

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

In the Matter of)	
)	
Annual Assessment of the Status of)	MB Docket No. 17-214
Competition in the Market for the)	
Delivery of Video Programming)	

**REPLY COMMENTS OF
NCTA – THE INTERNET & TELEVISION ASSOCIATION**

NCTA – The Internet & Television Association (“NCTA”) hereby submits reply comments in the above-captioned proceeding. NCTA has submitted initial comments generally describing the flourishing of robust competition in the market for the delivery of video programming and identifying certain regulatory implications that follow from such competition. In these reply comments, we address a separate issue. Specifically, in September 2017, the Government Accountability Office (“GAO”) and the Commission agreed that the Video Competition Report is an appropriate forum for gathering market data relevant to whether there is a need for regulations to ensure the commercial availability of devices to access MVPD programming.¹ Accordingly, these reply comments describe the thriving marketplace for retail devices that consumers can use to watch MVPD programming.

Nearly twenty-two years ago, Congress directed the Commission to assure that consumers had the option to purchase set-top boxes used to access multichannel video programming from manufacturers, retailers, and other vendors not affiliated with their cable operator. The primary objective of Section 629 of the Communications Act was to enable

¹ United States Government Accountability Office, *Video Programming: FCC Should Conduct Additional Analysis to Evaluate Need for Set-Top Box Regulation* at 22, 26 (Sept. 2017) (“GAO Report”). The GAO stated that the FCC’s 2017 video competition report “does not discuss the extent to which new choices for services have affected the importance of consumer choice for devices.” GAO Report at 21.

customers to go to Circuit City to buy the same device that they otherwise rented from their incumbent cable operator. At that time, most customers viewed cable operators as their sole option for multichannel video services and set-top box equipment.

Since then, the video market has been radically transformed and expanded. Consumers now have an extraordinary level of choice for watching MVPD programming over retail devices, far more than the drafters of Section 629 could ever have imagined. As the GAO Report concluded, the “market for video services and devices to access video services has evolved significantly in recent years so that consumers now have considerably more choices for video services and devices to access such services than when Congress passed the Telecommunications Act of 1996.”² The market for such retail devices is thriving and expanding rapidly as video “apps” have revolutionized television viewing. Cable operators have been in the forefront of this new apps-based market, making their video services available without a leased set-top box on millions of the same retail navigation devices that consumers use to watch online streaming video and access thousands of other apps.

Cable operators and other MVPDs have invested substantial resources to develop apps that enable customers to access their video services on retail devices. At present, the top 7 MVPDs provide more than forty apps on nine of the most popular retail platforms, including PCs, Macs, iOS, Android, Amazon Kindle Fire, Roku, Xbox One, and Samsung and LG smart TVs.³ Through these apps, customers can watch linear programming and video-on-demand, and in many cases can record and watch recorded programs.

² GAO Report at 22.

³ *TV features go anywhere with the U-verse app*, AT&T, <https://www.att.com/esupport/article.html#!/u-verse-tv/KM1001371> (indicating that the AT&T U-verse App is available on iOS, Android, and Amazon/Kindle Fire platforms); *DIRECTV Mobile Apps*, DIRECTV, <https://www.att.com/directv/experience/watch-directv-app.html> (illustrating that DIRECTV Mobile Apps are available on iOS and Android platforms); *DIRECTV for Fire Tablets*, Amazon, <https://www.amazon.com/DIRECTV-for-Fire-Tablets/dp/B00HEVAHAQ>; *XFINITY Stream*,

Consumers are continuing to adopt these retail devices at a rapid pace, and as the GAO reported, “sales of these alternative devices, such as streaming devices and smart TVs, have been growing.”⁴ For example, Roku, a retail set-top box that relies entirely on apps, has more than 15 million monthly active accounts,⁵ and has sold over 20 million boxes and sticks, while newer entrant Google sold over 14 million Chromecast devices in 2015.⁶ Over two-thirds of U.S. TV homes now have at least one TV connected to the Internet via a Roku, Apple TV, Amazon Fire TV, or other streaming device; and 25% of all adults and 43% of those aged 18-34 watch their video with those devices on a daily basis.⁷ A study released in April 2016 found that *there are now more connected TV devices in the United States than MVPD set-top boxes*.⁸ As the GAO

