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## FURTHER INQUIRY INTO TWO UNDER-DEVELOPED ISSUES IN THE OPEN INTERNET PROCEEDING

GN Docket No. 09-191 WC Docket No. 07-52

Comment Date: 30 days after publication in the Federal Register Reply Comment Date: 55 days after publication in the Federal Register

In order to promote innovation, investment, competition, and free expression, and to protect and empower consumers, in late 2009 the Commission issued a Notice of Proposed Rulemaking in the Matter of Preserving the Open Internet (NPRM). The NPRM seeks public comment on rules that would codify the Internet Policy Statement's four principles and strengthen them by prohibiting broadband Internet access providers from treating lawful traffic in a discriminatory manner, and by requiring providers to be transparent regarding their network management practices.<sup>1</sup> The discussion generated by the Commission's Open Internet proceeding appears to have narrowed disagreement on many of the key elements of the framework proposed in the NPRM: First, that broadband providers should not prevent users from sending and receiving the lawful content of their choice, using the lawful applications and services of their choice, and connecting the nonharmful devices of their choice to the network, at least on fixed or wireline broadband platforms. Second, that broadband providers should be transparent regarding their network management practices.<sup>3</sup> Third, that with respect to the handling of lawful traffic, some form of anti-discrimination protection is appropriate, at least on fixed or wireline broadband platforms.<sup>4</sup> Fourth, that broadband providers must be able to reasonably manage their networks, including through appropriate and tailored mechanisms that reduce the effects of congestion or address traffic that is unwanted by users or harmful to the network.<sup>5</sup> Fifth, that in light of rapid technological and market change, enforcing high-level rules of the road through case-by-case adjudication, informed by

<sup>&</sup>lt;sup>1</sup> Preserving the Open Internet; Broadband Industry Practices, GN Docket No. 09-191, WC Docket No. 07-52, Notice of Proposed Rulemaking, 24 FCC Rcd 13064 (2009) (Open Internet NPRM); see also Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities et al., CC Docket Nos. 02-33, 01-337, 95-20, 98-10, GN Docket No. 00-185, CS Docket No. 02-52, Policy Statement, 20 FCC Rcd 14986 (2005) (Internet Policy Statement).

<sup>&</sup>lt;sup>2</sup> See, e.g., AT&T Comments at 1-2; Comcast Comments at ii; Qwest Reply Comments at 5; Communications Workers of America Comments at 12.

<sup>&</sup>lt;sup>3</sup> See, e.g., Cablevision Reply Comments at 15; Comcast Reply Comments at ii; Verizon Reply Comments at 18.

<sup>&</sup>lt;sup>4</sup> See, e.g., Verizon & Google, Verizon-Google Legislative Framework Proposal, at 1, available at http://www.google.com/googleblogs/pdfs/verizon\_google\_legislative\_framework\_proposal\_081010.pdf; Communications Workers of America Comments at 14-21.

<sup>&</sup>lt;sup>5</sup> See, e.g., Free Press Reply Comments at 10.

engineering expertise, is a better policy approach than promulgating detailed, prescriptive rules that may have consequences that are difficult to foresee.<sup>6</sup>

There are two complex issues, however, that merit further inquiry. The first is the relationship between open Internet protections and services that are provided over the same last-mile facilities as broadband Internet access service (commonly called "managed" or "specialized" services). The second is the application of open Internet rules to mobile wireless Internet access services, which have unique characteristics related to technology, associated application and device markets, and consumer usage. The *NPRM* raised both of these issues but addressed them in less detail than many other issues, and the Commission's analysis would benefit from further development of these issues in the record. We therefore find it appropriate to further inquire into these areas.

