



National Cable & Telecommunications Association
25 Massachusetts Avenue, NW – Suite 100
Washington, DC 20001
(202) 222-2300

www.ncta.com

Neal M. Goldberg
Vice President and General Counsel

(202) 222-2445
(202) 222-2446 Fax

February 5, 2014

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

**Re: MB Docket No. 10-91; CS Docket No. 97-80; MB Docket No. 07-269;
PP Docket No. 00-67**

Dear Ms. Dortch:

Michael K. Powell, President and CEO of the National Cable & Telecommunications Association, today sent a letter to Chairman Wheeler, a copy of which is attached. Copies were also sent to Chairman Wheeler's Chief of Staff Ruth Milkman, his Legal Advisor Maria Kirby, and his Confidential Assistant Deborah Ridley. Please include this letter in the above-referenced dockets. If you have any questions about this submission, please contact me.

Respectfully submitted,

/s/ **Neal M. Goldberg**

Neal M. Goldberg

Attachment

cc: Chairman Wheeler
Ruth Milkman
Maria Kirby
Deborah Ridley



National Cable & Telecommunications Association
25 Massachusetts Avenue, NW, Suite 100
Washington, DC 20001-1431
(202) 222-2300

Michael K. Powell
President and Chief Executive Officer

(202) 222-2500
(202) 222-2514 Fax

February 5, 2014

The Honorable Tom Wheeler
Chairman
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: MB Docket No. 10-91; CS Docket No. 97-80; MB Docket No. 07-269

Dear Mr. Chairman:

In your remarks at CES, you noted how change is occurring so rapidly that regulators are better served by defining values to be protected rather than trying to prescribe the precise solution for technology or the market. Your observation is particularly incisive in the world of multichannel video navigation devices. If one were to believe the portrait painted recently by the so-called "AllVid Tech Company Alliance," innovation and choice in video devices is so sparse that the Commission must prescribe one universal technical solution.¹ But CES 2014 demonstrated quite the contrary: the remarkable variety of technological approaches and the dizzying speed with which the market is providing American consumers the ability to enjoy multichannel, Internet, and other content through multiple devices in and outside of the home. For its part, the cable industry is one of many industries clearly committed to this rapid innovation and to offering consumers attractive and compelling user experiences. Developments throughout 2013 and new technologies displayed at CES 2014 underscore that innovative offerings continue to emerge rapidly and in unexpected ways, without regulation or the need for technology mandates.

Cable Service as an Application on Retail Devices. Today, rather than having to lease a set-top box from their cable operator, consumers can buy at retail Smart TVs, gaming devices, smartphones and tablets, and all sorts of other devices that will enable them to watch cable programming. Rather than relying upon CableCARDS in those devices, services are delivered via IP-based applications that can receive the cable operator's IP-based services on different platforms and devices.

¹ Letter from AllVid Tech Company Alliance to Marlene H. Dortch, Secretary, FCC, CC Docket 97-80 (Jan. 16, 2014).

The variety of those devices is growing faster than anyone could have imagined. For example:

- Mobile platforms like Apple's iOS and Google's Android enjoy access to cable programming through apps from Comcast, Time Warner Cable, Cox, Charter, Cablevision, and Bright House.
- Microsoft's Xbox 360 can access video from Comcast, Time Warner Cable, and others. Comcast also offers its video-on-demand experience to subscribers on certain Samsung Smart TVs.
- Time Warner Cable now provides subscribers with access to 300 linear channels plus video-on-demand using iOS, Android, Mac/OS X, PC/Windows, Xbox 360, Roku, and Samsung.
- Time Warner Cable, Cox, Charter, Bright House and many others support HBO Go on Roku.

