

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc.)	MB Docket No. 10-56
)	
For Consent to Assign Licenses and Transfer Control of Licenses)	
)	
Protecting and Promoting the Open Internet)	GN Docket No. 14-28
)	

**Petition for the Federal Communications Commission to
Enforce Merger Conditions and its Policies**

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Introduction

Public Knowledge requests, pursuant to 47 C.F.R. § 1.41, that the Commission enforce the conditions it imposed on Comcast as part of Comcast's merger with NBC-Universal. Comcast's decision to exempt its online video service from its own data caps is precisely the type of behavior contemplated and barred by the Commission in the Merger Order. This behavior is also inconsistent with the intent of the FCC's 2015 Open Internet rules.¹ As such, the Commission must put a stop to this behavior and prevent it from being repeated in the future.

I. Comcast is Using Discriminatory Billing Practices to Disadvantage Competing Online Video Services

The Commission must enforce its policies and Comcast's merger commitments. Comcast's violations are not merely technical violations. As set out in this document, Comcast's actions could harm consumers by turning the online video distribution marketplace from an open and competitive market to one dominated by cable incumbents such as Comcast. Accordingly, Public Knowledge requests that the Commission stop Comcast's discriminatory zero-rating, stop its discriminatory use of data caps, and take any other enforcement actions it deems necessary.

Comcast is already a dominant, vertically-integrated national video distributor, and the nation's largest broadband provider. But this is not enough for Comcast. It is currently taking steps to further expand its dominance into new markets such as the market for online video. But rather than competing fairly, among other things,² it is leveraging its control over content and

¹ To be clear, Public Knowledge does *not* intend this as a formal complaint pursuant to 47 C.F.R. § 8.12. Public Knowledge seeks only to substitute this complaint for its now moot 2012 Petition regarding Comcast's previous practice of zero rating its XBox streaming application.

Nevertheless, because Comcast's conduct is relevant and informative to the Open Internet docket, Public Knowledge submits this complaint as an *ex parte* filing in GN Docket No. 14-28. ² Comcast's recent troubling behavior is not limited to its zero-rating of Stream TV. For instance, Comcast has taken advantage of "authentication" to control which TV Everywhere apps its subscribers can access, and on what devices. Comments of Roku, *Protecting and Promoting the Open Internet*, GN Docket No. 14-28 (July 15, 2014), available at

infrastructure to give its own new online video service, Stream TV, advantages that put competing, unaffiliated online video services at a disadvantage.

Comcast imposes a 300 GB data cap on many of its customers, and has been rolling out this limit to other of its markets. Comcast admits that this cap serves no technical purpose.³ This is not surprising, since wireline cable networks do not face significant capacity constraints. Rather, according to Comcast’s own documents, its data cap is merely about “fairness”⁴ – that is, data caps are a price discrimination practice, designed to get some people to start paying more for their broadband service.

While there is no technical justification for the level at which Comcast has set its cap, the business justification seems clear. The cap is set in such a way that viewers cannot easily stop using Comcast video services without accruing financial penalties. According to Nielsen, the average American watches about 31 hours of video per week across TVs, mobile and multimedia devices, and PCs.⁵ According to Netflix, 1 hour of HD video consumes 3 GB.⁶ Thus, a single

<http://apps.fcc.gov/ecfs/document/view?id=752148133>. The Department of Justice has already found that the authentication system itself was designed to combat online video. *See* Competitive Impact Statement of the United States at 19, *United States v. Comcast Corp.*, 1:11-cv-00106 (D.D.C. Jan. 18, 2011) (“Competitive Impact Statement”). Comcast’s use of authentication magnifies the threat to online video and consumer choice. Additionally, Comcast is attempting to convince other MVPDs nationwide to cede some control of their set-top boxes to it via its X1 platform, a move that would further magnify its power. *See* Jeff Baumgartner, *Cox Inks National X1 Deal with Comcast*, Multichannel News (Nov. 11, 2015), <http://www.multichannel.com/news/content/cox-inks-national-x1-deal-comcast/395239>.

³ Jon Brodtkin, *Comcast VP: 300GB data cap is “business policy.” not technical necessity*, Ars Technica (Aug. 14, 2015), <http://arstechnica.com/business/2015/08/comcast-vp-300gb-data-cap-is-business-policy-not-technical-necessity/>.

⁴ Jon Brodtkin, *Don’t say “data cap”: Highlights from a Comcast customer service script*, Ars Technica (Nov. 6, 2015), <http://arstechnica.com/business/2015/11/dont-say-data-cap-highlights-from-a-comcast-customer-service-script/>.

⁵ Nielsen Q3 2015 “Total Audience Report,” table 1A, counting Live+DVR/Time-shifted TV, DVD/Blu-Ray Device, Multimedia Device, Video on a PC, and Video on a Smartphone.

user watching an average amount of HD video, entirely through streaming, would consume 372 GB per month – well over Comcast’s data cap.⁷ Since a typical subscriber uses broadband for much more than online video, anyone who wanders outside Comcast’s video walled garden could be expected to hit this cap fairly quickly. Of course, a typical household of multiple users would hit the cap even more quickly.

To avoid hitting Comcast’s cap and accruing penalties, a typical user could be expected to reduce her amount of online video usage in either hours watched, or the quality of the stream. Of course, this can be expected to benefit Comcast’s traditional cable TV business. But Comcast has another “solution” to the data caps problem it chose to create – it has exempted its own online video service Stream TV from the cap, a practice known as “zero-rating.” While a user could easily hit her monthly cap watching services unaffiliated with Comcast such as Netflix, iTunes, or YouTube, she can watch Stream TV all day without the meter running.

The effects of this on the marketplace and for consumers could be drastic. Comcast is taking advantage of its position as an infrastructure provider to ensure that the dominance it enjoyed in traditional cable services extends online. The very promise of online video is that it can finally bring viewers the choice that has been lacking for so many years in the pay TV marketplace, allowing customers to choose services, packages, bundles, and content that better meets their needs. But Comcast’s actions could drive other online video providers out of the

⁶ Netflix, *How can I control how much data Netflix uses?* (last accessed Mar. 2, 2016), <https://help.netflix.com/en/node/87>.

