Before the
Federal Communications Commission
Washington, D.C.

In the matter of

Expanding Consumers’ Video Navigation Choices
Commercial Availability of Navigation Devices

REPLY COMMENTS OF THE
COMPUTER & COMMUNICATIONS INDUSTRY ASSOCIATION (CCIA)

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Expanding Consumers’ Video Navigation Choices
Commercial Availability of Navigation Devices

MB Docket No. 16-42
CS Docket No. 97-80

REPLY COMMENTS OF THE
COMPUTER & COMMUNICATIONS INDUSTRY ASSOCIATION (CCIA) ¹

CCIA respectfully submits these reply comments in the above-referenced proceeding regarding the Commission’s mandate to promote innovation and consumer choice in accessing multichannel video programming distributor (MVPD) programming under Section 629 of the Communications Act. ²

I. Introduction and Summary.

Twenty years ago, a bi-partisan Congress identified a problem with how consumers access pay-TV programming. The prevalence of consumers leasing set-top boxes from their cable provider prevented the development of a vibrant retail market for these devices. In line with its pro-competition goals, Congress included Section 629 into the Telecommunications Act of 1996 (1996 Act) in order “to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all

¹ CCIA represents large, medium, and small companies in the high technology products and services sectors, including computer hardware and software, electronic commerce, telecommunications, and Internet products and services. Our members employ more than 750,000 workers and generate annual revenues in excess of $540 billion. A list of CCIA’s members is available online at http://www.ccianet.org/members.
² See 47 U.S.C. § 549a (requiring that the Commission “adopt regulations to assure the commercial availability . . . of converter boxes, interactive communications equipment, and other equipment used by consumers to access multichannel video programming and other services offered over multichannel video programming systems, from manufacturers, retailers, and other vendors not affiliated with any multichannel video programming distributor.”).
telecommunications markets to competition.” However, despite various attempts to pursue Section 629’s mandate, a fully competitive retail market has not developed as Congress envisioned.

Today, 99% of customers lease the set-top box provided to them by their MVPD, costing the average family $231.82 a year on leasing fees alone. The Obama Administration has noted how unlocking the set-top marketplace could result not only in a significant cost savings for consumers, but it could also yield benefits to the economy due to enhanced competition. This Notice of Proposed Rulemaking (NPRM), pursues a balanced approach, driven by a public sector open standards process, that will finally assure a competitive environment that will unleash innovation in the set-top box market that will benefit consumers and our economy.

The NPRM addresses the central problem that Section 629 seeks to address of how third-party video navigation devices can access pay-TV programming as traditionally provided by MVPDs. A key aspect of this is the NPRM’s support for open standards by which parties not affiliated with the MVPDs can build devices and features to a common framework and be assured that their end product can access the pay-TV signal. The NPRM sets up a process through which the private sector, including MVPDs, can develop standards that would adapt more quickly than government regulation. However, instead of contributing substantively and refining this proposal, many opponents of the NPRM, including some MVPDs, have resorted to calling the NPRM a “tech mandate.” Furthermore, some opponents espouse bogus arguments to

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obfuscate the debate, like invoking the nondelegation doctrine, which does not apply to the open standards process proposed by the NPRM. Indeed, government agencies commonly utilize open standards processes in various different industries – the Commission even employs them for set-top boxes.

Opponents of the NPRM have attempted to deflect attention from the underlying issue of whether third-party video navigation devices can continue to access the pay-TV signal by incessantly quoting Apple CEO Tim Cook, who said that “the future of TV is apps.” However, apps are not as widely available on third-party devices as opponents of the NPRM claim, nor do they provide the same functionality as set-top boxes. Indeed, MVPDs have not shown a commitment to supporting apps on third-party devices, and despite touting their own apps, they are investing heavily in their own next-generation set-top boxes. Without action by the Commission, the underlying problem of third-party access to the pay-TV signal will not be addressed, and cable companies will face little pressure to change their practices of forced, set-top box leasing. If the NPRM is not approved, MVPDs will continue to increase set-top box leasing fees, and a consumer who buys or has bought a third-party video navigation device will not be assured that said device can continue to access the MVPD’s pay-TV package.

Comments made by opponents of the NPRM indicate that this debate is a reboot of Cable’s long-running attempts to maintain its control over how subscribers access content, and that they are seeking different rules for themselves and the ability to determine who can access content and through which means. Indeed, in raising concerns about copyright law, some commenters have made sweeping misstatements about settled legal doctrine that could dramatically alter settled questions of copyright law or expand the reach of the Copyright Act when this is not the appropriate forum for such action.
Almost fifty years ago, the Commission established an important principle when it enabled consumers to connect nonharmful devices to the telephone network. This led to incredible innovation and ultimately to the commercial Internet. Even though innovation has flourished and prices have come down in almost every area of consumer electronics, the set-top box remain a glaring exception. The Commission should embrace this opportunity to promote open standards in the set-top box marketplace that will ensure that third-parties can continue to access the pay-TV signal. Consumers will benefit from having real choices in the marketplace, and competition will be a catalyst for innovation and the broader economy.

II. The NPRM’s Open Standards Will Promote Technological Innovation.

A. The NPRM’s Open Standards Will Ensure Third Parties’ Access to the Pay-TV Signal, Which is Crucial to a Competitive Market.

The Commission has hit on the central problem of this debate – ensuring that third-party devices can access pay-TV programming. Indeed, if a third-party device cannot access the pay-TV signal, then it cannot compete on an even-playing field with the MVPD’s offerings. Therefore, it could not effectively challenge the MVPDs’ practice of set-top box leasing. In its framework for the Open Standards Body, the Commission has rightly identified this concern about third parties’ “confidence” in maintaining access to MVPD programming. Open standards are very important because they essentially set a common language by which innovators not affiliated with the MVPDs can build their own devices and features. Facilitating an open standard will “assure” competition because the NPRM “assures” third parties that their

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7 See Fed. Commc’n, Connecting America: the National Broadband Plan 51 (2010), available at https://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf (stating the Commission’s belief that the lack of a vibrant retail market was because “[r]etail set-top boxes have been competing on an uneven playing field.”).