Cable Programming on Devices without a CableCARD	
COMCAST	XBOX 360
Time Warner Cable	ROKU
Time Warner Cable	Samsung SMART TV
Time Warner Cable	XBOX 360
COMCAST	Windows Apple
Time Warner Cable	Windows Apple
COX	Windows Apple
Charter	Windows Apple
CABLEVISION	Windows Apple
bright house	Windows Apple

- Comcast, Time Warner Cable, Cox, Charter, Cablevision, and Bright House offer TV Everywhere apps streaming thousands of movies and TV episodes on-demand (and sometimes live) via mobile, tablet, PCs, and other Internet-connected devices.

This proliferation of consumer choices is, of course, not limited to cable operators. Telco and satellite MVPDs are also making their services available on consumer-owned devices.

- Verizon FiOS is available via FiOS TV apps on Xbox, Samsung TVs, Blu-ray players, LG Smart TVs, and on Android and iOS devices.²
- AT&T U-Verse apps provide U-verse programming to iOS and Android devices.³
- DirecTV is offered through “DirecTV Ready” Sony and Samsung TVs with built-in RVU.⁴
- DISH uses its “Hopper” to offer service to Sony PlayStation, Smart TVs, and other devices.⁵ At CES, DISH announced the most recent technique for serving such devices, a “virtual” set-top box embedded in an LG Smart TV.⁶
- Along with cable operators, DirecTV, DISH, AT&T, and Verizon offer apps that make programming available on Android and iOS devices.

Multichannel Video Provider	iOS	Android
COMCAST	✓	✓
DIRECTV	✓	✓
dish	✓	✓
Time Warner Cable	✓	✓
at&t	✓	✓
verizon	✓	✓
COX	✓	✓
Charter	✓	✓
CABLEVISION	✓	✓
bright house	✓	✓

² Verizon, *Verizon FiOS TV App for Samsung Devices*, <http://www.verizon.com/Support/Residential/TV/FiosTV/Other+Hardware/OtherDevices/SamsungDevices.htm>. Edgar Alvarez, *Verizon FiOS Mobile on Android and iOS can now stream live TV from anywhere*, Engadget, <http://www.engadget.com/2013/09/20/verizon-fios-mobile-live-tv-from-anywhere-android-ios/>.

³ AT&T, *U-verse Enabled apps for smartphones or tablets*, http://www.att.com/esupport/article.jsp?sid=KB411932&cv=813#fbid=1o3h1kND9n_.

⁴ DirecTV, *What is a DIRECT Ready TV and how does it work?*, https://support.directv.com/app/answers/detail/a_id/3992. RVU provides DIRECTV service and full HD DVR functionality without a receiver when it is used as an additional TV in a Genie HD DVR setup. With TVs that are not DIRECTV Ready, a small device called Genie Mini is required to access the Genie HD DVR.

⁵ Greg Avery, *Dish Network extends Hopper to Sony PlayStation, LG smart TVs, kitchens, garages*, Denver Business J. (Jan. 6, 2014), http://www.bizjournals.com/denver/blog/boosters_bits/2014/01/dish-network-extends-hopper-to-sony.html?page=all.

⁶ Jeff Baumgartner, *Dish Unveils ‘Virtual Joey’ App For LG TVs: Software App Delivers Dish Hopper Experience Without Separate Hardware*, Multichannel News (Jan. 5, 2014), <http://www.multichannel.com/distribution/dish-unveils-%E2%80%98virtual-joey%E2%80%99-app-lg-tvs/147484>.

CES 2014 demonstrated that connected TVs – indeed, connected devices of every sort – continue to proliferate.⁷ A study prepared just before the opening of CES 2014 predicts that connected TVs will exceed 200 million by 2015.⁸

Online Video Providers

It was clear throughout 2013 that a diverse and growing range of TV shows, movies, and other video services is widely available on dozens of devices via various online video providers.