⁷ This is consistent with Comcast’s own estimate from 2010, which found that a “replacement” level of online video viewing that included standard definition video would consume 288 GB per month. Mark Israel and Michael L. Katz, “The Comcast/NBCU Transaction and Online Video Distribution,” Submitted by Comcast Corporation, MB Docket No. 10-56 (May 4 2010) at 33, <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020448236>; <http://apps.fcc.gov/ecfs/document/view?id=7020448237>. It is reasonable to assume that a viewer in 2016 would consume much less SD video than a viewer in 2010.

market or make it more difficult to reach viewers. This reduced competition would inevitably drive up prices for video services nationwide while making it less likely that viewers would have access to new services offered in new ways. Comcast would enhance its role as a video gatekeeper, to the detriment of creators, and harming viewer's ability to access diverse content.

Comcast frames giving "free data" to consumers who stay inside its walled garden as a benefit, but this benefit is little more than a remedy for a problem that Comcast itself created. Comcast could have continued offering unlimited data to its customers, set its cap at a level designed to deter abuse but not typical video usage, or allowed customers themselves to choose what services to exempt from metering. Instead, Comcast has chosen a path designed to benefit its bottom line at the expense of consumers and competition. Stream TV may be able to successfully compete without anticompetitive advantage – Comcast has experience and expertise in content acquisition, established business relationships, and marketing prowess. Other major pay TV providers such as DISH have leveraged their expertise to compete in the online video marketplace to notable success.⁸ But Comcast has decided not to trust an open marketplace and seeks to subvert competition instead. To avoid the grave harms this could cause to viewers and the future development of the online video marketplace, the FCC must act to enforce its rules and Comcast's binding commitments and find that Comcast's zero-rating of Stream TV is unlawful.

Comcast has a pattern of engaging in discriminatory zero-rating behavior. Previously, Comcast had zero-rated the Xfinity app that was available on devices such as the Xbox 360. In 2012, Public Knowledge asked the Commission to enforce the merger conditions Comcast

⁸ Shalini Ramachandran, *Dish Network's Sling TV Has More Than 600,000 Subscribers*, Wall Street Journal (Feb. 18, 2016), <http://www.wsj.com/articles/dish-networks-sling-tv-has-more-than-600-000-subscribers-1455825689>.

agreed to when it merged with NBC-Universal and to find this behavior illegal.⁹ Since then, Comcast has discontinued its Xbox app and has begun zero-rating Stream TV. Public Knowledge therefore withdraws its older complaint and files this new complaint that addresses Stream TV more directly.

The legal issues raised by the 2012 complaint and this complaint are similar. To the extent there are differences, they cut in favor of Stream TV being even more discriminatory and harmful to competition than the earlier zero-rating of the Xfinity app on some platforms. For instance, unlike Stream TV, the Xfinity apps were tied to a cable TV subscription. While the Xfinity apps themselves may have competed with online services, the overall bundle may have operated in a different market or market segment because a cable TV subscription is more expensive than typical online video subscriptions services. Stream TV, by contrast, is not bundled with cable TV and is a more clear, direct substitute for competing online video services. While Public Knowledge still maintains that Comcast's earlier practices violated both the Department of Justice's Consent Decree and the conditions the FCC placed on its merger, the present situation presents an even clearer case.

In 2012, as a matter of legal posture, Public Knowledge argued that the Commission should simply enforce Comcast's merger obligations. However, given the public importance of this issue, and to establish that similar behavior would be illegal from any ISP, in this complaint Public Knowledge also offers analysis as to why Comcast's zero-rating of Stream TV is inconsistent with the 2015 Open Internet rules.

⁹ See Petition to Enforce Merger Conditions, MB Docket No. 10-56 (Aug. 1, 2012) ("2012 Petition").

II. Stream TV is Illegal Regardless of its Regulatory Classification

In 2012, Public Knowledge observed that “behind-the-scenes engineering and billing details should have no bearing on the regulatory treatment of a service.”¹⁰ This still holds true, and in this case, Comcast violates provisions of the Department of Justice’s Consent Decree and the FCC’s conditioned approval of its merger with NBC-Universal, regardless of the regulatory classification of Stream TV. Whether or not Stream TV is an MVPD service, and whether or not it is a specialized service or some other “non-broadband” service, and whether or not it is offered over the “public Internet,” Comcast’s practice of zero-rating Stream TV is illegal.

The impact of the artificially low usage cap is fairly straightforward in dollar terms. For broadband subscribers to have unlimited access to Stream TV content, they must pay an additional \$15 a month. To have the same unlimited access to a competitor, such as Netflix, Hulu, or Amazon Prime, the same subscriber must pay \$35 a month for “unlimited” broadband,¹¹ on top of the cost of the streaming service. For example, Hulu’s commercial-free plan costs \$12 per month.¹² Using the Hulu example, the result of Comcast zero-rating Stream TV is that it costs a subscriber an additional \$32 per month to have unlimited use of a non-affiliated online video service. This is precisely the kind of anticompetitive behavior the Commission foresaw, and sought to prevent, in both the 2010 Comcast/NBC-Universal Order and the 2015 Open Internet rules.

The Consent Decree and the Commission’s conditioned approval were structured to complement the FCC’s then-in-force 2010 Open Internet rules. For example, Comcast was to be

¹⁰ 2012 Petition at 11-12.

¹¹ Phillip Dampier, *Comcast Customers Buy \$35 Usage Cap Insurance, Report “Unlimited” is Slower Than Ever*, Stop the Cap! (Dec. 28, 2015), <http://stopthecap.com/2015/12/28/comcast-customers-buy-35-usage-cap-insurance-report-unlimited-is-slower-than-ever/>.

