

## **Written Statement**

**Nat Kretchun  
Senior Vice President for Programs  
Open Technology Fund (OTF)**

**Select Committee on the Strategic Competition  
Between the United States and the Chinese Communist Party**

**“The Great Firewall and the CCP’s Export of its Techno-Authoritarian Surveillance State”**

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Chairman Moolenaar, Ranking Member Krishnamoorthi, and distinguished Members of the Committee, thank you for inviting me to testify.

The Chinese internet today is unrecognizable from the internet we all know.

It has been roughly 15 years since Google, Facebook, foreign independent media, and much of free and open internet was blocked in China and replaced by CCP-controlled domestic platforms, such as WeChat and Weibo. In that time, an entire generation has grown up never knowing the global internet. This generation does not long for the global internet because – by design – they have never meaningfully experienced it.

This is the fundamental challenge we are faced with today.

The CCP has spent billions of dollars and erected a complex technical architecture to isolate over a billion people from the global internet. However, its ability to control information has less to do with blocking access to foreign websites and censoring international media and far more to do with its success creating an entirely new internet ecosystem and fundamentally reengineering its population’s online behavior.

In order to be successful in this context, internet freedom strategies must adapt to Chinese citizens’ online needs by providing accessible new pathways to information and facilitating otherwise censored interactions; a task that is far more complex than uncensoring websites or tunneling through firewalls.

### **Conventional Censorship Circumvention**

OTF was established over a decade ago as a project within Radio Free Asia to contend with the CCP’s increasingly sophisticated information control policies. Even then press freedom and human rights organizations widely viewed China as among the most information-restricted environments in the world due to significant state-sanctioned censorship and an unrivaled digital

surveillance apparatus. Responding to this challenge has been integral to OTF's history and mission, which has long prioritized internet freedom solutions for the safety of journalists and human rights defenders, and digital audience reach within China.

Today, OTF is a Congressionally-authorized non-profit funded through a grant from the U.S. Agency for Global Media. OTF's mission is to advance internet freedom in repressive environments by supporting the research, development, implementation, and maintenance of open source technologies that provide secure and uncensored access to the internet and counter attempts by authoritarian governments to control the internet and restrict freedom online. Over two billion people globally use OTF-supported technology daily, and more than two-thirds of all mobile users have OTF-incubated technology on their devices.

As OTF has done this work over the last decade, the “cat and mouse” game of internet freedom has remained fundamentally unchanged. Authoritarian regimes have developed and implemented increasingly aggressive information controls and, in response, civil society has created and adopted increasingly sophisticated internet freedom technologies – censorship circumvention solutions and privacy-enhancing communications tools – enabling people to safely access the uncensored internet. This escalatory pattern has remained relatively consistent and holds true even in countries considered to have advanced internet controls, like Russia and Iran. In both, their populations are willing and able to access circumvention technologies that they then use to interact with a wide array of global platforms and information. Internet freedom solutions have generally been developed based on an assumption that overcoming censorship is simply a technical impediment that once addressed, will meaningfully restore free, online expression.

This assumption no longer holds in China.

### **China's Internet Substitution Model**

The CCP is not simply building an ever greater firewall. It has undertaken a much more ambitious project, erecting multiple layers of self-reinforcing technical and social controls. The result of which is not a globally-recognizable internet with key redactions, but the wholesale substitution of an entirely distinct online ecosystem.

