Minister Mahmoud Vaezi criticised conservative presidential candidates for hypocrisy in their stances on internet freedom. He stated that: “those who have been making threats about the closure of cyberspace are now prolific users of the internet themselves. Before and during this election campaign they have purchased channels and networks with high numbers of users in order to spread their message.” ([Source](#))

- **3 May:** During the first televised TV debates between presidential candidates, Ebrahim Raeisi criticised Rouhani’s administrative record by attacking the slow implementation of e-government projects. He said: “the completion of e-government would increase transparency... yet reports suggest that only 15% of the project has been completed so far.” ([Source](#))

- **6 May:** The National Post Company of Iran launched a central portal for candidates in the presidential and local elections. The portal provides the public with information about the campaigns of candidates and can be accessed [here](#). ([Source](#))

- **7 May:** During a press conference Iran’s Interior Minister stated that presidential hopeful Mohammad Bagher Ghalibaf’s job posting site “Karaneh” was unlawful, equating it to “bribery” and accusing Ghalibaf of “buying votes”. ([Source](#))

- **8 May:** A spokesman for the judiciary has said that 100 Telegram channel admins belonging to candidates or their campaigns have received “pre-emptive warnings”. He added that 57 of the warnings
went to so-called conservative channels and less than half to reformist channels. (Source)

- **8 May**: ICT Minister Mahmoud Vaezi has said that the filtering of Mohammad Bagher Ghaliba’s website ‘Karaneh’ was not by ordered by the ICT Ministry or any other part of the Rouhani administration. However, the Chair of the Committee to Determine the Instances of Criminal Content (CDICC) has claimed that the filtering request did come from Rouhani’s administration, and was only approved after a vote of CDICC members. (Source I, Source II)

- **14 May**: The head of the supervision committee of Tehran’s City Council election raised concerns about using electronic voting in the upcoming elections. Alireza Rahimi said the National Election Committee allowed electronic voting for 19 out of the 26 constituencies in Tehran province, although he noted that coordination of these systems was inadequate. (Source)

- **15 May**: Telecommunications Company of Iran (TCI) announced that it had planned no works which might lead to service disruptions during the closing stages of the election campaign. (Source)

- **18 May**: Iran’s elections took place using the Mobile Telecommunication Company of Iran’s (MCI’s) network infrastructure. The MCI was described as a ‘strategic partner’ of the Interior Ministry by the head of Iran’s National Election Committee Ali Asghar Ahmadi. (Source)

- **18 May**: ICT Minister Mahmoud Vaezi visited the National Center for the Monitoring and Management of Communications Networks. He stated that the Ministry was proud that there had been no disruption in national communication infrastructure in the run-up to the election. (Source)

- **18 May**: Iran’s ICT Ministry issued a statement dismissing rumours of an internet shutdown in Iran, stating that no service disruptions had been detected. (Source)

- **18 May**: By order of the Interior Ministry, Iran’s ICT Ministry placed restrictions on mass SMS messaging until the conclusion of the Iranian presidential election. (Source)

- **21 May**: In his first televised address after his sweeping election victory, President Rouhani thanked online activists for their enthusiastic support of his re-election campaign. (Source)

- **21 May**: Iran’s ICT Minister Mahmoud Vaezi thanked Internet
Service Providers (ISPs) for providing stable internet connections during the presidential election period. (Source)

- **25 May:** ICT Minister Vaezi observed that Iran’s public broadcaster, Islamic Republic of Iran Broadcasting (IRIB), saw itself in competition with cyberspace during the election campaign. He added that cyberspace played a significant role in the election. (Source)

- **27 May:** The CEO of the Telecommunications Infrastructure Company has announced that SHOMA ensured there were no service disruptions in the election period. (Source)

- **28 May:** Rouhani’s spokesperson Mohammad Baagher Nobakht praised the role of the internet in increasing participation at the presidential election. He claimed that by using online channels Rouhani was able to succeed in informing the public, and that therefore the government believes that action should be taken to protect these online spaces. (Source)

### APPS, SOCIAL NETWORKS AND COMMUNICATION TOOLS

While all of the presidential candidates saw the need to use Telegram to reach a wider audience, pro-reformist Telegram channel admins remain subject to intimidation from the judiciary and security forces. With the election campaign concluded, it is likely that conservatives will resume their attacks on Telegram and renew their criticisms of President Rouhani’s administration for failing to block their services in Iran.

