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The Honorable Julius Genachowski
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:

I again want to express my sincere gratitude for your participation in The 2011 Cable Show, especially the time you spent touring the Show floor to witness firsthand all of the remarkable innovation that is occurring in the U.S. cable industry. The 270 exhibitors demonstrated a wide range of technology, content, and services which show how the cable industry is providing American consumers with powerful, personal, and portable services and networks that support unprecedented mobility of content to multiple devices both in and out of the home.

Perhaps the most buzz at The Cable Show was generated by the exciting announcements and demos highlighting cable's efforts to enable a fully competitive and innovative retail video device marketplace, a goal that we both share. The Cable Show demonstrated that Congress's and the Commission's video device goals are already being achieved in the marketplace. As a panel of top industry CEOs underscored, there is broad-based momentum in the cable industry to deliver cable services to consumers on any device.¹

The Cable Show illustrated the many innovative approaches that are already empowering consumers, and many more innovations are rapidly emerging:

- Live linear and on-demand cable video is being offered as a clickable retail application on Internet-connected televisions, tablets and PCs.
- TV Everywhere offerings are expanding from the PC to other devices such as smart phones and tablets.

¹ See Mike Farrell, *Cable Execs: Give the People What They Want; Top Operators and Programmers Agree Content on Any Device, Any Time Will Drive Success*, Multichannel News, June 15, 2011, available at <http://www.multichannel.com/article/469761-Cable-Show-2011-Cable-Execs-Give-the-People-What-They-Want.php>.

- New cloud-based interfaces introduced by Comcast enable searchable guides, applications, and social networking tools; and a new partnership with Skype is bringing wide-screen Internet video conferencing to the television.
- Standards-based home networking is providing new ways to navigate and combine video content from a variety of sources.
- More business-to-business approaches were announced to distribute programming and content and to combine the worlds of retail devices, web, and MVPD service.
- Cable operators and programmers also continue to embrace cloud-delivery mechanisms.

The cable industry's commitment to multiple new approaches, based on open web service standards and technologies, has prompted rapid innovation and increasingly attractive and compelling user experiences—carefully managed to protect the intellectual property of content providers and the privacy of customers, and securely deliver the cable services which our customers expect. All of this is happening without regulation or the need for technology mandates.

When Section 629 of the Communications Act was drafted, almost everyone had to lease a specific, proprietary set-top box from a cable company to receive multichannel programming. As the announcements at the Show demonstrate, today's marketplace offers staggering innovation, with cable programming on Internet-connected TVs and smart video devices, made available from the cloud to PCs, tablets, and other new devices, and shared on home networks. Consumers have even more choices for content from DBS, telco TV, video over the Internet, game consoles, and "smart TV" platforms. Tens of millions of tablets, game consoles, Internet-connected TVs, and other smart, video-capable devices have been sold. Analysts predict that by the end of 2015, more than 500 million televisions with Internet connectivity will have shipped worldwide.² The Commission need not "create" a retail marketplace; the unprecedented choices available *today* have already surpassed what the drafters of Section 629 could have imagined, and they are growing rapidly in creativity and variety.

The innovation and services that have emerged make up an impressive and growing list.

Cable Service as an Application on Retail Televisions. Cable's video services were offered live as applications on a number of consumer electronics manufacturers' retail televisions at The Cable Show. For example,

- Sony's television delivered Time Warner Cable live and on-demand video content from the Time Warner Cable headend without a set-top box, using Internet Protocol (IP) technologies over a managed network and a custom electronic program guide jointly developed by Sony and Time Warner Cable. The clickable Time Warner Cable icon appeared alongside icons for Internet video sources in a shopping mall application format similar to smart phones.

² See News Release, DisplaySearch, *Connected TV Shipments to Exceed 138 Million Units in 2015* (July 5, 2011), available at http://www.displaysearch.com/cps/rde/xchg/displaysearch/hs.xsl/110705_connected_tv_shipments_to_exceed_138_million_units_in_2015.asp.