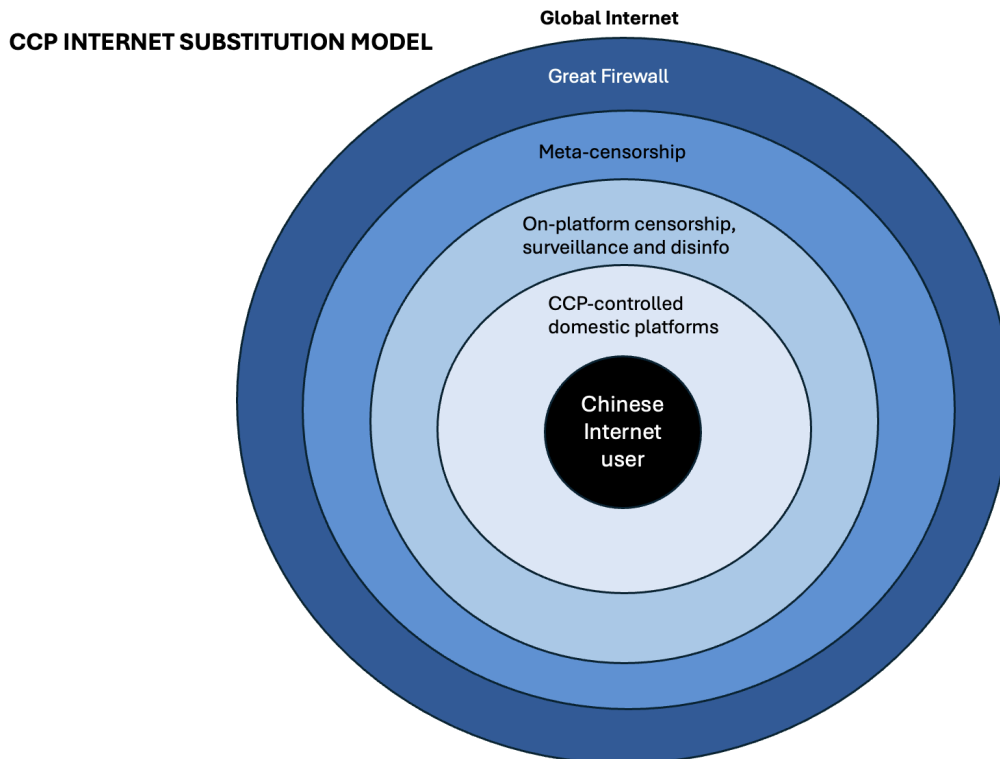
An important component of the CCP's information control strategy is the substitution of global platforms for domestic alternatives. While scrubbed of most content Chinese authorities would find objectionable, these domestic alternatives are extremely compelling, well-designed, content-rich, and leverage the network effects of most of the world's Chinese speakers. Chief among these, Wechat is now indispensable to life in China, along with a handful of other popular domestic platforms. As a result, most Chinese internet users have no reason to explore beyond China's own social media platforms.

This substitution of all encompassing domestic platforms provides China's censors with a huge “home field” advantage: the amount of control that can be asserted through WeChat and other

platforms is far beyond what is possible on the open internet. On these platforms, censorship is faster, more nuanced, and more complete; surveillance is harder to avoid; and party messages spread more forcefully and more quickly by committed little pinks. Add to that authentic identity registration, ensuring only Chinese nationals are on these platforms. Combined, these attributes mean that it is very difficult to view or share content that contradicts established narratives or connect with anyone who is unencumbered by the same digital controls. The near-universal reach of this domestic platform ecosystem effectively contains and constrains over one billion Chinese citizens.

For those that want to look for information or connections that are unavailable on domestic platforms, precisely how to do so is far from simple. The Chinese government has engaged in a novel project of meta-censorship to obscure even the possibility of circumvention from its citizens. They have criminalized VPNs and have thoroughly blocked discussion of how to download or use tools to evade censorship. Domestic search engines do not index censored sites. And app stores – most notably those run by Apple and Google – remove thousands of apps at the request of the Chinese government, including most internet freedom tools.

As if these obstacles were not enough, users must still also contend with the Great Firewall, which remains the world’s most advanced national filtering system. It isolates the Chinese internet ecosystem from the rest of the global internet by censoring international websites and social media, and filtering keywords. It blocks circumvention tools and protocols, as well as secure messaging apps and alternative app stores that do not comply with takedown orders.



From the vantage point of an average Chinese internet user, it is becoming increasingly difficult to even imagine what exists beyond China's domestic ecosystem, much less discover ways to access it. For those who take on the journey from an unanswered question to an uncensored space online, oppressive digital surveillance with potential real-world consequences remains a serious risk.

