

March 5, 2018

**VIA ECFS**

Marlene Dortch  
Secretary  
445 12<sup>th</sup> Street SW  
Washington, DC 20554

**REDACTED FOR**  
**PUBLIC INSPECTION**

Re: *T-Mobile Wireless Priority Service Waiver Request*, PS Docket No. 18-40

Dear Ms. Dortch,

T-Mobile USA, Inc. (“T-Mobile”)<sup>1</sup> hereby submits the attached supplement to its Petition for Expedited Waiver<sup>2</sup> in order to provide the Commission with additional information supporting its request. Some of the information provided is competitively sensitive and, accordingly, T-Mobile requests confidential treatment for that information. In support of this request and pursuant to Section 0.459(b) of the Commission’s rules,<sup>3</sup> T-Mobile hereby states as follows:

**1. IDENTIFICATION OF THE SPECIFIC INFORMATION FOR WHICH CONFIDENTIAL TREATMENT IS SOUGHT<sup>4</sup>**

T-Mobile seeks confidential treatment of certain information and exhibits attached to its supplement to its Petition for Waiver, submitted pursuant to Section 20.18(i)(3) of the Commission’s Rules.

**2. DESCRIPTION OF CIRCUMSTANCES GIVING RISE TO THE SUBMISSION<sup>5</sup>**

T-Mobile is submitting information related to the geographic distribution of its Wireless Priority Service (“WPS”) users, and information describing its network configuration and capabilities, to support its assertion that provision of “always-on” WPS will not have a detrimental effect on its non-priority users.

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<sup>1</sup> T-Mobile USA, Inc. is a wholly-owned subsidiary of T-Mobile US, Inc., a publicly traded corporation.

<sup>2</sup> Petition of T-Mobile USA, Inc. for Expedited Waiver, PS Docket No. 18-40 (filed Sept. 29, 2017).

<sup>3</sup> 47 C.F.R. § 0.459(b).

<sup>4</sup> 47 C.F.R. § 0.459(b)(1).

<sup>5</sup> 47 C.F.R. § 0.459(b)(2).

**3. EXPLANATION OF THE DEGREE TO WHICH THE INFORMATION IS COMMERCIAL OR FINANCIAL, OR CONTAINS A TRADE SECRET OR IS PRIVILEGED<sup>6</sup>**

The information for which T-Mobile seeks confidential treatment contains sensitive commercial information which would customarily be guarded from competitors.<sup>7</sup> The marked confidential information and exhibits reveal commercially sensitive information about T-Mobile's customer distribution and network configuration.

**4. EXPLANATION OF THE DEGREE TO WHICH THE INFORMATION CONCERNS A SERVICE THAT IS SUBJECT TO COMPETITION<sup>8</sup>**

The marked confidential information and exhibits to the waiver supplement contain information relating to commercial matters that could be used by competitors to T-Mobile's disadvantage. T-Mobile has numerous competitors for commercial mobile radio services. Detailed network and customer information of the type provided by T-Mobile could compromise T-Mobile's position in this highly competitive industry. Release would therefore result in substantial competitive harm to T-Mobile.

**5. EXPLANATION OF HOW DISCLOSURE OF THE INFORMATION COULD RESULT IN SUBSTANTIAL COMPETITIVE HARM<sup>9</sup>**

Competitors could use T-Mobile's proprietary commercial and network information to T-Mobile's detriment as they would gain access to sensitive information about how T-Mobile provides services.

**6. IDENTIFICATION OF ANY MEASURES TAKEN BY THE SUBMITTING PARTY TO PREVENT UNAUTHORIZED DISCLOSURE<sup>10</sup>**

T-Mobile has not distributed the information marked as confidential in the waiver supplement or exhibits to the public.

**7. IDENTIFICATION OF WHETHER THE INFORMATION IS AVAILABLE TO THE PUBLIC AND THE EXTENT OF ANY PREVIOUS DISCLOSURE OF THE INFORMATION TO THIRD PARTIES<sup>11</sup>**

T-Mobile has not previously disclosed to the public the marked information in its waiver supplement or exhibits. T-Mobile has provided the information in Exhibit A to its waiver

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<sup>6</sup> 47 C.F.R. § 0.459(b)(3).

<sup>7</sup> 47 C.F.R. § 0.457(d)(2).

<sup>8</sup> 47 C.F.R. § 0.459(b)(4).

