

AUGUST 2015



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 —

Last month's report introduced Filtershekanha, a bi-weekly mailing list distributing information about the latest circumvention tools. This month, we again made use of the the service's mailing list, this time to distribute a survey gauging Iranian attitudes to online privacy.

In addition to unpacking the results of the survey, we've got a roundup of all the latest ICT - related statements from politicians and policy makers. Highlights this month include: the ongoing fight between Rouhani's ICT Ministry and a telecommunications company managed by the Revolutionary Guard, ICT Minister Mahmoud Vaezi's take on banned social media, and the latest updates regarding the national Internet (SHOMA) and the "intelligent filtering" system.

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Privacy in Iran

The right to privacy, enshrined in Article 12 of the Universal Declaration of Human Rights, has received ample scholarly and media attention in the past few years. In addition to the political debates about **encryption** and **surveillance**, several prominent tech companies have made a concerted effort to demonstrate their commitment to **strong privacy protections** for their customers' data.

As privacy becomes an increasingly central issue in internet policy, interest in public perceptions of privacy has grown. In recent years, **numerous polls** have been **commissioned** with the aim of gauging public opinion in Western countries on topics related to privacy, yet there seems to be very little information about how Iranians view the issue. This report aims to fill the gap by discussing the results of a survey of Iranian internet users we recently took.

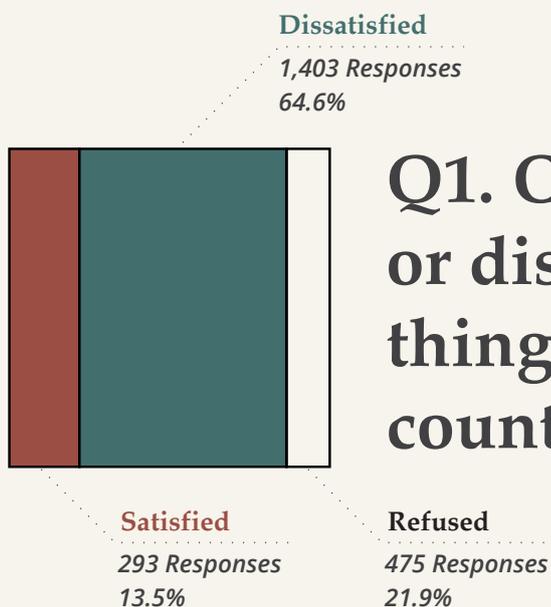
METHODOLOGY

On August 10, we sent out a six question survey to the subscribers to Filtershekanha's mailing list (which has 102,974 members). Most of the questions we used were drawn from a **Pew Research Center survey** aimed at measuring American attitudes to privacy in the post-Snowden era. The questions were adapted for Iranian respondents and then translated into Farsi. Results were collected and tabulated on September 7, at which point we had 2,171 responses. For the five multiple choice questions, we have provided statistical breakdowns of the responses, and for the one open-ended question in the survey, we created a word cloud illustrating the most popular answers.

Due to issues of access and the sensitive nature of internet policy in Iran, survey research on this topic is notoriously difficult to conduct. The Filtershekanha mailing list gives us access to a large number of Iranian internet users, but we cannot assume that that sample is representative of the Iranian netizens as a whole. Our claims are more modest: the 2171 respondents provide an initial impression of how Iranians think about privacy online, a topic that has received little scholarly or media attention. We hope that the initial findings we present below can be supplemented with further research.

