Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
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Media Bureau Seeks Comment on the Status of Competition in the Market for the Delivery of Video Programming	)	MB Docket No. 15-158
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COMMENTS OF THE
CONSUMER ELECTRONICS ASSOCIATION

I. INTRODUCTION

The Consumer Electronics Association ("CEA")[1] respectfully submits these comments in response to the above-referenced Public Notice ("*Notice*")[2] seeking information on the marketplace for the delivery of video programming. The *Notice* emphasizes the Commission's interest in obtaining specific data and information in order to better understand the consumer implications of recent marketplace trends and to provide a more solid foundation for policy making.[3] CEA thus is pleased to offer the Commission the benefit of its comprehensive and up-to-date market research on the rapidly evolving video marketplace, particularly with respect to

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[1] The Consumer Electronics Association is the technology trade association representing the $285 billion U.S. consumer electronics industry. More than 2,000 companies enjoy the benefits of CEA membership, including legislative and regulatory advocacy, market research, technical training and education, industry promotion, standards development and the fostering of business and strategic relationships. CEA also owns and produces CES – The Global Stage for Innovation. All profits from CES are reinvested into CEA's industry services.

[2] *Media Bureau Seeks Comment on the Status of Competition in the Market for the Delivery of Video Programming*, Public Notice, 30 FCC Rcd 7114 (2015) ("*Notice*").

[3] *See, e.g., id.* at 7117.

the nascent market for online video.[4] Of particular note, CEA data show that: the "Millennial" generation (ages 18-34) is playing a key role in shaping the video landscape; the new 4K Ultra High Definition TV ("4K UHD TV") technology shows real promise; and most consumers ultimately want to use their television sets (rather than smaller, portable devices) for streaming online video, ideally through integrated, easy-to-use streaming technology. CEA elaborates on these findings below.

II. THE ONLINE VIDEO MARKETPLACE IS NASCENT AND RAPIDLY EVOLVING

As an initial matter, it bears repeating that online video services are nascent, the extent of consumer demand for them is unknown, and many possible iterations of Internet video technology and business models have not yet been fully developed, offered to the public, or even imagined.[5] Thus, despite the number and variety of offerings, this is still an evolving area very much in its infancy. The *Notice* aptly explains that business models for online video distributors ("OVDs") vary greatly: "Some OVDs rely on subscriptions or per-program fees, others rely on advertising, and some OVDs rely on a combination of subscription and advertising revenue. Some offer tens-of-thousands of video programs, others offer much fewer. Some OVDs have ownership interests in little or no video programming, while others have significant ownership interests in all or most of the video programming they make available over the Internet. Some OVDs distribute only video programming previously available through other delivery

[4] In addition to its advocacy work before the Commission and other U.S. and international government agencies and officials, CEA's Market Research arm is the authoritative source for consumer technology market research. Its industry knowledge – including more than 25 unique research studies per year, as well as five-year industry forecasts, industry sales reports, and economic webcasts – is relied upon by the technology community, financial markets, the media, and economists.

[5] *See, e.g.*, Comments of the Consumer Electronics Association, MB Docket No. 14-261 (filed Mar. 3, 2015).

technologies, while others create their own content."[6] Indeed, consumers today have access to more video content and service options over the Internet than ever before, with the number and variety of offerings expanding exponentially by the year, and even by the quarter.[7] Some of these are intended as "linear programming offerings" that may compete with traditional MVPD services, while others are not. OVD offerings are launching from equipment manufacturers, content companies, large MVPDs, start-ups, edge providers, retailers – everyone is getting in on the act at this early stage. For example, this year DISH announced at CES that it would offer a new Sling TV streaming video product, the first major Internet-streaming television service from a cable or satellite company.[8] Sling TV is a $20 per month set of 12 channels, targeted toward U.S. customers seeking a smaller, less expensive TV package. Also this year, Sony launched its Internet-based TV service, PlayStation Vue,[9] a streaming service for live TV, movies, and sports for the PS4 and PS3, without a cable or satellite subscription. Vue is available in Chicago, New York, Philadelphia, San Francisco, Los Angeles, Dallas, and Miami. An a la carte option for Showtime also is available on Vue. In March, Viacom launched Noggin, a $5.99 per month

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[6] *Notice*, 30 FCC Rcd at 7128.