### I. SPECIALIZED SERVICES<sup>7</sup>

In the *NPRM*, the Commission recognized that broadband providers may provide other services over the same last-mile facilities used to provide broadband Internet access service. These services may drive additional private investment in networks and provide consumers new and valued services. However, there appear to be three general areas of concern about how to maintain the investment-promoting benefits of specialized services while protecting the Internet's openness:

- (1) Bypassing Open Internet Protections: Open Internet protections may be weakened if broadband providers offer specialized services that are substantially similar to, but do not technically meet the definition of, broadband Internet access service, and if consumer protections do not apply to such services. A similar concern may arise if specialized services are integrated into broadband Internet access service; for example, if a broadband provider offers broadband Internet access service bundled with a "specialized service" that provides prioritized access to a particular website.<sup>10</sup>
- (2) Supplanting the Open Internet: Broadband providers may constrict or fail to continue expanding the network capacity allocated to broadband Internet access service in order to provide more capacity for specialized services. If this occurs, and particularly if one or more specialized services serve as substitutes for the delivery of content, applications, and services over broadband Internet access service, the open Internet may wither as an open platform for competition, innovation, and free expression.<sup>11</sup>

<sup>&</sup>lt;sup>6</sup> See, e.g., Public Interest Commenters (PIC) Comments at Appendix B; Center for Democracy and Technology (CDT) Comments at 38.

<sup>&</sup>lt;sup>7</sup> The *NPRM* used the term "managed or specialized services" to describe the services that we here call "specialized services." We avoid the term "managed services" to prevent confusion with services that have long been provided by communications service providers to enterprise customers, which may include managing computing and communications facilities on behalf of such customers. *See, e.g.*, CDT Comments at 47; Akamai Reply Comments at 11; Wikipedia, *Managed services*, http://en.wikipedia.org/wiki/Managed services.

<sup>&</sup>lt;sup>8</sup> Open Internet NPRM, 24 FCC Rcd at 13116-17, paras. 148-53.

<sup>&</sup>lt;sup>9</sup> See, e.g., Verizon Comments at 8; Comcast Comments at 60-61, 64-66; American Cable Ass'n Comments at 17-18; Clearwire Comments at 13-14; OPASTCO Comments at 11, 13; PAETEC Comments at 31; Bright House Comments at 13-14; Covad Comments at 9-10; Motorola Comments at 14-16; Sprint Nextel Reply Comments at 2.

<sup>&</sup>lt;sup>10</sup> See, e.g., Netflix Comments at 9-10; CDT Comments at 46-48; Vonage Comments at 27; Google Comments at 75; Free Press Comments at 111; Dish Network Reply Comments at 12; XO Communications Reply Comments at 20-21.

<sup>&</sup>lt;sup>11</sup> See, e.g., CDT Comments at 46-49; Independent Film & Television Alliance (IFTA) Comments at 18-19; Google Comments at 76; Sony Electronics Reply Comments at 6-7.

(3) Anti-competitive Conduct: Broadband providers may have the ability and incentive to engage in anti-competitive conduct with respect to specialized services, particularly if they are vertically integrated providers of content, applications, or services; or if they enter into business arrangements with third-party content, application, or service providers concerning specialized service offerings. Such discriminatory conduct could harm competition among, and private investment in, content, application, and service providers.<sup>12</sup>

These concerns, particularly the second and third, may be exacerbated by worries that due to limited choice among broadband Internet access service providers, consumers may not be able to effectively exercise their preferences for broadband Internet access service (or content, applications, or services available through broadband Internet access service) over specialized services.<sup>13</sup>

There appear to be at least six general policy approaches to addressing these concerns while promoting private investment and encouraging the development and deployment of new services that benefit consumers. These approaches could be employed alone or in combination:

- (A) *Definitional Clarity*: Define broadband Internet access service clearly and perhaps broadly, and apply open Internet rules to all forms of broadband Internet access service. <sup>14</sup> Specialized services would be those services with a different scope or purpose than broadband Internet access service (*i.e.*, which do not meet the definition of broadband Internet access service), and would not be subject to the rules applicable to broadband Internet access service. But such services could be addressed through one or more of the below policy approaches, or, alternatively, the Commission could address the policy implications of such services if and when such services are further developed in the market. <sup>15</sup>
- (B) *Truth in Advertising*: Prohibit broadband providers from marketing specialized services as broadband Internet access service or as a substitute for such service, and require providers to offer broadband Internet access service as a stand-alone service, separate from specialized services, in addition to any bundled offerings.<sup>16</sup>
- (C) Disclosure: Require providers to disclose information sufficient to enable consumers, third parties, and the Commission to evaluate and report on specialized services, including their effects on the capacity of and the markets for broadband Internet access service and Internet-based content, applications, and services.<sup>17</sup> The Commission or Congress could then take action if necessary.

