

November 19, 2015

Ms. Marlene H. Dortch, Secretary  
Office of the Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, NW  
Washington, DC 20554

**Re: IB Docket No. 13-213**, Terrestrial Use of The 2473-2495 MHz Band for Low-Power Mobile Broadband Networks

**ET Docket No. 15-105**, Public Notice OET and WTB Seek Information On Current Trends In LTE-U and LAA Technology

Dear Ms. Dortch:

On November 19, 2015, I spoke with Edward Smith, wireless advisor to Chairman Wheeler, with regard to the above captioned proceeding.

I explained that these two proceedings are examples of a larger problem that continues to emerge with increasing frequency as unlicensed spectrum becomes increasingly important in our broadband eco-system. The Commission should therefore look at Globalstar as an important opportunity to explain the relationship between unlicensed and license spectrum clearly, and to reframe the Commission’s public interest analysis to stress the importance of unlicensed as equal to, not subordinate to, licensed spectrum. This does not mean change the nature of Part 15 interference protection. Rather, this builds on a steady evolution in the Commission’s thinking, as illustrated most clearly in the Commission’s *Progeny Order*.<sup>1</sup> That the measure of interference protection is not an intrinsic measure of moral worth, and that while no specific Part 15 device is protected from *harmful* interference, the Commission can, and has, protected the Part 15 ecosystem from “unacceptable levels” of interference.<sup>2</sup>

Although the Commission in *Progeny* acted pursuant to its licensing power under Section 303<sup>3</sup>, the Commission can, and should, apply this standard more broadly to the Part 15 space. Section 333 prohibits anyone from “***Willfully*** or maliciously interfere[ing] or ***caus[ing]*** ***interference*** to any radio communications of any station licensed or authorized by or under this chapter,”<sup>4</sup> including unlicensed spectrum.<sup>5</sup> The Commission should clarify, whether as part of any

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<sup>1</sup> Request by Progeny LMS, LLC, For Waiver of Certain Multilateration Location and Monitoring Service Rules; Progeny LMS, LCC Demonstration of Compliance with Section 90.353(d) of the Commission’s Rules, 28 FCC Rcd 8555 (2013).

<sup>2</sup> *Id.* at ¶¶23-30. *See also* 47 C.F.R. §15.3(m) (defining “harmful interference”).

<sup>3</sup> 47 U.S.C. §303.

<sup>4</sup> 47 U.S.C. §333 (emphasis added).

decision on Globalstar’s TLPS petition or in a declaratory ruling on its own motion,<sup>6</sup> that the term “willfully” includes a deployment and use of a device that the operator knows will create “unacceptable levels of interference” as defined in *Progeny*, or, once it is clear that deployment is creating unacceptable levels of interference, must cease or reduce operation to avoid unacceptable levels of interference.

Contrary to the dissenting statements in *M.C. Dean*, this does not require a separate rulemaking – although the Globalstar Petition presents the opportunity to act via rulemaking if that is preferred. The Commission here is not conferring any new protection from harmful interference that would change the nature of the Part 15 rules. Section 333 is not directed to the users of Part 15 devices or operations pursuant to a license granted under 47 U.S.C. §307. Rather, Section 333 is an independent prohibition that prevents any individual – including those authorized to operate devices under Part 15 or pursuant to licenses granted under Section 307 – from willfully or maliciously causing interference.

Consider the following analogy. It is illegal to drive without a license. It is also illegal to drive while under the influence of alcohol. This second prohibition applies whether or not the driver has a license to drive, because it makes driving while under the influence a separate offense independent of whether or not the individual has a license or is operating at the legal speed limit. Similarly, Section 333 independently prevents any person from “willfully or maliciously” causing interference to licensed or unlicensed systems. The fact that Part 15 devices generally must accept any incidental harmful interference does not grant immunity to those who violate Section 333 and willfully cause interference to Part 15 devices, just as driving with a license and in accordance with the speed limit does not confer immunity from driving under the influence.

