



February 2, 2015

1300 I Street, NW, Suite 400 West  
Washington, DC 20005

Phone 202 515-2543  
Fax 202 336-7922  
maggie.m.mccready@verizon.com

**VIA ECFS**

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

**Re: Protecting and Promoting the Open Internet, GN Docket No. 14-28;  
Framework for Broadband Internet Service, GN Docket No. 10-127**

Dear Ms. Dortch:

Appropriately framed disclosures can provide broadband customers meaningful, useful information about their services, and provide content providers and other Internet players enough information to market and provide their products. But disclosures must be calibrated so that they do not overwhelm consumers and other recipients with useless data and do not unnecessarily burden providers or undermine vigorous competition between broadband providers.

The Commission's 2010 transparency rule<sup>1</sup> struck the right balance and advanced these goals, and will continue to do so.<sup>2</sup> Nonetheless, the *NPRM*<sup>3</sup> and several parties propose to expand and modify the existing rule in ways that will not serve consumers and will needlessly burden providers. The Commission should reject these proposals.

***The existing disclosure requirement provides consumers, content providers and other stakeholders with meaningful information.*** The current transparency rule requires broadband providers to disclose "accurate information" about a wide variety of data points:

- ***The provider's network practices***, including congestion management, application-specific behavior, device attachment rules, security measures, the types of traffic subject to such practices, the purposes served by them, the practices' effects on end users' experience, and the criteria used to effectuate such practices, as well as whether

---

<sup>1</sup> *Preserving the Open Internet; Broadband Industry Practices*, Report and Order, 25 FCC Rcd 17905 (2010) ("*Open Internet Order*").

<sup>2</sup> See generally Comments of Verizon and Verizon Wireless, GN Docket Nos. 10-127 & 14-28, at 21-25 (July 15, 2014) ("*Verizon Comments*"); Reply Comments of Verizon and Verizon Wireless, GN Docket Nos. 10-127 & 14-28, at 13-17 (Sept. 15, 2014).

<sup>3</sup> See *Protecting and Promoting the Open Internet*, Notice of Proposed Rulemaking, 29 FCC Rcd 5561 (2014) ("*NPRM*").

and why the provider blocks or rate-controls specific protocols or protocol ports or otherwise inhibits or favors certain applications or classes of applications.

- ***The service’s performance characteristics***, including a general description of system performance (such as speed and latency); its suitability for real-time applications; the effects of specialized services on available capacity; usage limits and the consequences of exceeding them; and
- ***The commercial terms associated with the service***, including pricing, termination fees, privacy policies, and redress options.<sup>4</sup>

In addition to the disclosures required by the existing requirements, consumers and online providers have easy access to reams of relevant information through third-party sources. Many applications (including the Commission’s own) allow customers to test the performance of their individual broadband connections in real time.<sup>5</sup> And Internet access providers, transit providers, content delivery networks (“CDNs”), and others exchange information in a well-developed commercial ecosystem. These parties can negotiate for the information they need from each other and ensure that confidential information remains protected.

Any proposals for detailed or real-time performance disclosures are impracticable. On “best efforts” Internet access services, metrics such as “effective download speeds, upload speeds, latency, and packet loss”<sup>6</sup> will vary based on a large array of factors outside a broadband provider’s control. Providers account for these variables in their current disclosures.<sup>7</sup> Mandatory disclosures at the level of specificity suggested in the *NPRM*, however, are impracticable. There would be no way to report this information concisely, and such disclosures would be meaningless to all but the most technically sophisticated customers. Likewise, service quality metrics vary from moment to moment, and it would be impractical or impossible to

---

<sup>4</sup> 47 C.F.R. § 8.3; *see also* *Open Internet Order*, ¶¶ 55-56; *FCC Enforcement Bureau and Office of General Counsel Issue Advisory Guidance for Compliance With Open Internet Transparency Rule*, Public Notice, 26 FCC Rcd 9411 (2011); *FCC Enforcement Advisory: Broadband Providers Must Disclose Accurate Information to Protect Consumers*, Public Notice, 29 FCC Rcd 8606 (2014) (describing purpose of transparency rule and circumstances under which it will be deemed to have been violated)

<sup>5</sup> *See NPRM* ¶ 79.