- Samsung's new "Smart TV" delivered Comcast services through an internal software application inside the television.
- LG Electronics demonstrated how its new open standards-based Smart TV platform, now being utilized by some cable providers overseas, can be used by pay TV providers in North America to deliver linear and on-demand content without a set-top box.³

Cable Service as an Application on Tablets and other Retail Devices. Cable operators are offering – and enhancing – video services as applications on tablets and other devices available at retail. For example,

- Comcast displayed its Xfinity[®] TV Online application on Apple iOS, offering advanced search capabilities, remote control operation, DVR programming, and thousands of hours of video-on-demand content available on the tablet for viewing both inside and outside of the home.
- Time Warner Cable displayed its TWCable TV[™] for iPad[®] and Cablevision demonstrated its Optimum iPad Application, both allowing subscribers to view VOD and subscription linear channels on an iPad.
- CableLabs demonstrated the use of a tablet as a second screen synchronized with the television screen, an application that may provide enhanced features while reducing clutter on the television screen.
- TiVo announced new set-top boxes and a new iPad application that allows users to search live TV, DVR recordings, and cable video-on-demand content, and "flick" the VOD from the iPad onto the TV screen.⁴
- Cisco demonstrated the use of its new Videoscape Media Suite platform integrating linear, on-demand and over-the-top content with soft clients running on an iPad, Android smart phone and PC.⁵
- Motorola Mobility announced the availability of Motorola Televation[™], a broadband device that plugs into a Wi-Fi router to allow consumers to watch live TV on a connected IP device anywhere around the home, using real-time

³ The demonstration is available at http://www.youtube.com/watch?v=w-GgvYRSPYM&feature=youtube_gdata_player.

⁴ See Todd Spangler, *TiVo Opens Up Two New Boxes For Cable; DVR Vendor Also Upgrades iPad App to Access MSO Video Services*, Multichannel News, June 13, 2011, available at http://www.multichannel.com/article/469526-Cable_Show_2011_TiVo_Opens_Up_Two_New_Boxes_For_Cable.php. Prior to The Cable Show, TiVo also announced an agreement with Comcast to enable access to Comcast's robust library of Xfinity TV On Demand content on TiVo Premiere set-top boxes sold at retail. See News Release, TiVo, *TiVo and Comcast Team Up to Offer the First Retail Cable Set-Top With DVR That Delivers Linear TV, Broadband Content and Xfinity On Demand Library All From One Box* (May 9, 2011), available at <http://investor.tivo.com/phoenix.zhtml?c=106292&p=irol-newsArticle&id=1561261>. TiVo also has distribution agreements with RCN, Suddenlink, and Charter.

⁵ See News Release, Cisco, *Cisco at Cable Connections* (June 13, 2011), available at <http://blogs.cisco.com/sp/cisco-at-cable-connections/>.

transcoding and changing resolution and bit rate to match the capabilities of the consumer's viewing device.⁶

- Seachange announced an HTML5 user interface that can keep the look and feel of the MVPD's user interface consistent across smartphones, PCs, tablets and TVs.⁷
- Prior to the Cable Show, Comcast revealed plans to conduct a trial delivering IP cable service on the MIT campus to computers, tablets, gaming devices, and other IP-connected devices.⁸

Television from the Cloud. Cable operators and programmers also continue to embrace cloud-delivery mechanisms. For example,

- Comcast demonstrated its next-generation Xfinity TV experience, now being trialed in Augusta, Georgia.⁹ Using the new cloud-based interface, subscribers can easily search content, whether it is on live television, on demand, on their DVR, or from a selection of additional content. The interface includes selected enhanced-for-television weather and traffic applications, and social networking features that allow Facebook friends to offer viewing recommendations.¹⁰ This model allows for faster and more frequent innovation providing a more vibrant experience for consumers.
- Comcast's Xfinity TV Online service allows cable video-on-demand content to be viewed on PCs and Macs.

⁶ See News Release, Motorola Mobility, *Motorola Mobility Introduces Live Streaming Device For All the Other Screens in the Home* (June 13, 2011), available at <http://mediacenter.motorola.com/Press-Releases/Motorola-Mobility-Introduces-Live-Streaming-Device-For-All-the-Other-Screens-in-the-Home-36fd.aspx>.

⁷ See Jeff Baumgartner, Light Reading, *SeaChange Navigates TV Everywhere*, June 9, 2011 http://www.lightreading.com/document.asp?doc_id=208810&site=lr_cable.

