

BEFORE THE  
Federal Communications Commission  
WASHINGTON, D.C.

In the Matter of	)	
	)	
Video Device Competition	)	MB Docket No. 10-91
	)	
Implementation of Section 304 of the Telecommunications Act of 1996	)	
	)	
Commercial Availability of Navigation Devices	)	CS Docket No. 97-80
	)	
Compatibility Between Cable Systems and Consumer Electronics Equipment	)	PP Docket No. 00-67
	)	

**REPLY COMMENTS OF MOTOROLA, INC.**

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**TABLE OF CONTENTS**

**I. INTRODUCTION AND SUMMARY.....1**

**II. THE RECORD AFFIRMS THAT THE VIDEO DEVICE MARKETPLACE IS WORKING TOWARDS ACHIEVING THE GOALS OF SECTION 629.....2**

**III. COMMENTERS AFFIRM THAT PROPOSALS FOR INTRUSIVE REGULATION AND TECHNOLOGY MANDATES WOULD STIFLE INNOVATION AND HARM CONSUMERS. ....6**

**A. The Commission Should Not Adopt Rules That Limit What the AllVid Device Can Do or the Technologies the Device Can Support.....7**

**B. Calls for “Common Reliance” Are Misguided.....10**

**C. AllVid Cost Estimates Are Entirely Speculative and, Even if Accurate, Would Mean Significant Added Expense for Consumers.....13**

**IV. CONCLUSION .....16**

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**REPLY COMMENTS OF MOTOROLA, INC.**

Motorola, Inc. (“Motorola”) respectfully submits these reply comments in response to the comments filed in the above-captioned proceeding.<sup>1</sup> As the initial comments filed by Motorola and others demonstrated, innovation and investment in the video device marketplace are thriving, and the Commission should avoid regulations or mandates that stifle continued innovation.

**I. INTRODUCTION AND SUMMARY**

The record in this proceeding underscores the breakneck pace of innovation in the video device marketplace. A new generation of smart video devices, home networking solutions, and video services are providing consumers with the ability to access content from a variety of sources and to view that content on a diverse array of devices, where and when they want to

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<sup>1</sup> *In re Video Device Competition; Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices; Compatibility Between Cable Systems and Consumer Electronics Equipment*, Notice of Inquiry, 25 FCC Rcd. 4275 (2010) (“Notice”).

watch. As Motorola explained in its initial comments, the Internet Era of Television is here, and consumers are the beneficiaries.

Commenters disagreed on how best to ensure that this trend towards consumer empowerment continues. Many commenters agreed with Motorola that the Commission could best promote these trends by encouraging the work of cross-industry organizations, such as the Digital Living Network Alliance (“DLNA”), that are facilitating device interoperability in the absence of any government mandates. However, some commenters urged the Commission to adopt mandates that specify the technical features and functions of AllVid adapters and require “common reliance” by MVPDs on such adapters.

The Commission should refrain from imposing technical and common reliance mandates. As numerous commenters pointed out, such mandates would conflict with Congress’s directive that the Commission avoid navigation device policies that freeze or chill innovation, and also would raise a host of jurisdictional and other legal issues. Moreover, by imposing mandates on only some marketplace participants, but not others, the Commission would be repeating the mistakes of the CableCARD regime. To the extent the Commission elects to consider rules in this area, such rules should focus on performance requirements and provide MVPDs and device manufacturers with as much flexibility as possible with respect to the features and functions of the AllVid adapter.

## **II. THE RECORD AFFIRMS THAT THE VIDEO DEVICE MARKETPLACE IS WORKING TOWARDS ACHIEVING THE GOALS OF SECTION 629.**

Commenters widely affirmed that the marketplace for video devices is rapidly evolving and innovating in many different directions. The Internet Era of Television has arrived. Service and content providers and equipment manufacturers are responding to consumer demand for compelling content delivered whenever, wherever, and however consumers want it by

introducing a new generation of smart video devices, home networking solutions, and innovative video service business models.