<sup>9</sup> 47 C.F.R. § 0.459(b)(5).

<sup>10</sup> 47 C.F.R. § 0.459(b)(6).

<sup>11</sup> 47 C.F.R. § 0.459(b)(7).

supplement to the Office of Emergency Communications (“OEC”), but only pursuant to a non-disclosure agreement with OEC.

**8. JUSTIFICATION OF THE PERIOD DURING WHICH THE SUBMITTING PARTY ASSERTS THAT MATERIAL SHOULD NOT BE AVAILABLE FOR PUBLIC DISCLOSURE<sup>12</sup>**

T-Mobile requests that the marked confidential information in its waiver supplement and exhibits be treated as confidential for a period of ten years. This period is necessary due to the proprietary nature of the information in the report.

**9. OTHER INFORMATION THAT T-MOBILE BELIEVES MAY BE USEFUL IN ASSESSING WHETHER ITS REQUEST FOR CONFIDENTIALITY SHOULD BE GRANTED<sup>13</sup>**

The information concerns T-Mobile’s proprietary network information, related to current and planned commercial and operational information and, as such, is commercially sensitive.

Should you have any questions regarding the foregoing information, please contact the undersigned at (202) 730-1338.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'K. Devine', is positioned above the printed name.

Kristine Laudadio Devine  
*Counsel to T-Mobile USA, Inc.*

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<sup>12</sup> 47 C.F.R. § 0.459(b)(8).

<sup>13</sup> 47 C.F.R. § 0.459(b)(9).

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
T-Mobile Wireless Priority Service Waiver Request	)	PS Docket No. 18-40
	)	
	)	

**SUPPLEMENT TO PETITION FOR EXPEDITED WAIVER OF T-MOBILE USA, INC.**

T-Mobile USA, Inc. (“T-Mobile”)<sup>1</sup> hereby submits this supplement to its Petition for Expedited Waiver<sup>2</sup> in order to provide the Commission with additional information supporting its request. This additional information further shows that a grant of the requested waiver would be in the public interest, and that failing to grant the waiver would be detrimental to the public interest.

**A. The Commission Has Granted Waivers of the WPS Rules Under Similar Circumstances.**

At least twice in the nearly 20 years since priority access service was implemented, the Commission has granted waivers to carriers allowing them to deploy the service (today generally called wireless priority service or WPS) without meeting all of the requirements set forth in Appendix B of Part 64. In 2001, as cited by T-Mobile in its petition, the Commission granted VoiceStream a waiver allowing it to deploy “always-on” WPS until “the per call invocation feature can be commercially deployed on a global system for mobile communications (GSM)

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<sup>1</sup> T-Mobile USA, Inc. is a wholly owned subsidiary of T-Mobile US, Inc., a publicly traded corporation.

<sup>2</sup> Petition of T-Mobile USA, Inc. for Expedited Waiver, PS Docket No. 18-40 (filed Sept. 29, 2017).

system, upon expiration or termination of the contract between VoiceStream and [the National Communications System (NCS)]<sup>3</sup>, DynCorp, or any other service integrator acting on behalf of NCS, to provide a wireless priority access capability; or by December 31, 2002.”<sup>4</sup> At the time, VoiceStream was deploying WPS over GSM for the first time, and the necessary technology to permit per-call activation was not commercially available.<sup>5</sup> The Commission recognized that “ensuring NCS access immediately to a wireless priority access service, even if limited in its capability, is in the public interest.”<sup>6</sup>

Similarly, in 2005, the Commission granted Verizon Wireless a waiver of the WPS rules, permitting it to deploy WPS over CDMA for the first time with a single priority level (rather than five priority levels). Verizon Wireless’s request was based on the “complexity of software and budgetary constraints” that restricted its ability to comply fully with Part 64.<sup>7</sup> Accordingly, Verizon Wireless requested a waiver until the earlier of (1) notification by Verizon Wireless or NCS that it could deploy five priority levels, (2) expiration or termination of Verizon’s contract with NCS, or (3) June 30, 2007. Because of the software development that would be needed to implement five priority levels and because of the limited funds available from NCS for that development, NCS worked with Verizon Wireless to plan a two-phase CDMA WPS deployment.

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<sup>3</sup> NCS’s functions today have been subsumed by the Office of Emergency Communications (“OEC”).