[7] *See, e.g.*, Mignon L. Clyburn, Commissioner, FCC, Remarks at Federal Communications Bar Association Luncheon, at 2 (Feb. 19, 2015) ("The media landscape has undergone sweeping and dramatic change in just a few short years. Growing numbers of Americans consume content in ways that are disrupting the traditional landscape. . . . [W]hile many continue to value traditional cable and broadcast outlets, an entirely new suite of options have taken hold. From Netflix and Hulu, to Sling and Amazon, the over- the- top offerings provide consumers with increasingly diverse programming, at a variety of price points."), https://apps.fcc.gov/edocs_public/-attachmatch/DOC-332138A1.pdf.

[8] *See, e.g.*, Scott Moritz and Lucas Shaw, *Dish Starts $20-a-Month Streaming TV With ESPN, TNT*, Bloomberg, Jan. 5, 2015, http://www.bloomberg.com/news/articles/2015-01-05/dish-to-unveil-20-a-month-streaming-tv-service-with-espn-tnt.

[9] *See id. See also* PlayStation Network, PlayStation Vue, https://www.playstationnetwork.com-/vue (last visited Aug. 21, 2015).

Nickelodeon streaming service for children, available on Apple devices.[10] Other key announcements and launches came this year from Apple TV,[11] Verizon,[12] and most recently Comcast.[13] All signs point to this innovation, differentiation, and variety continuing, and likely increasing.

As reflected in the Commission's most recent video competition report[14] and in the *Notice*, the online video marketplace necessarily is a component of the Commission's review of the video marketplace as a whole. Broadband is the key to the economic future of the U.S. and the world, and IP-delivered video unquestionably is, and will continue to be, a key driver in the global economy. The wide-ranging online video offerings both incorporate and challenge aspects of traditional video distribution, and this sector is rapidly evolving. The technological progress that was demonstrated at the 2015 International CES in January has the potential to

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[10] Jennifer Saba, *Nickelodeon Unveils Paid Streaming Service for Kids*, Reuters, Feb. 25, 2015, http://www.reuters.com/article/2015/02/25/us-viacom-nickelodeon-idUSKBN0LT2O520150225.

[11] Jeff John Roberts, *Apple Poised for Over-the-Top Deal with Networks, Report Says*, Fortune, July 14, 2015 (noting that Apple will be able to offer a "'skinny bundle' of channels that consumers could access through phones, computers, or the company's existing Apple TV . . . consist[ing] of shows from ABC, NBC, CBS, and Fox" among others), http://fortune.com/2015/07/14/apple-tv-affiliate-deal.

[12] Jeff Baumgartner, *Verizon's OTT Service to Be Called 'Go90': Report; Ad-Supported, Mobile-First Service to Initially Be Free*, Multichannel News, July 24, 2015 (describing a new, network-agnostic Verizon service (optimized for the Verizon network) to launch in "late summer" and feature content from AOL, Vice Media, Scripps Networks Interactive, ACC Digital Network, Campus Insiders, CBS Sports, ESPN, 120 Sports, and Awesomeness TV), http://www.multi-channel.com/news/next-tv/verizon-s-ott-service-be-called-go90-report/392477.

[13] Daniel Frankel, *Comcast to Answer Sling TV with $15-per-month OTT Pay-TV Service, Stream*, Fierce Cable, July 13, 2015 (describing the Stream service, available only to Comcast Xfinity broadband customers, which blends streaming of the major broadcast networks and HBO, as well as access to Comcast's cloud DVR service and on-demand library, but does not include major cable networks), http://www.fiercecable.com/story/comcast-answer-sling-tv-15-month-ott-pay-tv-service-stream/2015-07-13.

