

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

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In the Matter of	)	
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Expanding Consumers' Video Navigation Choices	)	MB Docket No. 16-42
	)	
Commercial Availability of Navigation Devices	)	CS Docket No. 97-80
	)	

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REPLY COMMENTS OF COMCAST CORPORATION AND  
NBCUNIVERSAL MEDIA, LLC

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*"Congress was clear. They said there should be competition. Now technology has advanced to a point where this is possible without changing the functioning of the pay-TV system and its copyright protections and its security."* So declared Chairman Wheeler in voting to approve the *Notice* on February 18.<sup>1</sup>

The record compiled in this proceeding makes clear that the Chairman's statement above was entirely correct. Video apps have revolutionized the marketplace, expanding consumers' options for devices and services while still protecting copyright, honoring licensing agreements, and ensuring pay-TV customers enjoy the full privacy rights and remedies Congress intended.

But the record also overwhelmingly demonstrates that the complex, costly, and backward-looking technology mandate envisioned by this *Notice* (referred to herein as the "Set-Top Box Mandate") fails each of these tests and does not align with the Chairman's statement.<sup>2</sup> Unlike the apps approach advocated by MVPDs and many others in the record, the proposed

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<sup>1</sup> Tom Wheeler, Chairman, FCC, Statement at FCC Open Meeting, at 55:43 (Feb. 18, 2016), <http://www.c-span.org/video/?404893-1/fcc-meeting-cable-settop-box-purch&start=3271>.

<sup>2</sup> See *Expanding Consumers' Video Navigation Choices; Commercial Availability of Navigation Devices*, Notice of Proposed Rulemaking and Memorandum Opinion and Order, 31 FCC Rcd. 1544 (2016) ("*Notice*").

mandate exceeds the Commission's authority under Section 629 and conflicts with other provisions of the Communications Act and the First Amendment; disregards copyright protections and licensing agreements; threatens to halt the unbridled innovation that has permeated the video marketplace for years; requires new in-home equipment; and strips consumers of privacy protections and legal remedies.

Choosing the deeply flawed Set-Top Box Mandate approach over the clearly superior and proven apps approach would require the Commission to ignore the overwhelming weight of evidence entered into the record by MVPDs, programmers, content creators, diversity advocates, labor organizations, economists, environmentalists, policy analysts, and over 70,000 concerned citizens. The record is clear: apps, not hardware mandates, are the quickest path to achieving the Commission's goal of increasing competition for video navigation devices.

## **I. INTRODUCTION AND SUMMARY**

With the general exception of the same advocacy organizations that supported the Commission's 2010 AllVid proposal and companies that stand to gain a windfall from not having to follow the same rules as others in the marketplace, the Commission's proposed Set-Top Box Mandate was widely criticized by commenters. Notably, the record leaves little doubt that the Set-Top Box Mandate would exceed the Commission's limited authority under Section 629 and violate other provisions of the Communications Act, substantial copyright and other intellectual property protections, and the First Amendment. It would endanger the entire video distribution ecosystem by disregarding licensing requirements, jeopardizing content security, and promoting piracy and theft of service. It would weaken privacy and other critical consumer protections. It would impose substantial costs on MVPDs and consumers and chill innovation. And, like the Commission's prior CableCARD and IEEE 1394 interface rules, it would saddle

MVPDs and their customers with another unnecessary and costly technology mandate that would likely be obsolete before it could even be implemented.

Commenters also underscore that all this is completely unnecessary. The simple fact is that the video marketplace is, as the Commission itself has repeatedly recognized, vibrantly competitive, and consumers today have more device options than ever before to access their MVPD service via downloadable apps on smartphones, tablets, smart TVs, and other TV-connected devices. Furthermore, this apps revolution is rapidly accelerating, as evidenced by Comcast's announcement of its Xfinity TV Partner Program. By leveraging recently-completed open standard HTML5 technologies, the Program provides a common framework to which smart TVs and other TV-connected devices can build in order to make the Xfinity TV Partner app available to customers on their devices. Comcast is already working with launch partner Samsung Electronics to implement this app on its smart TVs, as evidenced by the recent demonstrations of the Xfinity TV Partner app on a Samsung TV at the INTX conference, and has received dozens of inquiries from others in just the few weeks since launching the Program. Comcast is also open to working with device manufacturers that do not use HTML5, as evidenced by its agreement to develop an app for Roku TVs and streaming devices.

Notwithstanding these developments, the *Notice* calls for the most intrusive regulations of the video ecosystem that the Commission has ever pursued. But a quick review of the record shows overwhelming concern with the Set-Top Box Mandate from a wide and diverse array of entities, including, among others:

- Over 150 bipartisan Members of Congress, including nearly half of the House Democratic Caucus, and 30 members of the Congressional Black Caucus;
- Numerous programmers from larger ones like Fox, CBS, Disney, Viacom to diverse and independent networks like Crossings TV, TV One, VMe, C-SPAN, Revolt, and ¡Hola! TV.

- Nearly 20 content community organizations, including the MPAA, Directors Guild of America, American Federation of Musicians, CreativeFuture, the Independent Film and Television Alliance, National Music Publishers' Association, Recording Industry Association of America, Screen Actors Guild/American Federation of Television and Radio Artists, and the Copyright Alliance;
- Thirty-five diversity and civil justice groups, such as the NAACP, Rainbow PUSH Coalition, National Action Network, National Black Chamber of Commerce, MANA – A National Latina Organization, Hispanic Technology and Telecommunications Partnership, the National Urban League, and the LGBT Tech Partnership;
- Accessibility advocates like the American Council of the Blind and Telecommunications for the Deaf and Hard of Hearing, Inc.;
- Environmental organizations like the Natural Resources Defense Council;
- Device manufacturers like Roku and ARRIS and other technology companies like Cisco;
- Dozens of academics and public policy groups, including a former Commission Chief Economist;
- Organizations representing more than 1.8 million members of the labor community, including the Communications Workers of America, the International Brotherhood of Electrical Workers, and the International Alliance of Theatrical Stage Employees; and
- Over 70,000 concerned consumers.