8 See NPRM at ¶ 41 (“The five characteristics that define an Open Standards Body would ensure that navigation system developers have input into the standards-setting process, give them confidence that their devices will be able to access multichannel video programming, and prevent them from needing to build a glut of ‘capacities to function with a variety of types of different systems with disparate characteristics.’“).
products will have access to the cable signal. The NPRM will ensure that those devices maintain access to content; that MVPDs, content companies, and third party manufacturers are part of the process for evolving those standards; and that devices will work across MVPD systems, enabling a viable, retail market. The NPRM’s adoption of the principles of transparency and openness in accessing the cable signal will instill confidence and certainty, which is now lacking as the integration ban has been repealed.

B. The NPRM is not a “Tech Mandate” – It Allows the Private Sector to Develop Standards and Continue Driving Innovation.

Comcast and NCTA claim that the framework proposed by the NPRM is a “tech mandate”;

instead, the NPRM sets up a process through which the private sector, including MVPDs, can develop standards that would adapt more quickly than government regulation. The Open Standards Body would have a “fair balance of interested members,” including MVPDs, content companies, apps developers, device manufacturers, and consumer interest groups; “a published appeals process;” and it would “strive[] to set consensus standards.” The NPRM’s five characteristics for an Open Standards Body will not only “assure” the confidence of third parties, but the Open Standards Body also provides a way for the private sector to chart the course for standards. Under this framework, standards could adapt more quickly to technological and market changes than they could under government regulation.

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9 See John Eggerton, Eshoo Pushes Colleagues on FCC Set-Top Proposal, MULTICHANNEL NEWS (May 18, 2016), http://www.multichannel.com/news/congress/eshoo-pushes-colleagues-fcc-set-top-proposal/405031 (“The FCC’s proposal requires an independent, open standards body to set a technology-neutral standard, meaning any company will be able to manufacture a set-top box or design an app and sell it to consumers. Nothing in the proposal requires the purchase of a second box. If consumers want to continue renting their set-top box from their pay-TV provider, they can.”).

10 Comments of Comcast Corp. and NBCUniversal Media, LLC, MB Docket 16-42, at 102 (filed Apr. 22, 2016); Comments of NCTA, MB Docket 16-42, at 106 (filed Apr. 22, 2016).

11 NPRM at ¶ 41.

12 See NPRM at ¶ 48 (“Our proposal attempts to give MVPDs a diversity of choices and flexibility in making their Navigable Services available through competitive navigation devices, by allowing them to choose from any standard to offer the Information Flows, so long as the Information Flows are provided in a published, transparent format developed by Open Standards Bodies.”).
Commission provides further flexibility for MVPDs as it proposes that they “choose the specific standards they wish to use to make their services available via competitive navigation devices or solutions, so long as those standards are in a published, transparent format that conforms to specifications set by an open standards body.” 13 Given this framework of private-sector driven standards and flexibility, it is curious that the NPRM’s opponents, specifically the MVPDs, oppose it so vociferously. Chairman Wheeler recently remarked at NCTA’s INTX trade show that the cable industry should engage in more substantive suggestions rather than providing blanket opposition. 14

**C. Government Agencies Frequently Utilize Open Standards Processes.**

Open standards processes are commonly employed by different government agencies and in various different industries. 15 However, some commenters have suggested that by utilizing an open standards body, the Commission is impermissibly delegating away or abdicating its authority. NCTA’s outside counsel incorrectly claim that the Commission is violating the nondelegation doctrine because “[t]he rules would unconstitutionally delegate rulemaking authority to private standards-setting bodies and regulatory enforcement authority to a self-certification process.” 16 Plainly, despite claims by NCTA’s outside counsel, the nondelegation doctrine is not applicable to the NPRM. In *Whitman v. Am. Trucking Ass’ns*, the Supreme Court stated: “In a delegation challenge, the constitutional question is whether the statute has delegated

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13 NPRM at ¶ 34.
14 Matt Daneman, ‘Everything Is Going to Court’: Cable Industry’s Schism With Chairman Wheeler Seen as Ideology Fight, WASHINGTON INTERNET DAILY (May 23, 2016).
15 See Lesley K. McAllister, Third-Party Programs to Assess Regulatory Compliance, ADMIN. CONF. OF THE UNITED STATES (Oct. 22, 2012) at 1, available at https://www.acus.gov/sites/default/files/documents/Third-Party-Programs-Report_Final.pdf (“Federal agencies in diverse areas of regulation are using private third parties to carry out inspections and verify that regulated entities are in compliance with federal standards and other requirements. With oversight by the responsible federal agency, third parties are charged with assessing the safety of imported food, children’s products, medical devices, cell phones and other telecommunications equipment, and electrical equipment used in workplaces. Third parties also ensure that products labeled as organic, energy-efficient, and water-efficient meet applicable federal standards.”).
legislative power to the agency.”\textsuperscript{17} The nondelegation doctrine prevents Congress from delegating its legislative powers to a government agency. However, Congress can grant rulemaking authority to an agency as long as Congress has provided an “intelligible principle” upon which the agency can promulgate its rules.\textsuperscript{18}