As Motorola explained in its initial comments, competition in the video device marketplace is no longer limited to traditional televisions, set-top boxes, and standalone recording devices that access traditional MVPD and broadcast content.<sup>2</sup> Cablevision, for example, noted that there are now 17 different types of standalone devices that can access Netflix's streaming video service.<sup>3</sup> TiVo's DVRs combine content from Netflix, Blockbuster, and Amazon with standard linear TV programming.<sup>4</sup> Likewise, Google noted how it has partnered with Dish Network to build "an interactive video experience that joins the previously separate spheres of traditional pay-TV programming and rich Web content" and plans to roll out the service this fall.<sup>5</sup> Innovation in MVPD-leased set-top boxes also is exploding. For example, DIRECTV commented that in the last 15 months alone, it has added 75 new features to its set-top box.<sup>6</sup>

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<sup>2</sup> See Motorola Comments at 5-6. Unless otherwise noted, all citations to comments herein are to comments filed in MB Docket No. 10-91 on or about July 13, 2010. Recent forecasts confirmed that over-the-top ("OTT") video services are experiencing tremendous growth, and will reach approximately 75 million homes by 2014. See Rick Ducey, *Over The Top (OTT) Homes Top Cable by 2013*, BIA|Kelsey, July 19, 2010, available at <http://blog.bia.com/bia/2010/07/19/over-the-top-ott-homes-top-cable-by-2013/>.

<sup>3</sup> Cablevision Comments at 16. These include multi-function devices such as gaming consoles and Blu-ray players. *Id.*

<sup>4</sup> TiVo Premiere Product Information, <http://www.tivo.com/products/tivo-premiere/index.html> (last visited Aug. 12, 2010). Recent TiVo agreements with certain cable operators also will enable delivery VOD content to TiVo's retail devices. See, e.g., Todd Spangler, *Cox Opens VOD Door to TiVo*, Multichannel News, Aug. 12, 2010, available at [http://www.multichannel.com/article/455967-Cox\\_Opens\\_VOD\\_Door\\_To\\_TiVo.php](http://www.multichannel.com/article/455967-Cox_Opens_VOD_Door_To_TiVo.php).

<sup>5</sup> Google Comments at 6. Cisco noted that Roku, which previously produced standalone boxes for streaming over-the-top video, is now working on adding traditional VOD options to its standalone player. See Cisco Comments at 12-13.

<sup>6</sup> DIRECTV Comments at 3.

Advances also are occurring in the home networking space. As Panasonic noted, “the increasing availability of [over-the-top] video delivery (including to consumers’ television screens) is motivating MVPDs to expand the availability of their programming on unaffiliated devices and platforms.”<sup>7</sup> NCTA detailed the various networking solutions that are available or are emerging in the marketplace today.<sup>8</sup> Motorola described its Multi-Room DVR solutions,<sup>9</sup> and other commenters discussed their own wireline home-networking solutions.<sup>10</sup> For example, Cablevision discussed its PC to TV Media Relay, which allows computer content to be displayed on a TV over the home network,<sup>11</sup> and Cisco described its Next Generation IP Video Platform, which “merge[s] on a single platform MVPD managed video, managed and unmanaged broadband video” and a host of other services.<sup>12</sup> Still others noted innovations that are occurring over wireless home networks.<sup>13</sup>

In concert with these and other technological advances, service providers are experimenting with a wide range of new products and business models. Motorola explained how the development and deployment of EBIF-enabled set-top boxes are providing consumers with a

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<sup>7</sup> Panasonic Comments at 7.

<sup>8</sup> See NCTA Comments at 11-13.

<sup>9</sup> See Motorola Comments at 10-12. Of note, the universe of providers offering Motorola’s Multi-Room DVR service is expanding. See *Cincinnati Bell Launches Motorola Multi-Room DVR*, Cable360.net, July 27, 2010, available at <http://www.cable360.net/technology/news/42448.html>.

<sup>10</sup> See, e.g., HomeGrid Forum Comments at 1; HomePlug Powerline Alliance Comments at 1; HomePNA Comments at 1; MoCA Comments at 1.

<sup>11</sup> Cablevision Comments at 10.

