

# JONES DAY

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November 13, 2019

## BY ELECTRONIC DELIVERY

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

**Re: Permitted Written *Ex Parte* Notice  
Wireless E911 Location Accuracy Requirements  
PS Docket No. 07-114**

Dear Ms. Dortch:

NextNav, LLC (“NextNav”) herein addresses the recent *ex parte* submissions of Google LLC and Apple Inc. on the issues of privacy and vertical location accuracy. As an initial point, NextNav seeks to correct the record with respect to any implication that NextNav’s vertical location technology will not be compliant with the Commission’s privacy requirements as identified in the draft Fifth Report and Order or that were adopted in the Fourth Report and Order to address the National Emergency Address Database (“NEAD”).<sup>1</sup> This is factually inaccurate.

NextNav’s technology is fully compliant with the Commission’s existing and proposed privacy requirements. NextNav’s service does not store location information for wireless handsets, it only collects air pressure offset information for the barometric pressure sensor within a handset (*i.e.*, the deviation measured in pascals between the pressure reported by the sensor and the pressure identified by NextNav’s local monitoring network). This data does not include location information and cannot be converted into location information absent additional inputs. Further, the deviation data for each sensor is never associated with a particular telephone number or

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<sup>1</sup> *Contra* Letter from Megan Anne Stull, Counsel to Google LLC, to Marlene H. Dortch, Secretary, Federal Communications Commission, PS Docket 07-114, at 3 (Nov. 8, 2019) (“*Google Letter*”) (claiming incorrectly that “[l]ocation information would be collected using a barometer and sent to the third party’s networks even when the user is not placing an emergency call, potentially raising questions about privacy and user consent”).

Marlene H. Dortch  
November 13, 2019  
Page 2

subscriber name, in part because none of this information is ever supplied to NextNav by a wireless carrier.

Second, Apple has requested changes to the Commission's wireless location privacy rules that would make them much more restrictive than the existing privacy rules, including the rules that the Commission adopted in 2015 to address the highly sensitive information that would be included in the NEAD. Specifically, Apple has proposed edits to the rule that would prohibit "disclosure of a user's precise location to any z-axis technology vendor for purposes of complying with § 9.10(i)(2)(ii)."<sup>2</sup> Such a proposal would significantly impede location technology vendors by preventing them from having access to z-axis information for such valid purposes as system calibration and accuracy verification. NextNav concurs with the remainder of Apple's suggested edits, as they appropriately clarify that the privacy protections apply both to the wireless carrier as well as any third-party location technology vendor. NextNav also concurs with Apple's request that the Further Notice explore how confidence and uncertainty metrics can be applied to address-based or floor-labeling location approaches.<sup>3</sup>

Third, NextNav responds to Google's last minute suggestion that the Commission should give wireless carriers the option to report a range of "floor label" information rather than vertical location information to emergency first responders.<sup>4</sup> Although there is very little in the current record to support such an alternative compliance metric, it is important to recognize that Google's proposed "+/-1 floor level metric" is significantly less accurate than the +/-3 meter requirement advocated by public safety. Allowing compliance within a range of three floors is essentially equivalent to +/-5 meter accuracy (*i.e.*, at least 30 feet for three floors),<sup>5</sup> which the carriers previously proposed in 2018 and which public safety appropriately rejected. To be considered an acceptable alternative to +/-3 meters of vertical accuracy, the logical objective would be identifying *the* correct floor (rather than three floors) for 80 percent of calls. This proposal is also

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<sup>2</sup> Letter from Paul Margie, Counsel for Apple Inc. to Marlene H. Dortch, Secretary, Federal Communications Commission, PS Docket 07-114, Exhibit A (Nov. 12, 2019) ("*Apple Letter*").

<sup>3</sup> *See id.* at 2.

<sup>4</sup> *Google Letter* at 3.

<sup>5</sup> The Commission has previously observed that the average floor height of a multi-story building floor is 3.1 meters in residential buildings, 3.9 meters in office buildings, and 3.5 meters in mixed-use settings. *See* Wireless Location Accuracy Requirements, PS Docket No. 07-114, *Third Further Notice of Proposed Rulemaking*, FCC 14-14, ¶ 71 n.143 (Feb. 21, 2014) (*citing* Council on Tall Building and Urban Habitat, Height Calculator).

Marlene H. Dortch  
November 13, 2019  
Page 3

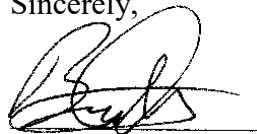
not supported by any objective test data as conducted and publicly released by ATIS, CTIA or other such bodies.

NextNav, however, does believe inclusion of an optional floor label metric is a reasonable proposal for consideration in the Further Notice. Such a notice and comment process is needed to clarify the scope of Google's proposal, which makes reference to a compliance option of "a floor label within +/-1 floor of the floor" in the cover letter,<sup>6</sup> but describes it as "+/-1 floor" (without reference to a floor label) within Google's accompanying slide presentation.<sup>7</sup> Comment will also be needed on the appropriate definition of "floor label", whether such labeling can be determined in a consistent and objective manner, and whether a single floor or a range of floors represents an appropriate compliance objective. Fortunately, sufficient time exists to explore these important questions in a rulemaking process given Google's acknowledgement that more research is needed before a floor label approach is achievable and "appropriate for designation by government" as a long-term solution.<sup>8</sup>

Finally, based on the submissions of Google and Apple, it is clear that the two major players in the design and manufacture of handsets and operating systems intend to exercise a significant role in the implementation of the Commission's indoor location requirements. Therefore, it is important for the Commission to appropriately encourage all participants in the wireless ecosystem to collaborate with the major wireless carriers to ensure they can satisfy their compliance requirements by the April 2021 and 2023 deadlines in order to achieve the core objective of this proceeding, which is to heighten the safety and security of the public.

Thank you for your attention to this matter. Please contact the undersigned if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Bruce A. Olcott", written over a horizontal line.

Bruce A. Olcott

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<sup>6</sup> *Google Letter* at 3.

<sup>7</sup> *See id.*, Attachment 1 at unnumbered page 11.

<sup>8</sup> *See id.* at 3 (explaining that "[r]esearch on floor label technologies is the next natural step").