### **Application Of The Public Interest Framework To Globalstar**

Turning to the specifics of Globalstar, the Commission should take the opportunity to reframe its public interest analysis in a manner consistent with the evolution of technology in the 21<sup>st</sup> Century. Traditionally, because the Commission could only grant licenses to a handful of licensees, it required the licensee of the “public airwaves” to serve as a trustee for the community.<sup>7</sup> Modern technology, at least in some cases, removes the necessity to rely on an intermediary. As an initial matter, therefore, the Commission should consider the highest form of public interest is to permit direct access by the public to the public airwaves.

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<sup>5</sup> See *In the Matter of M.C. Dean, Inc.*, Notice of Apparent Liability for Forfeiture (rel. Nov. 2, 2015) (“*M.C. Dean*”).

<sup>6</sup> The Commission may issue a declaratory ruling on its own motion to clarify any provision of the Communications Act. See 47 U.S.C. §403.

<sup>7</sup> See generally *Red Lion Broadcasting Co., Inc. v. FCC*, 395 U.S. 367 (1969).

At the same time, this is not possible for all uses. High power mobile systems, for example, still require exclusive licensing. In such cases, however, the Commission should recognize that the public interest requires that grant of exclusivity should be compensated to the public both with concrete benefits<sup>8</sup> and by enhancing – or at a minimum protecting – the existing open spectrum.

Applying this framework to Globalstar, it is important to note that Globalstar not only will receive expanded spectrum rights for free, but that TLPS service requires that Globalstar enjoy a uniquely privileged position as against other users of the 2.4 GHz Part 15 band. Specifically, Globalstar wants the exclusive right to operate at a higher power on that portion of Wi-Fi Channel 14 that extends into the 2.4 GHz band. In this instance in particular, because the grant of an exclusive right extends into the publicly available spectrum, it is critical to ensure that grant of this exclusive privilege actually *enhances* operation of systems in the spectrum commons. Likewise, the Commission must have confidence that operation of TLPS will not create an “enclosure” problem where interference from TLPS impacts the existing open use of the spectrum commons.<sup>9</sup>

Accordingly, Public Knowledge continues to adhere to its previously filed position that the Commission should permit all unlicensed users to utilize Channel 14.<sup>10</sup> If the Commission finds that full sharing is not feasible, it should adopt a “use or share” condition that will allow Part 15 users to use Channel 14 subject to the same rules and limitations as TLPS until the TLPS licensee indicates it will deploy in the geographic area. This would also benefit Globalstar, as it would encourage wide deployment of equipment able to use Channel 14 in the United States in a

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<sup>8</sup> See generally 47 U.S.C. §309(j)(3)(C).

<sup>9</sup> It is popular to speak of a “tragedy of the commons.” But historically, what killed “the commons” (meaning the common grazing area for cows shared by peasant farmers in England) was the “enclosure movement” by the aristocracy to take back the commons, which they technically owned, for sheep herding. As shown by Nobel prize winning economist Elinor Ostrom and others of the “Ostrom School,” common pool resources can be (and often are) effectively managed by those with similar interests and where there is power to enforce general conduct rules to prevent spoliation or exhaustion. Until recently, the Part 15 space has been used primarily by parties with similar interests, equally dependent on unlicensed access to provide spectrum access. As a consequence, parties have had incentive to avoid any “tragedy of the commons,” and to develop joint standards (such as Wi-Fi and Bluetooth) to enhance overall use of the unlicensed space. The introduction of licensees, who have licensed spectrum to rely upon in the event the Part 15 space becomes significantly impaired, and who have financial incentives to drive users to their licensed services, raises the likelihood of deliberate enclosure of the spectrum commons rather than a market failure “tragedy of the commons.”

<sup>10</sup> See, e.g., Letter of Michael Calabrese, Director, Wireless Future Project, Open Technology Institute, and Harold Feld, Senior Vice President, Public Knowledge, to Marlene Dortch, Secretary, Federal Communications Commission, filed in IB Docket No. 13-213 (February 13, 2015).

manner compatible with Globalstar's management system, providing Globalstar with economies of scale and an installed customer base when it does turn on its system.