<sup>6</sup> *Id.* ¶ 72.

<sup>7</sup> *See, e.g., Terms and Conditions – Broadband Performance: High-Speed Internet*, VERIZON, [http://www.verizon.com/about/terms/BroadbandPerformance\\_HSI.htm](http://www.verizon.com/about/terms/BroadbandPerformance_HSI.htm) (last visited Feb. 2, 2015); *Broadband Performance*, AT&T, <http://www.att.com/gen/public-affairs?pid=20879> (last visited Feb. 2, 2015); *Your Internet Service Performance*, COMCAST NETWORK MANAGEMENT INFORMATION CENTER, <http://networkmanagement.comcast.net/index.php/component/content/article?id=28> (last visited Feb. 2, 2015); *Internet Services*, T-MOBILE, [http://www.t-mobile.com/Company/CompanyInfo.aspx?tp=Abt\\_Tab\\_ConsumerInfo&tsp=Abt\\_Sub\\_InternetServices](http://www.t-mobile.com/Company/CompanyInfo.aspx?tp=Abt_Tab_ConsumerInfo&tsp=Abt_Sub_InternetServices) (last visited Feb. 2, 2015).

collect and disclose this information in real time as some parties have called for.<sup>8</sup> Moreover, the constant collection and dissemination of data could itself generate network congestion that undermines performance. In fact, given that “consumers have difficulty understanding commonly used terms associated with the provision of broadband services,”<sup>9</sup> the proposed disclosures could simply deter consumers from reviewing the information provided, undermining the rule’s effectiveness and disserving the Commission’s objectives.

Nor is there any reason to mandate particular disclosure formats for disclosures to consumers. The existing rule allows broadband providers to develop individualized disclosures for different constituencies as appropriate. A rule requiring tailored disclosures would create uncertainty about who needs to know what and when, particularly as some entities provide different services in different contexts.<sup>10</sup>

***Required disclosures must be limited to last-mile broadband networks.*** The *NPRM* proposes mandatory disclosure of “meaningful information regarding the source, timing, speed, packet loss, and duration of congestion.”<sup>11</sup> However, it acknowledges that congestion “may originate beyond the broadband provider’s network or in the exchange of traffic between that network and others.”<sup>12</sup> Content companies and transit providers make many choices regarding how to route traffic and where and when to obtain additional capacity. These deliberate choices directly affect congestion and performance experienced by consumers.

For example, Netflix’s routing decisions impact the performance of its video streaming service. After relying extensively on third-party CDNs, Netflix opted “in early 2012 . . . to transition its traffic off of [those] CDNs and onto transit providers with settlement-free routes” with respect to traffic bound for Comcast.<sup>13</sup> It appears that Netflix took similar action for traffic bound for Verizon and other broadband access providers. As a result of Netflix’s decision, traffic was routed to Verizon’s network over connections that could not handle the massive traffic volumes.<sup>14</sup> Those connections became congested and end users experienced buffering. In such circumstances, requiring broadband providers alone to disclose congestion data could

---

<sup>8</sup> See Letter from Dr. Jeremy Gillula, Electronic Frontier Foundation, to Secretary Marlene H. Dortch, FCC, GN Docket No. 14-28, at 2 (Oct. 30, 2014) (“ISPs should be required to disclose to their customers (preferably in real time) any major links within their network that are experiencing congestion . . .”).

<sup>9</sup> *NPRM* ¶ 68.

<sup>10</sup> See, e.g., *id.* ¶ 76 (noting that Google and Amazon may act as content providers, CDNs, or cloud service providers).

<sup>11</sup> *Id.* ¶ 83.

<sup>12</sup> *Id.* ¶ 82.

<sup>13</sup> Netflix Petition to Deny, *Applications of Comcast Corp. and Time Warner Cable Inc. for Consent to Transfer Control of Licenses and Authorizations*, MB Docket No. 14-57, at 55 (Aug. 27, 2014).