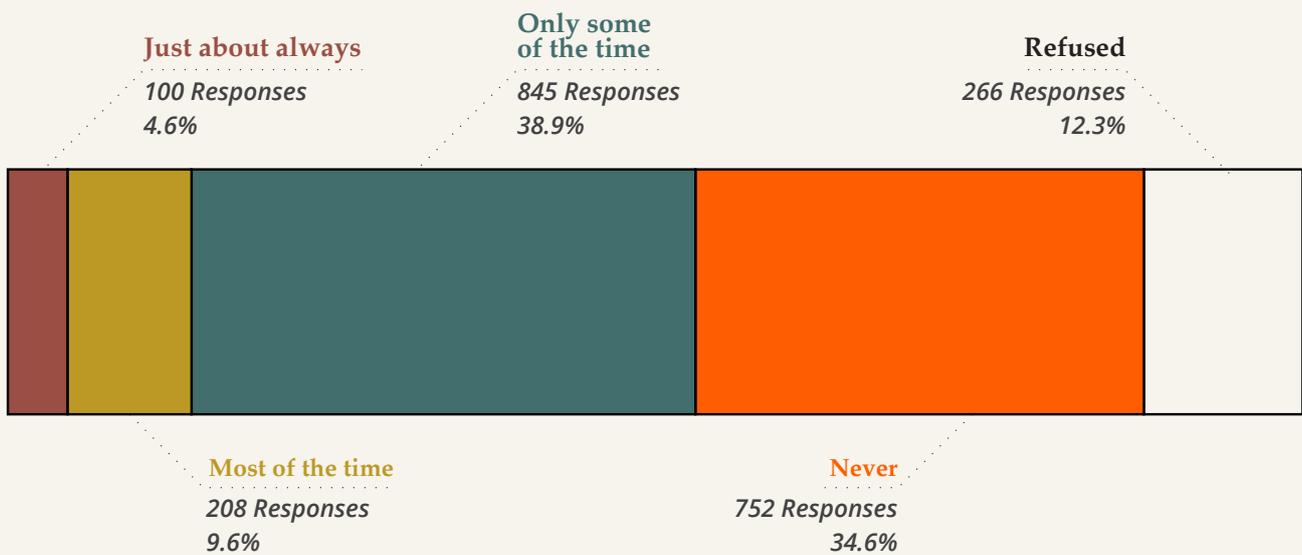
THE RESULTS

In this section, we present the responses to each question, followed by a brief discussion contextualising the results.

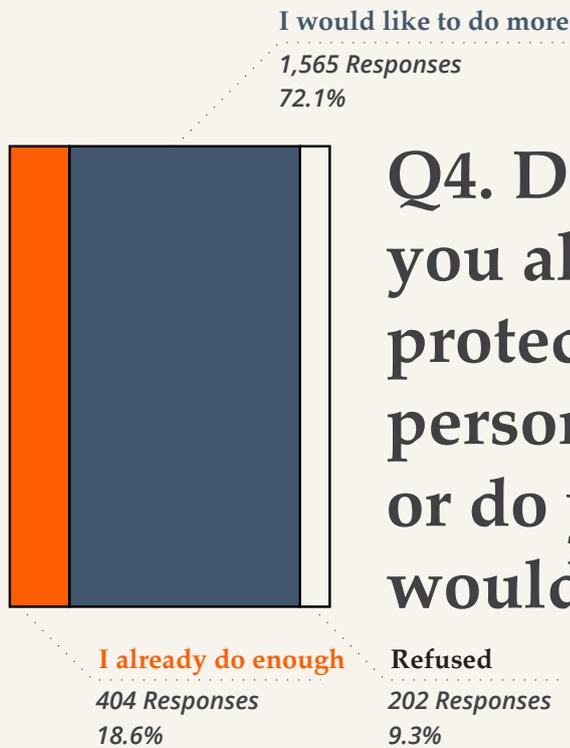


Q1. Overall, are you satisfied or dissatisfied with the way things are going in this country today?

Q2. How much of the time do you think you can trust the government to do what is right?



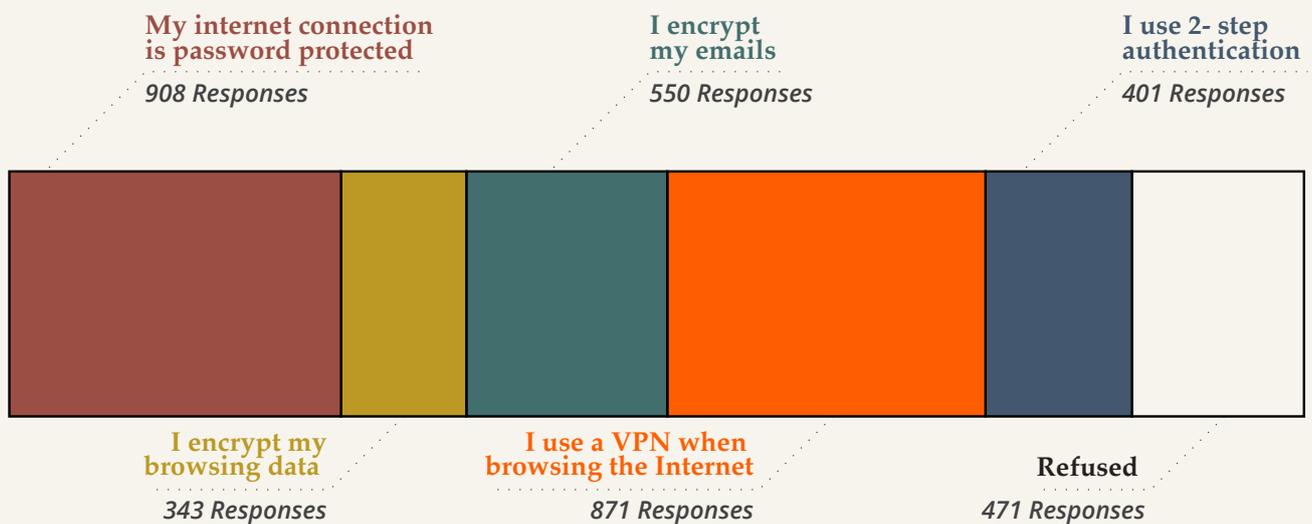
The responses to these two questions illustrate a clear trend: high levels of general dissatisfaction with the state of life in Iran, and the low levels of trust in the government.