- **1 May:** Judiciary spokesperson Mohsen Ezhei stated that there have been no further developments regarding the Telegram admins arrested in March 2017. (Source)

- **3 May:** Iran’s Supreme Leader established a new Arabic-language Twitter account (@ar_khamenei) after his original account was suspended for unknown reasons. (Source)

- **10 May:** Iran’s Intelligence Minister Seyed Mahmoud Alavi said that: “the reaction to cyberspace needs to be vice-like. We have complete knowledge of all the channels and groups, and most of these groups are families and are not a threat, but there are other groups that need to be dealt with by warning or guidance. If they are anti-religion or anti-revolutionary we will take alternative, and more appropriate action against them.” (Source)

- **20 May:** A member of the Supreme Council for Cyberspace (SCC), Rasoul Jalili, claimed that while Iran’s position is that Telegram should move its servers from the Netherlands to Iran, this has not
taken place owing to personal opposition from President Rouhani. (Source)

INFRASTRUCTURE DEVELOPMENT AND THE NATIONAL INTERNET
The announcement of an additional $750m investment into fibre-optic development by MTN Irancell is a sign of the Rouhani government’s commitment to continued infrastructure development. At the same time as Iran seeks further development of the Internet connection in rural and less-developed provinces, the development plans in Iran also call for an increase in the share of domestic content accessed by Iranians.

- 7 May: Iran’s ICT Ministry published a statement dismissing criticism of low internet speeds, claiming that operators in Iran offer connection speeds of up to 10MB/s. (Source)
- 7 May: Iran’s ICT Ministry announced that internet disruptions on 6 May were caused by operators and were not due to failures of, or government interventions into national infrastructure. According to the Ministry, necessary system upgrades at the Mobile Telecommunication Company of Iran (MCI) resulted in 400,000 users experiencing service disruptions. (Source)
- 9 May: South African telecommunication company Mobile Telephone Networks (MTN) agreed to invest $750m in the Iranian internet communication and electronic services company Iranian Net, which was established in 2011. Iranian Net is the company responsible for expanding fibre-optic internet connections to Iranian households. (Source)
- 10 May: Aziz Najafpour Aghabiglou, a former member of the National Cyberspace Centre’s (NCC) management committee, sent a letter to President Rouhani. The letter raised eleven questions prompted by “the concerns of experts and the people” regarding ICT development in Iran. In his letter, he criticised the allocation of ICT development budgets to government departments under the control of Rouhani and his ministers, rather than autonomous bodies such as the NCC. (Source)
- 11 May: Iran’s Vice President Eshagh Jahangiri wrote a letter to the ICT Ministry outlining ICT projects that have been prioritised by the Resistance Economy Committee. (Source)
- 14 May: Tehran residents can now receive Very-high-bit-rate Digital Subscriber Lines (VDSL) from the Telecommunication Company
of Tehran (TCI). The newly available VDSL services in Tehran will provide its subscribers with internet speeds of between 16 to 50Mbps. (Source)

- **15 May:** Iran's Deputy ICT Minister claimed that the share of Iranian users' usage of domestic content (as a share of their total internet usage) has increased from 10% to 40% between March 2016 – March 2017. He also predicted that this figure will increase further after establishment of local search engines and social networks. (Source)

- **16 May:** Thet TCI announced that domestic and foreign traffic have been separated in 15 of Iran's operational ICT regions. This separation of traffic is to operationalise the separate pricing model for domestic and foreign traffic. (Source)

- **17 May:** Iran's ICT Ministry announced that the first Rouhani Government was successful in connecting 27,000 villages to the internet and placing 1,000 ATMs in Iranian villages. (Source)

- **20 May:** The Secretary of the Supreme Council for Cyberspace (SCC) Abolhasan Firoozabadi has said that fibre-optic networks are a key prerequisite for the development of a solid national communication infrastructure. (Source)