<sup>4</sup> *VoiceStream Wireless Corporation Petition for Waiver of Section 64.402 of the Commission’s Rules*, Memorandum Opinion and Order, 17 FCC Rcd. 6134 ¶ 1 (2002) (“*VoiceStream Waiver Order*”). T-Mobile was formerly known as VoiceStream.

<sup>5</sup> *Id.* ¶¶ 8-9.

<sup>6</sup> *Id.* ¶ 17.

<sup>7</sup> *Petition for Waiver of Section 64.402 of the Commission’s Rules*, Memorandum Opinion and Order, 20 FCC Rcd. 13603 ¶ 7 (2005) (“*Verizon Wireless Waiver Order*”).

The Commission agreed that grant of the waiver would be “consistent with the underlying purposes of the Commission’s PAS rules and [would] serve[] the public interest.”<sup>8</sup>

While the technological issue T-Mobile faces today is different from the issue faced by VoiceStream, and while the particular operating protocol that it cannot meet is different from the problem Verizon Wireless faced, the underlying policy rationales remain the same. Today, OEC is working with various carriers to deploy WPS over LTE for the first time. Unfortunately, OEC has limited funding to support its contract with T-Mobile; thus, the funding needed to begin software development implementing per-call activation of WPS over LTE is unavailable. Given this, T-Mobile and OEC worked together to determine the most efficient way for T-Mobile to provide WPS on its LTE network in the short term, with a workable roadmap to full deployment once additional funds become available.<sup>9</sup>

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<sup>8</sup> *Id.* ¶ 8; *see also id.* ¶ 9 (“Although Verizon Wireless’s Phase I PAS would have only one priority level, the DoD argues that granting the waiver would enhance PAS coverage, reduce prices and enhance services with the addition of a CMRS competitor.”); ¶ 10 (“We further recognize that granting a waiver will promote our statutory mandate to make a rapid efficient Nationwide communications service for the purpose of national defense and promoting safety of life and property. Accordingly, we accept NCS’s determination that Verizon Wireless providing CDMA PAS with one priority level with planned upgrades to five priority levels is more desirable than no CDMA PAS capability.”).

<sup>9</sup> Moreover, unlike some other carriers, T-Mobile currently does not charge its WPS users an activation fee or per-minute call charges. Thus it has no means of offsetting the expenses incurred when provisioning the service with customer fees.

OEC has filed a statement in support of T-Mobile’s petition for waiver,<sup>10</sup> as it did for previous WPS waiver requests in 2002<sup>11</sup> and 2005<sup>12</sup>—statements that the Commission relied on heavily in granting the prior waivers.<sup>13</sup> And, just as the Commission determined in 2002 and 2005 that waivers of particular operating protocols set forth in the WPS rules were in the public interest, it should do so today.

**B. The Commission Has Expressly Recognized that WPS Does Not Violate Section 202(a).**

When it adopted rules governing WPS, the Commission expressly acknowledged that, though the service is discriminatory as a factual matter, it is not unjust or unreasonable. The Commission found that “providing priority access to authorized NSEP users in accordance with our PAS Rules will be prima facie lawful under the Communications Act and not unreasonable discrimination or an unreasonable preference.”<sup>14</sup> The Commission confirmed this understanding in 2005 when it granted Verizon Wireless’s waiver request.<sup>15</sup> As the Commission noted in 2005,

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<sup>10</sup> Letter from Ronald T. Hewitt, Director, Office of Emergency Communications, to Marlene H. Dortch, Secretary, Federal Communications Commission, PS Docket No. 18-40 (filed Feb. 14, 2018).

<sup>11</sup> Statement in Support of Petition for Waiver, National Communications System, WT Docket No. 01-333 (filed Dec. 6, 2001).

<sup>12</sup> Statement in Support of Petition for Waiver, National Communications System, WT Docket No. 05-212 (filed June 13, 2005).

<sup>13</sup> See *VoiceStream Waiver Order* ¶¶ 15-16 (“In light of NCS’s responsibility to coordinate the planning for and provision of NSEP communications for the federal government, we continue to give great deference to the NCS with regards to its needs in this respect.”); *Verizon Wireless Waiver Order* ¶ 10.

<sup>14</sup> *Establishment of Rules and Requirements for Priority Access Service*, Second Report and Order, 15 FCC Rcd. 16720 ¶ 23 (2000).