Q4. Do you feel as though you already do enough to protect the privacy of your personal information online, or do you feel as though you would like to do more?

The responses to this question illustrate that the overwhelming majority of respondents, by their own admission, do not do enough to protect their personal information online. To gain further insight on the steps Iranians are taking to ensure digital security, the next question asks for specifics.

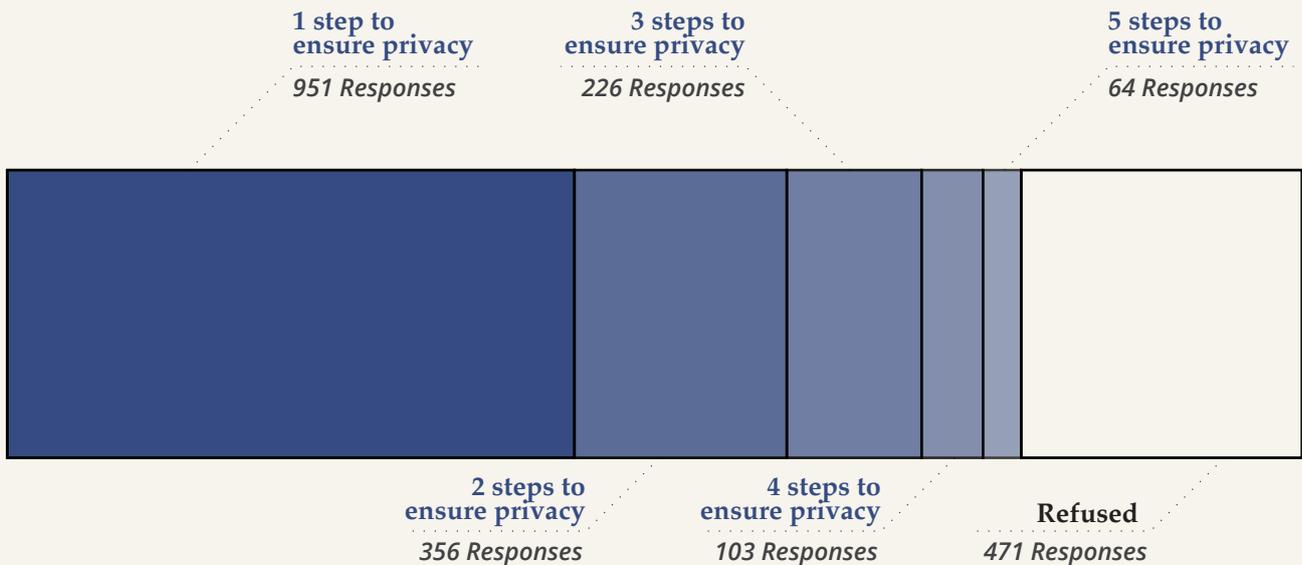
Q5. What steps are you currently taking to secure your privacy online [mark all that apply]?



For this question, we tallied the number of times each step was selected (see above).

The list of possible answers we have provided is not intended to be comprehensive. Instead, we have tried to include some of the most popular methods of ensuring privacy online.