- **21 May:** Head of the TCI board of directors Borat Ghanbari said that within the next five years Iran's communication market will triple in size and that the TCI will be at the forefront of developing this sector. (Source)

- **21 May:** Deputy of the ICT Ministry Borat Ghanabari has said that in the last year one million fibre-optic ports have been installed, and this year this figure will triple. He asserted that by the end of the year three million Iranian families will have access to fibre-optic internet connections. (Source)

- **22 May:** IranCell has confirmed that from now on within its pre-paid data bundle domestic traffic will be 50% cheaper than accessing internationally hosted content. (Source)

- **23 May:** Deputy of Iran's Technology Organisation Reza Baghaeri has said that all payments to or from the Iranian government could be conducted online thanks to an expansion of e-government services. (Source)

- **25 May:** ICT Minister Mahmoud Vaezi unveiled the first household connected to fibre-optic networks in the City of Abadan. Vaezi said that the fibre-optic network provides access speeds of up to 50Mbps. (Source)
• **25 May:** ICT Minister Mahmoud Vaezi unveiled a city-wide Wi-Fi project in Abadan which connected 25 commercial and public spaces to Wi-Fi, with speeds of up to 70Mbps. (Source)

• **25 May:** ICT Minister Vaezi has said that all the current unfinished ICT projects will be finished by August, in time for the formation of President Rouhani’s second government. (Source)

• **27 May:** The Guardian Council’s spokesperson announced that if electronic voting could prevent long queues and protect the accuracy of voting, then it is something that should be pushed for. (Source)

**CONTENT CONTROLS AND FILTERING**

Unlike many previous electoral contests in Iran, the presidential election and its aftermath did not see any crackdowns or information controls being imposed on websites by means of filtering, blocking or internet shutdowns.

• **21 May:** Secretary of the Committee to Determine the Instances of Criminal Content (CDICC) and Deputy Attorney-General of Iran Abdolsamad Khormabadi dismissed rumours about the filtering of Instagram pages and websites belonging to President Rouhani’s critics. He said that no orders had been delivered from the CDICC or judiciary to do so. (Source)

**DIGITAL SECURITY AND CYBER ATTACKS**

The global WannaCry ransomware attack demonstrated that Iran shares many vulnerabilities with the rest of the world when it comes to large-scale cyber attacks. In a future edition of this report, we will monitor reactions to the attack from Iran, and discuss what measures will be taken to secure Iran’s internet in face of such future attacks.

• **13 May:** Following the widespread global impact of the WannaCry ransomware, Iran’s Cyber Police (FATA) asked all governmental bodies and organisations to update their operating systems to protect themselves from attack. Iran’s Information Technology Organisation (ITO) reported that it identified more than 200 victims of WannaCry ransomware in Iran. (Source)

• **15 May:** The head of Iran’s Passive Defence Organization General Jalali claimed that the WannaCry ransomware originated from America’s National Security Agency (NSA) and has been used deliberately. To attempt to back up his claim, he pointed at the
limited impact of the WannaCry ransomware upon US-based organisations. (Source)

- **29 May:** The Computer Emergency Response Coordination Centre confirmed that on 28 May a number of Iranian websites, including the Central Bank of Iran, the National Post Company of Iran and IranCell were targets of cyber-attacks. The attacks caused a number of service disruptions. (Source)

- **30 May:** The Iran Technology Organisation (ITO) announced that despite public information campaigns more than 4,000 Iranian computers were affected by the WannaCry ransomware. (Source)

- **30 May:** Colonel Mortazavi of the Isfahan Police Department said that investigations are underway after the accounting system of a reputable company was compromised. The company states that 10,000,000,000 IR has been misplaced as a result. (Source)

**DOMESTIC CONTENT AND ONLINE SERVICES**

Despite ongoing criticism from some quarters regarding slow progress, this month Iranian officials have taken a celebratory tone in highlighting Iran’s e-governance developments. It is likely that in President Rouhani’s second term we will witness the further expansion of government services available online.