¹² Hulu, *Your guide to the No Commercials plan* (last accessed Mar. 2, 2016), <http://www.hulu.com/help/articles/52427902>.

permitted the same flexibilities that the 2010 Open Internet rules allowed ISPs, with additional restrictions meant, among other things, to address Comcast's enhanced incentive and ability to discriminate against competing online video service. Thus, under the 2010 Open Internet rules, ISPs were permitted to offer "specialized services." Under the Consent Decree and the Commission's conditioned approval, Comcast is also permitted to offer specialized services. However, Comcast is prohibited from offering "a Specialized Service that is substantially or entirely comprised of [Comcast's] affiliated content."¹³ The 2010 Open Internet rules contemplated that ISPs would be permitted to offer usage-based billing plans.¹⁴ The conditioned approval and the Consent Decree also contemplated that Comcast might offer such plans. However, regulators imposed the following condition:

If Comcast offers consumers Internet Access Service under a package that includes caps, tiers, metering, or other usage-based pricing, it shall not measure, count, or otherwise treat Defendant's affiliated network traffic differently from unaffiliated network traffic.¹⁵

As the Department of Justice's Competitive Impact Statement makes clear, this language is quite straightforwardly intended to ensure that "OVD traffic is counted in the same way as Comcast's traffic, and that billing plans are not used to disadvantage an OVD in favor of

¹³ Modified Final Judgment at 23, *United States v. Comcast Corp.*, 1:11-cv-00106 (D.D.C. Aug. 21 2013) ("Comcast/NBCU Consent Decree"), available at http://corporate.comcast.com/images/modified.final_judgment.pdf; Applications of Comcast Corporation, General Electric Company and NBC-Universal, Inc. For Consent to Assign Licenses and Transfer Control of Licensees, *Memorandum Opinion and Order*, 26 FCC Rcd. 4238, 4363 (Jan. 20, 2011) ("FCC Merger Order").

¹⁴ Preserving the Open Internet, GN Docket No. 09-191, WC Docket No. 07-52, Report and Order, 25 FCC Rcd 17905, 17945 para. 72 (2010) ("2010 Open Internet Order"), *aff'd in part, vacated and remanded in part sub nom.* *Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014).

¹⁵ Comcast/NBCU Consent Decree at 22-23.

Comcast.”¹⁶ By zero-rating Stream TV, Comcast is disadvantaging competing services in favor of its own. It therefore stands in violation of this condition.

A. Stream TV is “Affiliated” with Comcast

Stream TV is “affiliated” with Comcast under the definitions adopted by the FCC and DoJ, because Stream TV “is controlled by, or under common control” with Comcast.¹⁷ Under this definition, services offered by Comcast are “affiliated” with Comcast. Additionally, a substantial percentage of the programming available via Stream TV – NBC-Universal programming – is also “affiliated” with Comcast.

B. Stream TV is “Network Traffic”

Stream TV is “network traffic” for the purpose of this restriction, no different than traffic from video services like Youtube and Netflix. Customers access Stream TV via their broadband Internet access subscriptions. It is not available on a standalone basis without a broadband connection, as MVPD services such as cable TV are. Stream TV data travels over the same path as other broadband data, from Comcast’s network, and through the cable modem in customers’ homes. Additionally, viewers watch Stream TV on the same devices (such as personal computers and mobile devices) they use to watch other online video services.

Comcast has argued before that when it offers a service to its own customers, this service is not subject to broadband-related restrictions such as the 2010 or 2015 Open Internet Rules because it does not travel on the “public Internet.”¹⁸ Put another way, Comcast appears to believe that it need do nothing more than physically locate the servers which offer a given broadband

¹⁶ Competitive Impact Statement of the Department of Justice 38, *United States v. Comcast Corp.*, 1:11-cv-00106 (D.D.C. Jan. 18, 2011) (“Comcast/NBCU Competitive Impact Statement”).

¹⁷ FCC Merger Order at 4355; Comcast/NBCU Consent Decree at 2.

¹⁸ Jim Puzzanghera, *FCC asking if free-data plans from T-Mobile, AT&T and Comcast break Internet rules*, Los Angeles Times (Dec. 17, 2015), <http://www.latimes.com/business/la-fi-fcc-tmobile-free-video-20151217-story.html>.

service on its own property for that service to be categorically immune from various consumer protection policies. Arguments of this kind fail for a variety of reasons.

First, whether or not Stream TV travels on the “public Internet,” customers access it over their broadband Internet Access Service connections. There is no exception in the term “network traffic” that makes some kind of public/non-public Internet distinction.

Second, Stream TV *does* travel on the “public Internet.” As Public Knowledge understands it, Comcast restricts Stream TV to Comcast broadband connections. However, PK understands that it does this for licensing, not technical reasons. A traditional MVPD service is one-to-many and uses transmission techniques well-suited to video delivery, such as IP multicast and quadrature amplitude modulation (QAM). These services cannot be made available to arbitrary network endpoints because they rely on a different physical delivery mechanism than the Internet uses. Stream TV, by contrast, is limited to Comcast broadband subscribers in the same sense that some online video programming is often unavailable to residents of particular countries, for instance – licensing terms require that video service providers institute such blocks. But putting technical restrictions on who may access Internet content does not mean that it’s no longer on the Internet.

Third, if Comcast could evade the prohibition in this case, it is difficult to see in what circumstances, even hypothetical ones, it would apply. Any “affiliated” network traffic that Comcast might produce would likely be “not offered on the public Internet” in the same sense, since any service that Comcast makes available to its customers would likely originate from Comcast servers, travel over Comcast wires, and be made available primarily or exclusively to Comcast broadband subscribers. It is not credible that the FCC and DoJ both would adopt a self-negating condition; namely, that Comcast was prohibited from exempting affiliated network

traffic from metering, while simultaneously, affiliated traffic was not “public” and was therefore exempt from the prohibition. Under such a view, what, exactly, does “affiliated network traffic” consist of?

Finally, there is no *a priori* reason why, even if Stream TV were a Title VI service, it would somehow be exempt from broadband-related oversight. As Public Knowledge argued in 2012,

Title VI is a type of service, and broadband is a type of delivery method. The two are not mutually exclusive, and there is no reason why a service cannot both be a Title VI service and a broadband service subject to the Commission’s Open Internet rules, Comcast’s merger commitments, and related protections. Title VI is a technology-neutral section that governs multichannel video programming distributors (MVPDs), regardless of what kind of delivery method they use. MVPDs provide a video service by various means. Analog cable systems are MVPDs. So are digital cable systems, IPTV systems like those offered by AT&T, Verizon’s FiOS television service, and direct broadcast satellite (DBS) systems...