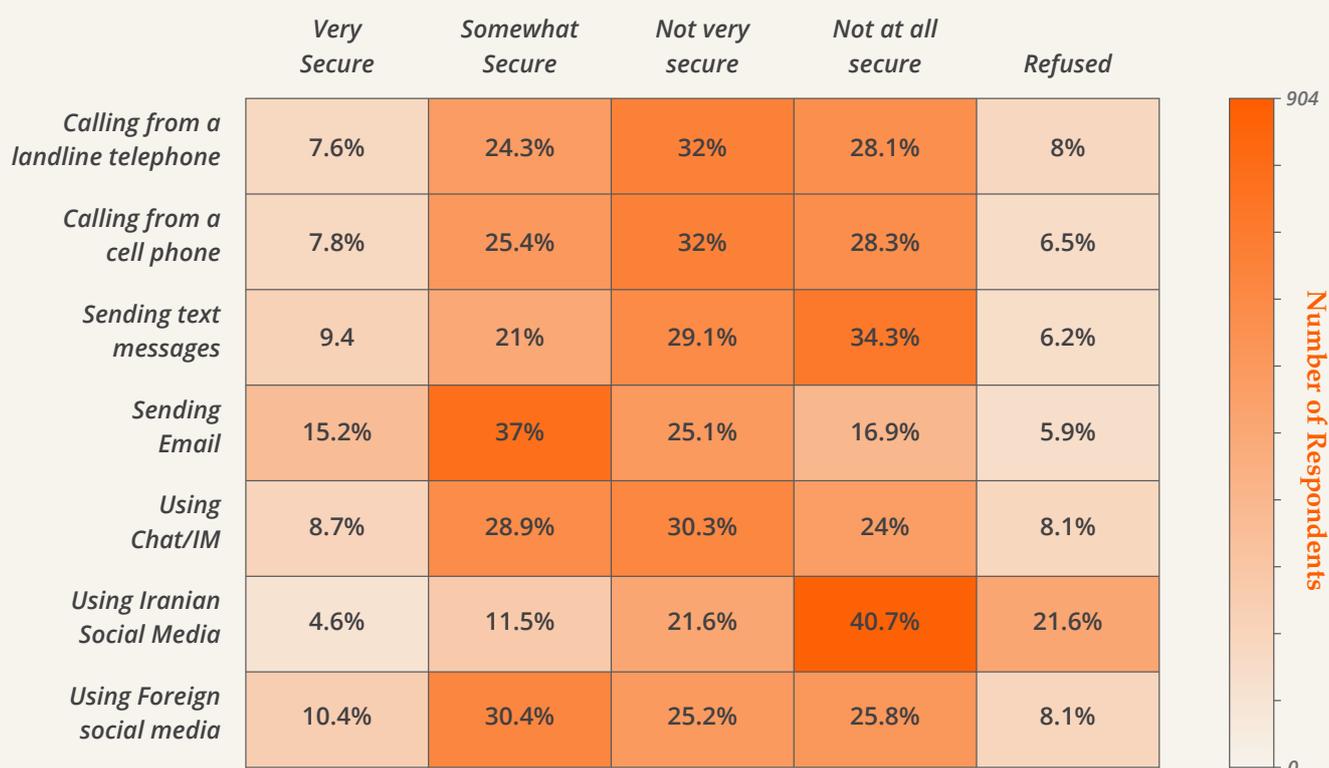
We then counted the number of steps each respondent took to secure his or her privacy online.



As the graphic above indicates, a strong plurality of respondents take only one of the steps mentioned to protect their privacy, while less than a quarter of respondents reported taking more than 2 steps to ensure privacy. These results shed light on the findings of question 4, which indicated that over 72% of respondents said they would like to do more to protect their privacy online.

In terms of specific methods of protecting privacy, it appears that password protecting an internet connection and using a VPN to browse the internet were most popular. The prevalence of VPN use within the sample is not surprising, given that all respondents are subscribed to a mailing list which distributes information about circumvention tools.

Q6. Thinking about your daily life, when you have private information that you would like to share with another trusted person or organization, how secure do you feel when...



One of the more striking (if not entirely surprising) findings is the strong distrust respondents harbour towards Iranian social media platforms. Fully 40% of respondents view these platforms as “not at all secure.” It is also worth noting that by a considerable margin, this was the question respondents were most reluctant to address; over one fifth of those polled refused to answer the question about Iranian social networks. Moreover, respondents were more than twice as likely to trust foreign social networks, with 40.8% of respondents rating these networks as either “very secure” or “somewhat secure,” compared to just 16.1% for their domestic counterparts.

Another interesting result is that respondents seem considerably more comfortable with email than with telephone calls. While respondents saw little difference between the privacy protections offered by landline phones versus mobile phones, they viewed emailed as considerably more secure than either one.

CONCLUSION

Given that our sample was not intended to be representative of Iran's internet-using population, attempts to draw generalised conclusions should be avoided. Yet the results discussed above do provide some initial insight into how some Iranians think about internet privacy. Here are some of the more noteworthy findings, in no particular order.

- A decisive majority of respondents take few steps to protect their privacy, while conceding that they would like to do more.
- Most respondents reported a disillusionment with the state of life in Iran generally, and dissatisfaction with the government in particular.
- Respondents most strongly associated the notion of privacy with security.
- When it comes to privacy protections, Iranian social networks are the least trusted media, while text and instant messaging were also viewed with suspicion.

