Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	**)**	
	)	
Restoring Internet Freedom	**)**	WC Docket No. 17-108
	)	

REPLY COMMENTS OF COGENT COMMUNICATIONS INC.

Robert M. Cooper
Hershel A. Wancjer
James A. Kraehenbuehl
BOIES SCHILLER FLEXNER LLP
1401 New York Ave. NW
Washington, D.C. 20005
(202) 237-2727
rcooper@bsfllp.com
hwancjer@bsfllp.com
jkraehenbuehl@bsfllp.com

Counsel to Cogent Communications Inc.

Dated: August 30, 2017

INTRODUCTION

A functioning interconnection market, unimpeded by deliberately created congestion at traffic exchange points, is necessary for the Internet freedoms the Commission and the NPRM are committed to protecting. There is no legitimate dispute—none—that consumers' freedom to access the lawful content and applications of their choice is adversely impacted when sustained congestion between broadband internet access service ("BIAS") providers and transit providers like Cogent Communications Inc. ("Cogent") exists. The Commission, as explained in Cogent's Opening Comments and by others, therefore should reject the NPRM's proposal to forego any oversight of interconnection.[1]

Instead, the Commission should adopt Cogent's proposal to (1) preserve robust disclosure requirements sufficient to identify congestion at interconnection points and (2) provide a forum for resolution of interconnection disputes on a case-by-case basis. Ideally, the Commission would accept both of these recommendations as part of preserving the *Title II Order*'s classification of BIAS as a telecommunication service.[2] That is a time-tested and legally sound basis for asserting this minimally intrusive level of oversight. But even if it does not preserve that classification, the Commission has authority to implement both aspects of this proposal under Title I.

Several other comments make similar proposals,[3] which Cogent supports because they provide a mechanism to ensure that the interconnection market does not fail as it has in the past.

---

[1] Restoring Internet Freedom, Notice of Proposed Rulemaking, WC Docket No. 17-108 (2017) ("NPRM") ¶ 42.

[2] The "Title II Order" is how the NPRM refers to the 2015 Open Internet Order.

[3] *See, e.g.*, Comments of Etsy, Inc., WC Docket 17-108 at 5 (July 17, 2017) ("Etsy Comments"); Comments of INCOMPAS, WC Docket 17-108 at 57-62 (July 17, 2017) ("INCOMPAS Comments"); Comments of Microsoft Corporation, WC Docket No. 17-108 at 21 (July 17, 2017) ("Microsoft Comments"); Comments of Netflix, Inc., WC Docket 17-108 at 3 (July 17, 2017) ("Netflix Comments");

Others, however, urge the Commission to abandon all oversight of the interconnection market.[4] Despite disagreement over the appropriate degree of regulatory oversight, if any, there are some areas of agreement relevant to interconnection. Specifically, there is widespread consensus that the Commission should not abandon its protection of the Internet freedoms articulated in 2005 and reiterated, most recently, in the NPRM. Nor is there any serious suggestion that the Commission lacks authority to protect these Internet freedoms. Accordingly, there is a general consensus that an approach that maximizes the Internet freedoms is both good public policy and within the Commission's authority.

Additionally, the opening comments confirm that the role of interconnection in providing BIAS is well understood by market participants: "without interconnection, there is no Internet access."[5] Therefore, when BIAS providers cause or allow interconnection points to become congested, Internet access for their paying customers is impaired such that they no longer can reach the lawful content and applications of their choice.

Of course, there are areas of disagreement. Opponents of continued interconnection oversight argue that the interconnection market is, and always has been, fully functioning. Moreover, they suggest, but do not explicitly argue, that without the *Title II Order*'s basis for

---

People of the State of New York Comments on the May 23, 2017 Notice of Proposed Rulemaking, WC Docket 17-108 at 3-11 (July 17, 2017) ("NYAG Comments"); Opening Comments of VIMEO, Inc., WC Docket 17-108 at 2-3 (July 17, 2017) ("VIMEO Comments").

[4] *See, e.g.*, Comments of AT&T Services Inc., WC Docket 17-108 at 46-47 (July 17, 2017) ("AT&T Comments"); Comments of NCTA – The Internet & Television Association, WC Docket 17-108 at 3 (July 17, 2017) ("NCTA Comments"); Comments of Comcast Corporation, WC Docket 17-108 at 73-76 (July 17, 2017) ("Comcast Comments").