By contrast, a “broadband” service is simply a service offered via broadband delivery. A broadband service might fall into any regulatory category, such as Title II or Title VI. An MVPD service can easily be offered via broadband delivery, and an MVPD service offered via broadband is not somehow immune from any of the open Internet protections that apply to broadband services generally.¹⁹

This analysis still holds. Traditional MVPDs are outside the scope of Open Internet rules for the simple reason that their services are not offered via broadband. But this does not mean that broadband ISPs are categorically permitted to favor real or future MVPD services that *are* offered via broadband.

¹⁹ 2012 Petition at 12-13.

C. Comcast Measures, Counts, and Treats Stream TV Differently Than Unaffiliated Network Traffic

In some markets, Comcast's broadband Internet access service includes caps, metering, or other usage-based pricing, and in those markets, Comcast does not meter Stream TV.²⁰ This means that while a customer could hit a usage limit while watching a competing service like Sling TV or using another broadband service such as gaming service Steam, a customer cannot hit a usage limit while watching Stream TV. By giving Stream TV an anti-competitive and illegal advantage not available to other broadband services, Comcast is treating Stream TV "differently" than it treats other services.

III. Stream TV is not an MVPD Service

Comcast may try to evade its obligations under the Consent Decree and the Open Internet Rules by characterizing Stream TV as a Title VI MVPD service. However, this tactic must fail. As discussed elsewhere, even if Stream TV were an MVPD service, it would still violate the Consent Decree and the FCC's conditioned approval. However, even if this regulatory distinction were relevant, Stream TV is not an MVPD service, because it does not meet the controlling construction of that term.

The controlling construction of the term "Multichannel Video Programming Distributor" is that which was in force on the date of entry of the Department of Justice's Final Judgment and the FCC's conditioned order granting approval for the merger.²¹ According to the Media Bureau, "the definitions of that term in the Act and the Commission's rules ... appear to include a

²⁰ Stream TV - only from XFINITY: Frequently Asked Questions (last accessed Mar. 2, 2016), <http://customer.xfinity.com/help-and-support/cable-tv/stream-faqs> .

²¹ FCC Merger Order at 4357 ("MVPD" means a multichannel video programming distributor as that term is defined in 47 C.F.R. § 76.1200(b)."); Comcast/NBCU Consent Decree at 5 ("Q. "MVPD" means a multichannel video programming distributor as that term is defined on the date of entry of this Final Judgment in 47 C.F.R. § 76.1200(b)."). This is same construction that is in force today.

transmission path as a necessary element of a ‘channel.’ Moreover, the entities in the illustrative list in the Act’s definition of an MVPD all provide transmission paths for the delivery of video programming.”²²

Stream TV does not meet this construction because it does not provide a physical transmission path, in the way that a traditional cable TV service does. Like other online video services, Stream TV requires users to “bring their own” physical communications channel in the form of a broadband connection.

Even though, as the service is presently offered, Comcast provides a customer’s broadband connection in addition to the Stream TV service, Stream TV fails to meet the controlling construction of “channel” in “multichannel video programming distributor.” The channel in question is not provided by the Stream TV service itself, but by Comcast in another capacity, as part of another, separately-billed service. This distinguishes it from traditional MVPD services and moves it out of the operative definition.

To the extent, though, that these definitions are ambiguous, granting Comcast the benefit of the doubt on this point would be unwise. The policy consequences of construction that continued the Sky Angel “transmission path” requirement but found that Stream TV meets it would be wide-ranging. An ISP that offers a video service—such as Verizon’s Go90—would suddenly find that service considered an MVPD by the FCC and local authorities, subject to franchising rules, must-carry, program access, program carriage, and so on. This would apply even to on-demand video services, since the “transmission path” reading of “MVPD” is not limited to linear programming. Any service offered by an ISP or one of its affiliates that offers “video programming” – defined as “programming provided by, or generally considered

²² Sky Angel Emergency Petition for Temporary Standstill, *Order*, 25 FCC Rcd. 3879, 3883 para. 7 (2010).

comparable to programming provided by, a television broadcast station” would be an MVPD.²³

At a minimum the issues raised by a statutory construction that permitted Stream TV to be classified as an MVPD would require a Further Notice of Proposed Rulemaking in Media Bureau Docket 14-261. Public Knowledge would also expect the Commission to investigate whether and to what extent Comcast is complying with the full range of federal, state, and local obligations that apply to MVPD and cable services.²⁴

Finally, Public Knowledge readily acknowledges that it has long advocated for the FCC to definitively revise its interpretation of “multichannel video programming distributor” to permit online video services such as Stream TV to qualify.²⁵ While, for other reasons, Public Knowledge does not believe that even conceding that Stream TV is an MVPD would allow Comcast to freely zero-rate it, it is true that a competitive landscape where Stream TV *and any other online video distributor* could operate as an MVPD by meeting certain criteria would be a good development for consumers. (Such an outcome, of course, requires that the Commission abandon the “transmission path” construction of “channel” in favor of the “linear programming” construction, which renders the fact that Stream TV is offered by a company that is also a

²³ This definition cannot be restricted to linear programming, since the statute specifically states that “video programming” may be offered via “interactive on-demand services” or via prescheduled program delivery. 47 U.S.C. § 522(12).

²⁴ If Stream TV is an MVPD service that provides a “transmission path”, then it is also a cable television service. A cable system is “a facility, consisting of a set of closed transmission paths and associated signal generation, reception, and control equipment that is designed to provide cable service which includes video programming and which is provided to multiple subscribers within a community.” 47 U.S.C. § 552. It would not be a challenging exercise to establish that any given online video service involves “signal generation, reception, and control equipment.”