These preliminary insights can serve as useful guidelines for future research. It would be interesting to see if surveying a different sample of Iranian internet users would yield similar results. In any case, the way Iranians view privacy online remain an understudied but important topic. We hope our initial foray into the field will be supplemented by further research.

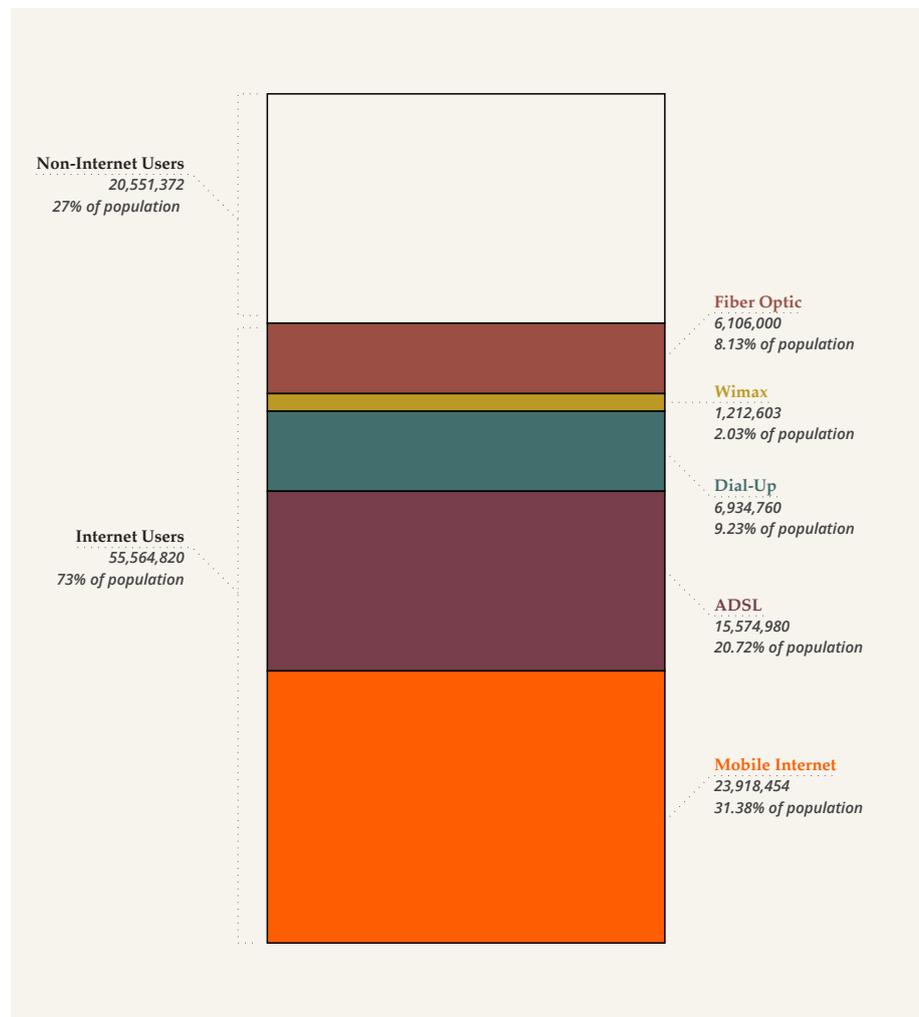
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Statements from Ministries and Politicians

- **August 3:** Ali Asghar Ansari, Deputy of Development and Management for the National Information Network (SHOMA) announced that 80% of government organisations are connected to SHOMA, while technical issues prevent the other 20% from connecting. Ansari also pointed out that Iran has almost 10 million high speed ports. ([Source](#))
- **August 3:** Alireza Daliry, Deputy of Iran's President Office in Development and Science Resources and Technology said that after the nuclear deal, Iran should only allow imports into country if they come with the associated technology and information about how the products were made with Iran. He mentioned that it is really important to support Iranian manufacturers. ([Source](#))
- **August 4:** Iranian President Hassan Rouhani said he disagrees with the blocking of social media. Rouhani also mentioned people's support on social media on Iran's nuclear deal. Later, he shared what he said on TV on his own [Instagram account](#). ([Source](#))
- **August 4:** ICT Minister Mahmoud Vaezi said the second phase of the Intelligent Filtering system on social media and websites will be run by a foreign company. He did not mention which company he had in mind, nor which country that company would be from. ([Source](#))
- **August 4:** Mohammad Hassan Entezari, Secretary of the Supreme Council of Cyberspace (SCC), announced a new plan for the regulation of the Iranian Internet. Entezari did not reveal details about the contents of the plan, or when it will be implemented. ([Source](#))
- **August 4:** Alireza Ghalambor Dezfouli, Director of MTN Irancell, said the mobile provider has 7.5 million mobile broadband users, which is more than one third of Irancell's client base. Dezfouli added that Irancell has over 22 million customers in the country. He also pointed out that Irancell's 3G network is available in 253 cities, while 4G is offered in 80 cities. Irancell plans to increase the number of cities with 4G coverage to up to 500. Finally, Dezfouli pointed out that the average daily traffic usage of Irancell customers is 275 TB. ([Source](#))