⁸ See Jessica E. Vascellaro, *Comcast Tests Tech Overhaul*, Wall St. J., May 26, 2011, available at <http://online.wsj.com/article/SB10001424052702304066504576345330554958642.html>.

⁹ See Meg James, *Comcast Chief Brian Roberts Unveils Next Generation Xfinity TV System*, L.A. Times, June 16, 2011, available at <http://latimesblogs.latimes.com/entertainmentnewsbuzz/2011/06/comcast-chief-brian-roberts-unveils-faster-xfinity-tv-system-.html>; News Release, Comcast, *Comcast Chairman and CEO Brian L. Roberts to Unveil Next Generation Television Experience and New Generation Television Experience and New Broadband Speeds* (June 14, 2011), available at <http://www.comcast.com/About/PressRelease/PressReleaseDetail.aspx?PRID=1097>.

¹⁰ This next-generation service uses an advanced application and video platform based on cloud computing, using technologies that can be extended to connected retail devices. The hybrid tru2way and IP set-top box is manufactured by Pace and powered by an Intel system on a chip. As Comcast explained, “[p]artnering with Intel accelerates this innovation through the large community of companies and technologies that support their processors today.” News Release, Intel, *Intel-Based Set-Top Box Powers Comcast's Next-Generation Xfinity TV Experience* (June 14, 2011), available at http://newsroom.intel.com/community/intel_newsroom/blog/2011/06/14/intel-based-set-top-box-powers-comcasts-next-generation-xfinity-tv-experience. The Platform's cloud-based video publishing system serves as the central management hub for Comcast's next-generation Xfinity TV service. See News Release, thePlatform, *thePlatform Serves as Central Video Logistics System for Comcast's Next-Generation TV Initiative* (June 14, 2011), available at http://theplatform.com/about/details/theplatform_serves_as_central_video_logistics_system_for_comcasts_next-generation_tv_initiative/.

- Synacor demonstrated its “next” generation of TV Everywhere products/services, expanding delivery of TV Everywhere services from the PC to other devices such as mobile devices and tablets.¹¹
- Alcatel-Lucent and the Platform, a leading cloud-based video publishing company, announced a strategic alliance for delivering video to tablets, set-top boxes, and other IP-connected devices using the optimal CDNs, formats, and policies associated with the video.¹²
- Avail-TVN announced July trials of its new AnyView service, which uses adaptive bit-rate technology to extend linear and video-on-demand content to customers’ broadband-connected PCs, Macs, tablets and smart phones.¹³
- EchoStar Technologies unveiled Aria, designed as a means for smaller cable operators to offer cloud-based VOD to hybrid cable set-top boxes.¹⁴
- The new UltraViolet digital rights system plans to launch in the Fall, promising to enable consumers to store the rights to their commercial video libraries in the cloud, and then view the libraries’ content over multiple networks on multiple devices, rather than depending on a single kind of device as intermediary.
- Programmers are also enabling online access to their content. For example, ESPN has made its live channels available through an online login process. HBO’s library of original programming and movies can be accessed via the HBO Go website or application.
- New platforms have emerged around television platforms, such as Samsung Smart Hub, LG Smart TV, Panasonic Viera Cast, and Sony Bravia Internet Video. These platforms now offer video content from Netflix, Amazon Instant, Hulu Plus, Vudu, Cinema Now, Blockbuster, Qriosity, Crackle, YouTube, and MLB.TV. As noted above, Sony and Samsung demonstrated the addition of video from Comcast and Time Warner Cable, and LG showed how the smart TV platform it launched with overseas cable operators is now available in the U.S.

¹¹ Synacor supports Suddenlink’s Suddenlink2Go service and recently reached agreement to do the same for Mediacom. See Mike Robuck, *Suddenlink On the Go With TV Everywhere Service*, CED, June 8, 2011, available at <http://www.cedmagazine.com/News/2011/06/Suddenlink-Suddenlink2Go-TV-Everywhere-Turner-Synacor-stream.aspx>; News release, Synacor, *Synacor Signs Deal With Mediacom to Provide TV Everywhere Services for Cable Subscribers* (June 15, 2011), available at <http://www.marketwire.com/press-release/synacor-signs-deal-with-mediacom-provide-tv-everywhere-services-cable-subscribers-1527396.htm>.