Even proponents of the Commission's proposal have raised concerns about significant aspects of the proposal. On the same day that the White House issued a blog post endorsing the Set-Top Box Mandate, its advisory arm on telecommunications policy acknowledged that, with respect to privacy obligations, the Commission's proposal "leaves important questions to be addressed" and that it is "important to consider the potential for an effect on specialized and minority programmers."

On issue after issue, the record undermines the various claims that have been made in support of the Set-Top Box Mandate. First, the Commission initially asserted that expansive new mandates are needed to provide consumers with competitive alternatives to operator-supplied set-top boxes. But, as numerous commenters have demonstrated, MVPD apps are

providing those device alternatives, fulfilling the requirements of Section 629 and the Commission's navigation device goals, and without any of the harms that would result from the Set-Top Box Mandate. And to the extent the Commission and commenters supporting the Set-Top Box Mandate – such as Google, Public Knowledge, and Consumer Video Choice Coalition (“CVCC”) – view the rulemaking as a way to enable third-party device makers and app developers to offer *competing video services* using the piece-parts of MVPD service,<sup>3</sup> this view goes well beyond the Commission's authority. Section 629 makes clear that Congress intended to promote the retail availability of new *equipment* used by consumers to access an MVPD's service over the MVPD's network, not mandate the unbundling and forced sale (for free) of an MVPD's content and other data to favor Google's search and advertising businesses or other competing third-party video distribution *services*.

Second, the Commission has repeatedly claimed that the Set-Top Box Mandate will protect the sanctity of contracts, but the record makes plain that is not the case. Leading content companies have told the Commission point blank that “the rules would undermine the license agreements that maintain a positive viewing experience and preserve incentives to invest and innovate in both the production and distribution of high-quality video programming.”<sup>4</sup> Of particular note, TiVo and other proponents of the new rules have expressly stated that these license agreements do not apply to them. Consequently, it is unsurprising that TiVo is already

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<sup>3</sup> See Google Comments at 1-4; Public Knowledge Comments at 15-19; Consumer Video Choice Coalition (“CVCC”) Comments at 27-28. Unless otherwise noted, comments cited herein are to those filed in MB Docket No. 16-42 and CS Docket No. 97-80 on or around April 22, 2016.

<sup>4</sup> Letter from Kyle D. Dixon, VP, Public Policy, Time Warner Inc., et al., to Marlene H. Dortch, Secretary, FCC, at 1 (May 6, 2016).

engaging in the types of practices (e.g., ad overlays on existing programming streams) that programmers have warned would be commonplace under the Commission's rules.<sup>5</sup>

Third, the Commission has maintained that the Set-Top Box Mandate will ensure robust content security. However, programmers and other stakeholders have explained that the proposal would actually create a *less* secure environment for MVPD content, contrary to the express language of Section 629(b) that the "Commission shall not prescribe regulations . . . which would jeopardize security of multichannel video programming and other [MVPD] services . . . or impede the legal rights of a provider of such services to prevent theft of service." As the record makes clear, the Set-Top Box Mandate would conflict with the content security provisions in programmers' agreements with MVPDs, and would "jeopardize[] content security" and "increase[] the risk of piracy."<sup>6</sup> Notably, content security companies themselves have raised concerns regarding the impact of the Set-Top Box Mandate:

The government-mandated reduction to a single, regulated standard for security would create unacceptable vulnerabilities, prevent future innovations, and hamper the current competitive marketplace. . . . Regulated standards that dictate what a security system can and cannot do will tie the hands of a security platform provider . . . which needs the flexibility to adapt to every changing security circumstance.<sup>7</sup>

And rather than explaining or demonstrating how content security will be ensured, proponents of the Set-Top Box Mandate simply state, without any support, that it will be so. Wishful thinking, however, is no basis for reasoned decision-making, particularly when dealing with the security of the very asset – content – that is driving this entire ecosystem.

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<sup>5</sup> See, e.g., National Cable & Telecommunications Association ("NCTA") Comments at 44-47; Letter from Rick Chessen, Senior Vice President Law & Regulatory Policy, NCTA, to Marlene H. Dortch, Secretary, FCC, MB Docket No. 15-64, at 5-8 (Jan. 15, 2016) ("Jan. 15 NCTA Ex Parte").

<sup>6</sup> MPAA Comments at 20-21.

<sup>7</sup> Cisco Comments at 9-10.

Fourth, the Commission has claimed that its proposal would create new carriage opportunities for diverse programmers, but here again numerous independent diverse programmers and diversity groups strongly reject that view. Diverse and independent programmers have explained that the Set-Top Box Mandate, among other things, would be “catastrophic” and “pose[] an existential threat” to diverse and independent networks,<sup>8</sup> and that “minority content is likely to be buried on the ‘lowest rung’ of . . . search results.”<sup>9</sup> It also bears emphasis that nothing is stopping third-party device makers and app developers from promoting diverse programmers on their platforms today, but they have chosen not to do so. There is no reason to believe that their approach would change if new rules were adopted.

Fifth, the Commission repeatedly has contended that its proposal will maintain privacy and other consumer protections, but the record makes abundantly clear that the self-certification regime proposed in the *Notice* is legally impermissible and unworkable. As the Electronic Privacy Information Center explained, self-certification “fails to meaningfully protect consumers” and “fails to provide for effective oversight and enforcement.”<sup>10</sup> There is simply no practical way for MVPDs to monitor the activities of third parties or enforce compliance in the absence of any contractual relationship with those third parties. In the case of privacy, after having the Commission’s original proposal widely denounced as ineffective and thoroughly debunked, the Commission and proponents of the Set-Top Box Mandate now have turned to outsourcing privacy enforcement to the Federal Trade Commission (“FTC”) as a potential solution to the significant privacy concerns that have been raised. Yet, far from providing any assurances on the privacy front, this latest round of whack-a-mole simply abdicates the

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<sup>8</sup> Crossings TV Comments at 2-3.

<sup>9</sup> TV One Comments at 15.