Challenges to agency rulemakings based on the nondelegation doctrine have had limited success. As Justice Alito explained in his concurrence in \textit{DOT v. Ass’n of American Railroads}, “the formal reason why the (Supreme) Court does not enforce the nondelegation doctrine with more vigilance is that the other branches of Government have vested powers of their own that can be used in ways that resemble lawmaking.”\textsuperscript{19} As Chief Justice Roberts stated in his dissenting opinion in \textit{Arlington v. FCC}, which was also quoted by Justice Alito in his \textit{DOT v. Ass’n of American Railroads} concurrence,\textsuperscript{20} “the citizen confronting thousands of pages of regulations—promulgated by an agency directed by Congress to regulate, say, ‘in the public interest’—can perhaps be excused for thinking that it is the agency really doing the legislating.”\textsuperscript{21}

In this context, NCTA’s outside counsel invokes the nondelegation doctrine not for a delegation of power from Congress to an agency but for a supposed delegation of authority from an agency to an open standards body. Section 629 empowers the Commission to rely on an open standards body to develop formats and specifications for set-top boxes because Congress mandated that the Commission “adopt regulations” “in consultation with appropriate industry standard-setting organizations.”\textsuperscript{22} Indeed, to ensure that the Commission’s regulations could

\begin{itemize}
\item \textsuperscript{17} 531 U.S. 457, 472 (2001).
\item \textsuperscript{18} Id. at 472 (“[W]hen Congress confers decisionmaking authority upon agencies Congress must ‘lay down by legislative act an intelligible principle to which the person or body authorized to [act] is directed to conform.’”).
\item \textsuperscript{19} 135 S. Ct. 1225, 1237 (2015).
\item \textsuperscript{20} Id.
\item \textsuperscript{21} City of Arlington v. FCC, 133 S. Ct. 1863, 1879 (2013) (Roberts, C. J., dissenting).
\item \textsuperscript{22} 47 U.S.C. 549(a).
\end{itemize}
foster a competitive environment, Congress said that the Commission had to consult with industry standards organizations. Moreover, stating that the Commission cannot consult with “appropriate industry standard-setting organizations” represents not just a misreading of the statute, but also ignores Congress’ intent and decades of administrative law precedent.

It is similarly perplexing that NCTA’s outside counsel implies a nondelegation doctrine violation based on a belief that the Commission would be abdicating its enforcement authority to an open standards body or the self-certification process. First, that is not happening here because the Commission retains enforcement authority under the NPRM. Even if the Commission were allowing an open standards body to enforce agency regulations, it would not necessarily be violative as many agencies rely on audited self-regulation by private self-regulatory organizations and the agencies retain their enforcement and review powers. There are many examples where the Commission has relied on standards bodies. The Commission even relies on them for set-top boxes.

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23 But cf. Comments of Comcast Corp. and NBCUniversal, supra note 10, at 103 (opining that the NPRM’s open standards process is “contrary to Congress’s directive in Section 629 that the Commission ‘take cognizance of the current state of the marketplace and consider the results of private standards setting activities.’”) (quoting H. Rep. No. 104-458, at 181 (1996)).
24 See NPRM at ¶ 41 (“We also believe that the characteristics listed in the definition would arm the Commission with an established test to judge whether an MVPD’s method of delivering the three Information Flows is sufficient (in combination with the other elements of the proposal discussed in this item) to assure a retail market.”).
26 See McAllister, supra note 15, at 28-29 (explaining the Commission’s utilization of Telecommunication Certification Bodies (TCBs) that can issue certifications that certain types of equipment, including those that “generate radio frequency (RF) energy” comply with the Commission’s requirements.).
27 See 47 C.F.R. 76.640(b)(4)(iii) (requiring that cable operators shall “[e]ffective December 1, 2012, ensure that the cable-operator-provided high definition set-top boxes, except unidirectional set-top boxes without recording functionality, shall comply with an open industry standard that provides for audiovisual communications including service discovery, video transport, and remote control command pass-through standards for home networking.”).
III. The NPRM Properly Addresses the Lack of Set-Top Box Competition in the Marketplace.

A. The Lack of Competition for MVPD Services Will Result in Harm to Consumers if the NPRM is Not Approved.

As CCIA stated previously in this proceeding, there has long been a lack of competition in the market for set-top boxes, which was a primary motivation for including Section 629 in the 1996 Act. The 99% figure from the Markey-Blumenthal report coupled with NCTA’s own numbers show that over the past decade leasing of MVPD-provided set-top boxes has actually increased. Section 629 sought to facilitate a competitive market for third-party set-top boxes, but that vibrant market has remained elusive as MVPDs have maintained their control over how subscribers access content. The NPRM is especially necessary as concentration among MVPDs continues unabated. The Commission’s General Counsel estimated last year that “about 70% of American residential units have fewer than two choices for such broadband.” Furthermore, it is estimated that three companies (Comcast, Charter, and Time Warner Cable) have roughly three-quarters of all cable subscribers. With the Commission’s recent approval of Charter’s merger with Time Warner Cable and Bright House, the market will become even more concentrated.

The increased concentration and market dynamics ensure that set-top box competition is in serious danger if the NPRM is not approved. Set-top box leasing fees generate almost $20 billion per year for MVPDs. MVPDs have identified the lease fees as an area where they can

28 See generally Comments of CCIA, MB Docket 16-42, at Sec. II (filed Apr. 22, 2016).
29 See Press Release, Office of Sen. Ed Markey, supra note 4 (finding that 99% of subscribers lease their set-top box from their MVPD, generating $19.5 billion annually for the MVPDs yet costing the average family over $230 per year).
30 See generally Comments of CCIA, supra note 28, at Sec. II.
increase revenue. There are a myriad of factors explaining why cable faces few competitors for broadband and especially for the pay-TV packages they offer, but the fact remains that if the market for pay-TV as provided by cable stays concentrated, without action by the Commission, cable companies will face little pressure to change their practices of forced, set-top box leasing. Although MVPDs continue to face pressure from cord cutting, due to the lack of options for pay-TV packages as traditionally offered by MVPDs, consumers who stay with their MVPD could face escalating fees for leasing their MVPD’s set-top box. If the NPRM is not approved, a consumer who buys or has bought a third-party video navigation device will not be assured that said device can continue to access the MVPD’s pay-TV package. If the consumer cannot be assured that access on a third-party device, the only other option for viewing the programming to which he or she subscribed is what the MVPD decides.