COMCAST, <https://tv.xfinity.com/> (demonstrating that XFINITY Stream App is available for use on iOS, Android, and computer platforms); *Activate the XFINITY Stream Beta App on Roku*, COMCAST, <https://www.xfinity.com/support/xfinity-apps/activate-xfinity-tv-app-on-roku/>; *Spectrum TV App: Getting Started*, SPECTRUM, <http://www.spectrum.net/support/tv/spectrum-tv-app/> (showing that the Spectrum TV App is available for use on iOS, Android, Amazon Kindle Fire, Roku, Xbox One, and Samsung TV platforms); *Watch TV on Spectrum.net: Spectrum TV Plug-in*, SPECTRUM, <http://www.spectrum.net/support/internet/watch-tv-spectrum-tv-plug/>; *DISH Anywhere*, DISH, <https://www.dish.com/dish-anywhere/> (indicating that DISH Anywhere is available for use on iOS, Android and Amazon Kindle Fire platforms); *Stream Fios TV on the go, data free*, VERIZON, <https://www.verizon.com/home/fiosmobileapps> (illustrating that Fios Mobile is available for use on iOS, Android and Amazon Kindle platforms); *The Contour App*, COX, <https://www.cox.com/residential/education-center/tv/app.html> (indicating that the Cox Contour App is available on iOS and Android); *Download the free Optimum App*, OPTIMUM, <https://www.optimum.net/tv/optimum-app/> (demonstrating that Optimum App is available on iOS, Mac OS X, Android, and Amazon Kindle Fire platforms); *Suddenlink2GO*, APPLE, <https://itunes.apple.com/us/app/suddenlink2go/id853306018?mt=8>. All of the top providers also support PC and Mac devices. Downloadable Security Technology Advisory Committee (DSTAC) Final Report at 208, 263 (Aug. 28, 2015) (DSTAC WG4 at Tables 8, 9), <https://transition.fcc.gov/dstac/dstac-report-final-08282015.pdf>.

⁴ GAO Report at 11.

⁵ Janko Roettgers, *Roku Boasts 15 Million Monthly Active Accounts*, VARIETY (July 12, 2017), <http://variety.com/2017/digital/news/roku-15-million-monthly-active-accounts-1202493321/>.

⁶ Daniel B. Kline, *What's the Best-Selling Streaming Device?*, MOTLEY FOOL (Apr. 9, 2016), <https://www.fool.com/investing/general/2016/04/09/whats-the-best-selling-streaming-device.aspx>.

⁷ Jeff Baumgartner, *Study: 69% of U.S. Homes Connect a TV to Internet*, MULTICHANNEL NEWS (Apr. 27, 2017), <http://www.multichannel.com/news/content/study-69-us-homes-connect-tv-internet/412495>; Press Release, Leichtman Research, *69% of U.S. TV Households Have a Connected TV* (Apr. 27, 2017), <http://www.leichtmanresearch.com/press/042717release.html>.

⁸ Jeff Baumgartner, *Study: Connected TV Devices Eclipse Pay TV Set-Tops*, MULTICHANNEL NEWS (Apr. 22, 2016), <http://www.multichannel.com/news/distribution/study-connected-tv-devices-eclipse-pay-tv-set-tops/404377>.

Report concluded, “set-top boxes play a significant but diminishing role in delivering programming in an evolving video market.”⁹

MVPDs are increasingly enabling still more alternatives to leased set-top boxes. For example, Comcast launched its Xfinity TV Partner Program, which uses open standards adopted by the W3C to enable CE manufacturers to integrate the Xfinity TV app onto their smart TVs and other devices.¹⁰ Comcast is working with Samsung on an app for Samsung smart TVs, and in September, announced a partnership with LG Electronics to develop an app for LG smart TVs.¹¹ These apps will enable Comcast customers to access all of their live and on demand programming, and cloud DVR recordings in the home on Samsung’s and LG’s Smart TVs without a leased Comcast set-top box. In addition, earlier this year, Comcast launched the Xfinity app for the Roku streaming player and Roku TV,¹² and more recently launched Xfinity Instant TV, a boxless IP cable service that customers can watch on their computers, tablets, smart phones, and the Xfinity app on Roku. Traditional MVPDs have entered the online market as well, with DISH offering Sling TV and AT&T launching DIRECTV NOW as streaming subscription services that do not require an MVPD-supplied set-top box.