In the event that the Commission does not permit even a use or share condition (or even if it does permit use or share), the Commission should consider the evidence submitted by Globalstar that TLPS systems relieve local traffic congestion on existing Part 15 Wi-Fi systems – in some cases quite significantly. While this does not confer the same benefit as allowing all traffic to use Channel 14, it does potentially confer significant benefit to the unlicensed space. The Commission should emphasize the importance of such enhancement to the spectrum commons when granting exclusivity in a manner that ties together exclusive use rights and use of the spectrum commons. This is particularly important where, as here, the licensee is granted exclusive use rights without an auction. Enhancement of the common use spectrum by granting the new exclusive rights provides a broad public interest benefit that reduces the concern that the free grant of exclusive rights creates a private windfall from expanded use of the public airwaves.

### **Importance of Mitigation Mechanism and Relationship to Testing.**

Globalstar has offered a workable mitigation measure to protect the unlicensed space from enclosure. This is an important step forward in recognizing the general responsibility of licensees (and others) to protect the Part 15 space from unacceptable levels of interference.

This precedent is potentially significant in a number of ways. First, it confirms the approach taken in the 1995 M-LMDS Order, and subsequently developed in the *Progeny* Order, with regard to the importance actively preventing unacceptable levels of interference. As noted above, the concern that expansion of exclusive rights into the spectrum commons will encourage a “spectrum enclosure” movement, and the rational concern that Globalstar would benefit if the performance of pure Part 15 hotspots would be degraded,<sup>11</sup> gives rise to the need for a more rigorous interference mitigation mechanism than that used in *Progeny*.

The more self-executing and effective the mitigation mechanism, the less rigorous the pre-deployment testing needs to be. By contrast, in the absence of an effective mitigation measure, the Commission must make sure that testing accounts of the “edge cases” and worst case scenarios. Nevertheless, even with a significant and easily executed mitigation mechanisms, the Commission must require basic testing to ensure that the deployed devices will not cause unacceptable levels of interference to the unlicensed space.

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<sup>11</sup> Globalstar maintains that because its system relies on use of Channels 6 and 11, it has no incentive create unacceptable levels of interference and consistent incentive to avoid doing so. Nevertheless, it is possible to degrade performance with regard to Channels 6 and 11 so that they become unreliable for certain types of latency sensitive traffic, such as video. Globalstar would still enjoy an advantage because it could carry latency sensitive traffic on its protected TLPS service, while routing less sensitive traffic through channels 6 and 11. While this scenario may be unlikely, the Commission must nevertheless take necessary precautions to guard against this concern.

Globalstar has submitted evidence based on a handful of demonstrations. In particular, Globalstar has not yet conducted any outdoor testing. This leaves open the possibility that while the Globalstar TLPS may not cause unacceptable levels of interference indoors, only the attenuation of the signal from passing through walls prevents unacceptable levels of interference to outdoor operations.

At the same time, Public Knowledge recognizes that Globalstar requires clear timelines for any additional testing so that it may make suitable business plans. Endless and prolonged testing is a frequent problem for those seeking to deploy innovative services. At the same time, cooperative testing with other stakeholders is critical to ascertaining whether the technology can be deployed safely.

Again, the *Progeny* Order provides helpful precedent. The Commission required joint testing with concerned stakeholders, subject to a final evaluation for the Commission. Here, because Globalstar has proposed a more vigorous interference mitigation mechanism, Public Knowledge recommends a strict timeline for any additional testing. The Commission should act quickly to determine what additional data it needs (e.g., outdoor testing), and provide 30 days for Globalstar and representative stakeholders – under the supervision of the Office of Engineering and Technology – to design a new set of tests. The parties would then have a reasonable period of time to conduct the tests and submit their analysis. In total, the Commission should require no more than 90 days from the time it initiates the testing process to the time the Commission has concluded any reporting and comment period and is prepared to make a decision based on the results.