<sup>&</sup>lt;sup>12</sup> See, e.g., Netflix Comments at 9; Software & Information Industry Ass'n at 6, 8; Vonage Comments at 27-28; Dish Network Reply Comments at 12.

<sup>&</sup>lt;sup>13</sup> See generally Free Press Comments at 14; Vonage Comments at 7-8; Open Internet Coalition Comments at 71-73.

<sup>&</sup>lt;sup>14</sup> See, e.g., Vonage Comments at 27; CDT Comments at 49-50; Netflix Comments at 10; Google Comments at 75-76; Int'l Documentary Ass'n, et al. Reply Comments at 16; Qwest Reply Comments at 33-34; Sprint Nextel Reply Comments at 16-18.

<sup>&</sup>lt;sup>15</sup> See, e.g., PAETEC Comments at 31; Google Comments at 76-77; PIC Comments at 32; Free Press Comments at 110-11; NTCA Comments at 11; Akamai Reply Comments at 11; CCIA Reply Comments at 19-20; Dish Network Reply Comments at 14; Open Internet Coalition Reply Comments at 27-28.

<sup>&</sup>lt;sup>16</sup> See, e.g., IFTA Comments at 20; PIC Comments at 35; CCIA Reply Comments at 20.

<sup>&</sup>lt;sup>17</sup> See, e.g., PIC Comments at 35; CDT Comments at 47, 51; CCIA Reply Comments at 21-22; Int'l Documentary Ass'n, et al. Reply Comments at 16-17.

- (D) *Non-exclusivity in Specialized Services*: Require that any commercial arrangements with a vertically-integrated affiliate or a third party for the offering of specialized services be offered on the same terms to other third parties.<sup>18</sup>
- (E) *Limit Specialized Service Offerings*: Allow broadband providers to offer only a limited set of new specialized services, with functionality that cannot be provided via broadband Internet access service, such as a telemedicine application that requires enhanced quality of service.<sup>19</sup>
- (F) Guaranteed Capacity for Broadband Internet Access Service: Require broadband providers to continue providing or expanding network capacity allocated to broadband Internet access service, regardless of any specialized services they choose to offer. Relatedly, prohibit specialized services from inhibiting the performance of broadband Internet access services at any given time, including during periods of peak usage.<sup>20</sup>

We seek comment on each of these concerns and suggested policy responses, as well as any other concerns or policies regarding specialized services that the Commission should consider. Which policies will best protect the open Internet and maintain incentives for private investment and deployment of innovative services that benefit consumers? In addition, we seek comment on whether specialized services provided over mobile wireless platforms raise unique issues.

# II. APPLICATION OF OPEN INTERNET PRINCIPLES TO MOBILE WIRELESS PLATFORMS

The *NPRM* seeks comment on "how, to what extent, and when" openness principles should apply to mobile wireless platforms, with a particular emphasis on furthering innovation, private investment, competition,<sup>21</sup> and freedom of expression.<sup>22</sup> In light of developments since the issuance of the *NPRM*, it is now appropriate to update the record on certain questions related to the application of openness principles to wireless. Mobile broadband providers such as AT&T Mobility and Leap Wireless (Cricket) have recently introduced pricing plans that charge different prices based on the amount of data a customer uses.<sup>23</sup> The emergence of these new business models may reduce mobile broadband providers' incentives to employ more restrictive network management practices that could run afoul of open Internet principles.<sup>24</sup> Additionally, Verizon and Google issued a proposal for open Internet legislation that would exclude wireless, except for proposed transparency requirements.<sup>25</sup>

<sup>&</sup>lt;sup>18</sup> See, e.g., Vonage Comments at 28-29; IFTA Comments at 18; CCIA Reply Comments at 21.