²⁵ Comments of Public Knowledge, Promoting Innovation and Competition in the Provision of Multichannel Video Programming Distribution Services, MB Docket No. 14-261 (Mar. 3, 2015).

broadband provider immaterial.) Of course, the FCC has not revised its interpretation of “MVPD” in this way. The law is the law, and the FCC must apply it.²⁶

IV. Stream TV is Not a Specialized Service

Stream TV is not a specialized service. However, even if it were one, it would still violate the Consent Decree and the Commission’s conditional approval.

In the conditional approval, the FCC wrote that a

“Specialized Service” means any service provided over the same last-mile facilities used to deliver Broadband Internet Access Service other than (i) Broadband Internet Access Services, (ii) services regulated either as telecommunications services under Title II of the Communications Act or as MVPD services under Title VI of the Communications Act, or (iii) Comcast’s existing VoIP telephony service.²⁷

Of course the concept of a specialized service does not originate in the Comcast/NBC-Universal proceeding. The 2010 Open Internet rules had a broad exception for “specialized” or “managed” services. The Consent Decree and the Commission’s conditioned approval were structured consistent with this exception, and it is reasonable to assume that a specialized service under the 2010 Order would also be a specialized service under the Consent Decree or the FCC’s conditional approval.

With this background, the first question is whether Stream TV would qualify as a specialized service. It does not. In the 2010 Order, the Commission explained that specialized services

share capacity with broadband Internet access service over providers’ last-mile facilities, and may develop and offer other such services in the future. These

²⁶ Moreover, even if the FCC were in the future to revise its definition of MVPD going forward, on an industry-wide basis, the controlling definition would still be the one in place at the time of the deal’s approval, not some later change.

²⁷ FCC Merger Order at 4358. If Comcast claims that Stream TV is a Title VI service then it cannot claim that it is a specialized service. However, it may argue in the alternative.

‘specialized services,’ such as some broadband providers’ existing facilities-based VoIP and Internet Protocol-video offerings, differ from broadband Internet access service and may drive additional private investment in broadband networks and provide end users valued services, supplementing the benefits of the open Internet.²⁸

The Commission did not provide lengthy guidance beyond this language, but the examples it chose are telling. Facilities-based VoIP and then-existing IP video services like U-Verse share capacity with broadband in the sense that they travel along the same wire. However, these services are technically distinct from broadband. They are not offered over broadband, they are technically distinct from broadband and broadband-delivered edge services, and they are available on a standalone basis, without the need for a broadband subscription. The controlling authority therefore suggests that a specialized service cannot just be some service available over broadband that gets special treatment, but a distinct service that simply shares the same wire as broadband.

In 2015, the Commission confirmed this view when it updated its approach to protecting the Open Internet. Then, it wrote that “[t]he term ‘specialized services’ can be confusing because the critical point is not whether the services are ‘specialized;’ it is that they are not broadband Internet access service.”²⁹ It therefore elected to use a different term: “Non-Broadband Internet Access Service Data Services.”³⁰ However the underlying policy remains the same: ISPs are permitted to offer IP-based services that are distinct from broadband, but not permitted to merely label services available over broadband as “specialized” or “non-broadband” (nor to relabel broadband itself as something else).

²⁸ 2010 Open Internet Order at 17965, para. 112.

²⁹ Protecting and Promoting the Open Internet, *Report and Order on Remand, Declaratory Ruling, and Order*, 30 FCC Rcd. 5601, 5611 para. 35 (rel. Mar. 12, 2015) (“2015 Open Internet Order”).

³⁰ *Id.*

Thus it is apparent that Stream TV is not a specialized or non-broadband service. Stream TV is little different than any other online video service, apart from being zero-rated. Comcast cannot therefore claim that Stream TV is somehow exempt from otherwise-applicable prohibitions designed to protect video competition.³¹

However, even if Stream TV were a specialized service, it would still be specifically prohibited by the conditions on its merger. The FCC declared that “Comcast and C-NBCU shall not offer a Specialized Service that is substantially or entirely comprised of Comcast or C-NBCU affiliated content,” and “If Comcast or C-NBCU offers any Specialized Service that makes content from one or more third parties available to (or that otherwise enables the exchange of network traffic between one or more third parties and) Comcast or C-NBCU subscribers, Comcast or C-NBCU shall allow any other comparable third party to be included in a similar Specialized Service on a nondiscriminatory basis.”³² First, as discussed elsewhere, Stream TV is “affiliated” with Comcast because it is a service offered, billed, managed, and marketed by Comcast.³³ Stream TV itself seems to constitute “content” in this context, but even if “content” in this context applies only to video programming, Stream TV still is in violation, since NBC-Universal content is a substantial part of the offering. Additionally, Comcast does not even attempt to comply with the other condition, concerning nondiscriminatory access.

³¹ Even if one were to adopt a different view of what constitutes a non-broadband or specialized service such that an ordinary edge service such as Stream TV could qualify, the Commission has retained authority to prohibit practices designed to circumvent its rules. *See* 2015 Open Internet Order at 5696, para. 207.

³² FCC Merger Order at 4363.

³³ “Content” in this context applies to video programming, but also to video distribution services. In adopting this prohibition, the Commission cited Comcast’s stake in Hulu, noted its share of online video distribution sites, and explained that its conditions were designed to prevent Comcast from discriminating “against disfavored online content **or distributors.**” FCC Merger Order at 4275 (emphasis added).

Finally, Comcast is subject to a clear prohibition that does not contain any loopholes or exceptions. This prohibition states that:

If Comcast offers consumers Internet Access Service under a package that includes caps, tiers, metering, or other usage-based pricing, it shall not measure, count, or otherwise treat Defendant's affiliated network traffic differently from unaffiliated network traffic.³⁴

As discussed elsewhere, Stream TV runs afoul of this prohibition, which does not contain any hidden exemptions for specialized or non-broadband services.