In today’s video marketplace, consumers can choose among MVPD apps and an ever-growing array of over-the-top apps, and the lines between the two are getting blurred. Online

⁹ GAO Report at 8.

¹⁰ See Comcast Corp., *The Xfinity TV Partner Program: Bringing the Xfinity Experience to More Consumer Devices and TV Screens*, <https://developer.xfinity.com/cableapp> (last visited Nov. 1, 2017). W3C completed its review and approval of HTML5 EME – a key component of this program – as a recommendation in September 2017. Press Release, *W3C Publishes Encrypted Media Extensions (EME) as a W3C Recommendation* (Sept. 18, 2017), <http://www.w3.org/2017/09/pressrelease-eme-recommendation.html.en>

¹¹ Press Release, W3C, *Comcast and LG Partner to Provide Xfinity Customers Access to Their Xfinity TV Subscription on LG TVs* (Sept. 25, 2017), <http://corporate.comcast.com/news-information/news-feed/comcast-and-lg-partner-to-provide-xfinity-customers-access-to-their-xfinity-tv-subscription-on-lg-tvs>; see also *Comcast Comments*, filed in MB Docket No. 16-42, at 28-29 (Apr. 22, 2016).

¹² Andrew Ferrone, *Xfinity TV App for Select Roku Devices Begins Beta Trial*, Roku Blog, Sept. 11, 2017, <https://blog.roku.com/xfinity-tv-app-for-select-roku-devices-begins-beta-trial>.

streaming services, which originally consisted of on-demand content, have matured into streaming live TV: Hulu with Live TV, YouTube TV, Sling TV, PlayStation Vue, DIRECTV NOW and sports-focused Fubo TV are examples.¹³ Even live NFL games, among the most coveted content, were streamed by both Verizon and Amazon this past September.¹⁴ In a sign of the times, Nielsen has modernized its audience measurement standards by including viewership of these newer services.¹⁵ Cable operators and other MVPDs have been incorporating apps from online video distributors such as Netflix, HBO Now, Hulu, YouTube, Pandora and the ESPN App into their equipment offerings.¹⁶

¹³ Jeff Dunn, *There are 6 major services that let you stream live TV over the Internet—Here's How they Compare* BUSINESS INSIDER (Aug. 10, 2017), <http://www.businessinsider.com/streaming-services-comparison-hulu-youtube-tv-sling-directv-now-playstation-vue-fubo-2017-8>

¹⁴ Emily Bary, *Amazon's NFL Stream: Just the Beginning for Tech and Sports*, BARRON'S NEXT (Sep. 29, 2017), <http://www.barrons.com/articles/amazons-nfl-stream-just-the-beginning-for-tech-and-sports-1506704293> (“Despite some early buffering issues, Amazon impressed viewers with its first Thursday Night Football stream, and that could set the stage for more sports feeds from the e-commerce giant and its rivals.”); Todd Spangler, *Amazon's Big NFL Play Could Kick Off a Shake-Up in TV Sports Rights*, VARIETY (Sep. 26, 2017), <http://variety.com/2017/digital/news/amazon-nfl-thursday-night-football-sports-rights-1202570293/> (“But the Amazonian gridiron foray could mark just the earliest days of deep-pocketed technology giants pursuing the TV rights to league deals that for years have served as the glue that holds together the TV bundle.”); Thomas Barrabi, *NFL's first London game of 2017 is a digital streaming exclusive*, FOX BUSINESS (Sept. 23, 2017), <http://www.foxbusiness.com/features/2017/09/23/nfls-first-london-game-2017-is-digital-streaming-exclusive.html>.