<sup>12</sup> Cisco Comments at 14.

<sup>13</sup> See, e.g., Panasonic Comments at 6. Panasonic also noted that “MVPDs with all-IP content delivery can offer equivalent ‘AllVid functionality’ now, without the need for any specific or specified AllVid device” and that “[a]s MVPDs complete the transition to IP delivery, any mandated AllVid adapter would likely become a vestigial regulation only imposing unnecessary costs on consumers.” *Id.* at 8.

number of new Web-like interactive applications, and how its Medios cloud-based product enables the seamless integration of MVPD, Internet, and other content in legacy cable systems.<sup>14</sup> Likewise, Cablevision emphasized how its cloud-based solutions provide customers with more content and service options on a more cost-effective basis.<sup>15</sup> EchoStar described its Slingbox time-shifting technology.<sup>16</sup> Panasonic underscored how the migration of MVPD networks to IP can be used to leverage new cloud-based service offerings,<sup>17</sup> and AT&T and Verizon are already innovating with total or hybrid IPTV options.<sup>18</sup> DIRECTV discussed its upcoming plans for a “shopping mall” of video content of the type Chairman Genachowski has discussed.<sup>19</sup>

In contrast, commenters who supported new technical mandates in this area insisted that the marketplace for video devices has not materialized and that government regulations are necessary to address this perceived market failure.<sup>20</sup> There are two basic points worth making about this view. First, these commenters appear focused on a narrow subset of video devices, namely CableCARD-enabled devices, and do not properly account for the much wider array of products available in the marketplace today, including devices that can access cable, DBS, telco,

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<sup>14</sup> See Motorola Comments at 12-13. Likewise, Motorola also noted that the new Droid mobile phone can support the Blockbuster on Demand video streaming service. See *id.* at 5 n.7.

<sup>15</sup> See Cablevision Comments at 9-10.

<sup>16</sup> See Dish/EchoStar Comments at 3.

<sup>17</sup> See Panasonic Comments at 9.

<sup>18</sup> See, e.g., AT&T Comments at 11 (describing how AT&T is beginning to provide the ability to access its services from other CE devices like the Xbox 360, PCs, and mobile phones, obviating the need for a set-top box); Verizon Comments at 9 (describing how Verizon and other service providers differentiate themselves from competitors by provisioning innovative features and improving the underlying technologies they use).

<sup>19</sup> DIRECTV Comments at 4-9.

<sup>20</sup> See, e.g., Free Press Comments at 1-2; TiVo Comments at 4-5. Public Knowledge seems to support this view of the marketplace, despite citing to many of the innovations discussed here. See Public Knowledge Comments at 3 n.11.

or other MVPD content and/or content from the Internet and other sources. Second, even assuming arguendo that the relevant marketplace is limited to CableCARD devices, the absence of consumer interest in retail CableCARD devices is not evidence of market failure. Rather, as the economist report submitted by NCTA explained, “[l]ow demand for retail set-top boxes is a product of rational consumer preferences.”<sup>21</sup> There are numerous reasons why consumer prefer to lease, rather than buy, their cable set-top box: “leasing allows consumers to avoid sunk costs when upgrading equipment, leasing provides service and support from the same source as the content, leasing permits easier switching among MVPDs, and leasing reduces the upfront costs to a consumer.”<sup>22</sup> None of these reasons is indicative of market failure.<sup>23</sup>

### **III. COMMENTERS AFFIRM THAT PROPOSALS FOR INTRUSIVE REGULATION AND TECHNOLOGY MANDATES WOULD STIFLE INNOVATION AND HARM CONSUMERS.**

Several commenters urged the Commission to impose technical and “common reliance” mandates on MVPDs. However, as Motorola and numerous other parties pointed out, such proposals would chill investment and innovation in the video device marketplace, and ultimately harm consumers. Furthermore, estimates by certain commenters regarding the potential costs of the AllVid adapter are speculative and, in any event, merely highlight how a mandate that every

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<sup>21</sup> Michael G. Baumann & John M. Gale, *Economic Analysis of MVPD Navigation Devices*, at 1 (July 19, 2010) (“NCTA Economist Report”), attached to Letter from Neal Goldberg, Vice President and General Counsel, NCTA, to Marlene H. Dortch, Secretary, FCC, MB Docket No. 10-91 (July 19, 2010).