V. Comcast's Zero-Rating of Stream TV is Inconsistent With the Open Internet Rules

Comcast's zero-rating of Stream TV is inconsistent with the Commission's Open Internet rules. In the 2015 Order, in addition to the prohibitions on blocking, throttling, and paid prioritization, the Commission adopted

a rule setting forth a no-unreasonable interference/disadvantage standard, under which the Commission can prohibit, on a case-by-case basis, practices that unreasonably interfere with or unreasonably disadvantage the ability of consumers to reach the Internet content, services, and applications of their choosing or of edge providers to access consumers using the Internet.³⁵

Comcast's practice of zero-rating Stream TV appears to violate this rule, because it will make it harder for competing online video distributors to access content and reach customers, thereby denying consumers the choice of online video providers that would otherwise be available, and coercing them to use a service that might not otherwise succeed on its merits. Looking at the

³⁴ Comcast/NBCU Consent Decree at 22-23. Comcast's commitment to this language was specifically cited by the Commission as a consideration in its eventual approval of the merger. *See* FCC Merger Order at 4275, para. 94.

³⁵ 2015 Open Internet Order at 5659, para. 135. The rule itself states that "Any person engaged in the provision of broadband Internet access service, insofar as such person is so engaged, shall not unreasonably interfere with or unreasonably disadvantage (i) end users' ability to select, access, and use broadband Internet access service or the lawful Internet content, applications, services, or devices of their choice, or (ii) edge providers' ability to make lawful content, applications, services, or devices available to end users. Reasonable network management shall not be considered a violation of this rule." 47 C.F.R. § 8.11.

facts of this case, it is apparent that Comcast’s behavior is exactly the kind of behavior the Commission sought to prohibit with this rule.

A. The Commission’s Enumerated Factors Weigh Against Comcast

The Commission has outlined several factors³⁶ that guide its application of the Internet conduct rule. As described below, they all weigh against Comcast.

1. End-User Control

The Commission has stated that “A practice that allows end-user control and is consistent with promoting consumer choice is less likely to unreasonably interfere with or cause an unreasonable disadvantage affecting the end user’s ability to use the Internet as he or she sees fit.” Right now, end-users have no control over what video services are zero-rated and what services are not. Nor is it possible for customers to “opt out” of Stream TV’s anticompetitive effects. Even a user who chooses to avoid Stream TV will still be faced with an online video market that is distorted by Comcast’s actions. Thus, this factor weighs against Comcast.

2. Competitive Effects

As demonstrated elsewhere in this filing, a zero-rated service is more likely to attract customers and usage than one that is not. An otherwise-unremarkable service can “win” in the marketplace merely because it gets special treatment at the network and billing level. Competing video services have a significant deficit to overcome, and even being cheaper, easier-to-use, or the source of more unique content may not be enough to compete with a service that is favored by an infrastructure company such as Comcast.

Also, the Commission has stated that it “will also review the extent of an entity’s vertical integration as well as its relationships with affiliated entities.”³⁷ The degree of Comcast’s vertical integration, discussed below, is thus highly relevant.

³⁶ 2015 Open Internet Order at 5661-64, paras. 138-145.

Because Comcast is giving Stream TV such an unfair advantage over competing video services, this factor weighs against Comcast.

3. Consumer Protection

This factor weighs against Comcast because zero-rating Stream TV can harm customers' ability to access, and even the existence of, competing online video services. This is an "unfair practice" that "unreasonably interfere[s] with or disadvantage[s] end-user consumers' ability to select, access, or use broadband services, applications, or content."³⁸

4. Effect on Innovation, Investment, or Broadband Deployment

This factor weighs against Comcast as well. By employing data caps and selectively zero-rating its own services, Comcast is reducing the likelihood that increased subscriber demand for unaffiliated online services will drive broadband investment. It is harming innovation in the edge services market, since Stream TV is not competing through the quality of the overall offering or through a novel business model, but through employing billing practices that are not available to unaffiliated services. In a world where Comcast can freely discriminate in favor of its own or favored third-party video services by means of billing practices, video providers will be motivated to cut deals with Comcast, rather than to offer new kinds of offerings and new content, or to invest in quality improvements.

5. Free Expression

By tilting the marketplace, Comcast is reducing the ability for programmers to reach viewers through competing video services. It is increasing its bottleneck control over the video pipeline, setting itself up as the arbiter of what video its customers can access. This harms the

³⁷ 2015 Open Internet Order at 5662, para. 140.

³⁸ 2015 Open Internet Order at 5662, para. 141.

free expression of programmers, as well as the ability of viewers to access programming from diverse creators and with diverse points of view.

6. Application Agnostic

Stream TV is not application agnostic, because Comcast is zero-rating only its own proprietary video service.

7. Standard Practices

Comcast's behavior is not a standard practice and does not conform to "best practices [or] technical standards adopted by open, broadly representative, and independent Internet engineering, governance initiatives, or standards-setting organization."³⁹ However, unless the Commission acts now, anticompetitive behavior of this kind may be copied by other ISPs.

B. Usage Data Indicates that Consumers Are More Likely to Choose Zero-Rated Video Services Over Those That Are Not Zero-Rated

T-Mobile has recently introduced *Binge On*, which, like *Stream TV*, zero-rates some video services. *Binge On* is not directly comparable to *Stream TV* in that it zero-rates various video services, and limits all identifiable video to 1.5 Mbit/s of throughput. Nevertheless, a recent study that is framed as supporting *Binge On* nevertheless shows that consumers are significantly more likely to use a video service that is zero-rated over one that is not. According to P3, with zero-rating, the average duration of a user viewing Netflix went from 746 seconds to 922 seconds. Hulu, which is also zero-rated, went from 581 seconds to 883 seconds. By contrast, a non-zero rated service like YouTube saw a smaller change.⁴⁰ Other analysis has confirmed that zero-rating a service can cause users to use it much more than they otherwise would - for

³⁹ 2015 Open Internet Order at 5664, para. 145.

⁴⁰ P3 Communications, Inc., *P3 Insights Separate T-Mobile "Binge On" Fact from Fiction* at 9 (Jan. 15, 2016), available at http://www.p3-group.com/downloads/2/9/1/5/6/P3_Binge_On_Insight_Report_FINAL_1-15-16.pdf

instance, users began using WhatsApp and Twitter significantly more on carriers that began zero-rating those services.⁴¹

The implications of this data for Stream TV are clear: Consumers are more likely to use Stream TV if it is zero-rated than if it is not. This puts rival online video services at a disadvantage, and could ultimately reduce the number of online video choices available to Internet users. To be clear, Public Knowledge believes that policies that increase the demand for and usage of broadband can be positive developments. However, policies that simply shift usage from one app or service to another, or that otherwise undermine a free and open online marketplace should be viewed with a skeptical eye. The facts surrounding Comcast, this specific service, and the overall shape of the marketplace together show that Comcast's behavior is inconsistent with the Open Internet rules.