[5] INCOMPAS Comments at 60; *see also* AT&T Comments at 46-47 ("each network must connect either directly or indirectly with every other to ensure connectivity among their respective customers"); Comments of Amazon, WC Docket 17-108 at 7 (July 17, 2017) ("Amazon Comments") ("Because a consumer's choice would be frustrated if the content she requests is not readily available due to discrimination by BIAS providers anywhere in their networks, Amazon urges the Commission to maintain in its rules an oversight role over last mile interconnection agreements.").

overseeing interconnection, the Commission lacks any other basis to do so. These arguments ignore the state of the interconnection market prior to the *Title II Order* and overlook the alternative bases for the Commission's authority over interconnection.

REPLY COMMENTS

I. Interconnection Oversight Is Necessary To Protect The Internet Freedoms.

Since 2005, the Commission's approach to oversight of BIAS providers has been to protect four Internet freedoms, including that consumers "are entitled to" (i) "access the lawful Internet content of their choice" and (ii) "run applications and use services of their choice."[6] As explained in Cogent's Opening Comments, these freedoms can be—and have been—infringed upon by BIAS providers that cause or allow congestion to develop at interconnection points in order to enhance their bargaining leverage with transit and edge providers and/or to favor their own or affiliated content. Those who disagree make three points in response: (a) the interconnection market has never failed and is fully functional, (b) BIAS providers are not technically capable of using interconnection points to enhance their leverage, and (c) oversight results in asymmetric obligations. None of these are correct.

A. BIAS Providers Have A History Of Using Interconnections As A Vehicle To Increase Their Leverage Over Content And Transit Providers.

Several commentators argue that interconnection oversight is not necessary because "the interconnection marketplace has always functioned efficiently."[7] This is undermined by, among other things, the evidence provided by the Office of the New York Attorney General. Its

[6] Appropriate Framework for Broadband Access to the Internet over Wireless Facilities et al., 20 FCC Rcd. 14986 at ¶ 4 (2005).

[7] AT&T Comments at 47-48; *see also* Comcast Comments at 74-75 ("The well-functioning interconnection marketplace that existed prior to the Title II Order before any such regulation was in place provides ample evidence that Commission oversight and regulatory intervention is not needed."); NCTA Comments at 48 ("parties have had no issue negotiating interconnection agreements on reasonable and mutually acceptable terms").

investigation identified "documentary evidence revealing…that from at least 2013 to 2015, major BIAS providers made the deliberate business decision to let their networks' interconnection points become congested with Internet traffic and used that congestion as leverage to extract payments from backbone providers and edge providers, despite knowing that this practice lowered the quality of their customers' Internet service."[8] The "knowing" harm to ones' own customers,[9] in an effort to extract additional payment from other participants in the Internet ecosystem, is the antithesis of a functioning market.

These failures were not merely "anecdotal."[10] They "lasted for years"[11] and were the result of a "deliberate business decision to use congestion to strong-arm backbone providers and edge providers into paying for access" to BIAS providers' customers.[12] Moreover, this strategy became "increasingly common with the growth of consumer demand for streaming video" such that the issue was not an isolated event but a part of a long-term strategy that created additional congestion as consumers' demand for particular types of content increased.[13]

[8] NYAG Comments at 1; *see also* NYAG Comments at 5-6 ("These documents establish for the first time that the long-running interconnection disputes that harmed consumers and edge providers were the result of BIAS providers' deliberate business decisions to use degraded service to consumers as leverage to extract payments from backbone and edge providers.").

[9] NYAG Comments at 8 (One BIAS provider executive "acknowledged in an internal email that the company's new contentious relationships with backbone providers 'may be artificially throttling [subscriber] demand' for broadband services.").

[10] NCTA Comments at 47-48.

[11] NYAG Comments at 4.

[12] NYAG Comments at 7. BIAS providers carried out this strategy by "refusing to add ports at interconnection points, effectively limiting the ability of backbone and edge providers to deliver content to subscribers, unless the backbone or edge provider agreed to pay for access to subscribers." *Id.*

[13] NYAG Comments at 4. It is worth noting that the types of content most affected by congestion (*e.g.*, streaming video) poses a competitive threat to services offered by many BIAS providers.

