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February 2, 2018

**VIA ELECTRONIC FILING**

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

Re: *Promoting Technical Solutions to Combat Contraband Wireless Device Use in Correctional Facilities*, GN Docket No. 13-111  
Written *Ex Parte* Presentation

Dear Ms. Dortch:

T-Mobile USA, Inc. (“T-Mobile”), pursuant to Section 1.1206(b) of the Commission’s rules,<sup>1</sup> hereby submits the attached study by Roberson and Associates, LLC comparing Managed Access Systems (“MAS”) and precision jamming systems as potential solutions to prevent contraband phone use in correctional facilities. The study provides an overview of MAS and jamming solutions examining both technical and cost considerations. The paper finds that the cost to deploy and operate the two solutions is roughly equivalent, with the cost for a MAS being less than a jammer solution in larger prisons and the jammer solution being slightly less than an MAS solution for smaller prisons. However, the study also details a number of detrimental impacts of a jammer solution compared to an MAS solution, such as blocking legitimate use of wireless devices, including use for E911 and FirstNet, jamming other important uses, including GPS, Bluetooth and Wi-Fi, and creating a significant potential for interference with use of wireless devices by the general public in surrounding areas. Based on the findings of the study, any cost/benefit analysis would necessarily have to conclude that a jamming solution is not an appropriate approach to combating contraband devices in prisons given the availability of comparably priced, effective solutions that do not include the negative societal impacts associated with jammers.

The study compares MAS and precision jamming solutions, with particular focus on their coverage footprint requirements, methods of service denial, and impact on local commercial wireless networks. The document finds that there is little functional difference between network elements employed within the two systems, except for the core network which is applicable to MAS systems only. It also highlights that, although both solutions prevent the use of contraband

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<sup>1</sup> 47 C.F.R. § 1.1206.

devices within correctional facilities, MAS allows officials to permit the operation of authorized devices within correctional facilities, whereas jamming solutions prevent the operation of all devices for all purposes, regardless of legitimacy. Furthermore, the report identifies additional operational benefits available for MAS, *e.g.*, data collection, that are not available with a jamming deployment.

The study then analyzes the relative financial costs associated with these two solutions for small, medium, and large correctional facilities. Understanding that correctional institutions vary widely in function and age, and related to this and other factors, the design and building materials are quite diverse. The study finds generally that the comparative costs of MAS and precision jamming systems are similar and that the larger and more complex the facility, the higher the relative installation and operation cost is predicted to be for a precision jamming system versus the equivalent costs of a MAS.

Finally, given the importance of 911 calling and the increasing reliance of first responders on commercial networks (*e.g.*, FirstNet), the study concludes that the impact of potential solutions on these types of communications should be an important part of any analysis.

If you have any questions, please contact the undersigned.

Respectfully submitted,

/s/ Steve Sharkey

Steve Sharkey

Chief Engineering and Technology Policy,  
Federal Regulatory

cc: Charles Mathias  
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