B. Cable’s Comments about the Emergence of Content on Apps Miss the Point of the Proceeding and Congress’ Goals for Section 629.

The underlying issue of this NPRM is whether third-party video navigation devices can continue to access the pay-TV signal. Despite market consolidation and the lack of options for the full range of pay-TV packages as traditionally provided by MVPDs, opponents of the NPRM attempt to deflect attention from the underlying access issue by incessantly quoting Apple CEO Tim Cook, who said “the future of TV is apps.” They use this as justification for their claim that their apps are a solution to what Congress sought to address in STELAR. Although some

33 See Larry Rulison, Time Warner Cable raises TV and Internet rates once again, TIMESUNION (Jan. 18, 2016), http://blog.timesunion.com/business/after-ny-oks-merger-time-warners-cable-raising-rates/72121/ (reporting that Time Warner Cable’s announcement that it would increase leasing fees on its HD set-top boxes from $6.98 per month to $8.50 per month).

34 Comments of Comcast Corp. and NBCUniversal, supra note 10, at 20; Comments of NCTA, supra note 10, at 26; Comments of AT&T, MB Docket 16-42, at 8 (filed Apr. 22, 2016); see also THE FUTURE OF TV, http://futureoftv.com/ (last visited Apr. 20, 2016); Stacy Fuller, While the Future of TV is Apps, the FCC is Locked in the Box of the Past, AT&T PUBLIC POLICY BLOG (Feb. 3, 2016), http://www.attpublicpolicy.com/fcc/while-the-future-of-tv-is-apps-the-fcc-is-locked-in-the-box-of-the-past/; Reply Comments of NCTA, MB Docket 15-64, at 8 (filed Nov. 9, 2015); Comments of NCTA, MB Docket 15-64, at 4, 20 (filed Oct. 8, 2015); Comments of Comcast Corp., MB Docket 15-64, at 5 (filed Oct. 8, 2015).
may say that Section 629’s goals are being “fulfill[ed]” because MVPD apps “enable consumers to utilize an ever expanding ecosystem of retail devices to enjoy the rich interactive video programming service from the MVPD,” apps are not a substitute for the functionality or user experience provided by set-top boxes. Apps are not as widely available on third-party devices as opponents of the NPRM claim. Recently, Comcast announced its “Xfinity TV Partner Program,” touting it as a means to bring more programming to retail devices. However, many questions remain regarding the exact nature of this program: how widely Comcast seeks to deploy it, how Comcast will charge customers for it; and the crucial question whether it is truly an open system that will facilitate the competition Section 629 envisioned beyond those manufacturers with whom Comcast seeks to engage.

IV. **Set-Top Boxes Remain an Important Part of MVPD Business Plans.**

If “the future of TV is apps,” it is curious that many MVPDs are investing heavily in their own next-generation set-top boxes. Comcast is aggressively pushing its X1 box, reportedly installing 40,000 X1 set-top boxes per day and aiming to have X1s in the homes of

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35 See Comments of Arris, MB Docket 16-42, at 1-2 (filed Apr. 22, 2016); see also Comments of Arris, MB Docket No. 15-64, at 3 (filed Oct. 8, 2015) (“[T]he navigation device goals of Section 629 and the Commission’s implementing rules are being achieved.”).  
36 See Comments of CCIA, supra note 28, at Sec. IV.A. Compare Winter is Coming for Set-Top Boxes: How Game of Thrones and the FCC’s Set-Top Box Proposal are Intertwined, NCTA (Apr. 25, 2016), https://www.ncta.com/platform/public-policy/winter-is-coming-for-set-top-boxes-how-game-of-thrones-and-the-fccs-set-top-box-proposal-are-intertwined/ (“And with the HBO Now app, you wouldn’t even need a pay-TV subscription to enjoy Game of Thrones or other HBO content”) with Mari Silbey, GoT Fans Curse HBO (Not Right) Now, LIGHTREADING (Apr. 25, 2016), http://www.lightreading.com/video/ott/got-fans-curse-hbo-%28not-right%29-now/a/d-id/722872?itc=lrnewsletter_cabledaily (explaining the difficulty of trying to access programming through various different apps and on various different platforms and trying to authenticate those accounts when they are supported on some apps or platforms but not all).  
37 See Comments of CCIA, supra note 28, at Sec. IV.A.  
39 Comments of CCIA, supra note 28, at Sec. IV.A.  
40 See supra note 34 (detailing many of the times that opponents of the NPRM have quoted Apple CEO Tim Cook).  
41 See Comments of Comcast Corp. and NBCUniversal, supra note 10, at 72 (“Comcast, for example, invested hundreds of millions of dollars to develop its next generation X1 platform that integrates numerous features that revolutionize customers’ viewing experiences”).
half of its 22 million video subscribers by the end of 2016.\textsuperscript{42} According to Comcast’s CEO and chairman, X1 is viewed as “absolutely a game-changer.”\textsuperscript{43} For example, Cox has recently introduced its own upgraded boxes utilizing X1’s technology.\textsuperscript{44} As Cox and other operators also start to deploy X1, that opportunity to control advertising will reach millions of Americans and be controlled by just one company – Comcast.\textsuperscript{45} Despite Comcast’s announcement of its aforementioned “Xfinity TV Partner Program” days before the NPRM’s comment deadline, X1 shows that set-top boxes are not in Comcast’s rear view mirror.\textsuperscript{46}

