

Explainer: Can Russia Disconnect From The Internet?

By Luke Johnson

October 02, 2014

After chairing a meeting of the Russian Security Council on October 1, President Vladimir Putin insisted the Kremlin was not planning to limit access to the Internet or put it under total state control.

The authorities would, however, take additional measures to increase cybersecurity and continue to shut down sites promoting extremism, xenophobia, terrorism, and child pornography.

Putin's comments came amid widespread speculation about possible restrictions on the Internet -- or even a complete countrywide unplugging -- amid an ongoing crackdown on dissent and escalating tensions with the West over the conflict in Ukraine.

On September 30, [the Kremlin said](#) Russia was "rehearsing responses should our esteemed partners decide to switch us off from the Internet," possibly indicating a greater level of control from the state.

Regardless of Moscow's intentions, how easy would it be for Russia -- or any other country -- to unplug from the Internet?

Egypt shut off the country's Internet for five days in 2011 during the Arab Spring protests. Syria's Internet was shut off three times in 2011. Nepal and Burma have briefly disconnected, and China shut off access to the Xinjiang region during Uyghur unrest in 2009.

But how easy it is to unplug depends on the number of domestic Internet service providers (ISPs) that have purchased connectivity from another provider outside the country, according to Jim Cowie, chief scientist at Dyn, an Internet performance company. More of these make it more difficult for a government to unplug from the Internet.

"There's a protective effect because every one of those represents something that you would have to turn off in order to completely sever the country from the Internet," Cowie says.

Egypt has fewer than 10 of these connections, while Syria has just two. This made it easier for those governments to switch off the Internet.

What are the specifics that make this more or less difficult in Russia?

Russia does not lack for connectivity to the outside world. There are more than 300 companies that have purchased connectivity from outside the country, Cowie says.

The Russian government would have to force all of these providers to shut down to fully sever itself from the Internet. It could be done, but it would take a lot longer and be much more labor-intensive.

What are Russia's options to restrict Internet usage, short of a shutdown?

An alternative to shutting down the Internet is by filtering content.

Russia has already blocked several opposition websites and passed a law requiring registration by some bloggers.

Moscow has also indicated that foreign Internet companies will have to comply with its laws. Roskomnadzor, Russia's media regulator, [sent a notice to Facebook, Twitter, and Google](#) requiring them to comply with a law to register with the agency and store six months of archives of metadata on Russian soil.

The Russian government could also shut off the Internet in certain regions or cities, says Cowie. The telecommunications giant Rostelecom has been recentralized after a breakup into smaller regional firms in the 1990s, a move that could make a partial shutdown easier.

What are ways that users could get around an Internet shutdown or Internet controls?

Internet users could turn to their smartphones' Internet access via 3G if mobile carriers were still operational while ISPs were shuttered.

Dial-up Internet would also be an option for those with an international phone line, albeit at a much-reduced speed -- and a much higher cost. European dial-up providers [offered their services](#) to Egyptians during its 2011 Internet shutdown and provided connections while Egypt's ISPs were shuttered.

Short of a full shutdown, there are already technologies available that evade content filtering and monitoring. One already in use is [Tor](#), a network of virtual encrypted tunnels that make a user's movements opaque to tracking by an ISP or other third party.

In other words, instead of information coming directly from your computer to an opposition website, the information travels across encrypted connections through a series of other servers before reaching the final destination.

<http://www.rferl.org/content/can-russia-disconnect-from-the-internet/26617176.html>