

NETFLIX

December 11, 2014

The Honorable Ajit Pai
Commissioner
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Dear Commissioner Pai:

Thank you for your December 2nd letter and for your questions regarding Netflix's Open Connect technology. Netflix offers the following response.

With respect to open Internet policy, Netflix supported the FCC's use of section 706 to promulgate its 2010 Open Internet Order. The court's decision in Verizon's lawsuit invalidated Section 706 as the sole basis of Open Internet rules. This has left you and your colleagues at the FCC with little alternative but to consider other enforcement tools, such as industry standards, codes of conduct and Title II of the Communications Act to protect consumers and innovation. While we may differ on precisely what alternatives the Commission should use, our goal is to rest Open Internet policy on a solid legal foundation.

Netflix designed the Open Connect content delivery network (CDN) to provide consumers with a high-quality video experience that enables ISPs to manage their networks in an efficient and cost effective way. Through Open Connect, Netflix brings data to the location(s) of an ISP's choice, usually at common Internet exchange points or through localized caches. This is how most CDNs interconnect. Under the Open Connect program, Netflix bears all of the costs of providing Open Connect equipment to any ISP that chooses to participate in Open Connect.

Open Connect is not a fast lane. Since the beginning of this proceeding, Netflix has consistently opposed the Commission permitting "fast lanes" in consumer Internet connections. Open Connect does not prioritize Netflix data. Open Connect uses "best efforts" Internet services into and out of its content caches. When an ISP asks Netflix to localize an Open Connect cache within its network, it does not disadvantage other Internet content. To the contrary, Open Connect helps ISPs reduce costs and better manage congestion, which results in a better Internet experience for all end users.

Only ISPs can speed up or slow down data that flow over their last mile. When Netflix directly interconnects with an ISP, Netflix data does not travel faster than other Internet content -- unless an ISP is artificially constraining capacity to other data sources.

Open Connect uses open-source software and readily-available hardware components. Because these designs may be helpful for other providers of large media files and are very cost efficient, Netflix has published that information online for use freely by others.¹ Netflix is also active in efforts to develop open standards for streaming video. All truly open Internet Protocol Standards, including those used for streaming video delivery, are coordinated through the World Wide Web Consortium² (W3C) and the Internet Engineering Task Force³ (IETF). Netflix is an active participant in both.

Others in the industry are exploring the use of "open" or "proxy" caching for streaming video content. It is good that others are thinking about ways to improve streaming video quality. However, Netflix has focused its efforts and resources on Open Connect because we have found that it is more efficient and results in fewer service outages and customer complaints than these other options.

Netflix has not impeded the use of proxy caches by changing protocols. Netflix has obscured certain URL structures to protect our members from deep packet inspection tools deployed to gather data about what they watch online. Netflix is committed to, and will continue to ensure, the privacy of our members' viewing.

We hope that these responses have been helpful. Please do not hesitate to reach out if you have additional questions.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Libertelli", with a horizontal line extending to the right.

Christopher Libertelli
Vice President | Global Public Policy
Netflix Inc.

¹ See <https://openconnect.itp.netflix.com/openconnect/index.html>.

² <http://www.w3.org/Consortium/>.

³ <https://www.ietf.org/>.