Set-top boxes continue to be an important part of Charter’s future, too.\textsuperscript{47} As the Commission stated in its order granting the Charter-Time Warner Cable-Bright House merger, “[w]e note that New Charter intends to deploy Worldbox throughout all of New Charter’s footprint.”\textsuperscript{48} Charter is making long-term investments in supporting Worldbox as it “has opened two national centralized data centers to support the downloadable security system on its new cable box.”\textsuperscript{49} Indeed, the development and rollout of Worldbox also show that Charter is

\begin{itemize}
\item Krause, \textit{supra} note 42.
\item \textsuperscript{44}See Karl Bode, \textit{Cox Deploying New ‘Contour’ Set Top Box Upgrade}, DSL\textit{Reports} (Apr. 6, 2016), http://www.dslreports.com/shownews/Cox-Deploying-New-Contour-Set-Top-Box-Upgrade-136657 (“Cox says it is now offering the upgraded box in the majority of its markets as of this week. Only Virginia has yet to see the deployment, which the company says should occur on April 26. Just like the X1, the Contour features an improved interface, voice controls, some integrated cloud functionality, and 2 terabytes of storage -- capable of holding up to 300 hours of HD shows, or 1,000 hours of SD shows.”).
\item Dano, \textit{supra} note 42.
\item \textsuperscript{46}\textit{Xfinity TV Partner Program Announcement}, \textit{supra} note 38.
\item \textsuperscript{47}Charter Announces Fourth Quarter and Full Year 2015 Results, \textit{Charter} 3 (Feb. 4, 2016), available at http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-earnings (“Charter is also poised to launch its new set-top box, \textit{World Box}, which features downloadable security along with other advanced functionality . . .”).
\item In the Matter of Applications of Charter Communications, Inc., Time Warner Cable Inc., and Advance/Newhouse Partnership For Consent to Assign or Transfer Control of Licenses and Authorizations, MB Docket No. 15-49, Memorandum Opinion and Order, May 5, 2016, at n.907 [hereinafter Charter Merger Order].
\end{itemize}
employing the technology contemplated by the NPRM. However, this also indicates the broader problems that could occur if the Commission does not act in this proceeding because “Charter’s use of downloadable security to meet the separation of security requirement could lead New Charter to abandon CableCARD support at a time when CableCARD is still a method that retail navigation devices rely on to decrypt cable service.” 50 Furthermore, “New Charter presumably will no longer utilize CableCARDs to deliver video programming to proprietary set-top boxes in subscribers’ homes once it finishes replacing its proprietary CableCARD-enabled devices with Worldbox.” 51

V. Opponents of the NPRM Would Prefer an Environment Where They Operate Under Different Rules from Outsiders and New Entrants.

There has long been a lack of competition and new entrants into this marketplace. That was one of the key reasons why Congress included Section 629 into the 96 Act. The Commission noted almost fifteen years later that the lack of competition was because “[r]etail set-top boxes have been competing on an uneven playing field.” 52 As we stated before, this debate is a reboot of Cable’s long-running attempts to maintain its control over how subscribers access content. In addition to maintaining their walled gardens, a review of comments made by opponents of the NPRM quickly reveals that they are seeking different rules for themselves and the ability to determine who can access content and through which means.

A. Comments by Opponents Reflect Historical Trends of Content Companies’ Resistance to Technological Change.

The content industry’s opposition to this proposal is nothing new. For centuries, they have been voicing the same concerns about how technological innovation will change their

50 Charter Merger Order, supra note 48, at n. 907.
51 Id.
52 National Broadband Plan, supra note 7, at 51.
business models. In 1906, renowned American composer John Philip Sousa railed against the threat of the player piano and gramophone: “And now in this the twentieth century come these talking and playing machines and offer again to reduce the expression of music to a mathematical system of megaphones, wheels, cogs, disks, cylinders, and all manner of revolving things which are as like real art as the marble statue of Eve is like her beautiful living breathing daughters.” With the advent of the VCR, the movie industry upped its rhetoric as the longtime head of the MPAA, Jack Valenti, testified before Congress in 1982: “I say to you that the VCR is to the American film producer and the American public as the Boston strangler is to the woman home alone.” His concern, just as MPAA’s today, was really about dollars and cents, not copyright. He claimed that “. . . the VCR is stripping those [aftermarkets] clean, those markets clean of our profit potential, you are going to have devastation in this marketplace.”

B. Opponents of the NPRM are Seeking to Rewrite Copyright Law.

Some commenters have attempted to use this inquiry on set-top boxes to reverse longstanding principles of copyright law. In doing so, they are making sweeping misstatements about settled legal doctrine. The FCC is not the appropriate forum for relitigating settled questions of copyright law, nor for expanding the reach of the Copyright Act.

In one example of a blatantly inaccurate statement, comments by representatives from the motion picture industry claimed that “[u]nder copyright law, someone may not use copyrighted content without the permission of the copyright holder.” This is plainly incorrect. Many uses

53 See Nate Anderson, 100 years of Big Content fearing technology—in its own words, ARS TECHNICA (Oct. 11, 2009), http://arstechnica.com/tech-policy/2009/10/100-years-of-big-content-fearing-technologyin-its-own-words/ (detailing many of the dubious arguments posited by the content industry to protect the status quo in the face of great technological innovations).
56 Id.
57 Comments of MPAA et al., MB Docket No. 16-42, at i (filed Apr 22, 2016), see also id. at 16, 17.
of copyrighted content may occur without the permission or authorization of the rights-holder because (a) they do not exercise any of the copyright-holder’s exclusive rights (to reproduce, perform publicly, etc.,)\textsuperscript{58} or (b) any exclusive rights they do exercise are nonetheless non-infringing, due to doctrines limiting the scope of copyright like fair use.