<sup>22</sup> *Id.* at 4-8; see also Cisco Comments at 6-8. The Commission itself has noted that delivery platforms evolve at a rapid pace, see *Notice* ¶ 16, and the leasing market addresses this by allowing consumers to have the ability to upgrade to the latest technology to ensure compatibility. This is not unlike the mobile phone industry, where consumers similarly prefer to avoid up-front costs and also enjoy an upgrade path to the latest technology. See Cisco Comments at 6. TiVo itself has acknowledged that, all things being equal, consumers prefer to lease devices. Comments of TiVo Inc. on NBP Public Notice #27, GN Docket Nos. 09-51 *et al.*, at 12 (Dec. 22, 2009) (“[W]hen faced with the choice of buying or leasing a set-top box that performs exactly the same functions, in the same way, with the same user interface, consumers will opt to lease set-top boxes.”).

<sup>23</sup> See NCTA Economist Report at 8-10.

MVPD customer lease an adapter would increase consumer costs with no clear public interest benefits. Rather than follow this approach, the Commission should encourage and facilitate the work being done by various inter-industry organizations.<sup>24</sup>

**A. The Commission Should Not Adopt Rules That Limit What the AllVid Device Can Do or the Technologies the Device Can Support.**

Certain commenters asked the Commission to limit the functionality of the AllVid adapter. For example, CEA/CERC and others urged the Commission to define certain functions or features as “reserved” functions that the AllVid may not include.<sup>25</sup> Likewise, various commenters proposed that the Commission impose technology mandates that would force equipment manufacturers and service providers to use certain technologies to implement certain AllVid functions.<sup>26</sup> The Commission should reject these proposals. Restricting the functions of the AllVid adapter, or requiring the use of certain technologies, would stifle innovation and investment in this marketplace, ultimately harming consumers.

Proponents of limiting the capabilities of the AllVid device argued that limitations are necessary because “it would destroy the definition and nature of gateway devices to allow gateways also to serve as clients, competing with the products and choices that they are there to

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<sup>24</sup> See Motorola Comments at 21-22 (noting work of DLNA and DECE); NCTA Comments at 13-14 (detailing inter-industry efforts to facilitate home networking); Verizon Comments at 5 & 25 (noting work of ATIS, DLNA, MoCA, and RVU); AT&T Comments at 8-9 (discussing work of DLNA on remote user interfaces). In this vein, the recent announcement by the Digital Entertainment Content Ecosystem consortium regarding its new UltraViolet brand for products and services provides yet another example of the important work being accomplished by these groups. See *Digital Entertainment Content Ecosystem Unveils UltraViolet Brand*, Broadcast Engineering, July 28, 2010, <http://broadcastengineering.com/automation/digital-entertainment-content-ecosystem-unveils-ultraviolet-brand-20100728/>.

<sup>25</sup> CEA/CERC Comments at 5-7.

<sup>26</sup> See, e.g., Public Knowledge Comments at 11 (urging the Commission to require use of VP8 encoding technology).

support.”<sup>27</sup> Essentially, these commenters argued that the adapter should not be allowed to function as a set-top box -- *i.e.*, the adapter may not include display outputs, recording capability, or navigation functions, among other things.<sup>28</sup>

Motorola believes that such an approach would harm consumers by potentially denying them more cost-effective equipment options. For example, Motorola’s experience with whole-home DVR solutions shows that consumers like using a single device to perform both recording functions and gateway-type functions (by distributing content to client devices in the home). However, under the approach favored by CEA/CERC and certain other commenters, the consumer would be forced to obtain two separate pieces of equipment -- the AllVid adapter plus a leased or retail DVR. This would require the consumer to incur added costs regardless of whether the consumer wants the AllVid adapter.