[14] *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Sixteenth Report, 30 FCC Rcd 3253 (2015).

change the world and consumers' lives – but many of these developments may be displaced by newer, even better solutions at the 2016 International CES and beyond.

Thus, as it collects this important data, the Commission must be careful not to use the information to take action based on extrapolations or assumptions about how the video marketplace will work even five years from now.[15] As CEA explained in its comments on the *MVPD Definition Notice*, there presently appears to be no widely available commercial service that would meet the Commission's proposed definition of an OVD that qualifies as an MVPD. There are no fixed "realities of the current marketplace and consumer preference," other than the fact that video options are exploding as innovators develop and launch new offerings to see what best fits consumers' tastes. In short, now is not the time to intervene in the nascent and rapidly evolving online video marketplace, which to date has seen explosive growth absent any industry-wide regulatory involvement. The Commission should refrain from regulation and let online video technologies and business models more fully develop and compete.

III. MILLENNIALS' CONSUMER BEHAVIOR PLAYS A KEY ROLE IN SHAPING THE SHIFTING VIDEO LANDSCAPE

The increased availability and use of television content streaming options – particularly by young adult viewers (*i.e.*, Millennials) – is fundamentally changing the video industry.[16]

[15] In the *Notice*, the Media Bureau ("Bureau") requests data, information, and comment on regulatory conditions that affect OVDs' ability to compete for the delivery of video programming, including the possible reclassification of some OVDs as multichannel video programming distributors ("MVPDs"). *Notice*, 30 FCC Rcd at 7115-16, citing *Promoting Innovation and Competition in the Provision of Multichannel Video Programming Distribution Services*, Notice of Proposed Rulemaking, 29 FCC Rcd 15995 (2014) ("*MVPD Definition Notice*") (proposing to "modernize" the Commission's interpretation of the term "MVPD" by "including within [the definition's] scope services that make available for purchase, by subscribers or customers, multiple linear [*i.e.*, at a prescheduled time] streams of video programming, regardless of the technology used to distribute the programming").

[16] *See, e.g.*, National Association of Television Program Executives and CEA, *Consumer Choice in a Dynamic TV Landscape: The Content Distribution and Discovery Revolution*, at 3 (Feb.

Recognizing this evolution (and seeking to quantify it), the Bureau appropriately seeks comment on, among other things, the extent of substitution between MVPD services, OVD services, and over-the-air broadcast television, and whether consumers view OVD services as supplements, complements, or substitutes for MVPD services.[17] CEA data show that just 17% of households currently receive TV programming through an antenna, with only 6% of households relying exclusively on over-the-air broadcast programming.[18] With respect to MVPD services – defined in CEA marketplace reports as "Pay-TV" or cable, direct broadcast satellite, and IP-based television, such as AT&T U-verse – CEA data shows that the use of devices such as laptops, desktops, tablets, and smartphones for viewing video content in the home is having a significant effect on subscriptions.[19] A decline in traditional MVPD service (so-called "cord-cutting") also may be partially attributed to increasingly accessible Internet-sourced television programming on TVs, the adoption and use of alternative video-capable CE devices in homes, and inexpensive streaming options, such as Netflix and Hulu Plus.[20] Cord cutting is strongest among those most likely to watch streaming video content at home, particularly those watching paid streaming content.[21] Almost three in five (58%) MVPD subscribers stream video content, and more than

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2015) ("February 2015 Content Distribution Report") ("The paradigm for TV content discovery has changed dramatically with increased availability and use of TV content streaming options.").

[17] *Notice*, 30 FCC Rcd at 7121, 7125, 7129, 7130-31.

[18] CEA, *The Market for U.S. Household Television Services*, CEA Market Research Report, at 3 (June 2014) ("June 2014 TV Market Report").