<sup>15</sup> *Verizon Wireless Waiver Order* ¶ 13 (“The Commission held in the PAS R&O that providing priority access to authorized NSEP users in accordance with our PAS Rules would be prima facie lawful under the Communications Act and not unreasonable discrimination or an unreasonable preference”).

“Section 202 does not prevent carriers from treating users differently; it bars only unjust or unreasonable discrimination...Differentiation among users is lawful so long as there is a valid reason for the differentiation.”<sup>16</sup> Because WPS users are not “similarly situated” as non-WPS users—they are “attempting to save and protect lives and property, restore order, and restore critical services,”<sup>17</sup> wireless carriers do not violate Section 202 by offering WPS users that priority access, even if that priority access is offered temporarily as an always-on service.

**C. Granting T-Mobile’s Waiver Would Serve the Purpose of the WPS Rules.**

*1. WPS Would Be Unavailable for T-Mobile Customers in Many Areas Without the Waiver*

The Commission may waive specific requirements of its rules where granting a waiver would be in the public interest and “the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case.”<sup>18</sup> If the Commission declines to grant T-Mobile its waiver, the result is that WPS will be unavailable on T-Mobile’s LTE network. Because more of T-Mobile’s subscribers are on its LTE network than is true for other carriers—approximately 80 percent of T-Mobile customers are on LTE<sup>19</sup>—the lack of WPS on LTE is more likely to affect T-Mobile WPS users than might be the case for other carriers. This is even more true because of T-Mobile’s ongoing deployment of “LTE-only” service.<sup>20</sup>

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<sup>16</sup> *Id.* ¶ 14.

<sup>17</sup> *Id.*

<sup>18</sup> 47 C.F.R. § 1.925(b)(3)(i); *see also id.* § 1.3.

<sup>19</sup> Monica Allevan, *T-Mobile Deploys Ericsson Data Analytics to Measure Voice Quality, Detect VoLTE Issues*, FIERCEWIRELESS, Feb. 26, 2018, <https://www.fiercewireless.com/wireless/t-mobile-deploys-ericsson-data-analytics-to-measure-voice-quality-detect-volte-issues> (quoting T-Mobile CTO as stating that “80 percent of all voice calls on our network [are] over LTE”).

<sup>20</sup> T-Mobile is currently deploying LTE on recently-auctioned 600 MHz spectrum. *See* Press Release, T-Mobile Ready to Rock New Spectrum with First 600 MHz LTE Smartphone &



Today, WPS calls on T-Mobile's LTE network will fall back to T-Mobile's legacy network in the area, if any, whether GSM or UMTS. But, those legacy networks are increasingly limited in capacity as T-Mobile's subscriber base grows and as the company reallocates spectrum to its LTE network. Though T-Mobile is committed to supporting its legacy networks until at least 2020,<sup>21</sup> those networks are increasingly limited in their capacity for voice communications. In addition, T-Mobile is expanding its network into areas where it does not operate a legacy network—that is, greenfield LTE deployment. In these cases—where fallback, legacy networks are unavailable because of capacity constraints or because they do not exist—WPS users would not have access to WPS at all on T-Mobile's network without grant of this waiver.

It is also important to note that T-Mobile's WPS users are highly concentrated in priority levels 3, 4, and 5, with those users representing 95 percent of its total WPS users. Priority levels 4 and 5 (representing 80 percent of T-Mobile's WPS users) are reserved for public services/utilities, public welfare, and disaster recovery—all personnel who are more likely to be

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5G-Ready Network Gear (Aug. 31, 2017), <https://newsroom.t-mobile.com/news-and-blogs/tmobile-600mhz.htm> (noting that T-Mobile is rolling out LTE over 600 MHz, starting in Cheyenne, Wyoming, moving to Scarborough, Maine, with additional deployment to following in “parts of Wyoming, Northeast and Southwest Oregon, West Texas, Southwest Kansas, the Oklahoma panhandle, Western North Dakota, additional areas of Maine, Coastal North Carolina, Central Pennsylvania, Central Virginia and Eastern Washington,” allowing it to improve its coverage in rural areas); *see also* T-Mobile, Network Bands & Technologies, <https://support.t-mobile.com/docs/DOC-4988> (noting that T-Mobile offers 2G and 3G service on Bands 2 and 4, respectively, and offers LTE over Bands 2, 4, 5, 12, 66, and 71, indicating that where T-Mobile holds only Band 5, 12, 66, or 71 spectrum, it only offers LTE). These “LTE-only” areas using low-band spectrum require users to have a compatible handset which is currently limited in its availability.