- Subscription services like Netflix and Hulu Plus offer streaming video to smartphones, tablets, connected devices (Roku, Apple TV), game consoles (Xbox 360, PS3, Wii), Smart TVs, and PCs/Macs.
- Amazon Prime Instant Video and Redbox Instant by Verizon, which are two other subscription services, and retailer-affiliated services like CinemaNow (Best Buy) and Vudu (Walmart) offer movies and TV shows for rental or purchase, and also stream to many of the same devices.
- DISH's Blockbuster on Demand serves Samsung Smart TVs, Android, iOS, Roku 2 and 3 boxes, PCs and Macs.
- Apple's iTunes sells or rents a huge catalog of content to be viewed on iPhones, iPads, Apple TVs and PCs/Macs.
- Individual cable and broadcast networks – including CNN, Comedy Central, ESPN, MLB, MTV, NBA, NFL, NHL, ABC, and CBS – also offer streams of live linear and/or on-demand content.

Online providers are also beginning to offer their own original programming. Netflix original programming includes *House of Cards*, *Hemlock Grove*, *Orange is the New Black*, *Arrested Development* and the documentary *Mitt*. Hulu offers *Deadbeat*, *The Wrong Mans*, *The Awesomes*, *Quick Draw*, and more. Amazon Studios has approved or is developing *Alpha House*, *Annebots*, *Creative Galaxy*, *Tumbleleaf*, *Maker Shack Agency*, and *The After*, and is also planning to create and test five pilot episodes of children's programming. Google's YouTube spent over \$100 million to help about 150 media partners, including DreamWorks Animation, to create and promote dedicated YouTube Channels.

⁷ Anick Jesdanun, *CES: 2014: Panasonic to help make smart-TV Firefox software*, San Jose Mercury News (Jan. 6, 2014), http://www.mercurynews.com/business/ci_24854998/ces-2014-panasonic-help-make-smart-tv-firefox. Samsung, LG, Sony, Sharp and other manufacturers offer competing Smart TVs.

⁸ Jeff Baumgartner, *IP-Connected TV Devices Set For A Surge; U.S. Will Be Home To 202 Million Internet-Capable TV Devices By 2015, NPD Group Says*, Multichannel News (Dec. 30, 2013), <http://www.multichannel.com/technology/ip-connected-tv-devices-set-surge/147386>; Press Release, NPD Connected Intelligence, *Over 200 Million Connected TVs and Attached Content Devices Expected in U.S. Homes by 2015* (Dec. 18, 2013), <http://www.connected-intelligence.com/about-us/press-releases>.

CES demonstrated that 4K networks are now beginning to emerge as online services. Sony, which has been gearing up for a virtual cable service, introduced the first over-the-top video download 4K service launching in 2014.⁹ Comcast/Xfinity, Amazon, DirecTV, M-Go and Netflix are all working with Samsung to deliver 4K content on Samsung's new line of UltraHD TVs.¹⁰

Evolution of TiVo

TiVo offers an apt illustration of the rapid rise of IP and cloud approaches. Throughout 2013, TiVo's primary growth has been through partnerships with cable operators as an OEM device supplier or as a supplier of software for the user interface.¹¹ By the time of the show, TiVo announced that it has relationships with 10 of the 20 largest cable operators,¹² including marketplace arrangements for receiving cable operator video-on-demand on its retail TiVos. For example, Comcast and TiVo implemented a solution known as "Cardio" to deliver VOD services to retail TiVo CableCARD devices, and the solution is widely available across Comcast's footprint. At CES, TiVo demonstrated a new prototype cloud-based network DVR for use with cable operators.¹³ Press reports note TiVo's growing concentration on cloud-based offerings, and predict that those offerings may attract even wider partnerships with more cable operators.¹⁴



⁹ Steve Donohue, *Sony gears for launch of virtual cable service*, FierceCable (Jan. 8, 2014), <http://www.fiercecable.com/story/sony-gears-launch-virtual-cable-service/2014-01-08#ixzz2qJp8iDPO>.

¹⁰ Jeff Baumgartner, *Multiple 4K networks: Samsung Connects With Comcast, DirecTV, Amazon, Netflix and M-GO on 4K*, Multichannel News (Jan. 6, 2014), <http://www.multichannel.com/distribution/samsung-connects-comcast-directv-amazon-netflix-and-m-go-4k/147516>.