[19] *Id.* at 3.

[20] *Id.*

[21] CEA, *OTT Video Consumption*, CEA Market Research Report, at 24 (Jan. 2015) ("January 2015 OTT Video Report"). Those who stream video are also more likely to want to receive all their video content through the Internet than those who do not (61% vs. 26%) and would be more likely to cancel their Pay-TV service if they could purchase streaming subscriptions to channels of interest (52% vs. 29%). *Id.* *See also* June 2014 TV Market Report at 4 ("Although only 10% of U.S. TV households that currently subscribe to a traditional pay-TV service . . . indicate they

one-third (38%) have considered cancelling their MVPD service – a number that jumps to 47% for those who pay for streaming services.[22]

Not surprisingly, it is young adults – namely, the Millennials, ages 18-34 – who are setting the stage for the next revolution in video consumption.[23] This generation previously led the shift in demand from scheduled video consumption to consumption at the consumer's convenience, leading to increased offerings for recording shows through a digital video recorder ("DVR"), to recording multiple shows at a time, to watching or purchasing content on-demand from MVPDs. Millennials now are more likely than other groups to watch Internet-sourced content, including using subscription video on demand ("SVOD") services, as well as other streaming sources of video programming, and employing multiple screens for viewing.[24] Viewers assign a high value to the convenience and personalization offered by the growing streaming content landscape. Millennials, in particular, increasingly expect to access programming that is most relevant to them whenever, wherever, and on whatever device they want. While the decline of linear TV viewing continues to change the video business dramatically, the growth of streaming offers many new opportunities to content creators and distributors. The increased demand for original, scripted content offers creators, including women and minority writers who have been historically underrepresented, more opportunities to

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are likely to cancel these paid TV subscriptions in the next 12 months (and not subscribe to others), cord-cutting continues to play a small role in the growth of Internet-based programming. Some cord-cutting can be attributed to having other options for video content as 30% of likely cord-cutters plan to receive television programming solely via the Internet, 23% solely via an antenna, 20% from both antenna and Internet sources, and 17% would choose not to receive any programming at all.").

[22] January 2015 OTT Video Report at 24.

[23] February 2015 Content Distribution Report at 3, 27; January 2015 OTT Video Report at 4.

[24] February 2015 Content Distribution Report at 3.

get their works seen and distributed. As "recommendation" technology improves on streaming sites and becomes more important to discovering programming, the fragmented TV audience can be more easily targeted and reached with new content. Millennials, in particular, have a strong appetite both for programming they did not watch when it aired on linear TV, and for programs they have already seen on TV but want to re-watch. SVOD thus presents unique opportunities and challenges. Millennials extol the benefits of SVOD for its ability to shift from live viewing to streaming, ease of discovering new content through "recommended" functions, and for greater control in navigating their viewing experience, such as ability to watch episodes in blocks ("binge") and fully control playback.[25] In short, this generation consumes video content in ways that are far different (and far more diverse) than those that preceded it, and their expectations and preferences will drive the future development of the video marketplace.

IV. TELEVISIONS REMAIN THE MOST COMMON VIDEO PROGRAMMING DEVICE, AND CONSUMERS WOULD PREFER TO WATCH MOST STREAMING VIDEO ON THEIR TVS, VIA INTEGRATED TECHNOLOGY

Notwithstanding the proliferation of consumer electronic equipment designed to view video programming, one aspect of the video marketplace that remains constant is the ubiquity and desirability of television sets. CEA data show that the television set is "a mainstay in consumers' homes that is likely to remain for years to come."[26] At 97% of U.S. households, TVs have the highest penetration of any viewing devices and strongest video content viewership,

[25] *Id.* at 4.

