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ELECTRONIC FILING

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: GN Docket No. 09-191, GN Docket No. 14-28

Dear Ms. Dortch:

I'm writing to submit four recent publications to the record of the above proceedings:

- My analysis of the Republican network neutrality discussion draft, which appeared in the Stanford Law Review online;¹
- A blog post that summarizes that analysis;²
- A blog post on what to look for in this week's network neutrality announcement;³ and
- My paper *Network Neutrality and Quality of Service: What a Nondiscrimination Rule Should Look Like*, which was just published by the Stanford Law Review.⁴ The paper is the published version of a paper that I submitted to the record last year.⁵

¹ Barbara van Schewick & Morgan N. Weiland, *New Republican Bill Is Network Neutrality in Name Only*, 67 Stan. L. Rev. Online 85 (January 20, 2015), available at <http://www.stanfordlawreview.org/online/new-republican-bill-is-network-neutrality-in-name-only>.

² Barbara van Schewick & Morgan N. Weiland, *Seven Reasons the New GOP Bill Will Not Give Us Network Neutrality*, Stanford Center for Internet and Society Blog, <http://cyberlaw.stanford.edu/blog/2015/01/seven-reasons-new-gop-bill-will-not-give-us-net-neutrality> (January 28, 2015).

³ Barbara van Schewick, *What to look for in this week's network neutrality announcement*, Stanford Center for Internet and Society Blog, <http://cyberlaw.stanford.edu/blog/2015/02/what-look-weeks-network-neutrality-announcement> (February 2, 2015).

⁴ Barbara van Schewick, *Network Neutrality and Quality of Service: What a Nondiscrimination Rule Should Look Like*, Stanford Law Review, Volume 67, Issue 1, pp. 1-166, available at <http://www.stanfordlawreview.org/print/article/network-neutrality-and-quality-of-service>.

⁵ Barbara van Schewick, *Network Neutrality and Quality of Service: What a Nondiscrimination Rule Should Look Like*, Public Law and Legal Theory Working Paper Series, Research Paper No. 2459568 and John M. Olin Program in Law and Economics Working Paper Series, Paper No. 462, forthcoming Stanford Law Review, Volume 67, Issue 1 (2015), <http://apps.fcc.gov/ecfs/document/view?id=7522904135>.

The paper:

- proposes a substantive framework that policymakers can use to evaluate alternative proposals for network neutrality rules and assess specific forms of discriminatory conduct;
- evaluates eight existing proposals for nondiscrimination rules and the Open Internet Order’s nondiscrimination rule against this framework;
- proposes a nondiscrimination rule—ban application-specific discrimination, allow application-agnostic discrimination—that policymakers should adopt around the world—a rule that the FCC’s Open Internet Order adopted in part;
- highlights the differences between an antitrust framework and the broader theoretical framework on which most calls for network neutrality regulation are based and explains why an antitrust framework does not capture all instances of blocking or discrimination that concern network neutrality proponents;
- offers the first in-depth analysis of the relationship between network neutrality and new network-level services called Quality of Service; and
- provides the first detailed analysis of the Open Internet Order’s nondiscrimination rule for fixed broadband Internet access.

The following parts of the paper are particularly relevant to this proceeding:

- “Introduction” (pp. 4-16):
 - Provides an overview of the paper’s findings.
- “Ban Application-Specific Discrimination, But Allow Application-Agnostic Discrimination” (pp. 124-152) - describes my proposed non-discrimination rule, a rule that the FCC’s Open Internet Rules adopted in part:
 - Defines the terms application-specific (pp. 124-126) and application-agnostic (p. 127; see also pp. 24-25, 128-130);
 - Explains the rationale for the rule (pp. 127-133; see also 99-102);
 - Describes my proposal for a reasonable network management exception requiring network management to be as application-agnostic as possible (pp. 137-140).
- “Quality of Service” (pp. 133-137) and “The proposed rule in practice: questions and answers” (pp. 143-152):
 - Describes the conditions under which the FCC should allow ISPs to offer certain forms of user-controlled Quality of Service paid by the user (pp. 133-135);
 - Explains why allowing these forms of user-controlled and user-paid Quality of Service is good policy (pp. 135-137);
 - Explains how this proposal would work in practice (pp. 143-152).
- “The Open Internet Order’s Non-discrimination Rule” (pp. 152-161):
 - Describes the Open Internet Order’s non-discrimination rule (including the factors – application-agnostic and user choice – that the FCC said it would use to