<sup>21</sup> Press Release, T-Mobile Throws a Lifeline to AT&T's Stranded 2G IoT Customers with Free SIMs and Service (Sept. 14, 2016), <https://newsroom.t-mobile.com/news-and-blogs/att-2g-iot-lifeline.htm> (noting that T-Mobile “has pledged to continue supporting its nationwide 2G network through 2020”).

in the field with little access to other forms of communication. Without this waiver, those users would be deprived of the ability to make priority calls during emergencies.

*2. T-Mobile's LTE Network Has Ample Capacity to Provide Priority Access Without Affecting Non-Priority Users.*

T-Mobile's waiver is with respect to its LTE network—a packet-switched network with much more capacity than legacy circuit-switched networks. This inherent feature of LTE means that T-Mobile has ample capacity to deploy always-on WPS without affecting non-priority users or calls to 911. Moreover, T-Mobile's WPS user base is relatively small and geographically distributed, further reducing the likelihood that always-on WPS will result in any disruption to calls by non-priority users.

T-Mobile has analyzed its LTE network usage in times of high congestion, including two notable events of extreme network usage: (1) the Las Vegas shooting in October 2017 and (2) the January 2017 Women's March in Washington, D.C.; this analysis is graphically displayed in Exhibit A. In both of these events, T-Mobile's analysis shows that though initial radio access (the RRC, S1, and eRAB) demonstrated spikes in usage, no voice GBR eRAB setups failed.

The GBR data is most dispositive because a failure in that radio resource would indicate a likelihood that always-on priority could disrupt non-priority calls. Specifically, where WPS is implemented as "always-on," the network will request an additional priority GBR bearer for every VoLTE call. This is the only difference in call treatment between always-on WPS and per-call-activated WPS. Because T-Mobile's real-world data show no failure to allocate the GBR voice bearer, even during times of high network usage, it is clear that this resource allocation does not and will not be a bottleneck for other VoLTE traffic in times of normal network usage. In other words, T-Mobile's analysis shows that even on highly loaded cells only a small proportion of the available capacity of the cell is typically utilized for VoLTE calls,

enabling the network to flexibly allocate additional GBR voice bearers in times of high demand, once initial radio access has been provided (RRC, S1, and eRAB allocation).

Nor would always-on WPS impair the ability of callers to reach 911. Like WPS calls, 911 calls are assigned priority by T-Mobile's network—thus, at times of high network usage, 911 calls are prioritized over non-priority calls and sufficient capacity exists to originate emergency calls. When there is congestion in the 911 system, it is usually the result of limited capacity at the PSAP to accept incoming calls. For example, if all of the available trunks serving a PSAP are full, a 911 call may not complete—and that is the case regardless of whether other calls, such as WPS calls, would also be given priority for the next available channel in the queue.<sup>22</sup>

Furthermore, because T-Mobile has a relatively low number of WPS users compared to the other nationwide carriers that offer WPS and those users are, generally speaking, geographically distributed, it is extremely unlikely that calls by those users would disrupt non-priority calls, even in times of high network usage. Thus, though approximately 14% of T-Mobile's WPS users are in California, that is consistent with California's percentage of the total population of the United States.<sup>23</sup> Thus, always-on priority access is unlikely to cause disruption for non-priority users in any particular area.

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T-Mobile respectfully requests that the Commission expeditiously grant its temporary waiver of the WPS rules and permit it to offer always-on WPS over LTE. Permitting T-Mobile

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<sup>22</sup> Note that this conceptualization of how WPS operates—by giving priority for the next available channel—is inexact when it comes to priority on LTE networks, where voice traffic is prioritized by reallocating network capacity for data transmissions to VoLTE.

<sup>23</sup> Specific T-Mobile WPS subscriber numbers will be separately provided by OEC.

to enable always-on WPS over LTE is consistent with the purpose of the WPS program; denying T-Mobile's request for a waiver, on the other hand, would be contrary to the public interest given the importance of WPS to public safety, the time needed to implement that feature, and the current lack of funding for the network development required.

Respectfully submitted,



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March 7, 2018

# **EXHIBIT A**

**REDACTED FOR PUBLIC INSPECTION**