<sup>10</sup> Electronic Privacy Information Center (“EPIC”) Comments at 7.

Commission's responsibility in the important area of privacy to another agency. The Commission has no authority to subdelegate its regulatory and enforcement responsibilities under Section 631 and Section 338 in this manner. Notably, even with the FTC's involvement, consumers would still not receive all of the protections Congress granted to them under Section 631 and Section 338, such as the right to bring private legal action and their right to have a court order issued before their sensitive personal data may be handed over to the government.

Incredibly, proponents of the Set-Top Box Mandate, who would be the prime beneficiaries of the windfall should these rules be implemented, have explicitly stated that such privacy protections should not apply to them and that new rules are unnecessary. Chairman Wheeler has stated that he disagrees with this view and believes the privacy protections should apply to third-party device manufacturers and app developers.<sup>11</sup> Yet, he has not proposed any means that would ensure those entities can comply in any way the Commission can enforce since, for some reason, the Commission has protected edge providers from regulatory oversight at all cost. Moreover, the Commission's proposal refuses to allow contractual privacy for MVPDs to enforce the rules, and rejects the apps-based approach which would obviate this concern.<sup>12</sup>

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<sup>11</sup> See Wash. Post Interview with Tom Wheeler, Chairman, FCC (Feb. 10, 2016), [https://www.washingtonpost.com/video/business/technology/fcc-chairman-talks-set-top-boxes-consumers-right-to-choose/2016/02/10/5c19cdba-cff0-11e5-90d3-34c2c42653ac\\_video.html](https://www.washingtonpost.com/video/business/technology/fcc-chairman-talks-set-top-boxes-consumers-right-to-choose/2016/02/10/5c19cdba-cff0-11e5-90d3-34c2c42653ac_video.html) ("What we're going to do in our rulemaking is say [to new entrants], 'You have to have the same kind of [privacy] rules that cable companies have.'"); Tom Wheeler, Chairman, FCC, Press Conference at FCC Open Meeting (Feb. 18, 2016), <http://www.c-span.org/video/?404893-1/fcc-meeting-cable-settop-box-purch&start=3271> ("To be able to license the standard, you're going to have to comply with the Title VI Section 631 privacy rules which apply to cable operators.").

<sup>12</sup> With respect to accessibility protections, as commenters explained, the Commission's proposal would create significant gaps in accessibility enforcement since the existing accessibility rules do not apply to third-party apps, and would also raise significant questions around customer support when there are problems or failures with third-party devices and apps.

Finally, the Commission has insisted that the proposal will not require new operator-supplied equipment or impose other significant costs, but here again the record provides substantial evidence to the contrary. Neither the Commission nor any commenter has presented any credible evidence that the proposal can be implemented without additional equipment. In contrast, DBS providers have underscored that they will have to develop new in-home equipment to implement the proposed interfaces given the one-way nature of DBS platforms. Likewise, cable operators have demonstrated that the only practical way to avoid bandwidth and other network harms under the Commission's proposal would be to deploy a new in-home gateway device that could manage the interaction of third-party devices and apps with the network and serve as a firewall to protect the network and subscribers from security breaches.<sup>13</sup> In his attached technical declaration (*see* Appendix A), Dr. David Reed confirms this conclusion.

Astoundingly, the single technical filing describing how the Set-Top Box Mandate could be implemented was a brief six-page technical appendix filed by the CVCC that lacks specifics, includes substantial gaps, and demonstrates that the proposal is otherwise unworkable. As Dr. Reed explains in greater detail, that filing essentially “has been weighed,” “has been measured,” and has been “found wanting”; even that proposal depends on operator-supplied equipment in the home. Other commenters similarly catalogued substantial harms with the Commission's proposal, including, among other things, forcing changes in network infrastructure, choking off innovation since any new features and services must comply with the new standards, and adding energy costs associated with a new in-home device.

*The apps-based model raises none of these issues.* In contrast, the apps-based model complies with Section 629 and all other legal requirements; allows consumers to access MVPD

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<sup>13</sup> See Comcast Comments at 64-67; NCTA Comments at 18-22, 130-32.

service without the need to lease a set-top box; enables rapid innovation and new service and feature upgrades through automatic updates; complies with contractual, regulatory, and content security requirements; and allows MVPDs to deliver their services as intended and as customers expect on a wide and growing array of devices and platforms.

Remarkably, the Commission's immediate response to Comcast's Xfinity TV Partner Program – a no-set-top-box-needed alternative – was to dismiss it out of hand saying it would “allow only Comcast content on different devices.”<sup>14</sup> This criticism makes no sense. Consumers will have access to all of the apps they use on these devices to access video content – whether Netflix, Hulu, Amazon Prime, or others – and will also be able to access Xfinity TV content on the same devices without having to lease a set-top box. They'll get all of these apps with the user interfaces each provider has designed, as well as whatever umbrella user interface that the device itself provides. The Xfinity TV Partner Program is doing exactly what the statute seeks by offering Comcast's service on competitive devices available through retail outlets. From the Commission's dismissal of this new apps program, it seems the Commission's real objective is not to provide alternatives to leased set-top boxes or even to eliminate set-top boxes, but rather to tilt the video ecosystem playing field in favor of a few tech giants. Chairman Wheeler later stated that the announcement was “a good win and an important thing,” but also suggested that Comcast's recently announced app program shows that the Commission's proposal would work, when, in fact, the opposite is true.<sup>15</sup>

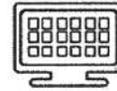
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<sup>14</sup> John Eggerton, *Comcast Xfinity Program Cited in Set-Top Dust-Up*, Broad. & Cable (Apr. 20, 2016), <http://www.broadcastingcable.com/news/washington/updated-comcast-xfinity-program-cited-set-top-dust/155819>. Indeed, following Comcast's announcement, even the Chairman's staff made clear that the new rules are really about competing user interfaces: “Today's cable apps force you to use the user interface cable chooses for you. Wouldn't \*you\* like to choose?” @GigiBSohnFCC, Twitter (Apr. 20, 2016), <https://twitter.com/gigibsohnfcc/status/722903678697340930>.