- determine whether discrimination and network management are reasonable) (pp. 155-161);
 - Describes the Open Internet Order’s stance towards Quality of Service (pp. 157-158, 161).
- “A Framework for Evaluating Network Neutrality Rules” (pp. 16-27)
 - Explains how to best choose among different proposals for non-discrimination rules and network neutrality rules more generally;
 - Defines “user choice,” “innovation without permission,” “application-agnosticism,” and “low cost of application innovation” and explains why they are important (pp. 21-23).
- “Problems with Case-by-Case Adjudication” (pp. 69-83):
 - Explains the social costs of using case-by-case approaches in the network neutrality context:
 - lack of certainty and predictability (pp. 70-73);
 - high costs of regulation (pp. 73-74);
 - limited ability to protect values and actors that network neutrality rules are designed to protect (pp. 74-81);
 - Explores the strategic incentives of policy makers and big stakeholders to adopt such approaches (pp. 81-83).
- “Formal Approaches: Ban Discrimination That Is Not Disclosed” (p. 83-99):
 - Explains why competition does not prevent ISPs from blocking or discriminating based on economic theory (pp. 83-96) and discusses the factors that provide ISPs with market power in the market for Internet services:
 - Consumers’ incomplete knowledge, cognitive limitations, and cognitive biases (pp. 86-88);
 - Product differentiation and bundling (pp. 88-92);
 - Switching costs (pp. 92-96).
 - Highlights the empirical evidence supporting this view (pp. 96-98).
- “Ban Discrimination That Violates an Antitrust Framework” (pp. 54-64):
 - Sets out the differences between an antitrust framework and the broader theoretical framework used by network neutrality proponents and the FCC in its Open Internet Order (pp. 10, 16-19);
 - Explains why using an antitrust framework to distinguish good and bad discrimination does not capture all instances of discrimination that network neutrality proponents are concerned about (pp. 54-64).
- “Ban discrimination among like applications or classes of applications” (pp. 102-124)
 - Explains why allowing ISPs to discriminate among classes of applications is socially harmful, even if the classes are not alike (pp. 107-124)

- “Summary: Network Neutrality and Quality of Service” (pp. 162-166)
 - Summarizes the paper’s findings with regard to Quality of Service
- Discussions related to Quality of Service
 - Defines “Quality of Service” (pp. 7-8);
 - Analyzes whether there is a need for Quality of Service, and discusses the relationship between congestion and the need for Quality of Service and whether overprovisioning removes the need for Quality of Service (pp. 37-53);
 - Evaluates the social costs and benefits of the following forms of Quality of Service, and explains whether they should be allowed in a network neutrality regime:
 - Allowing network providers to offer Quality of Service exclusively to one or more applications within a class of “like” applications (should be prohibited) (pp. 105-107);
 - Allowing network providers to offer different types of service to different provider-defined classes of applications as long as the network provider treats like traffic alike (should be prohibited) (pp. 107-123);
 - Allowing ISPs to offer different types of service, if (1) network providers make different types of service available equally to all applications and classes of applications; (2) in which users choose whether, when, and for which applications to use which type of service; and (3) ISPs are allowed to charge only their end users for the use of the service (should be allowed) (pp. 133-137, 143-152).

Should you have any questions, please do not hesitate to contact me.

Sincerely,

/s/ Barbara van Schewick

Barbara van Schewick
 Professor of Law and (by courtesy) Electrical Engineering
 Helen Crocker Faculty Scholar
 Faculty Director, Center for Internet and Society, Stanford Law School

cc:

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