March 2, 2010

Via Electronic Filing

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

Re: **EX PARTE**
GN Docket Nos. 09-47, 09-51, 09-137; WT Docket No. 06-150;
PS Docket No. 06-229

Dear Ms. Dortch:

On March 1, 2010, Mark McDiarmid, Bob Calaff, Michael Amend, John Pottle, Jim Nixon, Harold Salters, Jay Naillon and the undersigned of T-Mobile USA, Inc. ("T-Mobile"), and Kostas Liopiros of the Sun Fire Group LLC on behalf of T-Mobile, participated in a conference call with Stagg Newman of the Commission's Broadband Task Force and Michael Iandolo advising the Broadband Task Force.

The call explored issues related to the implementation of the Commission's proposal to develop the 700 MHz public safety broadband network through public/private partnerships. Consistent with the views T-Mobile expressed in the comments and other filings that it has submitted in the above-referenced proceedings, its representatives discussed how a flexible framework for public/private partnerships could leverage commercial wireless networks and technology. Such flexibility would allow public safety agencies to develop arrangements that best meet their individual needs, while at the same time potentially offering commercial operators the option to access public safety spectrum to meet consumer demand.

T-Mobile and the FCC staff discussed the advantages of sharing a common radio access network that both public safety and one or more commercial networks could leverage in parallel versus building the networks separately. As expressed in previous filings, T-Mobile noted its experience in network sharing in the U.S. and in Europe and discussed how network sharing can be applied to an LTE public safety network built out with shared radio infrastructure. Network sharing standards for several core network operators to share one radio access network are developed and discussed in 3GPP TR 22.951.

T-Mobile and the FCC staff then discussed the technical and cost issues involved in developing public safety user devices that use multiple bands within the 700 MHz spectrum

Main: 202-654-5900
Fax: 202-654-5963
401 9th Street NW, Suite 550
Washington, DC 20004

block. One concern is the difficulty of roaming on bands that have differing bandwidths. T-Mobile noted that 3G user devices currently are able to switch between bands with differing bandwidths and that LTE will have the same capability. Another concern is that the cost of developing and procuring unique components such as filters could increase the cost of public safety user devices above that of commercially available devices. T-Mobile noted that a way to reduce the cost of public safety user devices would be to insert public safety banding requirements into commercial developments (to drive up volume). In order to do this, standards need to be developed before the pubic safety system is built out. This could be a potential role for the Commission's proposed Emergency Response Interoperability Center (ERIC).

T-Mobile and the FCC staff next discussed several ways to extend coverage in rural areas. The FCC staff noted that public safety coverage and performance requirements are stated for 23 dBm (200 milliwatt) handheld devices. The feasibility of using higher power user devices with external antennas to extend range (and cell size) was explored. T-Mobile has previously noted that current LTE standards support a maximum cell range of up to 100 km (about 62 miles). The specific LTE coverage provisions are at Section 7.4 of 3GPP TR 25.913 v.9.0 (Dec. 2009). T-Mobile noted that it was feasible to modify commercial LTE devices for higher power and external antennas at some additional cost, but significantly less than what public safety is paying for terminals today.

Finally, T-Mobile and the FCC staff discussed the use of relay nodes (i.e. repeaters) to increase the range and performance of a system. One question is whether a commercial development of LTE repeaters could drive adoption by public safety. T-Mobile noted that although relay nodes could increase range and performance, their use needs to be well planned and managed.

It was further agreed to consider a follow-up discussion on techniques to increase cell radii in rural areas and techniques for deploying capabilities for public safety use in an emergency.

Pursuant to Section 1.1206(b) of the Commission's rules, an electronic copy of this letter is being filed with the office of the Secretary. If you have any questions regarding this notification, please contact the undersigned.

Very truly yours,

/s/ Kathleen O'Brien Ham

Kathleen O'Brien Ham
Vice President, Federal Regulatory Affairs

cc: Stagg Newman
Michael Iandolo