



June 5, 2013

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
455 12<sup>th</sup> St. SW  
Washington DC 20554

RE: **EX PARTE** in Amending the Definition of Interconnected VoIP Service in Section 9.3 of the Commission's Rules, GN Docket No. 11-117; Wireless E911 Location Accuracy Requirements, PS Docket No. 07-114; E911 Requirements for IP-Enabled Service Providers, WC Docket No. 05-196

Dear Ms. Dortch:

On June 4, 2013, Cisco Systems met with Henning Schulzrinne, Chief Technology Officer, Office of Strategic Planning, to discuss Cisco's activities and initiatives to advance the ability of the network and consumer devices to provide indoor location, as those might impact the FCC's continuing efforts to find indoor location mechanisms to support e911. Representing Cisco were: Marc Linsner, Bob Friday, and Brian Hart from our Engineering organization and myself.

Cisco explained that its current efforts, and the efforts of many industry players, are to use existing network and existing client device technologies to make indoor location as much like outdoor cellular GPS location as possible. In Cisco's view, this objective will best be achieved by harnessing the location data available in Wi-Fi networks, and Wi-Fi equipped client devices. Location data today is generally available in enterprise networks and is technologically feasible in residential Wi-Fi networks. Cisco reported on its involvement in industry indoor location service discussions that would hopefully address standardization of location services. We referred to a slide from the In-Location Alliance discussing an architectural approach as an example of the type of work now underway - [http://in-location-alliance.com/files/ILA/In-Location\\_Alliance\\_Introduction.pdf](http://in-location-alliance.com/files/ILA/In-Location_Alliance_Introduction.pdf).

Cisco also discussed potential business drivers to spur the development of indoor location, both for enterprise networks and for residential Wi-Fi, and the need to overcome cost barriers to those advancements. Cisco indicated that significant work remains to be done by industry in this area, such as development of a plan to generate civic addresses (including floor numbers) and generating location data for a Wi-Fi enabled device that has not authenticated to the Wi-Fi

access point. However, if that work can be brought to completion, location accuracy of 5 meters, and even as accurate as 1 meter, is achievable.

Finally, Cisco agreed to continue the dialog with the FCC on this important issue.

Sincerely,

CISCO SYSTEMS, INC.

By: Mary L. Brown  
Director, Cisco Government Affairs  
601 Pennsylvania Ave. NW 9<sup>th</sup> Fl. North  
Washington, D.C. 20004  
(202) 354-2923

cc: Henning Schulzrinne