This echoes Cogent's explanation of what transpired in the years before the *Title II Order*.[14] The evidence of a properly functioning interconnection market cited by those opposing continued oversight is unconvincing. Other than press releases predating the *Title II Order* by at least seven years,[15] the only evidence Comcast and NCTA provide of a properly operating market is Netflix's entering into interconnection agreements in 2014.[16] This is an odd choice given the well-documented series of events that led to those agreements, *i.e.*, the systematic use of congestion at interconnection points to force Netflix into paid agreements.[17] No other evidence is provided by the BIAS providers or their organizations.[18]

Thus, when the facts provided by the New York Attorney General are considered along with the well-known, public examples that have been collected by other commentators,[19] the Commission would be acting contrary to the evidence before it to conclude that the

[14] Comments of Cogent Communications Inc., WC Docket 17-108 at 9-15 (July 17, 2017) ("Cogent Opening Comments").

[15] *See* Comcast Comments at 74 & n.274 (citing Cogent agreements made in 2008 and 2005); NCTA Comments at 48 n.195 (same).

[16] *Id.*

[17] *See* Netflix Comments at 2 & nn. 6-7 (detailing examples of BIAS providers using interconnection to increase their leverage against Netflix); AT&T/DTV Order, 30 FCC Rcd. at 9211-9212 ¶ 214 (describing Netflix's dispute with AT&T over port congestion which resulted in "a significant detrimental effect on the ability of AT&T's DSL and U-verse customers to access the Netflix OVD service"); Reed Hastings, *Internet Tolls And The Case For Strong Net Neutrality*, Netflix Company Blog (March 20, 2014), available at https://media.netflix.com/en/company-blog/internet-tolls-and-the-case-for-strong-net-neutrality; Ken Florance, *The Case Against ISP Tolls*, Netflix Company Blog (April 24, 2014), available at https://media.netflix.com/en/company-blog/the-case-against-isp-tolls.

[18] AT&T acknowledges there have been "exceptions" to the rule of functioning markets but says this only occurs "when certain networks, hoping to shift blame to others or elicit regulatory intervention, have misleadingly accused ISPs of creating congestion." AT&T Comments at 47 n.83. This appears to be a reference to Cogent, because it cites to a story titled "Cogent Now Admits They Slowed Down Netflix's Traffic," but it is a non sequitur because it ignores the fact BIAS providers' creation of congestion compelled Cogent to implement certain network management practices to address BIAS-imposed, artificial congestion at interconnection points.

[19] *See* INCOMPAS Comments at 29-30 & nn. 97-99; *id*. at 77 & n.248.

interconnection market has never experienced recurring market failures that have harmed consumers.

B. History Illustrates That BIAS Providers Have The Means To Use Interconnection Congestion To Increase Their Leverage.

Certain BIAS providers also claim that oversight of interconnection is unnecessary because they do not have the technical ability to create the type of congestion needed to enhance their leverage over edge and transit providers. This contention is contradicted by the extensive record of BIAS providers doing precisely that.

Regardless, the argument ignores how interconnection works. AT&T contends that an "ISP cannot selectively degrade particular peering arrangements to harm particular edge providers because those edge providers and their transit intermediaries—not the ISP—choose the interconnection facilities they will use for sending content to the ISP's customers."[20] The ability to "choose the interconnection facilities" used to send content is only meaningful if there is at least one facility that is not congested. If a BIAS provider refuses to upgrade capacity at all of its facilities, then they all become congested eventually because the demand for data is always growing—particularly for bandwidth-intensive content like streaming video. This strategy can be commercially viable for a BIAS provider because it is difficult for consumers to know that congestion is degrading their service, and certain BIAS providers have viewed the costs as "short term" ones that would "eventually lead to longer-term revenue growth and cost containment."[21] It is thus no surprise that sustained congestion occurred between several transit and BIAS providers.[22]

---

[20] AT&T Comments at 47-48.

[21] NYAG Comments at 7.

[22] M-Labs, ISP Interconnection And Its Impact On Consumer Internet Performance at 4 (Oct. 28, 2014), available at https://www.measurementlab.net/publications/isp-interconnection-impact.pdf.

AT&T provides a fall back argument—that there is sufficient competition in the transit market such that an edge provider struggling to get data to a BIAS provider's customers can readily change transit providers. As a result, AT&T argues, in order to degrade connectivity it would have to limit "capacity across *all of its peering points* for extended periods."[23] This ignores that BIAS providers can, and have, been able to target edge providers by allowing congestion to occur with any transit provider that edge provider uses. That is precisely what several BIAS providers did with respect to Netflix.[24]

BIAS providers thus face no technical barriers to using congestion as a tool to extract additional payment from edge providers seeking to deliver content consumers are requesting. Moreover, the means are joined with self-serving reasons to do so. As Amazon explained, "The Commission has repeatedly determined, first in 2005, again in 2010, and again in 2015, that cable and telephone companies acting as BIAS providers have the ability and incentive to discriminate against unaffiliated content."[25]

C. BIAS Providers' Concerns About Asymmetric Application Of Interconnection Oversight Are Unclear And Overstated.

Some opponents of interconnection oversight by the Commission argue that it should be abandoned because it creates "asymmetric" obligations on BIAS providers relative to the

[23] AT&T Comments at 45 n.84.