<sup>14</sup> See Verizon Policy Blog, *Why is Netflix Buffering? Dispelling the Congestion Myth* (July 10, 2014), <http://publicpolicy.verizon.com/blog/entry/why-is-netflix-buffering-dispelling-the-congestion-myth>.

mislead consumers about that congestion's source. Even worse, broadband providers would be in no position to explain to customers why their content is not streaming optimally, because a broadband provider often has little or no visibility into routing decisions by content and transit providers.<sup>15</sup> These routing decisions can change overnight.

Nor would it be useful for broadband providers to disclose congestion at interconnection points. There is no way for the broadband provider or the customer to know the impact that congestion at a particular interconnection point will have on any individual customer. Nor is such a requirement necessary, because broadband providers and their interconnection partners already exchange information about congestion at their mutual interconnection points.

Verizon recognizes that congestion can affect the end user experience. To this end, the Commission should encourage all Internet participants to work together to establish best practices and other guidelines in a way that does not result in more regulatory gamesmanship by parties such as Netflix—for instance, by promoting collaboration through the Measuring Broadband America program.<sup>16</sup> But the Commission should reject calls to unfairly single out broadband Internet access providers rather than place responsibility for identifying congestion on the responsible parties.<sup>17</sup>

***The proposals are especially problematic for mobile wireless broadband.*** As CTIA explains, certain transparency proposals in the NPRM and the record would be especially problematic for mobile wireless broadband. Wireless providers must employ multifaceted, ever-changing network management practices to provide a satisfactory user experience.<sup>18</sup> The constant evolution and inherent variability of wireless networks makes the disclosure of performance characteristics and metrics infeasible.

The factors that can cause mobile network congestion are dynamic, and a wireless broadband provider's disclosures cannot account for every possible combination of traffic and usage conditions. Congestion-related transparency requirements would ignore factors such as dynamic channel conditions, the number of active users on a cell site, the quality-of-service requirements for the services in use, the amount of available spectrum, and user mobility, all of

---

<sup>15</sup> In particular, Cogent's proposal that broadband providers be required to disclose packet loss data on a system-specific level for data transmitted by content providers with respect to "popular content" would be impossible to implement without deploying extensive and costly deep packet inspection capabilities throughout the network, even if the broadband provider could readily identify what constitutes "popular content." *See, e.g.*, Comments of Cogent Communications, GN Docket No. 14-28, at 20-21 (Mar. 21, 2014).

<sup>16</sup> Letter from Steven F. Morris, Vice President & Associate General Counsel, National Cable & Telecommunications Association, to Secretary Marlene H. Dortch, FCC, GN Docket No. 14-28, at 4 (Jan. 21, 2015).

<sup>17</sup> *See* Verizon Comments at 19-21.

<sup>18</sup> Letter from Scott K. Bergmann, Vice President – Regulatory Affairs, CTIA-The Wireless Association, to Chairman Tom Wheeler *et al.*, FCC, GN Docket Nos. 10-27 & 14-28, Attach. at 1-2 (Jan. 15, 2015).

Marlene H. Dortch

February 2, 2015

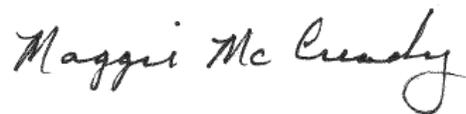
Page 5

which can influence the performance of a wireless network.<sup>19</sup> As a result, overly frequent or granular congestion or performance disclosures would be impossible or meaningless because so many different factors could be at play. Such disclosures could exacerbate congestion on resource-constrained wireless networks and they also would often be useless, for by the time a wireless customer in a car or train received a congestion notice, she could already have moved on to a congestion-free part of the network.

\* \* \*

For all of these reasons, the existing transparency rule has been effective and there is no need for “enhancements.” If the Commission nevertheless decides to modify the existing rule, it must take care to avoid requiring disclosures that are unduly complex and burdensome or that make it appear that broadband providers are responsible for factors outside of their control.

Sincerely,

A handwritten signature in cursive script that reads "Maggie McCreedy". The signature is written in black ink and is positioned below the word "Sincerely,".

---

<sup>19</sup> *Id.* at 2-3.