



September 12, 2018

VIA ELECTRONIC FILING

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street SW  
Washington, DC 20554

**RE: EX PARTE PRESENTATION: Request by Google LLC for Waiver of Section 15.255(c)(3) of the Commission's Rules, ET Docket No. 18-70**

Dear Ms. Dortch:

On September 10, 2018, the undersigned, Pankaj Venugopal, and Qi Qu (who joined by telephone) of Facebook, Inc. ("Facebook") participated in a meeting with Julius Knapp, Karen Rackley, Anh Wride, Aspasia Paroutsas, Kevin Holmes, Matthew Hussey, Michael Ha and Jamison Prime of the Office of Engineering and Technology of the Federal Communications Commission.

Facebook supports innovation and the advent of new technologies like the Project Soli devices for which Google has requested a waiver.<sup>1</sup> During the meeting, however, we observed that innovation in one technology should not unduly constrain innovation in another, and we emphasized that it is critically important that Google's new Soli radar technology shares spectrum fairly with existing technologies and in a manner that will not constrain future innovation in the 57-64 GHz ("60 GHz") band.

We further noted that Facebook engineers have analyzed the impact of Soli radars. Facebook's simulation studied the operation of one Google Soli device on 802.11ad for short range communications, and analyzed whether the radars would lead to: (i) significant degradation of the short range device's (SRD) throughput (packet error rate) and (ii) transmitter blocking of the SRD in certain conditions.<sup>2</sup>

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<sup>1</sup> Request by Google LLC for Waiver of Section 15.255(c)(3) of the Commission's Rules, ET Docket No. 18-70 (filed Mar. 7, 2018) ("Request for Waiver").

<sup>2</sup> See Letter from Alan Norman, Facebook, Inc. to Marlene H. Dortch, Secretary, FCC, ET Docket No. 18-70 (filed Jul. 20, 2018).

Although that analysis raised concerns for Facebook,<sup>3</sup> Facebook and Google have had a constructive dialogue, including further technical analysis. Based on this discussion, Facebook and Google have jointly proposed operating parameters for Project Soli radars that are provided on the record in this proceeding in a joint filing (the “Joint Letter”).<sup>4</sup> As such, Facebook supports the grant of Google’s Request for Waiver for the identified Soli devices so long as the Commission conditions the waiver on Google’s compliance with the parameters specified in the Joint Letter and applies the waiver only to the identified Soli devices.

We further indicated in the meeting that future product development in this band is likely to occur, including with respect to evolving standards and proliferation of new devices. Indeed, WiGig-based technologies are continuing to develop and expand in the 60 GHz band. We expect a variety of use cases to develop with respect to new radar devices, including Soli.

Looking ahead, we believe that a continuing dialogue between the Commission and industry stakeholders will be essential to ensure future continued cooperative use of the band, especially as technologies and use cases rapidly evolve. The Commission, as well as industry stakeholders, should continue to monitor the impact of Soli radars, including the impact of this waiver and any other proposed use of mobile radars at higher power levels in the band on point-to-point communications between SRDs. In particular, the Commission should encourage and support the industry-led coordination and collaboration that have made innovation in unlicensed spectrum so successful.

Respectfully submitted by:

/s/ Alan Norman

Alan Norman

**Facebook, Inc.**

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cc: (via email)

Julius Knapp

Karen Rackley

Anh Wride

Aspasia Paroutsas

Kevin Holmes

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<sup>3</sup> See *id.*; see also Reply Comments of Facebook, Inc. ET Docket No. 18-70 (filed Apr. 23, 2018).

<sup>4</sup> Letter from Megan Anne Stull, Counsel, Google LLC and Pankaj Venugopal, Associate General Counsel, Facebook, Inc. to Marlene H. Dortch, Secretary FCC, ET Docket No. 18-70 (filed Sep. 7, 2018) (“Joint Letter”).

Matthew Hussey

Michael Ha

Jamison Prime