# Preparing for the splinternet

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According to Wikipedia, a researcher at the Cato Institute first used the word "splinternet" in 2001 to describe the idea of "parallel Internets that would be run as distinct, private and autonomous universes." Clyde Wayne Crews, the researcher, thought it might be a good thing.

Roughly 20 years later, some aren't so sure.

A splinternet might "hurt individuals attempting to organize in opposition to the war, report openly and honestly on events in Russia, and access information about what is happening in Ukraine and abroad," argued 41 digital rights groups led by Access Now and the nonprofit Wikimedia Foundation.

Ultimately, the topic could have profound implications for executives and companies in the global telecommunications space. After all, there's a big difference between selling into a globalized economy and selling into a handful of splintered, Balkanized world regions.

**Cutting off Russia**

The notion of a splinternet gained new traction following the decisions by Lumen and Cogent to cut Russia off from the Internet.

"We decided to disconnect the network due to increased security risk inside Russia," Lumen wrote in a lengthy post about its decision. "We have not yet experienced network disruptions, but given the increasingly uncertain environment and the heightened risk of state action, we took this move to ensure the security of our and our customers' networks, as well as the ongoing integrity of the global Internet."

According to network-monitoring company Kentik, Lumen is the top international transit provider to Russia. The company boasts Internet providers including Rostelecom and TTK as customers, as well as all three major mobile operators (MTS, Megafon and VEON).

As telecom transit providers back out of Russia, so too are a wide range of other US companies, from Apple to McDonalds. In response, Russia has blocked Facebook and moved against Wikipedia, among other actions.

But it's the notion of separating Russia from the broader global Internet that has raised concerns among some public-interest organizations.

"We urge all actors considering steps that would limit internet access in the Russian Federation to carefully consider the full impact of such measures and their possible unintended consequences, and to act in a targeted, open, and strategic manner, consistent with international human rights principles of legality, legitimacy, necessity and proportionality," argued the groups led by Access Now and the Wikimedia Foundation.

Others agree.

"Once large network operators start demonstrating an ability to make routing decisions on political grounds, other governments will notice. This will attract regulatory requirements to shape network interconnection in real time along political lines. If we travel that path, in short order the network of networks will not exist," argued Andrew Sullivan of the Internet Society in a post to the group's website. He concluded: "The Internet is for everyone."

**From China to Brazil**

But Russia isn't the only country to chart a course toward the splinternet. China of course is the leader in this area, having fostered domestic suppliers for everything from 5G equipment (Huawei) to social media (WeChat). And the extent of the "Great Chinese Firewall" has been well documented.

Elsewhere, the Indian government is cracking down on critics on social media while concurrently funding its own ecosystem of domestic 5G suppliers. Similar activities can be found in locations stretching from Brazil to North Korea.

In the US, the US military continues to look for ways to use 5G to "ensure its forces can operate effectively anywhere, including in contested networks."

Some analysts believe this all indicates the splintering trend will accelerate, exacerbated by Lumen and Cogent in Russia.

"The actions of American companies, combined with their dominance in certain markets, will cause other countries to consider ways to either control those companies or utilize other companies," argued the financial analysts at New Street Research in a note to investors earlier this week.

"Certainly, in the case of China and Russia, the developments of the last week will reinforce their view that they were wise to take the steps they have already taken, but we would expect that they will intensify those initiatives," they continued. "We also wonder whether other countries, such as India and Brazil that represent large markets and whose governments have trended towards greater control of speech, particularly on the Internet, might also look at the events of the last week and start exploring even further steps to nationalize the rules of the Internet in their jurisdictions."

Ironically, the analysts also pointed out that the origins of today's global Internet can be traced back to the Cold War, when researchers began looking at ways to design a redundant, resilient communications system after the Cuban missile crisis.

**Economies of scale**

In the telecom industry, most vendors have global ambitions. And many, from Apple to Ericsson, already operate globally. Their goal is to create "economies of scale," whereby a development in one country can be sold worldwide, thus maximizing profits.

This trend can be clearly viewed through the lens of 5G. In the 2G and 3G era, there were a handful of competing standards: China fielded TD-SCDMA, Europe backed UMTS and some US players pushed CDMA. But the global industry rallied around the LTE standard in 4G and pushed that worldwide scale directly into the development of the 5G standard.

What happens next is anyone's guess. The 3GPP – the global standards association that has been driving the development of the Gs since 1998 – has been remarkably immune to geopolitical gyrations. Whether it remains so is unclear at best.