¹⁵ Alexandra Bruell, *Nielsen Adds YouTube and Hulu Skinny Bundles to Traditional TV Rating*, WALL ST. J., July 25, 2017, <https://www.wsj.com/articles/nielsen-adds-youtube-and-hulu-skinny-bundles-to-traditional-tv-rating-1500980401>.

¹⁶ See Eighteenth Video Competition Report ¶ 59; see also, e.g., Lisa Richwine & Anjali Athavaley, *U.S. cable firms embrace former foe Netflix as TV viewing shifts*, REUTERS (Aug. 6, 2017) (“A growing number of U.S. cable operators are forming alliances with Netflix Inc., a shift that is helping the streaming pioneer add customers as its largest single market matures.”), <https://www.reuters.com/article/us-netflix-cable/u-s-cable-firms-embrace-former-foe-netflix-as-tv-viewing-shifts-idUSKBN1AM05R>; Daniel Frankel, *Charter integrates Netflix into pay-TV app, YouTube coming next*, FIERCE CABLE (May 3, 2017), <http://www.fiercecable.com/online-video/charters-integrates-netflix-into-pay-tv-app-youtube-coming-next>; *X1 Apps on Your TV*, XFINITY <https://www.xfinity.com/support/cable-tv/dashboard-for-xfinity-tv-on-the-x1-platform/?currentTopicId=363c96e6-ca4e-4e1e-b0b4-6e9718660143¤tCollectionId=363c96e6-ca4e-4e1e-b0b4-6e9718660143-1>; Press Release, Comcast, *Comcast to Launch Netflix on X1 to Customers Nationwide* (Nov. 4, 2016), <http://corporate.comcast.com/news-information/news-feed/comcast-to-launch-netflix-on-x1-to-millions-of-customers-nationwide>; Daniel Frankel, *Comcast officially rolls out YouTube X1 integration, uses 'aggregator of aggregators' claim again*, FIERCE CABLE (Sept. 12, 2017), <http://www.fiercecable.com/cable/comcast-officially-rolls-out-youtube-x1-integration-uses-aggregators-aggregators-claim-again>; *Netflix on DISH*, DISH, <https://www.mydish.com/netflix>; Angela Yang, *ESPN App Completes Nationwide Rollout on AT&T DIRECTV Set Top Boxes*, ESPN MEDIAZONE (Feb. 15, 2017), <http://espnmediazone.com/us/press-releases/2016/12/espn-app-begins-nationwide-rollout-att-directv-set-top>

CONCLUSION

The apps revolution in TV viewing arose despite – not because of – Section 629 regulation. While the one device solution mandated by Commission – CableCARD – is still supported, it has been overtaken completely by apps and today’s competitive device market. Some commenters and analysts, as early as 2011, have made the case that the device market is fully competitive under the terms of Section 629.¹⁷ Since then, the video market has expanded even more dramatically, giving consumers an astounding number of options for watching MVPD content over retail devices and providing consumers, through the marketplace, the choice that Section 629 was intended to deliver.

Respectfully submitted,

/s/ Rick Chessen

Jim Partridge
VP, Industry & Technical Analysis

Rick Chessen
Neal M. Goldberg
Michael S. Schooler
NCTA – The Internet & Television
Association
25 Massachusetts Avenue, N.W. – Suite 100
Washington, D.C. 20001
(202) 222-2445

November 9, 2017

[boxes/](#); Daniel Frankel, *Layer3 TV integrates Pandora into set-tops*, FIERCE CABLE (July 9, 2017), <http://www.fiercecable.com/cable/layer3-tv-integrates-pandora-into-set-tops>; *Hulu* is now on Optimum TV Channel 605*, OPTIMUM, <https://www.optimum.net/pages/tv/hulu.html>; *Hulu is Now Available on TiVo®*, RCN, <https://www.rcn.com/hub/entertainment-zone/hulu/>.

¹⁷ Free State Foundation comments; George S. Ford and Lawrence J. Spivak, *Outliving Its Usefulness: A Law and Economics Argument for Sunset of Section 629*, PHOENIX CENTER POLICY BULLETIN NO. 29 (June 2011).