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Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street SW
Washington, DC 20554

October 14, 2008

**Re: Notice of *Ex Parte* Presentation
Formal Complaint of Free Press and Public Knowledge Against Comcast
Corporation for Secretly Degrading Peer-to-Peer Applications
File No. EB-08-IH-1518**

and

**Free Press et al. Petition 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"
CC Docket No. 02-33, CC Docket No. 01-337, CC Docket Nos. 95-20, 98-10, GN
Docket No. 00-185, CS Docket No. 02-52, WC Docket No. 07-52**

Dear Ms. Dortch,

Free Press submits this brief letter in response to Comcast's disclosure on September 19, 2008¹ as required by the Commission's August, 2008 Order. On balance, we are encouraged by the depth of Comcast's disclosure. We applaud the company for reversing its previous posture and opting for an open accounting of its network management plans. This is a very positive development, and it portends better consumer outcomes and a more harmonious relationship between Comcast and the consumer protection rules that govern it. However, after discussions with Comcast (during which they have been quite forthcoming), we remain concerned about a number of issues of principle and policy. Though we raise these questions to the Commission in the context of Comcast's disclosure and its compliance with the Order, they should also be considered more broadly as implicating the entire industry of information service providers.

After our initial review of Comcast's disclosure, we concluded that Comcast had failed to provide information essential for the Commission to protect consumers. Encouraged by the tone of Comcast's response, however, we first reached out to Comcast's counsel to see if we could reach agreement, and to encourage Comcast to make additional disclosures we believed necessary. Although Comcast's attorneys took our concerns to the relevant business and technical executives, and we appreciate Comcast's consideration of our concerns, in the end we were unable to agree on the underlying policy each side considered necessary to ensure

¹ Comcast has posted on its Web site a Compliance Plan, Current Network Management Technique, and New Network Management Technique. *Comcast.net Terms of Service – Network Management Policy*, at <http://www.comcast.net/terms/network/>.

compliance with the FCC's Order and to meet consumer expectations going forward. In short, we disagree with Comcast's interpretation of its obligations under the Order. We urge the Commission to review Comcast's disclosure in detail and to request certain additional information be made available to the FCC and public. Beyond that, we urge the Commission to embrace the very positive elements of Comcast's disclosure and consider applying them as an industry standard.

Comcast fails to disclose practices “following the termination of its current practices.”

On September 19, Comcast made available three documents: one detailing Comcast's past practices; one proposing a new practice; and one enumerating a timeline for moving from the past practices to the new practices by January 1, 2009. Comcast was acting under order of the FCC, which required Comcast to “disclose the details of their unreasonable network management practices, submit a compliance plan describing how it intends to stop these unreasonable management practices by the end of the year, and disclose to both the Commission and the public the details of the network management practices that it intends to deploy *following termination* of its current practices.”²

Comcast interprets disclosing the practice “following termination” to mean disclosing the practice in use immediately after termination of the old practices, however swiftly the practice may be abandoned. Comcast disclosed a new network interference method and certain initial thresholds, but also announced it would change the system and the relevant thresholds after its transition, to tweak the system. Comcast is not agreeing to provide any notice to the Commission of changes made after the transition is complete on January 1, 2009.³ Consequently, the Commission can be assured that it knows Comcast's practice for only the immediate moment following termination of the existing, illegal practice. Under Comcast's interpretation of the Order, Comcast has made a full disclosure of its subsequent network interference practice – even though it may promptly (or slowly) abandon that practice or augment it with other practices. Comcast has stated that it intends to provide its customers with notice of changes. We hope that commitment will be met, but Comcast's recent history of inadequate public disclosure and its unwillingness to provide more certainty to the Commission now give us pause.

² *In re Formal Complaint of Free Press & Pub. Knowledge Against Comcast Corp. 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 & Does Not Meet an Exception for “Reasonable Network Management,”* Memorandum Opinion and Order, FCC 08-183, at para. 1 (Aug. 20, 2008) (emphasis added).

