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VIA ECFS

Marlene Dortch, Secretary Office of the Secretary Federal Communications Commission 445 12th Street, S.W. Washington, DC 20554

Re: Ex Parte Notice; WC Docket No. 09-191 and 07-52

Dear Ms. Dortch:

On April 26, 2010, in response to reports of a class action settlement entered into by RCN Corporation ("RCN") on July 31, 2009,¹ reply comments were filed in Dockets GN 09-191 (Preserving the Open Internet) and WC 07-52 (Broadband Industry Practices) by parties alleging that RCN had engaged in broadband network management practices that were the same as the practices the Commission recently found violated the Commission's open Internet principles in *Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications; Broadband Industry Practices Petition of Free Press et al. for Declaratory Ruling that Degrading an Internet Application Violates the FCC's Internet Policy Statement and Does Not Meet an Exception for "Reasonable Network Management," 23 FCC Rcd 13028 (2008), rev'd and remanded sub nom. Comcast Corp. v. FCC, No. 08-1291, _F.3d (D.C. Cir. 2010).²*

In fact, as is evident from the description set forth below of RCN's network management practices in place between 2005 and May 2009, RCN's practices were very limited in nature and consistent with the Commission's 2005 Internet Policy Statement.³ RCN did not deny its subscribers access to Internet content of their choice, did not deny them the ability to run applications and use services of their choosing, did not affect competition among network providers, application and service providers and

Boston Hartford Hong Kong London Los Angeles New York Orange County San Francisco Santa Monica Silicon Valley Tokyo Washington

Sabrina Chin vs. RCN Corporation, Civ. Action No. 1:08-CV-7349 (S.D.N.Y.).

² See Reply Comments of Free Press, GN Docket No. 09-101 and WC Docket No. 07-52, at 2, 8-9 (filed Apr. 26, 2010); see also Reply Comments of Center for Media Justice, Consumers Union, Media Access Project and New America Foundation, GN Docket No. 09-101 and WC Docket No. 07-52, at 18-19 (filed Apr. 26, 2010).

³ *Policy Statement,* FCC 05-151, at 3 (released Sept. 23, 2005) ("2005 Internet Policy Statement").

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content providers, and did not inhibit or restrict its subscribers' ability to connect legal devices to the broadband network.

RCN's Network Management Practices

Starting in late 2005, RCN used hardware and software acquired from Sandvine Corporation to manage Internet traffic on the RCN network. As a relatively small, competitive provider of cable, broadband and telephone services, RCN deployed the hardware for the primary purposes of (1) lowering what were then escalating transit costs for traffic exchanged with other carriers outside the RCN network, and (2) positioning itself to manage rapidly increasing upstream usage that was occurring on RCN's network and which RCN believed would increase substantially in the future. Importantly, although the equipment and software had added features and tools with which to monitor and manage network traffic, the primary goal of the deployment was to maintain a competitive service offering by reducing and deferring costs, while enhancing the customer experience for the vast majority of RCN broadband customers.

RCN did not enable all of the network management tools that were available in the Sandvine equipment it installed. Rather, relying on vendor programming and installation support, RCN sought to narrowly limit the use of the Sandvine equipment in its network to two applications directed at peer-to-peer ("P2P") Internet traffic: *first*, to redirect subscribers who sought to download files using P2P applications to on-network locations for the desired files (thus avoiding transit costs because P2P traffic stayed on its network); and, *second*, to place a ceiling on the number of simultaneous P2P upload connections available at any given time in each of RCN's markets. As RCN understands Sandvine's implementation of these practices, this limited use of the Sandvine equipment and software differed from the actions discussed in the Commission's *Comcast Order*.⁴ Specifically, RCN never knowingly originated forged reset packets, nor did it otherwise intentionally interrupt TCP sessions once established.

The Sandvine equipment deployed in RCN's network consisted of the Policy Traffic Switch (model PTS8210 initially, and later the functionally equivalent, but higher capacity, model PTS14520) and Peer-to-Peer Element (PPE8100). The PTS devices were deployed directly in-line with RCN subscribers' data. Conceptually, the PTS was a bridge in the network between the Cable Modem Termination System (CMTS) and the RCN IP backbone. Data originated by or destined to RCN customers traversed the Sandvine equipment as it entered or left the RCN IP backbone. The Sandvine equipment was situated in a single location in each RCN market and managed traffic

⁴ In the Matters of Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications, FCC 08-183, Memorandum Opinion and Order (released Aug. 20, 2008).

for an entire market. Initial configurations of the traffic management functions of the Sandvine equipment were designed and implemented by Sandvine with directional input from RCN. RCN executed a limited field trial of the equipment during the first half of 2005 and fully deployed the equipment to all RCN markets later in that year.⁵

The first traffic management policy that RCN enacted was to redirect RCN subscribers seeking to download content via certain P2P applications to on-network rather than off-network sources. RCN used Border Gateway Protocol (BGP) to identify RCN IP networks to the Sandvine infrastructure. The Sandvine infrastructure, through its on-going monitoring of P2P traffic, then built a database of content that was available from on-network sources using the identified IP networks. When the Sandvine infrastructure detected an RCN subscriber request destined to an off-network source for content that was available from an on-network source, the Sandvine infrastructure would then redirect that request to the on-network source. The protocols redirected in this way were BitTorrent, eDonkey, Gnutella, and Fasttrack.