¹¹ All of TiVo's 2013 earnings reports have catalogued a continuing surge in business as a wholesale OEM provider to cable operators. In his most recent report, Tom Rogers, TiVo's President and CEO, reported "the best quarter for TiVo subscription growth since TiVo began mass distribution of its technology and services in the cable DVR market. . . . Roughly 80% of the increase in quarter over quarter net adds, of close to 60,000, was driven by MSO providers other than Virgin." Press Release, TiVo, *TiVo Reports Results for the Third Quarter Ended October 31, 2013* (Nov. 26, 2013), <http://investor.tivo.com/phoenix.zhtml?c=106292&p=irol-newsArticle&id=1880343>.

¹² Comments of TiVo's SVP, GM of Content and Media Sales Tara Maitra on the panel "Over the Top Video: Connecting the Future" at CES (Jan. 8, 2014).

¹³ Press Release, TiVo, *TiVo Demos Network DVR Prototype for Operators at CES* (Jan. 7, 2014), <http://pr.tivo.com/press-releases/tivo-demos-network-dvr-prototype-for-operators-at-ces-nasdaq-tivo-1079741>.

¹⁴ Jeff Baumgartner, *TiVo: We're Still in the Hardware Biz*, Multichannel News (Jan. 22, 2014), <http://www.multichannel.com/distribution/tivo-we-re-still-hardware-biz/147829>; *TiVo Premiere DVRs to Get Roamio Software in February*, Communications Daily, at 14 (Dec. 13, 2013).

Set-Top Boxes on a Stick

Multichannel providers need to serve many different types of consumers, and set-top boxes may not all disappear entirely into the cloud; but the set-top form factor is becoming much smaller. On display at CES were HDMI sticks running cable operator software stacks and guides, such as those from Alticast and Netgear.¹⁵ Google's Chromecast is designed to provide HDTV display of programming received on Android tablets and smartphones, iPhones, iPads, smartphones, tablets or laptops.¹⁶ At CES, Sony demonstrated one of the many new over-the-top equivalents with a video "smart stick" for connected TVs.¹⁷

As the FCC's recent Video Competition Report concluded, "Today the CPE [i.e., video device] marketplace is more dynamic than it has ever been, offering consumers an unprecedented and growing list of choices to access video content."¹⁸ These exciting developments are not arising from regulatory intervention or from technology mandates. They are driven by marketplace imperatives: consumer demand for mobility and new distribution platforms. Cable operators, other video distributors, equipment manufacturers, and application developers all are working to satisfy that demand. As new technologies, development communities, and rapid innovation cycles offer new opportunities, and as programmers move more confidently into IP distribution and software clients, cable operators are meeting these marketplace imperatives in ways that protect the copyright interests of our content suppliers. Of course, cable operators continue to support third-party use of CableCARDS, but all of the exciting innovations continue to demonstrate how rapidly the marketplace is moving beyond CableCARD technology.

I find it remarkable that in the face of today's astounding proliferation of consumer choices and new technological approaches, some parties continue to urge the Commission to adopt new technology mandates for cable operators and other MVPDs to follow. The "AllVid Tech Company Alliance," for example, recently dismissed all of the forgoing innovations as "proprietary," "limited," and not providing "true choice," and urged prompt Commission regulation to choose one universal solution pursuant to their reading of Section 629 of the

¹⁵ See, e.g., Mari Silbey, *Alticast HDMI Stick Shown Running Cox UI and Android*, Zats Not Funny (Jan. 10, 2014), <http://www.zatsnotfunny.com/2014-01/alticast-hdmi-stick-shown-running-cox-ui-and-android/>; Jeff Baumgartner, *Netgear Puts A Set-Top On A Stick: NeoMediacast Focused on Android Today, With RDK Support On Deck*, Multichannel News (Jan. 6, 2014), <http://www.multichannel.com/technology/netgear-puts-set-top-stick/147486>; Chris Fallon, *HDMI STB Sticks...All the Rage at CES*, Entropic (Jan. 7, 2014), <http://www.entropic.com/news/feature/80211n/hdmi-stb-sticks%E2%80%A6all-rage-ces>.