³ Comcast notes that “some additional adjustments -- and possibly material changes -- will be made as we continue our trials and move forward with implementation.” Attachment B: Comcast Corporation Description of Planned Network Management Practices, p. 3. Comcast further promises to “inform the Commission and the public of any material changes to the practices and plans detailed here, at least two weeks prior to implementation of any such changes,” *id.*, but only until the transition is complete. After full transition, Comcast merely offers to “provide our customers with clear, concise, and useful information about the services.” *Id.* at n.5. *See also id.* at p. 7 (“[I]t is a near certainty that these values will change in both the short-term and the long-term, as Comcast gathers more data and performs additional analysis resulting from widescale deployment of the new technique.”); *id.* at p. 9 (“As noted above, these values are subject to change as necessary in the same way that specific anti-spam or other network management practices are adjusted to address new issues that arise.”).

We believe Comcast's interpretation of the Order contravenes the clear purpose of the Commission's Order. The Order required Comcast – a company found by this Commission to have engaged in “obfuscation,” “misdirection,” and “verbal gymnastics” – to engage in the “hallmark” of reasonableness and disclose its network interference to the public and to the Commission.⁴ The Order followed Ronald Reagan's maxim of “trust, but verify,” not “trust, but verify for the briefest moment.”⁵ We were hoping Comcast had learned from its mistakes over the last two years and chosen to *embrace* disclosure to earn back the trust of the public and the Commission. But Comcast is resisting that path. In such case, the Commission and the public will return to the black box of secret network interference practices. Such secrecy harms the public, impedes consumer choice and informed competition among available access providers, and threatens dynamic innovation on the Internet.

We believe that Comcast is misreading the Order, and the Commission should require Comcast to disclose more information about the range of potential changes Comcast may make to its practices and the factors and thresholds that would prompt particular responses, on an ongoing basis. We recognize that this interpretation of the Order to implicate disclosure after January 1, 2009 will be disputed, even though Comcast's reading is unreasonable. To remedy this contention, we suggest that the FCC should propose rules to ensure that Comcast and all other ISPs disclose to consumers all network management practices that interfere with lawful Internet communications between end users and the content and services of their choice.

Comcast fails to disclose significant components of its network practices.

Though we are generally pleased with the depth of Comcast's disclosure, we feel strongly that Comcast should list any and all exceptions to its network interference. Comcast does not list in its disclosure any exceptions for specific applications.⁶ However, on a “Help & Support” site, Comcast states that its VoIP service, Comcast Digital Voice, will not be affected by the throttling.⁷ If Comcast Digital Voice or any other application or service is exempt from the throttling mechanism, then Comcast should disclose the exemptions to the public and to the Commission as part of its disclosure regarding the new practices. Comcast should also justify any exemptions, so that the Commission can evaluate whether they are reasonable and not in violation of the Internet Policy Statement. Comcast believes that Comcast Digital Voice is different from other VoIP services because it can only be used over Comcast's Internet services and because it uses specific network paths and equipment. However, Free Press has received conflicting reports on the operation of Comcast's network, a situation sufficient to warrant inquiry into whether Comcast Digital Voice may contribute to congestion in the last mile portion of the network between the user and the CMTS while remaining exempt from the effects of Comcast's new technique. To put it plainly, is Comcast Digital Voice being given a free pass around the congestion to which it contributes? The Commission should take up this question of

⁴ *In re Formal Complaint of Free Press & Pub. Knowledge*, FCC 08-183, at paras. 44, 53.

⁵ *Id.* at para. 54.

⁶ Comcast's only mention of any traffic that is not affected by the throttling is for traffic coming from older modems, which are incapable of handling the BE/PBE signaling mechanisms; traffic coming from older modems will always be treated as PBE. Comcast Attachment B, p. 6 n.9.

⁷ *Comcast Help & Support – Frequently Asked Questions about Network Management*, at <http://help.comcast.net/content/faq/Frequently-Asked-Questions-about-Network-Management#voip>.

possible discrimination, and at the very least Comcast should disclose the throttling exemption given to the service.