Not all uses of copyrighted works are regulated by the Copyright Act. Neither a device manufacturer nor a consumer should be charged a toll so that a consumer may watch lawfully acquired content on a device of their choosing. When a consumer watches lawfully acquired content in the home on a device, neither the distribution nor public performance right are implicated by the function of the device.\textsuperscript{59} Contrary to the MPAA’s suggestion, a consumer’s use of their own device to access their own content does not implicate Section 106 rights. The definition of public performance “does not extend to those who act as owners or possessors of the relevant product”,\textsuperscript{60} and “distribution” requires “the distribution of copies or phonorecords of a work to the public by sale or other transfer of ownership, or by rental, lease, or lending.”\textsuperscript{61} There is no Section 106 right regulating the mere processing of content, protests in this docket notwithstanding. A computer manufacturer does not require a license every time their consumers play lawfully acquired media on devices it has manufactured.\textsuperscript{62} Indeed, it would be ridiculous to suggest that when a consumer watches a video on his iPad, Apple is engaged in a  

\textsuperscript{58} See 17 U.S.C. § 106.

\textsuperscript{59} Contra Comments of MPAA et al., supra note 57, at 16-17. The MPAA’s interpretation is wholly at odds with statutory requirement that distribution involve circulating ”copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending”. See 17 U.S.C. § 106(3).

\textsuperscript{60} ABC v. Aereo, 134 S. Ct. 2498, 2510 (2014).


\textsuperscript{62} AT&T’s comments suggest that device manufacturers and service providers should not have “free reign [sic] to do what they desire” with regard to copyrighted content so long as that use is lawful. See Comments of AT&T, supra note 34, at 44 n.156. CCIA respectfully disagrees and submits that any broadening of the Copyright Act should be left to Congress.
Moreover, even among uses that are regulated by the Copyright Act, there are limitations. As the Supreme Court put it in *Sony*, “even unauthorized uses of a copyrighted work are not necessarily infringing.”64 Similarly, the Ninth Circuit last year explained that “[f]air use is not just excused by the law, it is wholly authorized by the law.”65 To demand that the Commission restrict any features which cable companies have not authorized is a brazen attempt to expand the regulatory reach of Section 106 and seize from consumers the right to control their own devices. Not only are such demands bad policy, but rewriting copyright jurisprudence as the cable industry would have it is beyond the Commission’s jurisdiction.

Some commenters have gone so far as to voice concern about devices that enable consumers to record programming66 — functionality that has been permitted by law for decades by *Sony* and its progeny, which established consumers’ rights to “time shift.”67 Device manufacturers, including companies represented by CCIA, build and sell devices for consumers to exercise these rights. If content licensing interests want to try to change this settled precedent, such discussions are legislative, and should occur outside of the Commission, which does not

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63 Not only would such functionality not exercise that author’s rights, but it would not constitute a volitional act, either, a requirement for alleging a direct violation of Section 106. *See, e.g., Fox Broad. Co. v. Dish Network LLC*, No. 12-4529, 2015 WL 1137593, at *11 (C.D. Cal. Jan. 20, 2015) (“The volitional conduct doctrine is a significant and long-standing rule, adopted by all Courts of Appeal to have considered it. . . .”). *See also Religious Tech. Ctr. v. Netcom On-Line Commc’n Servs., Inc.*, 907 F. Supp. 1361 (N.D. Cal. 1995); *CoStar Grp., Inc. v. LoopNet, Inc.*, 373 F.3d 544 (4th Cir. 2004); *Cartoon Network LP, LLLP v. CSC Holdings, Inc.*, 536 F.3d 121 (2d Cir. 2008).


65 *Lenz v. Universal Music Corp.*, 801 F.3d 1126, 1132 (9th Cir. 2015).

66 Comments of Copyright Alliance, MB Docket No. 16-42, at 12 (filed Apr. 22, 2016); Comments of RIAA et al., MB Docket No. 16-42, at 8 (filed Apr. 22, 2016).

67 *See, e.g., Cartoon Network LP, LLLP v. CSC Holdings, Inc.*, 536 F.3d 121 (2d. Cir. 2008); *Fox Broad. Co. v. Dish Network, LLC*, 905 F. Supp. 2d 1088 (C.D. Cal. 2012), aff’d *Fox Broadcasting Co. v. Dish Network LLC*, 747 F.3d 1060 (9th Cir. 2014); *see also Recording Indus. Ass’n of America v. Diamond Multimedia Sys., Inc.*, 180 F.3d 1072, 1079 (9th Cir. 1999) (permitting copying for personal use, also known as “shape-shifting”).
have jurisdiction or expertise over copyright law. Regulators may not withdraw rights from consumers that the Supreme Court has declared that they possess.⁶⁸

VI. **The NPRM Builds on the Competitive Mantra that has Seen Great Innovation, Lower Prices, and Greater Consumer Choice in Almost Every Other Area of Consumer Electronics.**

“*Competition drives prices down and spurs providers to improve service and create new products.*” – Former Commission Chairman, Kevin Martin⁶⁹

Nearly fifty years ago, the Commission established an important principle when it required that AT&T, the telephone monopoly at the time, allow customers to connect third-party devices as long as they did not “adversely affect” the network.⁷⁰ Because *Carterfone* enabled consumers to connect nonharmful devices, and more importantly they were able to break free from leasing the same, clunky, black telephone from AT&T, a new market developed. New companies and innovators were finally able to access consumers who were generally restricted to using the black rotary dial phone produced by Western Electric and leased to them by the local Bell Operating Company. These new entrants could bring new products to market and let consumers decide what they wanted. New entrants had to compete on price and features to get consumers’ attention, which ultimately led to the modem and the commercial Internet.