### **Application of the Framework to LTE-U.**

In recent weeks, I have written that the Commission should address the LTE-U controversy by issuing a declaratory ruling that Section 333 applies not only to deliberate jamming, but that – as discussed above – the Commission should interpret the word “willfully” as meaning deploying technology that one knows will create unacceptable levels of interference as described in the *Progeny* decision.<sup>12</sup> Since then, two other blogs, the EFF blog<sup>13</sup> and the AT&T Policy blog,<sup>14</sup> have explicitly referenced their support for this general approach.

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<sup>12</sup> See Harold Feld, “My Insanely Long Field Guide To the LTEU Dust Up Part II: A Storm of Spectrum Swords,” *Tales of the Sausage Factory*, October 20, 2015. Available at: <http://www.wetmachine.com/tales-of-the-sausage-factory/my-insanely-long-field-guide-to-the-lteu-dust-up-part-ii-a-storm-of-spectrum-swords/> (last visited November 19, 2015) (“TotSF”).

<sup>13</sup> Jeremy Gillula and David Maass, “Hurricane LTE-U: Don’t Let Wi-Fi Get Blown Away,” *EFF Blog* (November 4, 2015). Available at: <https://www.eff.org/deeplinks/2015/11/hurricane-lte-u-dont-let-wi-fi-get-blown-away> (last visited November 19, 2015).

<sup>14</sup> Joan Marsh, “The Wi-Fi/LTE Unlicensed Debate, A Path Forward,” *AT&T Public Policy Blog*, (November 12, 2015). Available at: <http://www.attpublicpolicy.com/fcc/the-wi-fi-lte-unlicenseddebate-a-path-forward/> (last visited November 19, 2015).

First, I stress that the Tales of the Sausage Factory blog is my own independent blog which I have maintained for over 10 years – well before I came to Public Knowledge -- and represents my personal views. This *ex parte*, and a previous written statement before the House Judiciary Committee Subcommittee On Courts, Intellectual Property, and the Internet,<sup>15</sup> constitute views of Public Knowledge.

Second, while it is important that AT&T and EFF have endorsed the general approach of relying on Section 333 to police bad actors and remediate situations where deployment of Part 15 devices create unacceptable levels of interference, the lack of details in the TotSF means that there is agreement in general principle only. Specifically, all three blog posts appear to share a common consensus:

1. The Commission should not fundamentally change the nature of the Part 15 space as place for innovation. Therefore the Commission should not mandate compatibility with any specific Part 15 technology (such as Wi-Fi) or impose any specific co-existence mechanism (such as “listen before talk”) as a requirement. Wi-Fi itself arose by the natural evolutionary processes of the Part 15 rules, as did Bluetooth and other popular protocols and devices. Many Wireless ISPs (WISPs) use non-standard or proprietary standard carrier grade equipment to provide broadband in rural communities.
2. At the same time, the Commission cannot ignore the fact that hundreds of millions of people and billions of dollars in economic activity depend on the regular, dependable functioning of Wi-Fi.
3. Accordingly, the Commission should not alter the basic structure of the Part 15 rules, but should use Section 333 to ensure – in the words of AT&T – that “all will be required by the FCC to act reasonably and play fair.”

Nevertheless, there also appear to be some clear differences between the approach envisioned by Public Knowledge (albeit not yet fully elaborated) and the general approach supported by EFF and AT&T. Accordingly, I clarified certain key aspects of the Public Knowledge proposal.