<sup>15</sup> See Amir Nasr, *Wheeler: Comcast “Proving Our Point” with Its New Set-Top Box Plan*, Morning Consult (Apr. 28, 2016), <https://morningconsult.com/alert/wheeler-comcast-proving-point-new-set-top-boxless-plan/>.

Comcast is proposing an apps-based solution that allows customers to receive their MVPD service without the need to lease a set-top box at all. In contrast, the Chairman's proposal favors a government-imposed set-top box mandate that goes well beyond expanding equipment options for consumers to instead taking apart existing video services to create new services. That approach not only exceeds the Commission's rulemaking authority, but also – in stark contrast to the apps approach – creates numerous harms, increasing consumer costs, weakening content security, eroding privacy and other consumer protections, and undermining intellectual property rights and content licensing agreements. In fact, Comcast's announcement proves the viability of a market-driven apps-based approach, which *avoids* the major issues with the Set-Top Box Mandate. To eliminate any doubt about the continued acceleration of apps, Comcast has put forward principles that could serve to advance the goals of Section 629 while preserving the rights of content owners and Title VI protections. Adopting the Set-Top Box Mandate with all of its associated harms and costs instead of the apps model alternative would be the epitome of arbitrary and capricious rulemaking.

As summarized in the chart below, an objective comparison of these two options clearly demonstrates that the Commission should take this opportunity to endorse the apps model as the best way and only rational path forward.



<p><b>COMPLIES WITH LAWS</b></p>	<ul style="list-style-type: none"> <li><b>X</b> Far exceeds Section 629, violates various communications and copyright laws and constitutional protections, and is arbitrary and capricious</li> </ul>	<ul style="list-style-type: none"> <li><b>✓</b> Complies with Section 629 and all other legal requirements</li> </ul>
<p><b>FOSTERS INNOVATION</b></p>	<ul style="list-style-type: none"> <li><b>X</b> Unproven in the marketplace with speculative manufacturer and consumer demand</li> <li><b>X</b> Locks in technical solutions that will be overtaken by marketplace developments and deters innovation</li> <li><b>X</b> Requires development of new standards through an unworkable and time-consuming, multi-year standards-setting process</li> <li><b>X</b> Rigid "parity" rules delay creation of new features and services</li> </ul>	<ul style="list-style-type: none"> <li><b>✓</b> Allows for rapid innovation and new service and feature upgrades through automatic app updates and downloads</li> </ul>
<p><b>EASY TO IMPLEMENT</b></p>	<ul style="list-style-type: none"> <li><b>X</b> Requires substantial and costly changes to MVPD networks</li> <li><b>X</b> Requires a new in-home gateway device (a "second box")</li> <li><b>X</b> More costs to consumers</li> <li><b>X</b> Requires additional network bandwidth, reducing bandwidth available for other innovations and migration to all-IP services</li> </ul>	<ul style="list-style-type: none"> <li><b>✓</b> Compatible with existing MVPD networks and supported on many retail devices</li> <li><b>✓</b> Same consumer-friendly approach as Netflix, Amazon, Apple, Google, and others in placing apps on third-party devices</li> </ul>
<p><b>MAINTAINS MVPD SERVICE</b></p>	<ul style="list-style-type: none"> <li><b>X</b> Customers don't receive their MVPD service</li> <li><b>X</b> Infringes on MVPDs' copyright interests in distinctive service offerings</li> </ul>	<ul style="list-style-type: none"> <li><b>✓</b> Allows MVPDs to deliver their services as intended and as customers expect</li> <li><b>✓</b> Allows third-party device manufacturers, e.g., Roku and Samsung, to innovate through their own topline user interfaces</li> </ul>
<p><b>HONORS PROGRAMMING AGREEMENTS</b></p>	<ul style="list-style-type: none"> <li><b>X</b> Infringes on programmers' copyright interests by creating a zero-rate compulsory copyright for third parties</li> <li><b>X</b> Allows third parties to ignore programming agreements (i.e., overlay ads, disrupt channel lineups and content presentation)</li> <li><b>X</b> Disrupts economic incentives to invest in high-quality programming</li> <li><b>X</b> Hurts diverse and independent programmers</li> </ul>	<ul style="list-style-type: none"> <li><b>✓</b> Respects all terms in programming agreements</li> </ul>



<p><b>PREVENTS PIRACY AND THEFT OF SERVICE</b></p>	<ul style="list-style-type: none"> <li><b>X</b> Weakens content security and increases risk of piracy by limiting range of permissible DRMs and security technologies</li> <li><b>X</b> Eliminates MVPD security features in apps and user interface</li> <li><b>X</b> Prevents MVPDs from testing and certifying security of third-party devices and apps</li> </ul>	<p>✓ MVPDs maintain secure "chain of trust" with security features built into apps</p>
<p><b>PROTECTS CONSUMER PRIVACY</b></p>	<ul style="list-style-type: none"> <li><b>X</b> Unenforceable self-certification for statutory privacy protections, with no way to monitor compliance by third parties</li> <li><b>X</b> Even if a violation is detectable, only remedy is decertification of device, which makes device useless, thereby hurting consumers</li> <li><b>X</b> Requires disclosure of sensitive customer entitlement data to third parties without customer consent</li> <li><b>X</b> No private right of action for privacy violations by third parties</li> </ul>	<p>✓ MVPD apps comply with strict privacy requirements under Sections 631 and 338 of the Communications Act</p>
<p><b>MAINTAINS OTHER CONSUMER PROTECTIONS</b></p>	<ul style="list-style-type: none"> <li><b>X</b> Creates "app gap" since third-party apps are not subject to FCC's accessibility rules and decisions; weakens accessibility compliance and enforcement regime</li> <li><b>X</b> No assurances that emergency alerts are transmitted via third-party devices and apps</li> <li><b>X</b> Third-party devices and apps would be free to overlay ads on children's programming, exceeding children's programming advertising time limits</li> </ul>	<p>✓ MVPD apps ensure compliance with accessibility, EAS, and children's programming ad limit obligations</p>
<p><b>ENSURES CUSTOMER SERVICE</b></p>	<ul style="list-style-type: none"> <li><b>X</b> Customers confused about who is responsible for problems accessing MVPD content on third-party devices or apps</li> <li><b>X</b> No guarantee that third parties will have adequate customer service resources to assist customers</li> </ul>	<p>✓ Customers contact MVPDs to troubleshoot any issues, or use customer service resources within apps; facilitates innovative MVPD customer service solutions, e.g., remote diagnostic and support tools</p>

## II. APPS FULFILL THE GOALS OF SECTION 629 WITHOUT THE HARMS OF THE SET-TOP BOX MANDATE, AND CRITICISMS OF THE APPS MODEL ARE WITHOUT MERIT.