C. As a Vertically-Integrated ISP, Comcast Poses a Particular Threat to Competition

Comcast is the largest broadband ISP, the largest cable television distributor, an online video distributor, a cable television programmer, a major broadcast network, and a movie studio. This high degree of vertical integration between infrastructure, services, and content means that Comcast's actions have a disproportionate effect.

The FCC has recognized the general threat that ISPs such as Comcast can pose to Internet Openness in the absence of rules that guard against anti-competitive and anti-consumer behavior. As the Commission stated in the 2015 Open Internet Order, "broadband providers hold all the tools necessary to deceive consumers, degrade content, or disfavor the content that they don't

⁴¹ Nick Feamster, *How Does Zero-Rating Affect Mobile Data Usage?*, Freedom to Tinker Blog (Feb. 10, 2016), <https://freedom-to-tinker.com/blog/feamster/how-does-zero-rating-affect-mobile-data-usage/>.

like,”⁴² and “carefully-tailored rules to protect Internet openness will allow investment and innovation to continue to flourish.”⁴³

But in particular, the Commission has recognized that vertically-integrated ISPs such as Comcast pose a heightened danger. As it found in 2010, “A broadband provider might ... benefit its own or affiliated offerings at the expense of unaffiliated offerings”⁴⁴ because “delivery networks that are vertically integrated with content providers, including some MVPDs, have incentives to favor their own affiliated content.”⁴⁵ Indeed, fears of the threats to competition that vertically-integrated ISPs pose stand at the foundation of the Commission’s efforts to protect the Open Internet. As then-Chairman Powell stated in 2004, the FCC’s Internet Freedom principles stood “as an insurance policy against the potential rise of abusive market power by vertically integrated providers.”⁴⁶

This understanding framed the review of the merger of NBC-Universal and Comcast by the FCC and the Department of Justice. In its Competitive Impact Statement, the DoJ placed particular attention on the potential consumer benefit of Online Video Distributors (OVDs), finding that “OVDs would be harmed competitively if ISPs that are also MVPDs (e.g., cable companies, telcos) were to impair or delay the delivery of video because OVDs pose a threat to those MVPDs’ traditional video programming distribution businesses.”⁴⁷ The DoJ also found specifically that “[b]ecause Comcast is the country’s largest ISP, an inherent conflict exists between Comcast’s provision of broadband services to its customers, who may use this service to

⁴² 2015 Open Internet Order at 5604, para. 8.

⁴³ 2015 Open Internet Order at 5603, para. 4.

⁴⁴ 2010 Open Internet Order at 17915, para. 21.

⁴⁵ 2010 Open Internet Order at 17918, para. 23.

⁴⁶ Michael K. Powell, Chairman, Federal Communications Commission, Remarks at the Voice of the Net Conference (Oct. 19, 2004), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-253325A1.pdf.

⁴⁷ Competitive Impact Statement at 11.

view video programming provided by OVDs, and its desire to continue to sell them MVPD services.”⁴⁸

The DoJ also found that “[g]rowth of OVDs also will depend, in part, on their ability to acquire programming from content producers.”⁴⁹ It noted that Comcast, pre-transaction, had already sought out exclusive content for its own online offerings,⁵⁰ and had participated in “authentication” (sometimes known as “TV Everywhere”) efforts that tied online video to traditional MVPD subscriptions and that were intended to combat the growth of independent OVDs.⁵¹ The DoJ also noted that program access rules, which are intended to ensure that MVPDs cannot lock other MVPDs out of valuable programming or otherwise behave anticompetitively, “do not apply to online distribution or to retransmission of broadcast station content.”⁵²

Focusing on Comcast, the DoJ noted that “NBCU content is extremely valuable to video programming distributors,” and that the transaction would “give Comcast ... control of an important portfolio of current and library content.”⁵³ It found that “Comcast will have a strong incentive to disadvantage its competitors by denying them access to valuable programming or raising their licensing fees above what a stand-alone NBCU would have found it profitable to charge.”⁵⁴ With respect to OVDs, it found that Comcast “could charge OVDs higher content fees than the stand-alone NBCU would have charged, or impose different terms for NBCU content than Comcast negotiates for itself.... [and] could withhold NBCU content completely, thereby

⁴⁸ Id.

⁴⁹ Id.

⁵⁰ Id. at 19.

⁵¹ Id.

⁵² Id. at 12.

⁵³ Id. at 22.

⁵⁴ Id. at 23.

diminishing OVDs' ability to compete for video programming distribution customers, again to Comcast's benefit. Either situation could delay significantly the development of OVDs as a competitive alternative to traditional video programming distribution services."⁵⁵ As a result of these incentives, the DoJ and FCC generally adopted conditions designed to protect the ability of OVDs to access programming.

In the aftermath of Comcast's failed attempt to purchase Time Warner Cable, several government officials spoke of the danger that vertically-integrated ISPs continue to pose to emerging forms of online competition. In Assistant Attorney General Bill Baer's words,

So many consumers' only option for high-speed internet service is the cable company – the same cable company that also derives significant revenues from its cable television business. This means that as online video distribution increases the cable companies have both the incentives and means to use their gatekeeper power to slow innovation to protect their video profits. In this way, the high-speed internet market and the video distribution market are inextricably intertwined.⁵⁶

FCC General Counsel Jonathan Sallet described the concerns FCC staff had with the proposed Comcast/Time Warner Cable transaction. As he put it,

the core concern came down to whether the merged firm would have an increased incentive and ability to safeguard its integrated Pay TV business model and video revenues by limiting the ability of OVDs to compete effectively, especially through the use of new business models.⁵⁷

He continued,

An OVD that seeks to successfully compete with a traditional cable system needs a few things. It needs programming. It needs access to broadband providers' networks and it needs to be certain that, once delivered to those networks, its

⁵⁵ Id. at 26.