### **The Commission Does Not Need A Rulemaking To Clarify The Meaning Of Section 333, or Other Sources of Relevant Authority.**

AT&T suggests that because this approach is “novel,” it would require a rulemaking. Public Knowledge does not believe a rulemaking is necessary. Instead, as noted above, the Commission may act on its own motion to issue a declaratory ruling to clarify its existing statutory authority. Indeed, because the Commission would *not* be proposing any new rules – the

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<sup>15</sup> Statement for the Record of Public Knowledge, Before the Subcommittee on Courts, Intellectual Property, And The Internet of the House Judiciary Committee, Hearing on the Internet of Things at 23-25 (Submitted July 29, 2015). Available at: <https://www.publicknowledge.org/assets/uploads/documents/testimony-iot.pdf> (last visited November 19, 2015).

entire point being to keep the existing rules governing Part 15 unchanged – the Commission should act via a declaratory ruling and not via a rulemaking. Furthermore, because of the urgency of the situation, and the increasing confusion surrounding the Commission’s authority, the Commission would do well to act swiftly to provide guidance. The record developed in the Marriott Petition for Declaratory ruling,<sup>16</sup> coupled with the record established in this proceeding (and possibly in accordance with the rulemaking in Globalstar), provide a sufficient record for the Commission to act.

### **Relationship Between Device Certification and Post Hoc Enforcement.**

As noted above in the discussion with regard to Globalstar, the existence of post hoc remediation does not eliminate the obligation under 47 U.S.C. §302a to set standards and certify devices capable of causing harmful interference to radio communications.<sup>17</sup> As a general policy, the Commission has not certified devices that are only capable of malicious interference, *e.g.*, cell phone jammers, and permitted their advertisement or sale within the U.S. pursuant to its powers under Section 302. Additionally, as noted in the M.C. Dean Notice of Apparent Liability, the Commission sets limits on Part 15 devices “to facilitate sharing,” and that Part 15 devices must be certified that they do not cause harmful interference.<sup>18</sup>

Accordingly, it is important to recognize that clarifying Section 333 as proposed by PK (as well as invoking additional Commission authority, such as Sections 302 and 303(g)) would not mean a reliance merely on *post hoc* complaint remedies. Rather, as discussed above and as already required by the Commission, certification of devices – including Part 15 devices – takes into account the likelihood of causing harmful interference.<sup>19</sup> Indeed, the primary purpose of

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<sup>16</sup> Petition of American Hotel and Lodging Association, Marriott International, Inc., and Ryman Hospitality Properties for a Ruling to Interpret 47 U.S.C. §333 or, In The Alternative, For Rulemaking, RM-11737 (dismissed without prejudice February 13, 2015).

<sup>17</sup> It should be noted that the statute uses the broad term “radio communication” without any qualifier limiting this protection to “licensed communication.” Indeed, the Commission has previously asserted that part of the basis for its statutory authority for the entire Part 15 regime lies in its device certification authority. *See* Amendment of Part 15 of the Commission’s Rules to allow certification of equipment in the 24.05–24.25 GHz band at field strengths up to 2500 mV/m, Memorandum Opinion and Order, 18 F.C.C.R. 15,944, ¶ 49 (2003). Additionally, the Commission has also found that Part 15 provides a means of licensing, and thus is subject to the protection of Section 333 and the certification obligations of Section 302. *See* M.C. Dean at ¶30.

<sup>18</sup> M.C. Dean at ¶10.

<sup>19</sup> *See, e.g.*, Software Security Requirements For U-NII Devices (rel. Nov. 12, 2015) (providing guidance on equipment certification for unlicensed devices operating in the U-NII Band).

Available at:

[https://apps.fcc.gov/kdb/GetAttachment.html?id=zXtrctoj6zH7oNEOO6De6g%3D%3D&desc=594280%20D02%20U-NII%20Device%20Security%20v01r03&tracking\\_number=39498](https://apps.fcc.gov/kdb/GetAttachment.html?id=zXtrctoj6zH7oNEOO6De6g%3D%3D&desc=594280%20D02%20U-NII%20Device%20Security%20v01r03&tracking_number=39498)

certification rules promulgated under Section 302 is to “govern[] the interference *potential* of devices.”<sup>20</sup> Accordingly, when certifying a device, the Commission must take into account whether the *potential* for the device to cause unacceptable levels of interference to Part 15 devices – including to widely deployed and widely relied upon protocols such as Wi-Fi – is suitably controlled.