To the extent the Commission decides to consider rules in this area, a more consumer-friendly approach would be to “only establish the minimum permissible functionality of the AllVid system rather than intentionally or inadvertently setting a ceiling on innovation.”<sup>29</sup> This approach would ensure that the AllVid adapter can perform the essential tasks necessary to support the wide variety of smart video devices and home networking solutions that consumers demand, while still allowing service providers and equipment manufacturers the flexibility to meet evolving consumer demands in the most efficient, cost-effective manner possible.

CEA/CERC and certain other commenters also proposed that the Commission impose technical requirements on the AllVid device. For example, Sony urged the Commission to

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<sup>27</sup> CEA/CERC Comments at 12.

<sup>28</sup> *See, e.g.*, TiVo Comments at 10-11.

<sup>29</sup> Panasonic Comments at 10; *see also* Cisco Comments at 22; Motorola Comments at 28-29.

mandate DLNA-endorsed standards for the adapter,<sup>30</sup> while Intel and Google recommended a Commission requirement that the adapter incorporate universal plug-and-play (“UPnP”) technology for service discovery.<sup>31</sup>

These technologies certainly have their strengths, but, as Motorola and others pointed out in their initial comments, the “best” solution for any given situation will depend on the characteristics of the network, the needs and preferences of the consumer, and the nature of the content being distributed, among other things.<sup>32</sup> A prime example of this is DTCP-IP. As AT&T and others noted, DLNA guidelines include DTCP-IP for link protection between the gateway and the client device, but DTCP-IP is not a complete solution for securing content in the client device, nor is it the only way to provide link protection.<sup>33</sup> A Commission mandate to require the use of certain technologies would prevent service providers and equipment manufacturers from developing solutions that meet the particular demands of consumers and content suppliers,<sup>34</sup> and would thereby stifle continued investment and innovation in this space.<sup>35</sup>

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<sup>30</sup> See Sony Comments at 10-11.

<sup>31</sup> See Intel Comments at 6; Google Comments at 12.

<sup>32</sup> See Motorola Comments at 16 (discussing the choice between the set-back proposal and the gateway proposal); Dish/EchoStar Comments at 9 (“[T]he ultimate form, placement, and function of the AllVid adapter will depend on the needs of the consumer.”); see also Cisco Comments at 20 & 29 (noting that, as proposed, AllVid would hinder DBS and telco providers); Verizon Comments at 15 (“A uniform, lowest common denominator mandate would undermine MVPDs’ ability to offer differentiated services to customers.”).

<sup>33</sup> See AT&T Comments at 34-37; Charter Comments at 7-8 (explaining how DTCP-IP does not support all business models); DIRECTV Comments at 17; Dish/EchoStar Comments at 11-12; MPAA Comments at 4-5. Moreover, as Time Warner, Inc. noted, “reliance on a single content protection technology significantly increases the likelihood that it will be compromised, which in turn creates unacceptable security risks and raises serious questions about renewability and revocation.” Time Warner, Inc. Comments at 10.

<sup>34</sup> For example, there are a wide range of different digital rights management (“DRM”) options for securing the content available in the marketplace today. See Digital Rights Management – Wikipedia, [http://en.wikipedia.org/wiki/Digital\\_rights\\_management](http://en.wikipedia.org/wiki/Digital_rights_management) (last visited Aug. 12, 2010) (providing a table with 16 different DRM solutions for personal computers, portable devices, and storage media).

In the event that the Commission elects to consider AllVid rules, a preferable alternative would be for the Commission to “articulate a functional ‘baseline’ to achieve stated policy objectives [and] allow manufacturers, consumers, and other interested parties to use the marketplace to settle on technologies that meet (or exceed) that baseline.”<sup>36</sup> A performance-based approach could ensure that the AllVid device performs the basic functions that the Commission believes necessary to support the wide variety of devices and services that consumers demand today, while giving service providers and equipment manufacturers the flexibility to implement different technologies to differentiate their products and offer devices and services that appeal to different consumers in different circumstances.