The record reflects broad consensus that apps are delivering an ever-growing number of options for consumers to access their MVPD services. From computers to smartphones and tablets to smart TVs and TV-connected devices, consumers today enjoy expanding device options when it comes to how they want to watch video programming, and these choices continue to proliferate. A broad range of commenters resoundingly support the apps-based model as the best path forward, and one that complies with Section 629 and is *already* achieving Congress's and the Commission's navigation device goals and benefitting consumers:

- “The applications approach is a creative, technology-neutral, and consumer-friendly solution that is already transforming the marketplace.”<sup>16</sup>
- “Consumers today enjoy unprecedented access to some of the highest-quality television programming ever produced, which they can watch anytime, anywhere, and on a wide variety of devices. . . . [I]t is unclear what purpose the new rules would serve in this era of unprecedented consumer choice.”<sup>17</sup>
- “It is not the Commission’s proposal but an app-based approach that aligns with customer needs and is supported by MVPD trends towards more app-based delivery of video content . . . .”<sup>18</sup>
- “App-driven innovations are already fostering unprecedented competition in the video market and providing diverse programmers more opportunities than ever for serving the nation’s growing Hispanic community.”<sup>19</sup>
- “[T]he apps-based model . . . fully protects consumers’ privacy interests and programmers’ copyright interests while achieving the Commission’s stated goals.”<sup>20</sup>
- “Apps are providing consumers with numerous and new ways to access MVPD and other video services on more and more devices, and are achieving the navigation device goals

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<sup>16</sup> Multicultural Media, Telecom and Internet Council (“MMTC”) et al. Comments at 5.

<sup>17</sup> Letter from 60 Bipartisan Members of Congress to Chairman Tom Wheeler, FCC, at 1 (May 5, 2016).

<sup>18</sup> ACA Comments at 57.

<sup>19</sup> Hispanic Technology and Telecommunications Partnership Comments at 2.

<sup>20</sup> LGBT Technology Partnership Comments at 1.

of Section 629 – all in response to consumer demand and in the absence of any government mandates.”<sup>21</sup>

- “Roku has found that in geographic markets where MVPD apps are available they are downloaded by large numbers of subscribers and are used on a regular basis once they have been downloaded. The Time Warner Cable app ranks among the most highly used apps of the more than 3,000 apps on Roku, even with the app currently available only in select markets. Roku also expects these positive trends to continue over time, especially as more MVPDs develop and promote Roku apps to their subscribers.”<sup>22</sup>

And MVPD apps are meeting contractual, regulatory, and security requirements without creating any of the harms to innovation and high-quality programming, unnecessary costs to consumers, or legal infirmities that would result from the Commission’s Set-Top Box Mandate.<sup>23</sup>

Criticisms of the apps-based approach are unfounded. Proponents of the Set-Top Box Mandate complain that MVPD apps are “proprietary” and present MVPD content in a “walled garden” that somehow prevents customers from accessing other content.<sup>24</sup> But there is nothing improper with MVPDs controlling how the service they have paid for, assembled, and curated is presented, which is precisely the MVPD service to which Section 629 applies. This ensures that MVPDs are complying with their programming agreements and regulatory obligations, and enables MVPDs to differentiate their services in the competitive video marketplace.<sup>25</sup> Indeed – and importantly – this is exactly the same approach that apps from Netflix, Hulu, Amazon Prime, and every other video distributor follow in the marketplace, but no one is suggesting that this is

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<sup>21</sup> ARRIS Comments at 5.

<sup>22</sup> Roku Comments at 7.

<sup>23</sup> See, e.g., Comcast Comments at 14-19, 32-60; AT&T Comments at 11-14; NCTA Comments at 148-54; ACA Comments at 57; ARRIS Comments at 11; Roku Comments at 6-8; Copyright Alliance Comments at 14-15; Independent Film & Television Alliance (“IFTA”) Comments at 5-6; Victor Cerda and Other Independent Content Creators (“Cerda et al.”) Comments at 3; MMTC et al. Comments at 21-22.

<sup>24</sup> See Public Knowledge Comments at 3; Engine Advocacy and Fandor Comments at 10-13; TiVo Comments at 4-6; CVCC Comments at 36-37.

<sup>25</sup> See AT&T Comments at 13; EchoStar/Dish Comments at ii-iii, 19; Midcontinent Communications Comments at 2-3; NCTA Comments at 108-09.

“improper” or that Netflix be required to allow Hulu to deliver Netflix’s programming in the Hulu app. Furthermore, the MVPD app experience in no way interferes with customers’ ability to use other apps to access video programming on the retail device. Customers can access content using their MVPD’s app, or toggle to other apps on the device user interface to access content from other distributors.

Proponents of the Set-Top Box Mandate also claim that MVPD apps provide a limited range of content and do not support integrated search.<sup>26</sup> While some of Comcast’s first-generation apps presented only VOD content,<sup>27</sup> its current-generation apps support the linear channel lineup, including PEG and local broadcast channels, VOD programming, and cloud DVR capability. And, as Comcast explained in its comments, it has now launched the Xfinity TV Partner Program to enable smart TVs and other devices to access Xfinity TV service using an open-standards-based HTML5 app, without the need to lease a set-top box from Comcast.<sup>28</sup> Samsung joined as the first partner. Comcast is also open to developing apps for device platforms that do not support HTML5, and, in this regard, announced last month that it is developing a customized app for Roku TVs and streaming players. In the short time since the

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<sup>26</sup> See Amazon Comments at 3-5; Engine Advocacy and Fandor Comments at 8-9; INCOMPAS Comments at 5.