- August 5:** Vaezi said that while there is no ban on the use of social media, Iran does not accept criminal content on these platforms. Vaezi added that over the past two years, Internet prices decreased by 25% and the standard mobile Internet tariff decreased from 5 IRR to 0.5 IRR. Small Media previously published a comprehensive report about Internet quality and price which is available [here](#). (Source I, Source II)
- August 6:** Hassan Karimi, Deputy of Development and Network Management in the Telecommunication Infrastructure Company (TIC), said Iran could manage 40% of the total traffic of the Iranian Internet on servers inside the country. Karimi added that Iran has added 5,000 km of fiber optic cables over the past two years, with total coverage reaching 56,500 km. (Source)
- August 6:** Deputy ICT Minister Nasrollah Jahangard announced that Iran will invest 25 billion IRR (834 million USD) in telecommunications infrastructure. He also mentioned that the ICT Ministry has invested 1.1 billion IRR (36 million USD) over the past two years. (Source)
- August 7:** Jahangard said Iran has both a national internet (SHOMA) and e-Government resources but both are of poor quality, and SHOMA has very little bandwidth. Previously, Small Media did an in-depth report about SHOMA which is available [here](#). (Source)
- August 8:** Vaezi announced that the National Bandwidth Network, which seems to be part of SHOMA, will be completed by end of the [Sixth Five-Year Plan](#) (2016-2021). (Source)
- August 9:** According to Mehr News Agency, the Mobile Communication Company of Iran (MCI) has over 73 million customers, and offers 3G and 4G in 257 cities. (Source)
- August 10:** Khosro Saljoughi, Head of the Strategic Council of National Search Engines said that the organisation will seek help from an international consulting company in an effort to improve Iran's national search engines. He did not mention which company he had in mind. (Source)
- August 10:** According to a report by the public relations department of the Telecommunication Company of Iran (TCI), Iran has the cheapest tariff for landlines in the Middle East. According to this report, the company's landline package in Iran costed 0.12 USD in 2013. (Source)
- August 10:** Gholamreza Dadashzadeh, Deputy of Regulatory Supervision at the CRA claimed that MCI is Iran's best mobile provider, with Irancell taking second place. (Source)

- August 12:** Mohammad Reza Keshavarzi, Deputy of Content in the National Center of Cyberspace said the organisation will produce new regulatory guidelines for social media. Keshavarzi added that Iran would like to prevent companies from sending unsolicited bulk text messages on both domestic and nondomestic social media platforms. (Source)
- August 14:** The National Internet Development Management Center (MATMA) published statistics on Iranian Internet users. According to MATMA, the provinces of Tehran and Mazandaran have the highest Internet penetration rates in the country, with 107% and 96% respectively. It is unclear how the report arrived at these figures, and Small Media has been unable to independently confirm them. The report also notes that the national Internet penetration rate has increased since the last report (published in March 2013), which placed the figure at 49.13%. (In the table below, subscribers refers to the number of people or organisations that sign up for an internet connection.) (Source)