Another important Commission action that opened up markets to competition and innovation occurred almost a decade ago when the Commission adopted its “open platform” rule

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⁶⁸ Indeed, when Congress has previously taken issue with federal jurisprudence regarding what consumers can and cannot do with video content, they have been explicit about reversing it. For example, the 1976 Copyright Act deliberately overturned *Fortnightly Corp. v. United Artists Television, Inc.*, 392 U.S. 390 (1968), and *Teleprompter Corp. v. CBS, Inc.*, 415 U.S. 394 (1974). See H.R. REP. NO. 94-1475, at 89 (1976). Congress has also been clear about regulatory action they do want to see, as with the 1996 Telecommunications Act, which explicitly mandated that the Commission “assure” set-top box competition.


in conjunction with the 700 MHz auction.\footnote{In the Matter of Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, Second Report and Order, July 31, 2007, at 7, http://apps.fcc.gov/ecfs/document/view?id=6519612373 (requiring that winners of the “C Block” “allow customers, device manufacturers, third-party application developers, and others to use devices and applications of their choice, subject to certain conditions.”).} This meant that the winners of a large chunk of valuable spectrum would have to open up their networks by allowing consumers to use whatever device and download the applications of their choosing. Shortly thereafter, the major wireless carriers embraced the open concept and allowed their customers to use any mobile device they want.\footnote{Martin, supra note 69, at v.} This served as the catalyst to the incredible innovation and competition we have seen in the mobile phone market.

\textbf{A. Competition Will Foster Innovation, Forcing Incumbents to Develop Better Products and Services.}

Incumbents, like the cable companies, have a vested interest in thwarting competition from third parties – new products and services developed by third-party innovators have forced the cable companies to decide whether they want to compete and attract new customers or stay the course and risk losing more subscribers. Unfortunately, in this instance, Comcast seems to believe that innovations in the marketplace, facilitated by competition, will only leave consumers “confused.”\footnote{Comments of Comcast Corp. and NBCUniversal, supra note 10, at 71 (“Customers would also be confused by the fact that third-party devices and apps will not deliver many of the same services and features customers have come to expect.”).} Incumbents, like Comcast, have traditionally utilized similar bogus arguments like this when confronted with competition. For example, in 2002, Comcast CEO Brian Roberts said that a consumer who uses a DVR “is getting all that content and recording it real easily, paying nothing extra to get it and stripping out the advertising.”\footnote{Julia Angwin et al, In Embracing Digital Recorders, Cable Companies Take Big Risk, WALL ST. J. (Apr. 26, 2004), http://www.wsj.com/articles/SB108292985324892853.} However, now DVRs are almost standard offerings of cable companies because consumer demand and competition forced cable companies like Comcast to recognize that “[t]his is something consumers really want and
ultimately that’s what’s going to drive everybody in a competitive business.”\textsuperscript{75} The MVPD-provided devices have generated complaints from consumers and market watchers because these devices usually employ outdated technology, cable systems operators are slow to update features, and consumers frequently encounter difficulties with installation.\textsuperscript{76} With the prospect of real change and outside pressure, the incumbents are instead resorting to obfuscations, claiming that consumers will be “confused” if third-parties develop features that could be better than what “customers have come to expect” for the boxes they lease from their MVPD.

B. Innovation and Competition Have Pushed Down Prices in Almost Every Area of Consumer Electronics Except for Set-Top Boxes.

Innovation has flourished and prices have come down in almost every area of consumer electronics except for set-top boxes. The Consumer Federation of America and Public Knowledge found that the price of consumer electronics, such as computers, televisions, and mobile phones, has decreased over 90% since 1994.\textsuperscript{77} However, the average charge for set-top boxes has increased 185% since 1994.\textsuperscript{78} This amounts to overcharges of between $6 billion and $14 billion every year for consumers.\textsuperscript{79} Still, opponents of the NPRM claim that it “will impede innovation in the development of competitive navigation devices . . .”\textsuperscript{80} Chairman Wheeler could not have responded better:

“When i[s] the last time that competition thwarted innovation rather than spurring innovation?” And you are telling me that a locked down, closed system will have more impetus to be innovative, than a competitive, open system? I think that history shows that it is exactly the opposite of what happens in reality.\textsuperscript{81}

\textsuperscript{75} See id. (quoting Brian Roberts’ rationale for his change of opinion).
\textsuperscript{76} Comments of Consumers Union, MB Docket 15-64, at 3 (filed Oct. 8, 2015).
\textsuperscript{78} Id.
\textsuperscript{79} Id.
\textsuperscript{80} Comments AT&T, MB Docket 16-42, at 28 (filed Apr. 22, 2016).
If consumers can choose whatever mobile device they want to access wireless networks, any modem or Wi-Fi router they want to access broadband networks, then as Chairman Wheeler recently put it: “Should pay-TV continue to be an exception?”

VII. Additional Issues.

A. In This Proceeding, the Commission Should Also Address the MVPD’s Support for TV Everywhere (TVE) Apps on Third-Party Devices.