<sup>&</sup>lt;sup>19</sup> See, e.g., Institute for Policy Integrity Reply Comments at 12-13, 17.

<sup>&</sup>lt;sup>20</sup> See, e.g., IFTA Comments at 19-20; PIC Comments at 33-35; CDT Comments at 50; CDT Reply Comments at 37-40; Software & Information Industry Ass'n Comments at 8-9.

<sup>&</sup>lt;sup>21</sup> Open Internet NPRM, 24 FCC Rcd at 13068, para. 13, 13117-18, para. 154.

<sup>&</sup>lt;sup>22</sup> *Id.* at 13095, paras. 75-78, 13102, para. 95.

<sup>&</sup>lt;sup>23</sup> See AT&T, AT&T Announces New Lower-Priced Wireless Data Plans to Make Mobile Internet More Affordable to More People, http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=30854 (June 2, 2010); Leap Wireless, Cricket Launches Industry-First All-Inclusive Mobile Broadband Service Plans, Press Release, http://phx.corporate-ir.net/phoenix.zhtml?c=191722&p=irol-newsArticle&ID=1455833&highlight= (August 3, 2010).

<sup>&</sup>lt;sup>24</sup> See, e.g., Leap Wireless and Cricket Communications Reply Comments at 11 ("carriers that charge overage fees to customers exceeding a certain usage level may not need to employ such techniques" as limiting throughput speeds

#### A. Transparency

We seek comment on what disclosure requirements are appropriate to ensure that consumers and content, application, service, and device providers can make informed choices regarding use of mobile broadband networks. What information should be disclosed about device and application requirements and certification processes? Are there any existing models that could provide guidance for shaping such rules?<sup>26</sup>

#### B. Devices

We seek further comment on the ability of new technologies and business models to facilitate non-harmful attachment of third-party devices to mobile wireless networks. Can adherence to industry standards for mobile wireless networks ensure non-harmful technical interoperability between mobile broadband devices and networks? Will deployment of next-generation technologies (*e.g.*, LTE) further facilitate interoperability? To the extent that compliance with technical standards needs to be validated through laboratory testing, could such testing be conducted through independent authorized test centers?<sup>27</sup> Were the Commission to require mobile providers to allow any non-harmful device to connect to their network, subject to reasonable network management, how would mobile broadband provider conduct have to change, if at all, in light of existing device certification programs?

As noted above, some mobile providers have introduced usage-based data pricing. To what extent do these business models mitigate concerns about congestion of scarce network capacity by third-party devices?

### C. Applications

We seek comment on how best to maximize consumer choice, innovation, and freedom of expression in the mobile application space, while ensuring continued private investment and competition in mobile wireless broadband services. To what extent should mobile wireless providers be permitted to prevent or restrict the distribution or use of types of applications that may intensively use network capacity, or that cause other network management challenges? Is the use of reasonable network management sufficient, by itself or in combination with usage-based pricing, to address such concerns? Should mobile wireless providers have less discretion with respect to applications that compete with services the provider offers? How should the ability of developers to load software applications onto devices for development or prototyping purposes be protected?

We also seek comment on the extent to which certain application distribution models—such as a mobile broadband Internet access service provider acting as both a network operator and an app store provider/curator—may affect consumer choice. If providers were to be prohibited from denying or restricting access to applications in their capacity as network providers, should they nevertheless have discretion regarding what apps are included in app stores that they operate? Are there safe-harbor criteria that, if met by a provider, would ameliorate potential concerns? For example, if a provider's customer

for customers that are heavy bandwidth users); AT&T Reply Comments at 94 ("To be sure, providers can—and some will—begin to address congestion challenges, in part, by adopting usage-sensitive data plans.").

<sup>&</sup>lt;sup>25</sup> See Tom Tauke, Verizon & Alan Davidson, Google, *Joint Policy Proposal for an Open Internet*, http://policyblog.verizon.com/BlogPost/742/JointPolicyProposalforanOpenInternet.aspx (Aug. 9, 2010).