- **August 15:** Abbas Asoushe, Deputy of Technology in the National Center of Cyberspace (NCC) said SHOMA is one of the organisation's top priorities. Asoushe added that within the Sixth Five-Year Plan Iran would like to have 50% of Internet traffic hosted on servers inside the country. He also said the NCC aims to improve content delivery within Iran, turning it into a regional hub. ([Source](#))
- **August 15:** Vaezi said more than 25,000 villages will be connected to the Internet by the end of this Iranian year (March 2016). He also mentioned available bandwidth in Iran has increased from 600 Gbps to 2400 Gbps in the last year. The ICT Ministry aims to get the number to 4000 Gbps by the end of March 2016. ([Source](#))
- **August 16:** Asoushe denied Iran was making use of SHOMA. Previously, Deputy ICT Minister Nasrollah Jahangard said Iran already has SHOMA. Asoushe said there is long way to go before SHOMA becomes operational. ([Source](#))
- **August 16:** Vaezi said the number of ADSL Internet subscribers has increased from 3.2 million to 20 million while the Rouhani government had been in office. ([Source](#))
- **August 16:** Police spokesman Saeed Montazar-Almahdi said there is only one legal website for dating in Iran, which is [Hamsan Gozini](#), and they will take action against 700 illegal dating websites. Hamsan Gozini's project manager Zohreh Hosseini has claimed that thanks to the site, 110 marriages have been registered since February/ March 2015. ([Source](#))
- **August 17:** Vaezi said that if the Telecommunications Company of Iran (TCI) does not make payments on their debts to the Telecommunications Infrastructure Company (TIC), then the TIC would not be able to pay their international debts and the entire country will be disconnected from the Internet. (The TIC has a monopoly on selling bandwidth to Iranian ISPs. If foreign providers stop selling bandwidth to the TIC because it cannot honour its debts, Iranian ISPs will not be able to offer Internet connectivity to customers.) The TCI, which is managed by the Revolutionary Guard, was previously suspended from selling Internet and providing services in a number of provinces in Iran due to poor service and debts to the TIC. ([Source](#))
- **August 17:** Dadashzadeh said all mobile SIM cards are registered and there are no more unregistered SIM cards. He also noted that anyone in Iran who has more than 10 SIM cards must explain why they need such a large number of SIM cards. Previously, Iran announced that all SIM card holders must register their SIM cards with their national ID number and their current address, otherwise their service would be disconnected. ([Source](#))

- **August 17:** Mahmoud Zargar, Director of the Scientific Committee of Iran's [Smart City Summit](#) in Tehran said the number of smartphones in the country is increasing rapidly. He mentioned that the number of mobile users stood at 2 million in 2013, while it stands at 20 million today. Zargar projects that this will increase to up to 44 million smartphone users by the end of next year (March 2017). ([Source](#))
- **August 19:** Amir Sayah, Director of Mobile Systems in the Digital Media and Information Technology Center (SARAMAD), said his organisation will launch an online platform to review unsolicited bulk text messages. ([Source](#))
- **August 22:** Vaezi announced his ministry will launch a Satellite Hub and Radio Frequency Monitoring Center in Iran. He also hoped that in the near future all SIM card holders will be able to change their operator without having to change their number (a process known as Number Portability) between Iran's three main mobile network operators. ([Source](#))
- **August 23:** Vaezi said the ICT Ministry is piloting the Intelligent Filtering system on social media, but he did not specify which platform. He added that 11 universities took part in the development of the Intelligent Filtering system. He also said that there were no plans to block social media, and that Telegram had promised to deactivate "immoral" and "pornographic" stickers for Iran. ([Source](#))
- **August 24:** Dadashzadeh said that the sale of Internet connectivity in provinces which sold faulty TCI services is largely back to normal, following a suspension on the sale of TCI services imposed by the TIC. He said that out of six provinces implicated in the suspensions, the TCI can resume sales in four provinces, while the other two provinces still have not resolved their issues. Dadashzadeh added that Internet companies provide service to over 1,200 TCI centers in Iran, only ten of which may experience bandwidth issues. The TCI has stopped these ten centers from providing services until they resolve their bandwidth problems. ([Source](#))
- **August 24:** Vaezi said that Iran plans to have two National Satellites: one for communication and banking and another for agriculture, environment, and weather. Vaezi also said that the ICT Ministry would ensure that any satellite jamming that took place would be completely safe and carry no adverse health implications. In 2012, Small Media published a report on satellite jamming, including a section on the health implications, which is available [here](#). ([Source](#))

- **August 25:** Sorna Sattari, Deputy of Science and Technology for the Office of Iran's President, announced collaboration with Russia to make satellites and airplanes. Sattari was talking to members of the press in Maks Air show in Moscow. According to the Mehr News Agency, more than 40 companies representing Iran attended the Maks Air show this year. ([Source](#))
- **August 25:** Mahmoud Khosravi, Deputy Ministry of ICT, said Iran has installed more than 4,700 km of fiber optic cables over the past two years. He pointed out that at the end of the Ahmadinejad government, Iran had only 450,000 km of E1 fiber optic cables. It now has 1,335,000 km, and the capacity has become 2.9 times faster than non-fibre optic connections. He said by the end of the current government they aim to have 12 million km of fiber optic cables in Iran. Khosravi also mentioned that the capacity of Iran's Domestic IP network increased from 643 Gbps to 2,400 Gbps, and they aim to increase this by eight times. ([Source](#))
- **August 25:** Vaezi announced Iran's future plans in the science and technology sector. He said the government is aiming to develop large satellites within the next fifteen years. Vaezi also said they were thinking of buying Intelligent Filtering technology but they ended up developing it Internally due to security and economic concerns. Vaezi added that 11 universities are helping with Intelligent Filtering. He went on to note that the first phase of Intelligent Filtering has been successful and they will launch the second and third phases soon. Finally, he observed that intelligent filtering will be implemented by Iranian ISPs. ([Source](#))
- **August 25:** Ghalambor Dezfouli, Director of MTN Irancell said Irancell covered almost 400 cities with 3G and 80 cities with the 4G, and he hoped that by end of this year (March 2016) they will cover 500 cities with both. He also mentioned that monthly data usage has increased 450% since July 2014. He added that the speed of data transfers via 3G is 10 time faster than 2G, while 4G ten time faster than 3G and 100 time faster than 2G. ([Source](#))
- **August 26:** Vaezi said the number of mobile users has increased to 80% of the population in the past two years. He added that transfer traffic had increased from 116 Gbps to 558 Gbps since the new government came into office. Vaezi said the number of mobile internet users had increased from 250,000 to 20 millions in the past two years. He added that 87% of the first phase of Intelligent Filtering had been successful and he hoped to finish the second phase by the end of March 2016. Also, Vaezi said they hope to finish building SHOMA's infrastructure by end of this Iranian year. ([Source I](#), [Source II](#))