**B. Calls for “Common Reliance” Are Misguided.**

CE manufacturers and consumer interest groups urged that the Commission adopt a “common reliance” policy for AllVid -- *i.e.*, that leased and retail smart devices commonly rely on the adapter.<sup>37</sup> They claimed that common reliance is the only way to ensure MVPD support for an AllVid solution.<sup>38</sup> Similar claims have been made over the years in the CableCARD

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(...footnote continued)

<sup>35</sup> See Motorola Comments at 22-24; see also Panasonic Comments at 6 (“the Commission should not ossify this innovative environment by mandating a particular home networking technology in its rules”). Several commenters suggested that the Commission consider rules relating to the specific conditional access technologies that MVPDs may deploy in their networks. See, e.g., NagraVision Comments at 3-7; Sony Comments at 29-30. As NagraVision itself has noted previously, “[t]he Commission has a mandate in Section 629 to assure the commercial availability of *navigation devices*, not conditional access systems.” Letter from Robin Wilson, Vice President, NagraVision USA, to Marlene H. Dortch, Secretary, FCC, CS Dkt. No. 97-80, at 1 (filed Sept. 30, 2009) (emphasis in original). As such, mandates in this area would be beyond the scope of the Commission’s authority and the goals of this proceeding. In any event, conditional access solutions will vary depending on the type of MVPD network involved, and decisions about what conditional access system is optimal for a particular network are best left to marketplace participants.

<sup>36</sup> TIA Comments at 8; see also Motorola Comments at 28-30; Panasonic Comments at 10.

<sup>37</sup> See CEA/CERC Comments at 14-15; Free Press Comments at 5; Public Knowledge Comments at 9; Sony Electronics Comments at 10-11; TiVo Comments at 11.

<sup>38</sup> See, e.g., Free Press Comments at 5, Public Knowledge Comments at 9.

context, and the results of that policy are abundantly clear. Cable operators have had to deploy over 21 million CableCARDS in their leased set-top boxes, while CE manufacturers have largely abandoned the retail CableCARD business.<sup>39</sup> In short, there has been nothing “common” about common reliance. It has been a costly failure, and the policy should not be adopted here.

Common reliance mandates would distort the smart device marketplace because they would be imposed only on MVPDs. As NCTA explained, “MVPDs are only one part of the market” and “CE will not commit to build devices and big box retailers will not commit to stock devices that they do not see as having adequate market demand.”<sup>40</sup> Furthermore, over-the-top (“OTT”) video providers would remain completely unaffected by AllVid rules, allowing them to innovate at a much more rapid pace than MVPDs without regard to any support requirements.<sup>41</sup> Mandating specific technologies and solutions raises numerous problems in and of itself; these problems are further exacerbated if all obligations are placed only on one set of marketplace participants.

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<sup>39</sup> See Letter from Neal M. Goldberg, Vice President and General Counsel, NCTA, to Marlene H. Dortch, Secretary, FCC, CS Dkt. No. 97-80, at 1 (June 23, 2010) (noting that the 10 largest cable operators have deployed more than 21 million CableCARD-enabled set-top boxes, while 520,000 CableCARDS have been deployed for use in retail CableCARD devices). The *Notice* itself recognizes that common reliance on CableCARDS did not lead to the manufacture or adoption of retail CableCARD devices. See *Notice* ¶ 10 (“Although following adoption of the CableCARD rules some television manufacturers sold [UDCPs], most manufacturers have abandoned the technology.”); *id.* (“[R]etail device manufacturers have abandoned CableCARD technology before any substantial benefits of the integration ban could be realized.”).

<sup>40</sup> NCTA Comments at 42. This mirrors CEA’s and CERC’s lack of commitment to build or stock CableCARD-enabled devices. See, e.g., Reply Comments of National Cable & Telecommunications Association, CS Dkt. No. 97-80, PP Dkt. No. 00-67, at 3-4 (June 28, 2010) (“[Congress] did not tell the Commission to force the cable industry to single-handedly create [a] market all at its own expense, without a single commitment from CE manufacturers, retailers, or other MVPDs. Where are CEA’s proposed rules that would require manufacturers to build set-top functionality into their devices, or provide adequate customer support? Where are CERC’s proposed rules that would require retailers to carry CableCARD-enabled set-top boxes?”).