MVPDs have not demonstrated an ability or willingness to let their apps provide the same options, functionality, or the full complement of MVPD programming that they provide on their set-top boxes. MVPDs have also shown that they will pull support for “apps” or let them disappear at any time. However, MVPDs have assured their subscribers that they can access programming from apps on third-party devices. This has profound competitive consequences for a competitive, retail market for navigation devices if the status quo continues where a third-party device could lose access the MVPD’s programming at any time. CCIA previously raised the discrepancy between consumers’ ability to access apps on third-party devices over Charter’s

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83 See Rob Pegoraro, Cable operators are trying to fix the single biggest problem with their apps, YAHOO! FINANCE (May 18, 2016), http://finance.yahoo.com/news/time-warner-comcast-charter-box-free-205131451.html (“They don’t actually let you watch TV on your TV, instead limiting you to phone or tablet viewing of shows streamed over the internet. A few cable operators at INTX said they’re trying to find ways to let you use these apps on your actual TV, but for most of us it’s way too soon to stop renting a cable box. . . . Don’t get too excited, though: Comcast is only treating the Android app as a research project for now, and the HTML5 app on display couldn’t play live TV. And Comcast wasn’t ready to show off the Roku app it has said it will ship.”); id. (“Time Warner Cable (TWC) demonstrated the Roku app it now offers to New York City viewers; below the Roku player, a placard noted the app doesn’t include a DVR and also leaves out pay-per-view and video-on-demand viewing “but we’re working on those.” A nearby demo from TWC purchaser Charter (CHTR) of its Spectrum app for Roku players revealed similar limitations. And in most markets, the app won’t work unless you have one cable box.”).
84 See Comments of CCIA, supra note 28, at Sec. IV.B.ii. (detailing instances where Verizon pulled its apps from Xbox consoles and Samsung Smart TVs, Comcast pulled its Xfinity On Demand app from Xbox 360s, Charter blocked the authentication credentials for apps on devices made by NVIDIA, Comcast blocked the HBO Go app on PlayStation 4, Comcast blocked HBO Go and Showtime apps for customers who used Roku devices in 2014, and Comcast will not authenticate a new app developed by Starz).
85 See generally supra note 34 (detailing many of the times that opponents of the NPRM have quoted Apple CEO Tim Cook).
and Time Warner Cable’s and Bright House’s networks. Although the Commission declined to act on the issue of TVE customer authentication in the Charter merger proceeding, it did recognize that these issues “will likely be addressed in the ongoing rulemaking proceeding,” referring to this proceeding. The Commission took note of the Charter merger Applicants’ argument that “authenticating programmer apps requires the programmer’s involvement”; however, as NVIDIA pointed out, at least in the case of the HBO Go app, “HBO further suggests users reach out directly to Charter,” suggesting that customers should contact Charter to facilitate the authentication. In the Charter merger proceeding, NVIDIA proposed, and CCIA supported, a merger-specific remedy that would have prohibited Charter “from restricting, degrading, or interfering with the use of lawful, non-harmful devices.” We encourage the Commission to finally address these “broader regulatory questions” with a similar, yet more broadly applicable, in a final Order. Therefore, consumers, who have bought third-party devices under the reasonable belief that they can access the MVPD programming to which they have subscribed, can continue to access that programming on the third-party devices they have purchased.

87 Charter Merger Order, supra note 48, at ¶ 262.
88 Id. at ¶ 263.
90 See Notice of Ex Parte Letter from John A. Howes, Jr., Legal Fellow, Computer & Commc’ns Indus. Ass’n (CCIA), Applications of Charter Communications, Inc., Time Warner Cable, Inc., and Advance/Newhouse Partnership For Consent to Transfer Control of Licenses and Authorizations, MB Dkt. No. 15-149; Expanding Consumers’ Video Navigation Choices, MB Dkt. No. 16-42; Commercial Availability of Navigation Devices, CS Dkt. No. 97-80 (filed May 9, 2016), at 2 (detailing NVIDIA’s merger-specific remedy that “At the request of a manufacturer of any lawful, non-harmful device that connects to the Internet, Charter shall, within 180 days, authenticate any video programming application: (1) designed to work with such device’s operating system where as of the date of the request, Charter authenticates such application for use on a competing device or (2) that as of March 20, 2016 Time Warner Cable authenticated for use on such device’s operating system.”).
91 Charter Merger Order, supra note 48, at ¶ 262.

The Commission should be proactive in its regulatory oversight of device charges and billing transparency. As the Consumer Video Choice Coalition noted, “set-top box pricing can be used by MVPDs as a tool to drive out competition from new entrants to the set-top box marketplace.” The Commission should require that MVPDs separately state any charges for the navigation devices that they lease to their customers. The Commission should also ensure that, as TiVo has described, consumers, who have purchased third-party devices do not “‘double pay’ for additional features they can access only using leased navigation devices.” Similarly, the Commission should also require that billing transparency and anti-cross-subsidization requirements apply to cable modems so that Section 629’s goals can be accomplished for other products that are covered by Section 629.

VIII. Conclusion.

With Section 629 of the 1996 Act, Congress provided a clear mandate for the Commission to ensure vibrant competition in the set-top box marketplace. Almost two decades later, the competition that Congress envisioned has not developed as ninety-nine percent of customers rent their provider’s preferred set-top box. However, the Commission now has an opportunity to promote real competition in the market for set-top boxes. The NPRM facilitates open standards that can drive innovation, and it will ensure that parties not affiliated with the MVPDs can maintain their access to pay-TV programming. With this NPRM, the Commission will finally be able to “assure the commercial availability” of third-party navigation devices,

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92 See John Eggerton, Cablevision Settles Set-Top Suit, MULTICHANNEL NEWS (Dec. 14, 2015), http://www.multichannel.com/news/courts/cablevision-settles-set-top-suit/395946 (“The plaintiffs in a class action suit against Cablevision for allegedly tying access to some of its services to rental of a set-top box from the company say they have reached a settlement and want the court to affirm (sic) it.”)
93 Comments of the Consumer Video Choice Coalition (CVCC) at 46.
94 Comments of TiVo at 30.
95 See generally Comments of Zoom Telephonics, Inc., MB Docket 16-42 (filed Apr. 22, 2016).
which will lead to greater innovation, benefitting consumers and the broader economy.

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Respectfully submitted,

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