In doing so, the Commission would not impose any new requirements or obligations on parties seeking Part 15 certification. Rather, the Commission would, as is its “standard practice,”<sup>21</sup> carefully consider whether any new device has sufficient indicia – including the strength of the interference mitigation mechanism in the event device deployment creates unacceptable levels of interference – to provide reasonable confidence that the potential of the device to cause unacceptable levels of interference is properly managed.

Comparing LAA and LTE-U provides a useful illustration of how the Commission’s standards process would work under PK’s proposal. LAA is being developed by a recognized standards body, 3GPP, with a long history of developing standards employed by devices certified by the Commission. 3GPP is open to a broad set of stakeholders, including many that have expressed concerns about compatibility with Wi-Fi (e.g., Cablelabs, Cisco). The Commission has observer status within 3GPP, and is currently monitoring the standards development process. Further, because 3GPP develops global standards, it must take into account those regions, such as the EU, that have mandated specific co-existence mechanisms such as Listen Before Talk. Finally, 3GPP has agreed to consult with IEEE, the standards organization that developed the 802.11 family of standards which constitute Wi-Fi.

None of these factors is, or should be, required by the Commission. Nor do they, or should they, constitute a safe harbor immune from scrutiny. Nevertheless, these provide strong indicia of trust and create a substantial record that the Commission may evaluate and review even before the certification process begins, facilitating swift certification by providing confidence that the “interference potential” of the device is suitably regulated.

By contrast, the LTE-U Forum, to the extent it can be said to constitute a “standards body,” has none of these indicia of confidence. The LTE-U Forum came into existence only after the FCC began its inquiry. It not only lacks the track record of producing reliable standards that 3GPP has, it has absolutely no track record at all. It’s organizational leader is the developer of LTE-U, Qualcomm, which maintains a patent monopoly on the proprietary protocols for LTE-U that is not subject to any requirement to license under fair, reasonable, and non-discriminatory (FRAND) terms. The other members appear to be manufacturers previously selected by Qualcomm to manufacture LTE-U equipment prior to the formation of LTE-U Forum, and Verizon – one of two major carriers that committed to deploy Qualcomm’s pre-standard LTE-U

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<sup>20</sup> 47 U.S.C. 302a(a)(1) (emphasis added).

<sup>21</sup> See Letter of Julius Knapp, Chief, OET to LTE-U Forum c/o Dean Brenner, August 5, 2015, at 2.

technology several months before the creation of LTE-U Forum.<sup>22</sup> LTE-U Forum’s official point of contact appears to be Qualcomm, as evidenced by the Commission’s August 5 letter and the other lack of any other contact information on its publicly accessible website. Given this, it is difficult to avoid the conclusion that “LTE-U Forum” is simply a front for Qualcomm continuing the development work on LTE-U that it has managed over the last several years when it intended it’s release as “pre-standard.”

LTE-U repeatedly publicly proclaims its commitment to transparency and the openness of its testing and standards development process as a significant indicia of trust. Comparison to the transparency of 3GPP finds this characterization severely wanting. A closer examination shows that this much touted “transparency” amounts to LTE-U Forum releasing whatever documents it chooses, whenever it chooses, under conditions of its choosing, without any obligation to provide even this much public information on a going forward basis. It allows no actual observers at any of its testing, this eliminating the ability of stakeholders to confirm whether the results reported actually match the results obtained. Since Qualcomm holds a patent monopoly on the relevant technology, it is impossible to reproduce any of LTE-U Forum’s experiments using the actual equipment used by LTE-U Forum without Qualcomm’s express permission. Not only has Qualcomm refused to give this permission, it has attacked the reliability of all testing that demonstrates significant concerns over the interference potential of LTE-U because it is “not based on actual LTE-U equipment.” Since Qualcomm, by exercise of its patent monopoly, makes any such testing impossible by refusing to provide equipment or conduct joint testing with LTE-U opponents, this criticism is highly suspect. Rather than inspiring trust, all of the actions of the LTE-U Forum generate considerable cause of suspicion.<sup>23</sup>

