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June 7, 2016

**VIA ELECTRONIC FILING**

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

Re: *Commercial Availability of Navigation Devices*, MB Docket No. 16-42, CS  
Docket No. 97-80

Dear Ms. Dortch:

On June 3, 2016, Kathy Zachem, Mark Hess, Mark Vickers, Frank Buono, the undersigned of Comcast Corporation (“Comcast”), and Jonathan Friedman of Willkie Farr & Gallagher LLP met with Scott Jordan, Chief Technologist, Bill Lake, Media Bureau Chief, Jessica Almond, Legal Advisor to Chairman Wheeler, and Michelle Carey, Mary Beth Murphy, Martha Heller, Brendan Murray, Jonathan Mayer, and John Williams of the Commission staff to discuss the above-referenced dockets.

We expressed concern that the parity requirements in the Commission’s proposal could be interpreted in ways that slow innovation and have other harmful effects. For example, we noted that the parity rules could delay the deployment of new technologies like High Dynamic Range video and HEVC, given the time needed to update standards for delivering the three Information Flows to third parties in order to accommodate these new technologies. We also expressed concern that the proposed rules could limit experimentation with innovative content business models and also impede MVPDs’ migration to cloud-based services.<sup>1</sup>

We also explained that the *Notice*’s model of three Information Flows does not fit the way any video or any data is delivered on the Internet or over IP-based MVPD systems today. That broadcast-type model is totally irrelevant for today’s two-way IP systems. We noted, by way of example, that basic tasks on the Xfinity TV platform today involve dozens of *two-way* communications between the code running in our app/device and our backend subs-systems and servers. These types of complex interactions are also involved in accessing content or enabling other features on the platform.

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<sup>1</sup> See Comcast Comments, MB Docket No. 16-42, CS Docket No. 97-80, at 66-69, 85-86; see also NCTA Comments at 109-11, 134-35; AT&T Comments at 33-38; MPAA Comments at 10-11. The *Notice* states that it is not adopting “common reliance” in its proposal, see *Notice* ¶ 69, but, as we explained, that is the effect of the parity requirements set out in the *Notice*, which, again, will have innovation-chilling, anti-consumer effects.

We explained that it is simply not realistic or feasible to think that this complex, interactive system can be adapted to the Commission's proposal, or that the network code that helps run the system can be easily replicated on third-party devices and apps. In this regard, we also noted that, among other things, MVPDs deploy very different network infrastructures so that the code that one MVPD develops for interacting with its network differs from the code that other MVPDs would develop; MVPD network code is regularly updated to accommodate network and service changes, and corresponding changes would be required in the third-party device (or app); and that programmers and content owners require a trusted execution environment as a key element of a strong content security and content presentation regimen.<sup>2</sup>

In response to questions about integrating HTML5 with premium media extensions into the Commission's proposal, we noted that the HTML5 standard does not describe how to work with a competitive user interface as envisioned by the FCC's proposal. More specifically, HTML5 is an international open standard that was designed and deployed to enable a video distributor to create a service that is presented using the *distributor's* user interface through its app, *not* a third party's user interface.<sup>3</sup> We also explained that HTML5 does not standardize interactions between the app and the video service backend. Rather, it standardizes the user interface elements of an app across different device platforms. HTML5 elements are used to present video and audio to the user, but communication between the app and backend servers is handled by code in the app in an idiosyncratic manner according to each MVPD's and other distributor's unique backend design.

We also discussed how Comcast, like other MVPDs, ensures that our apps deliver content consistent with our legal and regulatory obligations, and with our contractual obligations with programmers and content owners.<sup>4</sup> We explained that, through our apps-based code, we can control how content is handled on an end-to-end basis, from content ingest through to content display on the device. These technological measures ensure compliance with privacy, EAS, accessibility, and other regulatory obligations, as well as with content licensing terms. Comcast's agreements with device partners provide further assurance that these regulatory and contractual requirements are met. This apps-based approach is fundamentally different from the Commission's proposal, which would allow third parties to create a derivative service. Moreover, under this proposal, we would have no technical means to monitor or control what the

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<sup>2</sup> See Letter from Jordan B. Goldstein, Comcast Corporation, to Marlene H. Dortch, FCC, MB Docket No. 16-42, CS Docket No. 97-80, at 1 (May 11, 2016).

<sup>3</sup> As Comcast has previously explained, this is the manner in which OVDs like Netflix and MVPDs like Comcast are using the standard today. For example, like Netflix's app, Comcast's HTML5-based app will appear in the umbrella user interface of device partners, alongside other apps, and once the consumer opens the Xfinity TV app, the Xfinity TV service is presented using the Xfinity user interface, just as Netflix's service is presented using the Netflix user interface, the Amazon service is presented using the Amazon user interface, the Google/YouTube service is presented using the Google/YouTube interface, and so on for other MVPD and OVD apps. See *id.* at 2.

<sup>4</sup> See Comcast Comments at 26-27, 77-82.

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device maker or app developer does with the content, and thus no way to ensure that the third party honors the MVPD's underlying programming licensing terms.<sup>5</sup>

Finally, we discussed Comcast's Xfinity TV Partner Program and the proposed apps-related principles set forth in our comments, as well as our comments around supporting integrated search capabilities on retail device platforms.<sup>6</sup>

Please direct any questions to the undersigned.

Sincerely,

/s/ Jordan B. Goldstein  
Vice President, Regulatory Affairs  
Comcast Corporation

cc: Scott Jordan  
Bill Lake  
Jessica Almond  
Michelle Carey  
Mary Beth Murphy  
Martha Heller  
Brendan Murray  
Jonathan Mayer  
John Williams

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<sup>5</sup> The Commission's proposal also does not contemplate an agreement between the MVPD and third party.

<sup>6</sup> *See id.* at 28-32.