⁵⁶ Remarks of Assistant Attorney General Bill Baer at the Future of Video Competition and Regulation Conference, Video Competition: Opportunities and Challenges (Oct. 9, 2015), <http://www.justice.gov/opa/speech/assistant-attorney-general-bill-baer-delivers-keynote-address-future-video-competition>

⁵⁷ See Speech by FCC General Counsel Jonathan Sallet, Lessons of Recent Merger Reviews (Sep. 25, 2015), http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db0925/DOC-335494A1.pdf

video traffic will find its way to the intended consumer. It may also need access to devices used by consumers. And, it needs to ensure that consumers are not dissuaded from using its OVD services because of retail broadband terms and conditions that might raise the price of online video in a discriminatory way.⁵⁸

In short, vertically-integrated companies like Comcast have the incentive and ability to use different aspects of their businesses to help the others and to disadvantage competitors. Comcast has every incentive to use its programming library to help its distribution businesses such as Stream TV and its traditional cable offering (and vice versa). Its actions should therefore be subject to a greater level of scrutiny. In particular, Comcast's actions with respect to Stream TV mean that it is not playing on a level playing field with other online video distributors. By enhance its vertical integration, Comcast is exacerbating the very dangers the DoJ and FCC sought to avoid in conditioning its merger with NBC-Universal, and harming competition and consumers in ways that contravene the 2015 Open Internet Order.

D. Comcast's Scale Enhances the Competitive Impact of Its Actions

Comcast is the nation's largest cable company and its largest broadband ISP. It already has enormous market power as a broadband and programming distributor. Because it is disproportionately large, its actions have disproportionate impact. Additionally, by giving Stream TV an unfair and anticompetitive advantage, Comcast would increase its scale yet further as a distributor.

1. Comcast's Share of the Consumer Broadband Market Makes Its Zero-Rating of Stream TV All the More Damaging

Comcast is, by far, the nation's largest broadband provider. According to its own numbers, as of late 2014 it commanded 55.8% of the broadband marketplace.⁵⁹ What's more,

⁵⁸ Id.

⁵⁹ Comcast and Time Warner Cable Reply to Responses, MB Docket No. 14-57, at 7 (Dec. 23, 2014), *available at* <http://corporate.comcast.com/images/2014-12-23-AS-FILED-REDACTED-Final-Comcast-TWC-Reply-Comments-Combined.pdf>. (Comcast claimed that it would control

Comcast customers, like broadband subscribers generally, typically lack access to broadband alternatives – meaning that customers lack the ability to discipline Comcast by switching to a competitor if they dislike its practices.⁶⁰ And Comcast’s customers would have good reason to dislike its practices if it continues with its present course of action. If Comcast rolls out Stream TV to its entire broadband footprint, more than half of all broadband subscribers will no longer have access to a truly “open” Internet, but rather an Internet where an ISP can freely use its programming resources and control over broadband infrastructure to give its proprietary services an advantage not available to similar services from rivals. Indeed, the effect of this will be felt far beyond Comcast’s footprint. An online video service that finds itself to serve Comcast customers may be forced to raise its prices or even shut down, with nationwide effects. Especially in the context of a broadband marketplace that continues to consolidate, the effects of Comcast’s market share makes it more likely that its practice of zero-rating Stream TV “unreasonably disadvantage[s] (i) end users’ ability to select, access, and use broadband Internet access service or the lawful Internet content, applications, services, or devices of their choice, ...[and] (ii) edge providers’ ability to make lawful content, applications, services, or devices available to end users.”

2. Comcast’s Share of the Programming Distribution Market Likewise Magnifies the Effects of its Actions

Comcast’s market share as a distributor makes it a monopsony, or nearly so. A monopoly exists when a single seller of a good or services has market power, which means it can raise prices at will without being afraid of losing business to competitors. A monopsony, on the other

56.8% after a merger with Time Warner Cable, and that the merger only increased its market share by 1%.)

⁶⁰ Fact Sheet: FCC Chairman Tom Wheeler: More Competition Needed in High-Speed Broadband Marketplace (Sept. 4, 2014), *available at* https://apps.fcc.gov/edocs_public/attachmatch/DOC-329160A1.pdf.

hand, exists when a single buyer has the ability to demand that it pays less for goods or services, or is able to extract other kinds of onerous terms, leaving sellers with nowhere else to go.

Monopsonies, like monopolies, can violate antitrust law. As the Department of Justice explains,

Enhancement of market power by buyers, sometimes called “monopsony power,” has adverse effects comparable to enhancement of market power by sellers. The Agencies employ an analogous framework to analyze mergers between rival purchasers that may enhance their market power as buyers.⁶¹

If Comcast’s plan with Stream TV succeeds, then its market power as a distributor would increase, bringing about many of the harms policymakers sought to avoid when their skepticism forced Comcast to withdraw its attempted takeover of Time Warner Cable. This provides another reason why Comcast’s practice of zero-rating Stream TV unreasonably disadvantages both consumers and competition.

For the above reasons, Comcast stands in violation of its commitments and the FCC’s Merger Order, as well as the DoJ’s Consent Decree. Its behavior appears, furthermore, to be inconsistent with the FCC’s Open Internet rules.

⁶¹ DoJ Horizontal Merger Guidelines 2 (2010), *available at* <https://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf>.

VI. Conclusion

Comcast's zero-rating of Stream TV violates the text and the spirit of its binding merger commitments and a DoJ Consent Decree, and stands in stark contrast with the Commission's Open Internet rules. No loopholes or regulatory shell games excuse its actions. Comcast, if allowed to continue, will expand its efforts, harming competing online video providers and ultimately reducing the choices available to consumers, raising their prices and decreasing the quality and diversity of programming they can access. Therefore, the FCC must stop Comcast's discriminatory behavior by requiring that it eliminate its data caps to the extent they discourage the consumption of online video or cease discriminatorily zero-rating Stream TV, and take any and all necessary enforcement action that could put a stop to its present conduct and deter future anti-consumer actions.

Respectfully Submitted,

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