[24] *See* Petition To Deny of Netflix, Inc., MB Docket 14-57 at 52-60 (Aug. 25, 2014) (recounting the events that led to it paying Comcast directly for interconnection).

[25] Amazon Comments at 5 (citing the Commission's 2015, 2010, and 2005 orders and statement regarding protecting consumers' Internet freedoms); *see also Verizon v. FCC*, 740 F.3d 623, 645-46 (D.C. Cir. 2014) ("the Commission has adequately supported and explained its conclusion that, absent rules such as those set forth in the Open Internet Order, broadband providers represent a threat to Internet openness and could act in ways that would ultimately inhibit the speed and extent of future broadband deployment" ***because*** (1) "nothing in the record gives us any reason to doubt the Commission's determination that broadband providers may be motivated to discriminate against and among edge providers" and (2) "as the Commission found, broadband providers have the technical and economic ability to impose such restrictions. Verizon does not seriously contend otherwise.").

networks that primarily serve content providers.[26] The reason for this, however, is the market power BIAS providers have and transit providers do not. As BIAS providers themselves acknowledge, the transit market is highly competitive such that edge providers can select from a number of paths to reach particular BIAS providers.[27] BIAS providers, in contrast, control the sole path between any transit provider and the end-user customers who content and applications providers are seeking to reach at such end-users' request. Transit providers thus have neither the opportunity nor ability to engage in the type of discriminatory behavior that has enabled some BIAS providers to extract payments directly from content providers.[28] Consequently, because only BIAS providers are able to engage in discriminatory conduct with respect to interconnection points, they are the appropriate focus of interconnection oversight. Notwithstanding the sound basis for this differentiated treatment, Cogent is willing and prepared to have its interconnection practices subject to Commission oversight to the same degree as BIAS providers.

D. Without A Forum For The Resolution Of Interconnection Disputes, Market Failures Are Likely To Return.

The preceding sections show that BIAS providers have a history of manipulating—and the incentive and ability to manipulate—interconnection points in a manner that injures consumers' liberty to access the content and applications of their choice. Other than the *Title II Order*, nothing has changed with respect to BIAS providers' abilities or incentives. Thus, history would repeat itself if the Commission stopped providing the *post hoc* oversight contemplated in the *Title II Order*. Comcast suggests that transit providers have said otherwise,

[26] AT&T Comments at 48-49 ("The Commission should thus restore regulatory parity to these relationships by eliminating common carrier regulation from all interconnecting parties."); NCTA Comments at 47-48.

[27] AT&T Comments at 47-48.

[28] In addition, a transit provider is in no position to seek compensation directly from consumers given their lack of access to them.

citing statements on earnings calls discussing contracts signed shortly **after** the *Title II Order* was finalized.[29] But contracts have finite terms, exit clauses and the potential for breach. Thus, if post-*Title II Order* contracts terminate for any reason, BIAS providers and transit providers will be in the exact same situation they were before the *Title II Order*: a game of chicken characterized by growing, consumer-harming congestion at interconnection points.

That is why the *Title II Order* stopped this game and largely catalyzed the elimination of congestion.[30] Should the Commission now ignore interconnection, as the NPRM proposes, there is no reason to believe BIAS providers will adopt a strategy different than the one pursued prior to the *Title II Order*. No reasonable public policy goal would be served by the resurrection of that situation. Thus, the Commission should preserve its oversight of interconnection.

II. The Commission's Authority Over Interconnection Has Not Been Seriously Disputed.

Cogent explained in its Opening Comments that the Commission has authority to provide a forum to hear interconnection disputes under Title I or Title II. Rather than challenge this directly, opponents of Commission involvement in interconnection state that, absent Title II, the *Title II Order*'s basis for authority over interconnection is absent.[31] That is a tautology. There is

[29] Comcast Comments at 74-75 & n.277 (quoting statements from Cogent and Level 3 earnings calls).

[30] NYAG Comments at 2 ("Only then did BIAS providers begin to address the congestion at interconnection points for backbone and edge providers that had refused payment demands, resulting in improved performance for consumers."); *id*. at 10 ("Indeed, it was the Commission's regulation of interconnection arrangements through Title II in the 2015 OIO that largely ended ongoing interconnection disputes.").