RCN believes that redirecting subscribers seeking to download content to on-network locations provided a substantial benefit to both RCN and its subscribers. RCN saved transit fees that would have been incurred as a result of off-network traffic exchange. These cost savings contributed to RCN's ability to provide competition and choice in all of the markets where it competes with large incumbent cable and telephone providers. As a small competitor to industry giants, RCN must always be conscious of controlling expenses, and it is also important to recall that RCN had only just emerged from bankruptcy in December 2004. More importantly, the redirection of traffic to onnet locations enhanced the experience of RCN subscribers by optimizing download requests to download content from on-network sources. This practice typically produced faster average transfer speeds than would otherwise have resulted if the same files had been downloaded from a non-RCN network source. Significantly, this redirection of P2P requests to sources on RCN's network did not deprive RCN's subscribers of access to the content they sought. The redirection also did not involve RCN making any judgment (for example, with respect to the legality of copying the underlying content) other than that the P2P content was (or was not) available from a source on RCN's network. If the content was not available from a source on RCN's network, RCN did not alter or redirect the P2P request in any way. Moreover, to the extent RCN redirected a P2P request to an on-network source, that redirection occurred only at the initiation of the TCP session, and did not interrupt any TCP sessions once they were established.

⁵ The Sandvine infrastructure was never tested in a lab environment by RCN and the following discussion of the Sandvine traffic management features represents RCN's understanding of the technical function of the Sandvine infrastructure as explained to RCN by Sandvine and Sandvine documentation.

RCN's second network management practice involved upstream P2P connection limits. To ensure that upstream bandwidth capacity would be continuously available to customers using non-P2P applications, and to reduce or defer costs required to respond to ever increasing upload demand from all protocols, RCN established P2P upstream connection limits in each of the major regional service area markets it serves (i.e. systems in the metropolitan areas of Boston, Chicago, New York City, Philadelphia, and Washington, D.C., the Lehigh Valley in Pennsylvania and, prior to the sale of the system in 2007, the San Francisco Bay Area). Managing P2P upstream connections from RCN subscribers, rather than other connections to or from RCN subscribers, was least likely to have a perceptible impact on the subscriber's experience. The Sandvine infrastructure monitored inbound connection requests for P2P uploads (specifically, P2P protocols Fasttrack, eDonkey, Gnutella, and BitTorrent) to non-RCN destinations and compared the number of simultaneous active downloads to a pre-set limit. The limits varied by market, time and protocol, but were tuned to minimize customer impact. In the instances where the connection ceiling was reached, an initial request to form an upload connection was blocked. Due to the high connection ceilings and short durations of most P2P downloads, the capability to initiate a connection returned very quickly – usually within a few moments.⁶ RCN believes that implementation of its network management practices caused no material impact perceptible to an ordinary end user running a P2P application and attempting to upload content through use of that application, and certainly no adverse impact of any kind. And, as mentioned above, it is also important to note that, unlike the practices described in the Commission's Comcast Order, RCN did not knowingly use technology that terminated or interrupted either download or upload connections once formed.

RCN's Discontinuation of Network Management Practices

In August 2008, plaintiff Sabrina Chin commenced a putative class action against RCN by filing a complaint in the United States District Court for the Southern District of New York (*see* n.1, above). The principal claim in the *Chin* complaint alleges that RCN engaged in false advertising and consumer fraud by representing, in a marketing statement posted briefly on RCN's website, that it would provide its subscribers with "fast and uncapped" Internet service. The complaint alleged that RCN did in fact "cap" transport by delaying or preventing subscribers' Internet use and transmissions.

⁶ RCN took care to set the upload ceiling at a level that was high enough to ensure that an upload connection request that may have been initially rejected would be accepted within moments. RCN did not keep data regarding the number of upload connections that exceeded the connection limits or the time period of any delay. However, in the time since the initial adjustment of the Sandvine boxes that took place after they were first deployed at the end of 2005 and beginning of 2006, RCN does not believe that its customer service representatives received any complaints from subscribers relating to delays in P2P upload connections attributable to RCN's P2P network management practices.

Although RCN denied and continues to deny the material allegations of the complaint, the company made a business decision to seek settlement of the matter in order to avoid the cost and distraction of litigation. RCN promptly commenced settlement discussions with plaintiffs' counsel and, in connection with the settlement of the *Chin* case, removed from its network the Sandvine hardware necessary to implement its prior traffic management practices. RCN took these actions unilaterally and in good faith in connection with the settlement discussions. Since May 1, 2009, RCN has not engaged in any practices deployed to limit, throttle or prefer the throughput of any protocol or customer's data above any other protocol or data, either specifically or in the aggregate.

The settlement agreement in the *Chin* case provides for independent monitoring of the RCN network. RCN agreed to ongoing monitoring to help ensure and confirm RCN's compliance with its agreement not to employ any further P2P network management practices for 18 months from the date that it ceased all such practices. Importantly, while the independent monitor agreed to by the parties and appointed by the Court as part of the class action settlement has been engaged in the monitoring effort for almost a year, he has not informed RCN that he has detected any P2P network management practices in the course of his monitoring of the network.

In sum, the *Chin* litigation did not involve the same facts or issues as the Comcast matter. RCN continues to deny the material allegations in the *Chin* complaint, and its decision to pursue settlement was driven by a desire to minimize the cost and distractions of active litigation. RCN believes it has proceeded in compliance with the FCC's open Internet principles.

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

Respectfully submitted,

/s/ Jean L. Kiddoo

Jean L. Kiddoo

cc: John Nakahata Richard Ramlall

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