The end result of this socio-technological system is a dramatic change in user behavior. As researchers at [Stanford](#) concluded after they gave over one thousand students in Beijing circumvention tools, even with direct access to these technologies few students used them to access the global internet unless they were actively incentivized to do so.

The era in which we could reasonably assume that most Chinese citizens could and would naturally seek out uncensored content is unfortunately over. Put another way, from a policy perspective, we are well beyond a framework of “unblock it and they will come.”

While these challenges are daunting, Chinese internet users desire for connection and information beyond borders remains present and very real. Our role in this context is to provide the tools, technologies, and platforms that will empower users' free expression and connection, beyond the walled garden of China's online ecosystem.

### **Traditional Censorship Circumvention is Necessary but Not Sufficient**

Virtual private network (VPN) technology and traditional circumvention tools remain an important part of any internet freedom strategy. OTF-supported VPNs are still regularly used by millions of people in China – and these tools have proven to be resilient. We know, for example, that they successfully deliver approximately half of the digital audience in China for Radio Free Asia and Voice of America.

To better facilitate their efficacy and success, these tools need resources to maintain and support their users in China. Operable VPNs face significant costs that far exceed other authoritarian environments as a result of the government's control of dataflows. In addition, there is a need for investment to develop new, advanced transport protocols to improve VPNs' reliability and continued resilience; and ongoing research into innovative circumvention methods that can contend with aggressive censorship.

This is, however, no longer a complete strategy in China. The unique online experience requires a different internet freedom approach that deconstructs digital spaces to more directly and intentionally target new solutions. Traditional circumvention tools remain necessary, but not sufficient.

### **A New Internet Freedom Framework in China**

Moving forward we must adopt an updated approach to internet freedom in China that fosters more purposeful connections between information seekers and information providers in ways that map to the social and technological realities of life online in China today.

The process of reconnecting Chinese citizens to uncensored information is important in and of itself, but even more critical because it has been proven to create lasting demand. While China's internet-substitution model provides its citizens with the "bread and circuses" of contemporary online culture, what it intentionally omits remains in demand when people know how to seek it out. In the same Stanford study I mentioned earlier, researchers found that Chinese students who were exposed to the global internet maintained a "lasting demand for politically sensitive content and circumvention tools" even after the study ended. This shows that muscle memory to seek out uncensored information can be successfully re-established if users have the tools and motivation to do so.

There is no single, unifying policy solution for the Committee to peel back the layers of China's information controls. Instead, it will require multiple actions across the public, private, and civil society sectors to advance a committed, positive vision of a global internet despite the realities of fracture and fragmentation. To name a few:

- Internet freedom tool developers will need to more intimately understand and accommodate the online needs and socialized behaviors of Chinese users. This will require far greater tailoring to specific use cases, online behavioral patterns and risk profiles;
- Creators of objective, otherwise unavailable content will have to seek out connections with their audiences in less traditional online spaces and understand their needs. Content distribution systems must take into account questions of discovery and accessibility in Chinese online spaces;
- Apple, Google, and other U.S. technology companies must end their current practice of aiding CCP censorship efforts; and
- To counter CCP attempts to normalize techno-authoritarianism, we must join with like-minded partners to preserve a vision of a free global internet.

It took the CCP decades and billions of dollars in investments to engineer a socially and technologically distinct online environment. The elements of any effective response will necessarily take patience, time, significant resources, and iteration and experimentation.

While I have focused my remarks today primarily on the domestic implications of China's information controls, we are already seeing other authoritarians adopt these along the Belt and Road and beyond. If we do not attempt to contest China's model of internet substitution at its source, we will be unable to counter it where it spreads.

The scale of the challenge is immense, and yet it is unquestionably worthwhile. There is no message the U.S. could deliver that is more credible or as powerful as helping facilitate Chinese citizens' own search for truth.

Thank you and I look forward to your questions.