¹² See News Release, thePlatform, *Alcatel-Lucent and thePlatform™ Team Up To Help TV Providers Take Any Video To Any Screen, Anywhere* (June 13, 2011), available at <http://theplatform.com/about/details/alcatel-lucent-and-theplatform-team-up-to-help-tv-providers-take-any-video-to-any-screen-anywhere/>.

¹³ See News Release, Avail-TVN, *Avail-TVN Launches AnyView™ Managed Multi-Screen Video Solution*, (June 13, 2011), available at <http://www.tvn.com/press/2011-07.asp>.

¹⁴ See News Release, EchoStar, *EchoStar Introduces Aria™, a New Feature-Rich Solution Exclusively for Cable TV Operators* (June 6, 2011), available at <http://www.echostar.com/NewsEvents/PressReleases/PressRelease.aspx?prid=%7B07E35B8C-4093-43B3-BC15-68F38A0D5CCD%7D>.

Set-Top Boxes Combine TV and Web Content. Cable set-top boxes are combining more applications with the television. For example,

- CableLabs demonstrated how Twitter may be integrated into the television using the existing EBIF™ platform.
- Comcast announced a new partnership with Skype, offering consumers widescreen Skype video calls using their existing HD television and broadband connection.¹⁵
- Neustar demonstrated its Text Everywhere SMS solution, enabling cable subscribers to send texts to and from TV's, iPads, cell phones, emails, and Facebook.¹⁶
- IPgallery demonstrated a cloud-based social communications platform, capable of providing a personalized “Click to Anything” cable application inside social networks for talking, chatting, watching, sharing and transferring multi-media content across any device.¹⁷

Home Networking of Content. Cable operators continue to utilize standards-based home networks to share content with in-home retail devices. For example,

- Cox displayed its tru2way® Trio Guide, designed for compatibility with MOCA and DLNA and allowing retail devices in the home to find, retrieve, play, pause, fast-forward and rewind recorded content stored on a Cox DVR – even if the retail devices do not support tru2way.
- Time Warner Cable offered similar home networking capability through a set-top box that hosts a web server, using EBIF and tru2way technologies to deliver an HTML-based user interface to a Samsung television.
- Motorola Mobility demonstrated an advanced video gateway platform capable of delivering cable services to tablets and smartphones over the home network, using a mixture of QAM and IP to share content with other compatible devices in the home.¹⁸

We plan to periodically update you on these exciting developments. However, it is important now to recognize that these developments are not arising from regulatory intervention or from technology mandates. They are driven by marketplace imperatives. Consumers demand

¹⁵ See Brian Stelter, *Comcast to Offer Customers Skype Video Calls on Their TVs*, N.Y. Times, June 13, 2011, available at <http://www.nytimes.com/2011/06/14/business/media/14comcast.html>.

¹⁶ See Todd Spangler, *CableNET Features ITV, Video Everywhere*, Multichannel News, June 15, 2011, available at <http://www.multichannel.com/article/469755-Cable-Show-2011-CableNET-Features-ITV-Video-Everywhere.php>.

¹⁷ See News Release, IPgallery, *IPgallery to Demonstrate “Click to Anything” Facebook application for MSOs, at CableNET® 2011* (June 9, 2011), available at http://www.ipgallery.com/recent-news/pr_june9_ncta/.

¹⁸ See News Release, Motorola Mobility, *Motorola Mobility and Time Warner Cable Collaborate To Deliver an Advanced Video Gateway Platform* (June 14, 2011), available at <http://mediacenter.motorola.com/Press-Releases/Motorola-Mobility-and-Time-Warner-Cable-Collaborate-To-Deliver-an-Advanced-Video-Gateway-Platform-3705.aspx>.

mobility and buy enough tablets to create a viable distribution platform, and cable operators and other video providers are racing one another to satisfy that demand. New technologies, increased computer processing power, and reduced memory costs offer opportunities for efficiencies, and cable operators harness them for competitive offerings—such as moving DVR recording, transcoding, and even rights management to the cloud. New development communities and rapid innovation cycles arise around open web service standards and technologies like HTML-5, and cable operators embrace them to offer compelling applications and user experiences that can be adjusted and improved almost instantly. Programmers move with increasing confidence into IP distribution and software clients, and cable operators are able to offer customers the benefits of secure multi-screen access to their subscription content, carefully managed to protect the intellectual property of content providers and the privacy which our customers expect. This is not a matter of choice for cable operators: it is an imperative to meet consumer demand in a marketplace flush with video competitors.

