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**VIA ELECTRONIC FILING**

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

**Re: Ex Parte Presentation**

**WT Docket No. 09-66**

**WT Docket No. 06-150**

Dear Ms. Dortch:

The heart of the Commission's strategy for promoting broadband wireless competition must be the allocation of more spectrum for the provision of advanced mobile services. As Chairman Genachowski has rightly noted, spectrum is the "oxygen" of mobile broadband services, and there is an immediate and substantial need for additional spectrum to promote jobs, growth, education, and a range of other fundamental social and economic goals.

For this reason, T-Mobile, USA, Inc. ("T-Mobile") supports the National Broadband Plan's recommendation that the Commission identify and allocate 500 MHz of spectrum for wireless broadband services within the next 10 years, including through the auction of the Upper 700 MHz D Block for commercial use; the reallocation of spectrum from federal to non-federal use to pair with the AWS-3 band; and a rulemaking proceeding to reallocate 120 megahertz from the broadcast television bands.

As T-Mobile has stated previously, however, not all spectrum is created equal. In considering what measures will best promote competition in the wireless marketplace, the Commission should recognize that making more spectrum available in the lower bands would be especially effective. Because of its propagation characteristics, lower band spectrum is widely considered "beachfront property." Lower frequency bands can transmit more bandwidth over longer distances than higher frequencies, meaning that each cell site transmitting in the lower frequencies is capable of reaching much broader swathes of coverage. This, in turn, translates to efficiencies in the form of fewer cell sites needed to be built and lower capital costs. The National Institute for Standards and Technology (NIST) estimates that covering 100 square miles would require nine cell sites

at 2400 MHz and four cell sites at 1900 MHz – but only one site at 700 MHz.<sup>1/</sup> The greater efficiency possible in the lower bands allows for coverage at substantially the same transmission power, providing better wall penetration for buildings (of particular importance for emergency responders and E-911 services) at less expense to the carrier and therefore lower cost to consumers. Making more of this spectrum available will enable carriers to compete more effectively.

The 700 MHz band is particularly well-suited for advanced wireless services.<sup>2/</sup> Today, however, the lion's share of the valuable spectrum in the 700 MHz band is held by the largest wireless providers. In Auction 73, AT&T and Verizon bought nearly \$16 billion of the \$19 billion worth of licenses in this band. And because these companies also own wireline networks in many areas where they hold this spectrum, they may not have the same competitive incentives that non-wireline entities have to use spectrum to compete with wireline voice and data services. These same carriers also control most of the spectrum in the 800 MHz band – a result of their legacy cellular licenses and steady stream of acquisitions.

Making the D Block available for commercial use would offer the opportunity for additional competitors to enter the 700 MHz wireless marketplace – ultimately leading to more innovative services for consumers as well as providing a more competitive environment for public safety to negotiate partnership arrangements. Commercial auction of the D Block for 4G service will also enhance economic growth and create new jobs.<sup>3/</sup>

For these reasons, we strongly support the recommendation in the National Broadband Plan for the commercial auction of the D Block.<sup>4/</sup> Adoption of the related proposals in the Broadband Plan will ensure that the D Block can also be used to meet the advanced communications needs of public safety entities. These include a requirement for the D Block licensee to use a nationally standardized air interface; give roaming and priority rights to state, local, and federal public safety users, subject to compensation obligations; develop and offer devices that operate both on the D Block and the neighboring public

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<sup>1/</sup> National Institute for Standards and Technology, *700 Mhz Band Channel Propagation Model*, available at <http://www.nist.gov/itl/antd/emntg/700mhz.cfm> (last visited Apr. 13, 2010).

<sup>2/</sup> See, e.g., Marguerite Reardon, *Assessing Success in the FCC's 700 MHz Auction*, CNET NEWS, Mar. 19, 2008 (“Some experts believe the [700 MHz] spectrum is ideal for offering robust, affordable wireless broadband services.”), available at [http://news.cnet.com/8301-10784\\_3-9897722-7.html](http://news.cnet.com/8301-10784_3-9897722-7.html) (last visited Apr. 13, 2010).

<sup>3/</sup> See Letter from Charles W. Logan, on behalf of Coalition for 4G in America to Marlene H. Dortch, Secretary, Federal Communications Commission, WT Docket No. 06-150 (filed Mar. 19, 2010).

<sup>4/</sup> *Connecting America: The National Broadband Plan* at 86, available at <http://download.broadband.gov/plan/national-broadband-plan.pdf>.

safety block; and comply with commercially reasonable buildout requirements including incentives for building out rural areas and systems that support public safety agencies.<sup>5/</sup> To ensure effective public safety communications, we urge the Commission to apply these requirements equally to all of the commercial licensees in the 700 MHz band.

The spectrum occupied by broadcast television stations also has excellent propagation characteristics that make it well-suited to the provision of mobile broadband services.<sup>6/</sup> Reallocating at least a portion of this spectrum would offer competitive and public benefits similar to those described above for the D Block, while allowing consumers to retain access to free, over-the-air television. The Commission should commence a proceeding to consider the combination of technical rule changes, spectrum “repacking,” channel sharing, and the potential availability of incentive auctions proposed in the Broadband Plan to encourage broadcasters to voluntarily relinquish some of their spectrum.

T-Mobile urges the Commission to take the steps set forth above to make lower band spectrum available as soon as possible to smaller carriers. These actions will promote the twin goals of promoting wireless broadband investment and meeting public safety’s need for access to advanced broadband wireless services.

Sincerely,

/s/

Kathleen O’Brien Ham

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<sup>5/</sup> *Id.*

<sup>6/</sup> *Id.* at 88.