<sup>27</sup> For example, Comcast’s Xfinity apps for certain Samsung smart TVs and Xbox 360 were developed very early in app deployment and only included VOD content. Ultimately, Comcast decided to sunset these apps and expand the availability of current-generation apps to support linear channels, VOD, and cloud DVR recording capability.

<sup>28</sup> See Press Release, Comcast Corp., Comcast Launches Xfinity TV Partner Program; Samsung First TV Partner to Join (Apr. 20, 2016), <http://corporate.comcast.com/news-information/news-feed/comcast-launches-xfinity-tv-partner-program-samsung-first-tv-partner-to-join>; Comcast Comments at 25-30. As Comcast explained, HTML5 with premium video extensions is an open W3C standard. See Comcast Comments at 28-29. HTML5 with premium video extensions was designed to enable service providers to present an interface to their services that includes interactive graphics and video, and this is the manner in which OVDs like Netflix and MVPDs like Comcast are using the standard today. Comcast’s HTML5-based app will appear in the umbrella user interface of device partners, alongside other apps, and once the consumer opens the Xfinity TV app, the Xfinity TV service is presented using the Xfinity user interface. Letter from Jordan B. Goldstein, Vice President, Regulatory Affairs, Comcast, to Marlene H. Dortch, Secretary, FCC, at 2 (May 11, 2016).

launch of the Xfinity TV Partner Program, Comcast has received inquiries from dozens of other companies, further demonstrating the success of the market-driven apps-based approach.<sup>29</sup>

To eliminate any doubt about the continued acceleration of apps, Comcast put forward in its initial comments principles that will ensure (i) an open standards-based app is available to any interested third-party device manufacturer on commercially reasonable terms, and (ii) good faith negotiations on a customized app solution with device manufacturers that do not support that standard. As for integrated search, that is importantly not required by Section 629, since by definition it is concerned with services *not* provided by the MVPD, which clearly goes well beyond the objectives and related authority Congress authorized in the statute. That said, Comcast stated that it is prepared to provide consumers with a capability to search through Comcast's video assets from a device's user interface with playback of a selected asset handled in the Xfinity TV app. However, in order to provide a cohesive customer experience, such integrated search needs to include more than just MVPD apps; it must also include similar data from OVD and other video apps as well. Comcast believes these principles could serve to advance the statutory goals while preserving the rights of content owners and Title VI protections.

Some proponents of the Set-Top Box Mandate suggest that rules are necessary to extend the CableCARD model into the IP environment.<sup>30</sup> But the notion that CableCARD should provide a template for new Commission rules ignores the fact that CableCARD has been a failure in the marketplace. Comcast has done more than any operator to support CableCARD

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<sup>29</sup> See Comcast Comments at 5; David L. Cohen, "*Back to the Future*" Doesn't Work for Set-Top Boxes, Comcast Voices (Apr. 22, 2016), <http://corporate.comcast.com/comcast-voices/set-top-boxes>.

<sup>30</sup> See CVCC Comments at 23-24; Public Knowledge Comments at 10.

devices, but consumer adoption of those devices has been very limited.<sup>31</sup> In contrast, the apps-based model has been an overwhelming success among consumers – and in fact improves upon the CableCARD model by providing access to a broader range of content on retail devices and ensuring that customers have access to the user interface developments that cable providers have worked very hard over the past decade to develop as part of the integrated entertainment experience that cable has become.

As Comcast noted in its initial comments, over 460 million connected, consumer-owned devices support one or more MVPD apps. Roku, an apps-based platform, outsells TiVo devices 10 to 1. Roku’s success belies the supposed need for competitive user interfaces. Providers distribute their video programming using their own branded apps and user interfaces, while Roku and other retail devices can differentiate themselves through top-level menus and guides. “In Roku’s experience, the user interface is an integral part of a video service, including its economics. Mandating that full control of a video service’s user interface be given to third parties would be a significant disruption to the industry that would also impact content owners, advertisers, consumers, and others.”<sup>32</sup>

### **III. THE COMMISSION LACKS THE AUTHORITY TO ADOPT THE SET-TOP BOX MANDATE, AND THE RECORD REINFORCES THAT LEGAL CONCLUSION.**

“When Congress enacted Section 629(a), it made unmistakably clear through the plain text, history, and structure of the statute that the scope of the FCC’s rulemaking authority was

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<sup>31</sup> Cable operators continue to support CableCARDs notwithstanding the *EchoStar* decision, which vacated the CableCARD support rules. Indeed, as NCTA noted, cable operators “continue to have a duty under Rule 76.1204(a)(1) to provide separate security.” NCTA Comments at 173. Thus, there is no need to reinstate the CableCARD support regulations, and “such rules could constrain innovation in the future as they become more and more outdated.” *Id.*

<sup>32</sup> Roku Comments at 3.

limited to assuring the ‘commercial availability’ of ‘equipment’ used by ‘consumers’ to access their *MVPDs*’ service.”<sup>33</sup> Proponents of the Set-Top Box Mandate, however, make abundantly clear in their comments that they view this rulemaking as not being about enabling access to MVPD service on retail equipment, as the statute envisions, but rather about enabling device makers and app developers to offer derivative services using piece-parts of the MVPD service.<sup>34</sup> Google, for example, transparently describes the rulemaking as a way to enhance its search and advertising businesses.<sup>35</sup> Proponents of the rules do not explain how the text of the statute or legislative history support this expanded view of the Commission’s authority – nor can they.<sup>36</sup> No such support exists.