[31] AT&T Comments at 46 ("Classification of broadband Internet access as a 'telecommunications service' was the explicit and only legal basis for the Title II Order's assertion of regulatory authority over the terms of interconnection agreements between IP networks."); Comcast Comments at 73-74 ("As Title II regulation falls away, there is no basis to subject privately negotiated Internet traffic-exchange arrangements to ongoing regulatory oversight, particularly given the dynamic and competitive nature of the marketplace."); NCTA Comments at 45 ("if the Title II classification of BIAS falls away, so too will the Title II Order's asserted legal basis for overseeing Internet interconnection and traffic exchange").

no reasoned legal argument for why the Commission does not have authority over interconnection outside of Title II. Indeed, one BIAS provider contends that the Commission "should *not* relinquish any authority it has nor should it conclude that it has no legal authority with respect to Internet traffic exchange arrangements whatsoever."[32] This is consistent with, and reinforces, Cogent's position that the Commission has authority over interconnection.

Also consistent with Cogent's Opening Comments is the broad support for the Commission retaining Section 706 as a substantive basis for regulatory authority. As AT&T explains, "Section 706 is now an engrained part of telecommunications law, and the Commission could reasonably rely on that provision as its primary basis for open Internet rules."[33] And many commentators even urge the Commission to use Section 706 to preserve the rules against blocking and throttling.[34]

---

[32] Comments of CenturyLink, WC Docket 17-108 at 62 (July 21, 2017) ("CenturyLink Comments") (emphasis in original).

[33] AT&T Comments at 8; *see also* Comcast Comments at 57 ("Comcast has previously argued that imposing appropriately tailored rules under Section 706 would be a sound way to preserve the Commission's ability to address potential harms in a flexible manner while removing the Title II overhang that threatens network innovation and investment."); NCTA Comments at 57 ("While there is no demonstrated need to impose prescriptive mandates to safeguard Internet openness, the Commission will retain authority to take appropriate action in the unlikely event that threats to competition or consumers emerge. The D.C. Circuit has held that '[S]ection 706 of the 1996 Telecommunications Act . . . furnishes the Commission with the requisite affirmative authority" to protect Internet openness.'") (citation omitted).

[34] *See, e.g.*, AT&T Comments at 101 ("Again, AT&T would support a set of bright-line rules that require transparent disclosures of network-management practices and prohibit blocking and throttling of Internet content without justification under appropriately flexible principles of reasonable network management."); Comcast Comments at 53 ("Comcast will continue to support the principles of ensuring transparency and prohibiting blocking, throttling, and anticompetitive paid prioritization"); NCTA Comments at 5-6 ("NCTA does not oppose measures enabling federal enforcement of open Internet principles"); Comments of Akamai Technologies, Inc., WC Docket 17-108 at 9-10 (July 17, 2017) ("Akamai proposes that if the Commission reclassifies broadband Internet access service as an information service, it should not eliminate protections against blocking and throttling or other discriminatory traffic practices, but rather modify existing rules to target such anti-competitive conduct."); Comments of Verizon, WC Docket 17-108 at 4 (July 17, 2017); Etsy Comments at 3-5.

In light of this support, there is no reason for the Commission to reverse course and declare Section 706 "hortatory." To do so would be also to conclude that the Internet freedoms the NPRM seeks to protect are hortatory as well, because the Commission would be declaring it has no authority to actually protect them.

The Commission therefore should retain its authority to protect the Internet freedoms. An essential part of this is maintaining a forum for the resolution of interconnection disputes that will determine whether challenged interconnection practices are harming consumers because, for example, they are discriminatory, such as efforts to circumvent any no blocking or no throttling rules through deliberate congestion-creating tactics, or are anticompetitive. This, in conjunction with robust disclosure obligations, will ensure that the Internet remains free as the NPRM seeks.

CONCLUSION

For these reasons, and those provided in Cogent's Opening Comments, the Commission should preserve both disclosure requirements sufficient to provide information about interconnection congestion and a forum for exercising oversight over interconnection-related disputes.

Respectfully Submitted,

/s/ *Robert M. Cooper*

Robert M. Cooper
Hershel A. Wancjer
James A. Kraehenbuehl
BOIES SCHILLER FLEXNER LLP
1401 New York Avenue, N.W.
Washington, D.C. 20005
(202) 237-2727
Counsel to Cogent Communications Inc.

Dated: August 30, 2017