<sup>&</sup>lt;sup>26</sup> For instance, the Commission adopted transparency requirements for licensees in the 700 MHz Upper C Block. *Service Rules for the 698-746, 747-762 and 777-792 MHz Bands et al.*, WT Docket 06-150, Second Report and Order, 22 FCC Rcd 15289, 15501 (2007).

<sup>&</sup>lt;sup>27</sup> See generally New America Foundation Comments at 29-31, 34; Verizon Reply Comments at 56.

had a choice of several app store providers that offered applications that could be downloaded onto the customer's mobile device, would that adequately mitigate concerns about potentially anti-competitive or anti-consumer effects of a provider excluding applications from its own app store?

Finally, we seek comment on how differences between web-based and native applications should inform our analysis. Should a mobile provider have more discretion to restrict consumers' downloading and/or use of native applications than they should with respect to web-based applications?

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The *NPRM* in this proceeding included an Initial Regulatory Flexibility Analysis (IRFA) pursuant to 5 U.S.C. § 603, exploring the potential impact of the Commission's proposal on small entities.<sup>28</sup> The matters discussed in this notice do not modify in any way the IRFA we previously issued. However, we received comments concerning the IRFA with regard to matters discussed in this Public Notice.<sup>29</sup> Parties that filed comments on the IRFA, and anyone else, are invited to file comments on the IRFA in light of this additional notice.

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Interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. When filing comments, please reference **GN Docket No. 09-191 and WC Docket No. 07-52**.

Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. Ocmments filed through the ECFS can be sent as an electronic file via the Internet to http://www.fcc.gov/cgb/ecfs/. Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of the proceeding, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. In completing the transmittal screen, commenters should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking numbers. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form." A sample form and directions will be sent in reply. Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, commenters must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). Parties are strongly encouraged to file comments electronically using the Commission's ECFS. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission, 445 12th Street, S.W., Washington, D.C. 20554.

 Effective December 28, 2009, all hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12<sup>th</sup> St., SW, Room TW-A325, Washington, DC 20554. All hand deliveries must be held together with

<sup>&</sup>lt;sup>28</sup> Open Internet NPRM, 24 FCC Rcd at 13136-52, App. C.

<sup>&</sup>lt;sup>29</sup> See, e.g., American Cable Ass'n Initial Regulatory Flexibility Analysis; NTCA Comments at 12-13.

<sup>&</sup>lt;sup>30</sup> See Electronic Filing of Documents in Rulemaking Proceedings, GC Docket No. 97-113, Report and Order, 13 FCC Rcd 11322 (1998).

rubber bands or fasteners. Any envelopes must be disposed of <u>before</u> entering the building. The filing hours at this location are 8:00 a.m. to 7:00 p.m.

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Documents in GN Docket No. 09-191 and WC Docket No. 07-52 will be available for public inspection and copying during business hours at the FCC Reference Information Center, Portals II, 445 12<sup>th</sup> St. S.W., Room CY-A257, Washington, DC 20554. The documents may also be purchased from BCPI, telephone (202) 488-5300, facsimile (202) 488-5563, TTY (202) 488-5562, e-mail fcc@bcpiweb.com.

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This matter shall be treated as a "permit-but-disclose" proceeding in accordance with the *ex parte* rules.<sup>31</sup> Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one- or two-sentence description of the views and arguments presented generally is required.<sup>32</sup> Other requirements pertaining to oral and written presentations are set forth in section 1.1206(b) of the rules.<sup>33</sup>

For further information, contact William Kehoe, (202) 418-7122, or John Spencer, (202) 418-2487.

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<sup>&</sup>lt;sup>31</sup> 47 C.F.R. § 1.1200 et seq.

<sup>&</sup>lt;sup>32</sup> See 47 C.F.R. § 1.1206(b)(2).

<sup>&</sup>lt;sup>33</sup> 47 C.F.R. § 1.1206(b).