We also have concerns about the potential impact of the throttling techniques on Internet video services. We are still evaluating the technical details of Comcast's proposal, particularly to determine if the new network interference will discriminate against the delivery of long-format high-definition video that competes directly with Comcast's television offerings.⁸

Comcast suggests that it must only reveal its practices for managing "congestion," while the Order requires disclosure of "network management practices" more broadly. For example, Comcast continues to make the assertion that its 250 GB monthly bandwidth cap is not within the scope of required disclosure under the Order. In a footnote to its disclosure of new practices, Comcast justifies this by implicitly defining distinct concepts of "congestion management practices" and "network management practices," seemingly implying that, if a bandwidth cap or other practice is not directly targeted to the problem of congestion, the Commission's Order does not require Comcast to disclose the practice.⁹ We find this distinction puzzling, particularly as Comcast was the first party to speak of its bandwidth cap as a means of network management.¹⁰ More importantly, Comcast's *ex post* narrowing of the Order to cover only "congestion management practices" has no basis in the Order. The Order requires Comcast, under penalty of forfeiture, to disclose all of its network management, "including the thresholds that will trigger any limits on customers' access to bandwidth."¹¹ 250 GB is undoubtedly a "threshold," and although a bandwidth cap may not directly trigger a limit on customers' access to bandwidth, it certainly triggers a limit indirectly, as two violations of the cap within six months will result in a year-long disabling of the customer's account.¹² Comcast must presume that the Order requires disclosure of practices that impact a consumer's use of the network, such as those meant to limit the resources a consumer can use over a month.

Comcast reveals the results of four test markets as a component of its disclosure, to demonstrate that only a small percentage of users may be affected initially. But Comcast did not reveal any information about its test markets, and in particular did not disclose the level of congestion in the test markets relative to other markets. Without more information, test results in a few (apparently arbitrarily chosen) markets are largely meaningless to the Commission. Congestion problems may be much worse, or better, in other markets. That is, although Comcast's description suggests a small percentage of users in these markets were "de-

⁸ Comcast alleges that their thresholds have been set such that "most streaming video" will not trigger throttling. However, many video services build a buffer of data at higher than streaming rates before beginning playback, and could trigger the threshold. We are investigating the potential effects of Comcast's system on advanced services.

⁹ Consider the title of the attachment, which uses the phrase "network management practices," and compare this to footnote 3: "These congestion management practices are independent of, and should not be confused with, our recent announcement that we will ... establish a specific monthly data usage threshold of 250 GB per account..." Comcast Attachment B, p. 1.

¹⁰ See, e.g., Andy Patrizio, *Comcast Suspected of Limiting BitTorrent Use*, INTERNETNEWS (October 19, 2007), at <http://www.internetnews.com/infra/article.php/3706376> ("There are .01 percent [of users] that are engaging in what we call 'excessive use.' ... We need to manage that, and to the extent we identify this excessive use, we call those customers and offer them additional services like commercial services.").

¹¹ *Id.*

¹² *Comcast Help & Support – Acceptable Use Policy*, at <http://help.comcast.net/aup/>.

prioritized,” it remains unclear if that small percentage would hold across all of Comcast’s network. Comcast should reveal how its test markets compare to other markets.¹³ It may well be that these test markets are perfectly representative and a useful sample – but this is an issue which should be verified.

Similarly, Comcast’s disclosure does not clearly indicate how many consumers will actually be affected, for how long, and in what ways. Because the results of Comcast’s test market demonstrations cannot be automatically extended nationwide, Comcast has not indicated the actual impact of its new network interference. Comcast should disclose to each of its customers the current thresholds for throttling present in the customer’s portion of the network alongside current information on the percentage of customers recently affected by the throttling and the average duration of throttling. Additionally, congestion patterns will change, and over time some nodes will need to be upgraded or split. Comcast has not disclosed their intentions for when to upgrade certain nodes, such as an upper threshold on the percentage of customers locally affected by the throttling that would trigger Comcast to upgrade the local node to reduce the congestion.¹⁴ We believe Comcast could prominently display meaningful current state information on a customer’s local network, on a dynamic Web page, without much inconvenience or expense. We believe at least some customers would find that information valuable and would be able to serve as watchdogs for the benefit of other customers. Providing such information would help consumers understand the product offered by Comcast, and it would foster more informed competition, as consumers could weigh Comcast’s product against competing wired and wireless offerings.