[26] January 2015 OTT Video Report at 26 ("The television set is … the most commonly used device for watching streaming video content and the device consumers most want to watch this type of content on. Consumers watching this content desire to have access to this content built directly into the television, which will fuel adoption of Internet-enabled TV sets when consumers look to replace their next set or purchase an additional one."). The Bureau seeks data on the number or percentage of households that have HD televisions, ultra HD televisions, Internet-connected televisions, DVRs, and mobile video devices (*e.g.*, laptops, tablets, and smartphones). *Notice* at 18.

especially now that Internet-enabled televisions (*i.e.*, "smart" TVs) have reached mainstream consumers.[27] In 2015, CEA estimates that 2% of TV households have 4K UHD TV sets and 43% of TV households have Internet-enabled sets ("smart TVs").[28] Based on market shipment data, CEA estimates a quarter (24%) of all U.S. households owned a smart TV as of January 2014. This represents an 800% increase in ownership of smart TVs and a 300% increase in ownership for streaming media devices since 2011. Approximately 16.1 million app-enabled TVs were shipped in 2014, a 34% increase over 2013.

The new 4K UHD TV holds a lot of promise for the industry, as found in a recent CEA report.[29] Consumers increasingly are becoming aware of the technology[30] and expressing interest in future ownership. As prices decline, adoption is likely to grow. While a specific intent to purchase 4K UHD TVs is confined to a smaller, more technologically-savvy subset of TV viewers, many of the features offered in these TVs are of top importance to those considering a TV purchase in the future. Almost half of consumers indicate that they are likely to purchase a "smart" or Internet-enabled TV. Other top priorities are picture quality and color richness, both of which are characteristic of 4K UHD. In addition, CEA forecasts predict increasing shipment volumes for 4K UHD TVs with screen sizes of 40 inches or larger, which future TV buyers indicate is a top motivator for upgrading a TV. Consumers also are educating themselves about 4K UHD technology, and those who see it in person are more likely to be interested in owning

[27] June 2014 TV Market Report at 1.

[28] *See* CEA, U.S. Consumer Electronics Sales & Forecasts, July 2015 Edition.

[29] CEA, *4K Ultra HD Update: Consumer Adoption and Awareness,* CEA Market Research Report (Jan. 2015).

[30] *Id.* at 4 (nearly 7 in 10 online U.S. adults indicate they are familiar with the term "Ultra High Definition TV" (69%), a jump from 2013 when only 64% were familiar). Sources for awareness include retail stores (displays, in-store promotions, demonstrations, speaking with a salesperson) and Internet sources (manufacturer websites, retailer websites, product review sites, comparison shopping sites, social networking sites, search engines, and advertisements). *Id.* at 16.

the technology. Put simply, the quality and value of 4K UHD TV is apparent once experienced, placing substantial emphasis on the retail environment.[31] As consumers gain more firsthand knowledge and experience with the technology, interest and purchases are expected to rise.[32]

The source of programming displayed on TVs is evolving, driven in part by innovations in display technology and content delivery models, as well as broadband availability.[33] As of June 2014, 96% of TV households received television programming on their TVs from at least one source, and some from multiple sources.[34] MVPDs are the largest source of programming on TVs, although their share is declining slightly. Almost half (45%) of U.S. TV households receive some programming on their TVs through the Internet in a variety of ways.[35] As of June 2014, six million households relied solely on Internet programming, and that number is expected to continue to rise.[36] Even within a household, it is common to have more than one method for

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[31] *Id.* at 4, 18 (when the time comes to make a purchase, consumers are likely to do so in-store; 8 in 10 are likely to visit a store to see the product in person, and 61% are likely to get a demonstration of the product).

[32] The next big technology with even further consumer benefits and a large impact on the market will be 8K Ultra High Definition. Although shipments have yet to begin commercial volume roll out, they are expected to steadily increase over the next five years and reach nearly one million units by 2019. *See* Electronics360 News Desk, *8K TV Shipments Forecast to Grow Rapidly in the Next 5 Years*, IHS Electronics360 News Desk, July 15, 2015, http://electronics360.global-spec.com/article/5469/8k-tv-shipments-forecast-to-grow-rapidly-in-the-next-5-years.