These indicia of distrust are particularly worrisome because the proposed co-existence mechanism – using scanning and duty cycle to create opportunities for devices that use “listen before talk” to commence operation – is utterly novel. There is nothing intrinsically wrong with novel approaches. Indeed, encouraging such innovation is one of the great virtues of Part 15. But Qualcomm has proposed no interference mitigation or controlled rollout to test whether its coexistence mechanism is adequate or can scale with mass deployment. To the contrary, T-Mobile has stated that it wants to deploy Qualcomm’s LTE-U as broadly and as quickly as possible.<sup>24</sup> Nor has Qualcomm/LTE-U Forum explained what would prevent any manufacturer or wireless provider from altering the duty cycle on its own initiative.

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<sup>22</sup> It is not clear from the LTE-U website whether Verizon is a member of LTE-U forum or simply “helped to organize” LTE-U Forum. Indeed, the LTE-U website is entirely devoid of any details as to its membership, its by-laws, how one may apply for membership, what the criteria are for membership, or how LTE-U Forum makes decisions to set standards. The absence of any of these details from its website raises serious concerns as to its reliability as a standard setting body.

<sup>23</sup> Additionally, it is unclear whether Qualcomm has provided actual device equipment for FCC testing, as requested in the FCC’s August 5 letter.

<sup>24</sup> Verizon has proposed a somewhat more cautious roll-out by stating that its first deployment will be to enterprise customers. Presumably, if Verizon determines that this roll out was successful, it will also quickly ramp up to make LTE-U available throughout its national network.

Finally, Qualcomm/LTE-U Forum has not explained what would prevent it from altering its standard at any time in the future, or whether it would even be required to release any proposed changes to the standard to the public before implementing them. This is in marked contrast to 3GPP, which could not modify the LAA standard without going through a clearly documented process that would provide opportunity for diverse stakeholder review.

To be clear, none of these things is, or should be, a requirement for Part 15 certification. As noted above, WISPs and equipment manufacturers use proprietary or non-standard equipment. But the Commission has always, when certifying such equipment, thoroughly investigate the interference potential of the device as required by Section 302(a)(1). The Commission takes into account such factors as the proposed power levels of operation, the likely scale of deployment, the ability of device operators to modify the device in a way that could cause harmful interference, and any other relevant factor that reflects on whether the interference potential of the device is properly regulated.

None of this would change from clarifying that Section 333 allows the Commission to act if it finds that its predictive judgment in certifying the device is in error and the deployment of these Part 15 devices creates unacceptable levels of interference in the Part 15 space. Rather, clarifying Section 333 and the prohibition on “willfully” causing interference by deploying devices that create unacceptable levels of interference is designed to remove uncertainty and facilitate speedy equipment certification by reassuring existing users that Commission oversight does not end with certification. It will also provide clarity to Qualcomm, and future developers of Part 15 devices, that taking steps to avoid creating unacceptable levels of interference is a matter of law, not a matter of grace, as Qualcomm’s comments previous to August 5 indicated Qualcomm believed. Additionally, such clarification will encourage companies such as Qualcomm to avoid needlessly antagonizing other Part 15 stakeholders by asserting a right to act with reckless disregard in the Part 15 space, and to concentrate on developing a record that demonstrates that its devices will not cause unacceptable levels of interference rather than spending enormous sums on lobbying campaigns designed to pressure the FCC into certifying devices without evidence that they meet the appropriate standard.

In accordance with Section 1.1206(b) of the Commission’s rules, an electronic copy of this letter is being filed in the above-referenced docket. Please contact me with any questions regarding this filing.

Sincerely,

/s/ Harold Feld  
Senior Vice President  
Public Knowledge

CC: Edward Smith