Comcast should commit to disclosing to the public how many people are affected, where, and for how long. We raised this concern to Comcast, stressing that it is in Comcast’s best interest to inform their customers when they are being affected by throttling. With such disclosure, consumers would know whether their online applications are having problems because of Comcast’s throttling or unrelated reasons. If consumers do not know the cause of an application’s problems, the consumer may call Comcast’s help desk, costing Comcast additional expenses. Comcast agreed that it is valuable to inform customers when network throttling is occurring, but stated that this notification process should proceed through standard Internet practices and through interaction with the Internet Engineering Task Force if this is at all possible. We applaud Comcast for finally recognizing the value of using standard Internet practices and working with the IETF, but we believe Comcast can indicate to consumers when they are being throttled without jeopardizing privacy and without going beyond IETF standards, for example by dispatching a service email, just as it does to handle other sensitive topics such as billing issues. In addition, we are somewhat skeptical that the IETF will adopt a standard method for informing consumers of a non-standard practice.

¹³ We asked Comcast how the test markets compared to other markets, but we did not receive a response.

¹⁴ We recognize that Comcast has made informal comments on its upgrade strategies, but such comments do not take the place of adequate and complete disclosure. *See, e.g.*, Leslie Ellis, *How Sexy is HFC?*, CED Magazine, <http://www.cedmagazine.com/how-sexy-is-hfc-answer-plenty.aspx> (Comments of Tom Werner, CTO of Comcast) (“As we hit 70 percent utilization, we issue a work order to split the node.”).

Comcast continuously fails to utilize industry-standard techniques.

In contrast to Comcast's position on notifying users of interference with their connections, we are concerned that Comcast's proposed network interference techniques do not coordinate with and are not approved by the Internet Engineering Task Force for the purpose of congestion control.¹⁵ Consumers and application developers expect that providers of Internet access offer services that comply with the Internet's standards and customs. All providers of Internet access services -- regardless of technology -- should inform existing and potential subscribers of any differences between the standard behavior of the Internet and the provider's Internet access service. Providers should also strive to keep their network interference in line with established IETF methods. We encourage Comcast and other providers to standardize and coordinate its planned and future network interference with the IETF, the authoritative international community of network engineers. Absent this coordination, we run the risk of every ISP developing a non-standard network management practice, none of which are alike or organized around agreed-upon principles and techniques.

All Internet users have the right to know what services they are receiving.

Finally, the Commission should adopt industry-wide disclosure rules. Despite Comcast's more encouraging tone, Comcast's continued lack of full disclosure is disheartening. Comcast believes that disclosing its practices should be the exception, not the rule, and should end on a fixed date. But all service providers ought to disclose the details of practices that interfere with, or "manage," their customers' use of the open Internet, especially those practices that do not use IETF standards.

The Commission should issue an NPRM to propose requiring all broadband access providers to disclose details of their network management. This year, in the comments filed regarding the Free Press et al. petition against Comcast, parties on all sides of the debate adamantly supported the need for proper disclosure to the public.¹⁶ All providers ought to disclose network interference and infrastructure information to their customers and the Commission, including any and all limits that are imposed on customers' access to bandwidth. This critical information will allow consumers to make educated choices from their options for broadband service and help the Commission continue to implement federal Internet policy to promote an open Internet. Comcast's obligation under the Order to disclose its practices should be routine practice for all providers. Consumers deserve to know what they're purchasing.

We look forward to working with the Commission and Comcast over the coming months and years to protect consumers and to promote fair and nondiscriminatory network practices. While we are encouraged by our discussions with Comcast, we unfortunately disagree with

¹⁵ Peter Eckersley, Fred von Lohmann, and Seth Schoen, Electronic Frontier Foundation, *Packet Forgery By ISPs: A Report on the Comcast Affair*, p. 6, at http://www.eff.org/files/eff_comcast_report.pdf ("By arbitrarily using RST packets in a manner at odds with TCP/IP standards, Comcast threatens to Balkanize the open standards that are the foundation of the Internet.").

¹⁶ See, e.g., Reply Comments of NASUCA, WC Docket No. 07-52, at 3-4 (filed Feb. 28, 2008); Reply Comments of NCTA, WC Docket No. 07-52, at 11 (filed Feb. 28, 2008); Reply Comments of CDT, WC Docket No. 07-52, at 8-11 (filed Feb. 28, 2008); Reply Comments of CTIA, WC Docket No. 07-52, at 7 (filed Feb. 28, 2008).

Comcast on the nature of their obligation under the Order. We urge the Commission to clarify that Comcast's disclosure does not comply with the Order and to request additional disclosure as discussed above.

Sincerely,

A handwritten signature in black ink, appearing to read 'B. Scott', with a long horizontal line extending to the right.

Ben Scott, Policy Director
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