¹⁶ Google, *Chromecast*, www.google.com/intl/en-US/chrome/devices/chromecast/.

¹⁷ Steve Donohue, *Sony looks to ease delivery of OTT video to connected TVs with \$150 'smart stick'*, FierceCable (Sept. 18, 2013), <http://www.fiercecable.com/story/sony-looks-ease-delivery-ott-video-connected-tvs-150-smart-stick/2013-09-18#ixzz2qJpKaP6s>.

¹⁸ *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Fifteenth Report, 28 FCC Rcd 10496, ¶ 354 (2013).

Communications Act.¹⁹ The Commission tried that approach in 2003, adopting the 1394 connector and the CableCARD as mandatory digital solutions for cable operators (but imposing no similar constraints on satellite, AT&T U-Verse, or over-the-top video). The market did not embrace those FCC-prescribed technologies, notwithstanding the cable industry's substantial investments in and support for them. Instead, the marketplace created a wide variety of innovative video platforms and interfaces that are in wide use today.

In 2010, the AllVid Alliance proposed a similar prescriptive approach that was uniformly panned by program suppliers, cable, satellite, and IPTV distributors and that the Commission wisely did not pursue.²⁰ Had the proposal been adopted, it would have effectively prohibited the marketplace innovation that has been embraced by consumers – delivering MVPD services to video devices wirelessly over 3G or 4G, from the cloud to Android or iOS devices, or over the home network using a remote user interface based on HTML5 or RVU.

We have learned over the last decade that a prescriptive regulatory approach is simply not nimble enough to accommodate marketplace innovation. Waiver and rulemaking battles delayed elimination of the outdated 1394 rule, slowed cable's digital transition, and delayed approval of a new distribution model for early-release content. In the year since the *EchoStar* decision overturned the FCC's 2003 *plug-and-play* rules, the marketplace has continued to offer innovation, competition and diversity, which is the preferred US technology path. The innovation on display at CES should demonstrate conclusively that today's consumers have more sources of video programming on more devices than the drafters of Section 629 could have imagined.

The Commission should not impose another drag on innovation through prescriptive rules. It should neither reinstate legacy *plug-and-play* rules from another era, nor seek to constrain today's dynamic market with a replacement set of technology mandates.

We will continue to update you periodically.

Sincerely,



Michael K. Powell

¹⁹ Letter from AllVid Tech Company Alliance to Marlene H. Dortch, Secretary, FCC, CC Docket 97-80 (Jan. 16, 2014).

²⁰ See, e.g. Letter of AT&T, Comcast Corporation, DirecTV, HBO, Time Warner, Inc., Time Warner Cable, The Walt Disney Company, and Verizon to Marlene H. Dortch, Secretary, FCC, CS Docket 97-80 (Oct. 17, 2011); Comments in the 2010 Notice of Inquiry in CS Docket 97-80 by DIRECTV at 10-18; DISH Network at 4-9; Verizon at 5-20; AT&T at 26-43; Time Warner Cable at 13-19; Charter at 5-8; Cablevision at 17-24; HomePNA Alliance at 5-6; HomePlug Powerline Alliance at 2; Multimedia Over Coax Alliance (MoCA) at 4-6, 8; Entropic at 1-2; NCTA; MPAA, on behalf of Paramount Pictures Corporation, Sony Pictures Entertainment Inc., Twentieth Century Fox Film Corporation, Universal City Studios LLP, Walt Disney Studios Motion Pictures, and Warner Bros. Entertainment, Inc., at 8-9; Time Warner, Inc., at 6 (July 13, 2010); and the Reply Comments of NCTA in the 2010 Notice of Inquiry in CS Docket 97-80 (August 12, 2010).