- **2 May:** Head of the Information Technology Organisation (ITO) Nasrollah Jahangard said that the proportion of government services available online rose from 11% to 35% during the first four years of President Rouhani’s government. (Source)

- **16 May:** Iran’s Information Technology Organisation (ITO) has said that Iran will soon launch a beta version of a platform that allows Iranians to access information and documents available under right to information guidelines. (Source)

- **16 May:** The ICT Ministry’s Research Institute and Farhangian Teacher Education University have reached an agreement which seeks to increase the ICT skills of Iranian teachers. (Source)

- **21 May:** Iranian consumer now can sign up for landline internet services using the newly established portal and process all the payments online as well as in person. (Source)

**STARTUPS AND THE TECH ECONOMY**

It appears that Iranian authorities are seeking to encourage competition
among ISPs and mobile operators by conducting and releasing the result of consumer satisfaction research. At the same time, Rouhani’s administration continues to repeat its narrative that SHOMA and other ICT infrastructure developments are delivering significant levels of job creation across Iran.

- **2 May**: ICT Minister Mahmoud Vaezi has said that Iran’s Headquarters for Combating the Smuggling of Commodities and Foreign Currency’s will bring back compulsory registration of mobile phones in June or July. ([Source](#))

- **3 May**: ICT Minister Mahmoud Vaezi has said that job creation through online trade and business is one of the ICT Ministry’s priorities. ([Source](#))

- **5 May**: A member of the Supreme Council for Cyberspace Ezzatollah Zarghami said that students, lecturers and the [scientific] elite are extremely unhappy about low internet speeds and insufficient bandwidth. He added that the ICT Ministry overcharges for bandwidth, charging consumers 10 times the real price. ([Source](#))

- **13 May**: The Communications Regulatory Authority (CRA) has established a website to rank customer satisfaction levels for Iran’s Internet Service Providers (ISPs). The report, published [here](#), assesses the services provided by ISPs by looking at a range of indexes, including the quality of service as ranked by consumers as well as consumer loyalty to each provider. ([Source](#))

- **15 May**: The Industry Ministry of Iran have said that while 23 companies currently have hold licences to import iPhones into Iran, only 5 or 6 have been successful in doing so. ([Source](#))

- **23 May**: Rouhani’s science and technology assistant has said that Rouhani’s government is aiming to double the number of knowledge based companies and entrepreneurs by the end of his second term. ([Source](#))

- **24 May**: The Computer Business Organisation of Iran and the National Centre for Cyberspace have agreed to collaborate to create regulations for the ICT trade in Iran. They hope to make it more transparent and to work towards tackling challenges faced by ICT businesses in Iran. ([Source](#))

- **25 May**: The CEO of the Telecommunication Infrastructure Company (TIC) Javad Azari-jahromi has said that in the past year 100,000 new jobs have been created in the ICT sector. ([Source](#))

- **30 May**: On Thursday 3rd of August 2017 Persian Web Developers will be hosted at Iran’s ICT Ministry. The main areas discussed at the conference will be online work, FinTech, Cyber Security and web design and development. ([Source](#))
ICT STATISTICS

- **5 May:** Hossein Fallah-Joshaghi of the Communications Regulatory Authority (CRA) has stated that most Iranian fixed internet providers have been successful in implementing a 50% discount for domestic traffic. On the other hand, domestic mobile providers, IranCell and MCI, have received warnings for failing to implement the new system. ([Source](#))

- **21 May:** A report from the Statistics Centre of Iran claims that the number of Iranians active on social media networks has tripled in the last three years. The report also claims that 45.4% of those over 6 years old in Iran use the internet, which represents a 50% increase from three years ago. ([Source](#))

- **26 May:** The Head of Iran's Technology Organisation announced that on the day of the presidential election 2,700,000,000 billion messages were exchanged on SHOMA, of which 70% were multimedia messages. ([Source](#))

- **28 May:** The Communications Regulatory Authority (CRA) has released the latest ranking of ADSL Internet providers based on public opinion. The ranks are allocated based on customer satisfaction in each Iranian province. The research was done by asking the opinion of 35,000 Iranian ADSL users from across the country. ([Source](#))

- **28 May:** The Economic Office of the ICT Ministry has announced that the mobile penetration rate in Iran is 104% and that 33 million Iranian use mobile phones to connect to the internet. ([Source](#))