As NCTA points out, “the forced unbundling of MVPD service in order to facilitate the creation of new, derivative services provided by third parties using the disaggregated components of the subscriber’s MVPD service . . . is far beyond the permissible scope of Section 629.”<sup>37</sup> The D.C. Circuit and the Commission itself have both properly recognized these limitations,<sup>38</sup> and the legislative history of the statute confirms Congress’s intent to limit the scope of Section 629 and the Commission’s rulemaking authority to promoting retail devices that

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<sup>33</sup> NCTA Comments, App. A at iii (emphasis in original).

<sup>34</sup> See TiVo Comments at 14-15 (alleging that true retail competition “involves innovative user interfaces, improved search functions including the ability to search across MVPD and OTT content, content recommendation, social media features, and so on that give consumers greater choice and an enhanced user experience”); CVCC Comments at 15; Public Knowledge Comments at 37-39; Consumer Federation of America (“CFA”) Comments at 3, 19-23.

<sup>35</sup> See Google Comments at 3-4.

<sup>36</sup> See, e.g., CVCC Comments at 21-24; Public Knowledge Comments at 4-9.

<sup>37</sup> NCTA Comments, App. A at iii; see also AT&T Comments at 59-63; ACA Comments at 67-70; NTCA—The Rural Broadband Association Comments at 25-27; Roku Comments at 14-16.

<sup>38</sup> See Comcast Comments at 39-40 (citing, among other precedent, the Commission’s *Gemstar Order*, which found that “Section 629 is intended to assure the competitive availability of *equipment*, including *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.” (emphases in original)); see also NCTA Comments, App. A at 13-19.

receive services “provided by” MVPDs.<sup>39</sup> The D.C. Circuit has already warned the Commission against “unbridled” interpretations of Section 629,<sup>40</sup> and that it “cannot simply impose any regulation . . . as a means of promoting the commercial availability of navigation devices, no matter how tenuous its actual connection to [Section] 629’s mandate.”<sup>41</sup> But this is precisely what proponents of the Set-Top Box Mandate would have the Commission do.<sup>42</sup>

In addition, as Comcast and others explained in their initial comments, the proposed unbundling mandate would conflict with other provisions of the Communications Act by impermissibly subjecting MVPDs to common carrier regulation in violation of Section 621(c) and improperly interfering with the provision and content of cable service in contravention of Section 624(f).<sup>43</sup>

Attempts to point to other sources of authority – Section 624A and STELAR – to adopt the proposed rules are likewise unavailing.<sup>44</sup> Section 624A “does not authorize the Commission to promulgate rules, such as those at issue here, that go beyond ensuring compatibility of cable systems with video cassette recorders.”<sup>45</sup> In addition, the notion that STELAR provides a substantive statutory basis for the Set-Top Box Mandate is entirely at odds with the deregulatory

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<sup>39</sup> See Comcast Comments at 40; NCTA Comments, App. A at 24-26.

<sup>40</sup> See *EchoStar Satellite L.L.C. v. FCC*, 704 F.3d 992, 997 (D.C. Cir. 2013).

<sup>41</sup> *Id.* at 997-98. Proponents’ repeated references to *Carterfone*, which merely established a right to attach third-party phone equipment and not the obligation to unbundle and disaggregate the underlying telephone service, do nothing to alter these limitations. Moreover, commenters further explained that, as the Commission has previously recognized, *Carterfone* and the telephone network are not analogous to the video device marketplace. See NCTA Comments at 155-61 (citing prior Commission statements on the issue); AT&T Comments at 67.

<sup>42</sup> It is telling that, while supporting the Set-Top Box Mandate and lauding the purported benefits for consumers and competition, Amazon at the same time insists that the rules should only apply to MVPDs and not to its own video services. Apparently, Amazon believes that the apps model works perfectly well for OVDs and app-powered devices like Amazon Fire TVs and tablets, but not for MVPDs. See Amazon Comments at 9-10.

<sup>43</sup> See, e.g., Comcast Comments at 43-45; NCTA Comments at 163-64 & App. A at 29-30, 33-36.

<sup>44</sup> See, e.g., CVCC Comments at 24-25; INCOMPAS Comments at 10; TiVo Comments at 11-12.

<sup>45</sup> AT&T Comments at 75; see also Comcast Comments at 45; NCTA Comment at 163 & App. A at 64-65.

intent of the statute.<sup>46</sup> In STELAR, Congress *eliminated* the unnecessary integration ban (which cost consumers over \$1 billion dollars) and gave the Commission the very limited task of issuing a report on downloadable security. Once the Commission completed that task, its authority under STELAR was at an end.<sup>47</sup> Certainly, “Congress did not remotely contemplate the kind of heavy-handed government intervention in a working marketplace that the Commission has proposed.”<sup>48</sup> In fact, the legislative history of STELAR reveals that, during consideration of the STELAR bill in the Senate Commerce Committee, Senator Markey proposed an amendment that would have directed the Commission to adopt unbundling rules similar to those proposed in the Set-Top Box Mandate, but withdrew the amendment.<sup>49</sup>

The Commission also cannot ignore the host of other legal issues its misguided Set-Top Box Mandate would create, and no commenter has provided a workable or lawful solution to these issues, which arise from the fact that the *Notice* would take the Commission well outside its statutory authority and expertise.<sup>50</sup> As discussed further below, the proposed rules would

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<sup>46</sup> See CVCC Comments at 22-23; INCOMPAS Comments at 9-10; Public Knowledge Comments at 7; TiVo Comments at 10-11. *But see, e.g.*, CenturyLink Comments at 14 (noting that STELAR directed the Commission to form a working group to develop a not unduly burdensome downloadable security system and that “[t]he Commission’s use of the STELAR-mandated DSTAC process as a jumping off point for new burdensome rules that have as their core purpose fostering the development of an entirely new competitive MVPD navigation ecosystem, directly contravenes that Congressional mandate”).

<sup>47</sup> See *Motion Picture Ass’n of Am., Inc. v. FCC*, 309 F.3d 796, 807 (D.C. Cir. 2002) (“Congress authorized and ordered the Commission to *produce a report* – nothing more, nothing less . . . . Once the Commission completed the task of preparing the report . . . , its delegated authority on the subject ended.”).