It is especially noteworthy that these welcome developments have taken place without technology mandates and often in the face of existing regulatory impediments. Almost every one of these approaches was developed *despite* the CableCARD. Many of the major technology improvements in the last few years—such as switched digital video, digital transport adapters, replacement of the 1394 connector with IP connectors—resulted from waiver or elimination of CableCARD requirements (and, unfortunately, only after laborious regulatory or waiver processes). The various prescriptions for future regulatory steps to succeed CableCARD would fare no better. The “AllVid” solution suggested in the Commission’s NOI would have required a costly and unnecessary piece of hardware, and, if such a rule had been in place, would have prevented the delivery of cloud-based MVPD services directly to tablets and other third-party devices. Today, some predict that “set-tops are clearly moving to the point where they are either a piece of software that lives in another device, or they’re virtualized totally in the cloud,”¹⁹ a world that would be impermissible under proposals in the AllVid NOI.

Yet even today, those looking for regulatory leverage still denigrate these marketplace solutions as “isolated and proprietary,” and make the astounding claim that the marketplaces for devices, programming and services are “essentially in the same condition they were in when the Congress enacted Section 629 in 1996.”²⁰ This is preposterous, willfully ignoring the daily stream of innovations in the marketplace. Writing a cable application to iOS or Android does nothing to isolate the tablets from other video sources; the tablets can just as easily run applications from other MVPDs. Likewise, adding Comcast and Time Warner Cable programming clients to Sony and Samsung SmartTVs expands the range of video applications running on those platforms; it does not isolate them. And sharing content from the cloud with HTML-5, or sharing it across home networks with DLNA, does nothing to prevent any other source from making its content as readily accessible.

In short, consumers today have more sources of video programming and content on more devices than the drafters of Section 629 could have imagined, and the choices are only growing

¹⁹ Steve Donohue, *The Disappearing Set-Top*, Light Reading, Apr. 26, 2011 (quoting Ken Morse, CTO of Cisco’s Service Provider Technology Group), available at http://www.lightreading.com/document.asp?doc_id=207138&site=lr_cable.

²⁰ See, e.g., Letter from Robert S. Schwartz, “AllVid Tech Company Alliance,” to Marlene H. Dortch, Secretary, FCC, MB Docket No. 10-91 & CS Docket No. 97-80 at 2 (June 23, 2011).

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through a variety of market-based approaches. The variety of innovative approaches is no more “balkanization,” as some label it, than are the choices among Apple iOS, Google Android, Samsung Smart Hub, LG Smart TV, Panasonic Viera Cast, and Sony Bravia Internet Video, Netflix, Amazon, or any of the other myriad approaches in use in today’s marketplace. The variety of approaches is the mark of an innovative marketplace. It is not a problem to be solved.

The problem that remains in this marketplace is not the need for a single guiding regulatory prescription. The marketplace is at a critical juncture, inviting participants to make major bets and even more major investments in technology to meet rapidly developing consumer demand with rapidly changing technological tools. This kind of innovation is about risk taking. The environment that invites the greatest risk taking is one with the certainty that regulators will not step in and displace new technologies or new investments. The problem in today’s marketplace is the chronic overhang that yet another regulatory “solution” may be imposed on what is the most competitive device, programming and services marketplace this nation has ever enjoyed. Risk taking, investment, and innovation flourish most fully when freed from regulatory technology mandates and participants in the marketplace are able to craft thoughtful solutions that optimize value to consumers.

Sincerely,

/s/ Michael K. Powell

Michael K. Powell

cc: Commissioner Michael J. Copps
Commissioner Mignon Clyburn
Commissioner Robert M. McDowell
William Lake
Paul de Sa
Marlene Dortch