- **August 26:** TCI announced the availability of 16 Mbps Internet connections in Tehran and Alborz provinces. Iranian law forbids ISPs from offering internet speeds faster than 256Kbps (0.256Mbps) to domestic users, however this is often ignored. ([Source](#))
- **August 27:** Vaezi said that Iran will soon launch two satellites into orbit using domestically produced rockets: 'Sharif Sat', produced by Sharif University of Technology, and 'AT Sat', produced by Amir Kabir University. Vaezi was speaking at the launch of new communication initiatives, including Northern Tehran's first publicly accessible WiFi, built by Irancell. ([Source](#))
- **August 27:** Vaezi launched the foundation of the Frequency Monitoring Centre for Western and Northwestern Iran in Qazvin. Its purpose will be to monitor, regulate, manage and control the frequency space and monitor the border frequency in Iran. This center will cover the province of Qazvin, Shahrekord, Markazi, Khorramabad and Hamadan. ([Source](#))
- **August 29:** Irancell announced the launch of 3G and 4G coverage in the Tehran Metro for their customers. ([Source](#))
- **August 29:** Guardian Council spokesman Nejatollah Ebrahimian said they have received a new request from the Ministry of Interior to allow electronic voting in Iran's upcoming parliamentary elections, which will be held in February 2016. ([Source](#))
- **August 29:** Dadashzadeh announced the upcoming September 2015 launch of a new website for the registration of SIM cards, aimed at combating identity fraud. Dadashzadeh added that this website will allow any SIM card holder to register with any operator. Previously, the TIC regulations required users to register SIM cards using their national IDs. ([Source](#))
- **August 29:** Hossein Mehri, director of Iran's Postal Service announced a new plan to integrate Iranian addresses based on the GNAF system (Geocoded National Address File). Mehri also announced plans to open 10,000 new rural post offices across Iran. ([Source](#))
- **August 30:** Vaezi said that Iran has the joint-cheapest internet tariff in the world. Speaking with the Mehr News agency, Vaezi also announced that the government hopes to create revenue by selling phone applications. ([Source](#))
- **August 30:** Entezari said that he recommended that Hassan Rouhani change the party responsible for implementing SHOMA, criticising the Ministry of ICT for failing to implement SHOMA effectively. ([Source](#))

- **August 31:** Vahid Sadoughi, the CEO of MCI announced that the operator's annual budget sits at 2,700 billion IRR (90 million USD). Sadoughi launched 3G networks in 257 cities, as well as expanded public WiFi and internet access on the Tehran Metro. Sadoughi also stated that the MCI reinvests 27% of its profits in new projects. ([Source](#))
- **August 31:** Alireza Amidian, Deputy ICT Minister announced that 13,800,000 mobile users have high-speed internet access. He said that prior to the granting of 3G licences to MCI and Irancell, only 3,584 Rightel users had access to high-speed internet, adding that since last year the number of mobile internet users across different operators had increased from 5 million to 22 million. ([Source](#))
- **August 31:** Vaezi said that domestic bandwidth in Iran has increased from 620 GB/s to 2400 GB/s since the beginning of the Rouhani administration, predicting that it will increase to 4000 GB/s by the end of this government. Vaezi also mentioned that the E1 transfer network was comprised of 450,000 E1 connections when Rouhani took office, while it now stands at 1,350,000, will increase to 3 million by the end of this year (March 2016). He said 70% of the Iran National Information Networks has been finished. ([Source](#))