<sup>41</sup> See NCTA Comments at 30 (noting that it is especially important that the Commission not deny MVPDs’ flexibility to innovate if OTT video providers are unconstrained in the devices and services they provide).

Common reliance mandates also would place MVPDs in a technological straightjacket. Proponents of common reliance call not only for leased and retail smart devices to commonly rely on the AllVid adapter, but also for all MVPD services to be made available through the adapter.<sup>42</sup> This would mean that MVPDs would have to roll out new services in lockstep with CE devices -- and presumably only after such new services had been adopted in a standardization process and blessed by the Commission. Moreover, MVPDs would be obligated to make their services backwards-compatible with legacy CE devices on an ongoing basis and would be barred from deploying devices that are incompatible with the AllVid adapter. As NCTA aptly noted, a “rigid prohibition on devices that are not compatible with an AllVid adapter would likely preclude new innovations that we cannot imagine today that might not be supported by other devices available at retail.”<sup>43</sup>

Such a policy would contravene Congress’s clear directive in the legislative history accompanying Section 629 that “the Commission avoid actions which could have the effect of freezing or chilling the development of new technologies and services.”<sup>44</sup> It also would conflict with prior Commission statements about the need to avoid constraining cable innovation. In its *2005 Navigation Device Order*, the Commission emphasized that “[i]t is not our intent to force cable operators to develop and deploy new products and services in tandem with [CE]

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<sup>42</sup> See, e.g., CEA/CERC Comments at 9 (“The sole function of a gateway device should be the provision of MVPD services and programming . . . .”); *id.* at 14 (explaining that MVPDs’ new client-side devices for their own systems should be gateway-reliant); TiVo Comments at 8 (“[T]he core and minimum functions of a gateway are to securely enable and transparently support the delivery of the MVPD services to one or more client devices on the home network . . . .”); see also Sony Comments at 7-8 (arguing for a single, nationwide standard for MVPD service delivery, and that MVPDs should be obligated to provide adapters that support this standard).

<sup>43</sup> NCTA Comments at 29.

<sup>44</sup> S. Rep. No. 104-230, at 181 (1996) (Conf. Rep.); see also *In re Implementation of Section 304 of the Telecommunications Act of 1996; Commercial Availability of Navigation Devices*, Report and Order, 13 FCC Rcd. 14775 ¶ 16 & n.23 (1998).

manufacturers.”<sup>45</sup> Rather, “operators are free to innovate and introduce new products and services without regard to whether [CE] manufacturers are positioned to deploy substantially similar products and services.”<sup>46</sup> Likewise, in its *2009 SDV Order*, the Commission stated that “[o]ur UDCP rules were not intended to provide access to bi-directional services or to freeze all one-way cable programming services in perpetuity.”<sup>47</sup>

Finally, as multiple commenters pointed out, common reliance is not necessary because MVPDs have every incentive “to design services that are compatible with retail devices so that their services [are] accessible to the widest possible audience.”<sup>48</sup> The deployment of MVPD solutions like TV Everywhere that enable the delivery of MVPD content to third-party devices underscores this point. As Cisco further explained, “MVPDs’ interests are already aligned with home networking efforts,” rendering “support and installation issues that motivated common reliance in the CableCARD context . . . inapplicable.”<sup>49</sup>

**C. AllVid Cost Estimates Are Entirely Speculative and, Even if Accurate, Would Mean Significant Added Expense for Consumers.**

Sony noted in its comments that DLNA-compatible devices in the marketplace today provide a useful metric for the likely cost of the AllVid adapter.<sup>50</sup> Sony observed that current

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<sup>45</sup> *In re Implementation of Section 304 of the Telecommunications Act of 1996; Commercial Availability of Navigation Devices*, Second Report and Order, 20 FCC Rcd. 6794 ¶ 30 (2005) (“*2005 Navigation Device Order*”).

<sup>46</sup> *Id.*

<sup>47</sup> *See In re Oceanic Time Warner Cable et al.*, Order on Review, 24 FCC Rcd. 8716 ¶ 11 (2009) (“*2009 SDV Order*”).