[33] June 2014 TV Market Report at 4.

[34] *Id.* at 2. "Households without any means of receiving programming on their TVs may be using them solely as a screen for playing video games or watching movies and other content on physical formats (DVD, Blu-ray Disc, VHS, etc.)." *Id.*

[35] *Id.* at 4.

[36] *Id.* at 2.

accessing streaming content on TVs,[37] and consumers are slightly more likely to watch free (46%), as opposed to paid (39%), streaming services.[38]

Although the TV remains the most commonly used device for video consumption in the home, viewers also can access a plethora of content by using portable devices such as tablets, smartphones, and laptop PCs; desktop PCs, video game consoles, and Blu-ray Disc players; and dedicated streaming media devices (*e.g.*, Roku, Chromecast, Apple TV).[39] Indeed, even within the home, households are looking beyond TVs to alternative video devices. "[N]early half of TV user households watched video on either a portable computer (laptop, notebook, or netbook) or smartphone, and a third have watched on either a tablet or desktop computer."[40]

The "explosive growth of Internet programming continues to empower consumers with better options to enjoy video content on all the different types of screens they may own," but, ultimately, the data show that consumers would most prefer to watch streaming video on their TVs and want the simplest solution for doing so.[41] A tension currently exists: while Internet-

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[37] January 2015 OTT Video Report at 4.

[38] *Id.* at 12.

[39] CE devices dedicated to providing access to streaming content have grown tremendously in the past few years. According to CEA's *16th Annual CE Ownership and Market Potential Study* (2014), one in four U.S. households report owning a smart TV and a similar number report owning at least one streaming media device. This represents an 800% increase in ownership of smart TVs and a 300% increase in ownership for streaming media devices since 2011. January 2015 OTT Video Report at 9, 15.

[40] June 2014 TV Market Report at 1.

[41] *Id.* at 4. It bears noting that there are distinct differences in the use and preferences of Millennials for multiple screens. About half of Millennials say they watch TV programming on a laptop, and for nearly 2 in 10 (19%), a laptop is their preferred TV viewing screen. College-age Millennials view a laptop as a portable TV. Another 3 in 10 (28%) watch video programming on a tablet, and 22% on a smartphone. Portability and the ability to watch anywhere are cited as key benefits in Millennials' use of multiple screens, as well as greater comfort level with smaller screen sizes and a higher tendency to multitask. February 2015 Content Distribution Report at 5.

enabled/smart TV owners are more satisfied with the video *quality* of the content they watch, those who own streaming media devices are more likely to be satisfied with the *variety* of content they are able to access on their devices.[42] The findings suggest consumers are more driven by screen size over portability when watching streaming content at home.[43] Consumers report that for the sake of simplicity, they would most prefer to access streaming content via technology integrated directly into the TV (40%), eliminating the need for additional peripheral devices and unnecessary cables and cords.[44]

Finally, with respect to the Bureau's questions regarding customer premises equipment, CEA notes its consistent support for the consumer benefits that could be realized from a robust, competitive market for navigation devices.[45] CEA thus looks forward to the report of the FCC's Downloadable Security Technology Advisory Committee and applauds the FCC for actively engaging on this important issue in furtherance of the goals of Section 629 of the Communications Act.[46]

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[42] January 2015 OTT Video Report at 17.

[43] *Id.* at 19.

[44] *Id.* at 20.

[45] *See, e.g.*, Comments of the Consumer Electronics Association, MB Docket No. 14-16 (filed Mar. 21, 2014).

[46] 47 U.S.C. § 649.

V. CONCLUSION

CEA is pleased to contribute to the Commission's efforts to gather data on these important industry trends and welcomes the opportunity to further assist at the Commission's request.

Respectfully submitted,

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