<sup>48</sup> AT&T Comments at 65.

<sup>49</sup> See Comcast Comments at 42-43; AT&T Comments at 65.

<sup>50</sup> See NCTA Comments, App. A; *see also* NCTA, *Summary of Legal White Paper: The FCC’s “Competitive Navigation Mandate: A Legal Analysis of Statutory and Constitutional Limits on FCC Authority*, <https://www.ncta.com/sites/prod/files/Summary%20Set-Top%20Box%20Legal%20Issues%20White%20Paper%204-21-16%20FINAL.pdf>.

conflict with copyright law,<sup>51</sup> as well as other intellectual property protections.<sup>52</sup> The Set-Top Box Mandate would also run afoul of the First Amendment by impermissibly compelling speech and also restricting the protected speech of MVPDs and programmers,<sup>53</sup> and would authorize unlawful takings of property in violation of the Fifth Amendment.<sup>54</sup> Furthermore, the Set-Top Box Mandate is otherwise arbitrary and capricious. “The rules would impose tremendous costs on the industry and ultimately consumers, at tremendous risk to innovation and other societal benefits, to fix a ‘problem’ that the market is already efficiently resolving with the apps-based approach – a solution that fully satisfies Section 629.”<sup>55</sup>

Beyond the fact that the Commission would be exceeding its authority with the Set-Top Box Mandate, it would also be acting in an area where the marketplace has already achieved the desired result, making additional requirements unnecessary, unauthorized and at best arbitrary. Notwithstanding the clear evidence that the apps model is being widely embraced in the marketplace, proponents of the Set-Top Box Mandate nevertheless insist that government intervention is somehow warranted. For example, despite the Commission’s repeated findings that the MVPD marketplace is highly competitive,<sup>56</sup> the Consumer Federation of America

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<sup>51</sup> See discussion *infra* Section IV.

<sup>52</sup> See Comcast Comments at 51-54; NCTA Comments, App. A at 55-63.

<sup>53</sup> See AT&T Comments at 87-92; NCTA Comments, App. A at 69-74; Content Companies Comments at 41-42; Motion Picture Association of America (“MPAA”) Comments at 18-19.

<sup>54</sup> See AT&T Comments at 93-95; USTelecom Comments at iv, 17; Content Companies Comments at 42; MPAA Comments at 19-20.

<sup>55</sup> NCTA Comments, App. A at vii.

<sup>56</sup> The Commission itself has underscored that the video marketplace is “markedly different” than it was two decades ago, “with cable operators facing dramatically increased competition,” see *Amendment to the Commission’s Rules Concerning Effective Competition, Implementation of Section 111 of the STELA Reauthorization Act*, Notice of Proposed Rulemaking, 30 FCC Rcd. 2561 ¶¶ 6-7 (2015), and concluded just last year that cable systems nationwide were presumptively subject to effective competition in light of this changed marketplace, see *Amendment to the Commission’s Rules Concerning Effective Competition, Implementation of Section 111 of the STELA Reauthorization Act*, Report and Order, 30 FCC Rcd. 6574 ¶ 1 (2015); see also *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Seventeenth Report, DA 16-510, ¶ 20

suggests that new rules are necessary to promote greater MVPD competition.<sup>57</sup> CFA’s view of the MVPD marketplace bears no resemblance to current realities, where 99 percent of consumers can choose from three or more MVPDs, to say nothing of the plethora of online video options.<sup>58</sup> And this fierce competition is what is driving MVPDs to offer consumers more options for accessing their MVPD services and allowing MVPDs to differentiate themselves from their competitors.<sup>59</sup>

#### **IV. THE RECORD CLEARLY SUBSTANTIATES THAT THE COMMISSION’S SET-TOP BOX MANDATE WOULD ENDANGER THE ENTIRE CONTENT PRODUCTION ECOSYSTEM.**

There is widespread agreement among the vast majority of programmers that have commented in the proceeding, as well as other commenters, that the Commission’s Set-Top Box Mandate “would apply the reverse-Midas touch” to the Golden Age of video and pose grave risks to the robust array of diverse and high-quality content choices consumers enjoy today.<sup>60</sup> The Commission’s proposed rules would undermine programming agreements, harm diverse and

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& tbl. III.A.2 (May 6, 2016) (“Seventeenth Video Competition Report”); *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Sixteenth Report, 30 FCC Rcd. 3253 ¶¶ 30-31 & n.71 (2015) (finding that 99 percent of consumers can choose from three or more traditional MVPDs); *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Fifteenth Report, 28 FCC Rcd. 10496 ¶ 354 (2013) (finding that “the [device] marketplace is more dynamic than it has ever been.”).

<sup>57</sup> CFA Comments at 19-23; *see also* Public Knowledge Comments at 37-39.

<sup>58</sup> Seventeenth Video Competition Report ¶ 20 & tbl. III.A.2.

<sup>59</sup> This intense competition also undermines the rationale for any new anti-subsidy rules. Such rules are tantamount to rate regulation, and are particularly unwarranted given that the Commission concluded that there is a rebuttable presumption the cable operators are subject to effective competition. *See* discussion *supra* note 56; *see also* NCTA Comments at 169-72; AT&T Comments at 97-100. Indeed, the Commission itself has recognized that “subsidies by entities lacking market power present little risk of consumer harm and to impose restrictions would create market distortions.” *Implementation of Section 304 of the Telecommunications Act of 1996; Commercial Availability of Navigation Devices*, Report and Order, 13 FCC Rcd. 14775 ¶ 92 (1998); *see also* AT&T Comments at 98. As AT&T observed, these rules would “impose costly and artificial pricing requirements for no benefit.” AT&T Comments at 99.

<sup>60</sup> *See* Rep. Henry Waxman, *FCC Cable Box Proposal Affects More Than Just Cable Boxes*, The Hill, Congress Blog (Mar. 21, 2016), <http://thehill.com/blogs/congress-blog/technology/273590-fcc-cable-box-proposal-affects-more-than-just-cable-boxes>.