<sup>48</sup> NCTA Comments at 29; *see also* Cisco Comments at 28.

<sup>49</sup> Cisco Comments at 28.

<sup>50</sup> *See* Sony Comments at 27-28; *see also* Grupo Communications Comments at 3 (arguing that AllVid adapters will be less expensive than devices offered by service providers today); Public Knowledge Comments at 20 (arguing that the AllVid adapter will deliver lower prices to consumers).

DLNA-certified devices that include hard disk drive storage capacity typically cost around \$200,<sup>51</sup> and concluded that “[g]iven that an AllVid gateway would need to include a subset of this functionality” but not a hard disk drive, “the cost should be lower, and much lower at higher volumes.”<sup>52</sup>

These claims are speculative. The AllVid adapter is still just a concept, and neither Sony nor anyone else can reliably predict the costs of developing and deploying such a device.<sup>53</sup> Regardless, requiring *all* MVPD customers to use the AllVid adapter would translate into new costs for customers.<sup>54</sup> “[T]he [AllVid] mandate increases the number of devices in the home, even though many consumers may be averse to a directive that increases -- rather than reduces -- the number of the devices in the home. . . .”<sup>55</sup> As noted above, some consumers may prefer a gateway device that performs set-top box and gateway functions. Other consumers may not want a home network at all. For example, some cable customers may prefer the simplicity of using digital transport adapters (“DTAs”) to access their cable service. It is uncertain how DTAs could even work in an AllVid environment, but, even assuming that DTAs continue to be a viable option for consumers, they could no longer be deployed on a standalone basis.

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<sup>51</sup> Sony Comments at 27.

<sup>52</sup> *Id.* at 27-28.

<sup>53</sup> Moreover, Sony’s comparison to a DLNA-compatible device is flawed. DLNA-compatible devices do *not* typically include certain functions that the Commission envisions being performed in the AllVid adapter, including demodulation, conditional access, and technology for communicating with the MVPD network and translating MVPD services.

<sup>54</sup> *See, e.g.*, Massillon Cable Comments at 3 (requiring every MVPD to install in every customer’s homes some type of gateway device would limit customer choice and increase all costs to consumers); Verizon Comments at 20 (noting that AllVid requirements would be costly).

<sup>55</sup> Cablevision Comments at 21.

Consumers would have to add an AllVid adapter whether they want it or need it.<sup>56</sup> As Dish urged in its comments, before proceeding with any AllVid mandates, the Commission should study the costs associated with this initiative, and balance these costs with the anticipated benefits.<sup>57</sup>

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<sup>56</sup> *Id.* (“Consumers who wish only to enjoy ‘basic’ television service would still be required to lease and install AllVid devices . . .”); NCTA Comments at 29 (“The Commission should not saddle every MVPD customer with the cost of AVI-equipped devices that many consumers many neither want nor need.”); Motorola Comments at 16 (explaining that the “appropriate” gateway solution will depend on the particular customer and service provider); Time Warner Cable Comments at 5 (“[E]xperience thus far demonstrates the wisdom of a flexible approach that takes account of what consumers actually want and what precisely would be required to meet those needs.”).

<sup>57</sup> *See* Dish/EchoStar Comments at 13. It also bears emphasis that, in the cable context, consumer harms would be compounded if, as CE commenters urged, the Commission were to maintain CableCARD requirements on an indefinite basis. *See* CEA/CERC Comments at 5 & 20-21; TiVo Comments at 17-18. Under such a regulatory regime, customers would be incurring the costs of CableCARD *and* AllVid regardless of what their equipment preferences might be.

#### **IV. CONCLUSION**

The record in this proceeding confirms Motorola's belief that the Commission should adopt policies that let consumer demand continue to drive innovation in the video device marketplace. To the extent the Commission adopts rules in this area, it should avoid technology and common reliance mandates, but rather consider rules that establish minimum baselines and performance-based requirements that accommodate, to the greatest extent possible, continued innovation, experimentation, and competition.

Respectfully submitted,

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