Public Knowledge

October 11, 2016

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

**RE: ET Docket No. 13-49 – Revision of Part 15 of the Commission's Rules**

**RM-11771 – Petition for Rulemaking in the 5.9 GHz DSRC Band**

**ET Docket No. 15-105 – Office of Engineering and Technology and Wireless Telecommunications Bureau Seek Information on Current Trends in LTE-U and LAA Technology (LTE-U/LAA)**

**WC Docket No. 13-184 – Modernization of the E-Rate Program for Schools and Libraries**

Dear Ms. Dortch:

On October 6, 2016, John Gasparini, Policy Fellow at Public Knowledge, and Harold Feld, Senior Vice President of Public Knowledge, met separately with: Edward Smith, Legal Advisor to Chairman Tom Wheeler; Erin McGrath, Legal Advisor to Commissioner Michael O'Rielly; and Julius Knapp, Jamison Prime, Rashmi Doshi, Howard Griboff, and Geri Matise, all of the Office of Engineering and Technology, regarding the above-captioned proceedings.

**5.9 GHz/DSRC**

PK noted that no one who opposed PK's Petition, other than CTIA, defended the commercial use of DSRC spectrum. Nor did any party explain how use of commercial applications is consistent with the encryption and cybersecurity measures that licensees state are incorporated into the non-commercial life and safety network, or why permitting commercial use of the DSRC spectrum is even consistent with the public interest in light of the changes that have occurred since 2004. The closest any stakeholder came to defending commercial use was ITS America in its reply comments, which simply noted that no one objected on privacy or cybersecurity grounds when the Commission authorized commercial use of the spectrum in 2004.[1]

PK observed that the bulk of the objections from parties who are neither vendors of DSRC equipment, DSRC licensees, or potential DSRC licensees (such as the California

[1] Reply Comments of ITS America, Docket No. RM-11771 (filed Sept. 9, 2016).

Department of Transportation) objected primarily to the Commission's continued use of its privacy and cybersecurity authority, recently reaffirmed in the *Spectrum Frontiers R&O and FNPRM*. Setting aside that the Commission rejected precisely these arguments previously, PK noted that the Commission - if it proceeds to a rulemaking - is permitted to seek comment on whether to prohibit commercial operation on the DSRC spectrum as correcting a previous mistaken grant of a spectrum windfall that *also* improves cybersecurity and privacy in light of the additional vulnerabilities and risk to consumers raised by permitting commercial applications in the band. This alone would enhance consumer privacy and cybersecurity, without use of other Commission authority to which commenters like ITIF object.

PK noted, in particular, the contradictory assertions of DSRC licensees, who argued that cybersecurity and privacy standards built into NHTSA's DSRC standards were sufficient to protect the entire band, while simultaneously insisting that the NHTSA DSRC radio would only be capable of sending basic safety messages, not of supporting any other service. This suggests the use of a separate radio, outside NHSTA's jurisdiction and solely governed by FCC service rules, for the provision of commercial services. DSRC licensees completely avoided commenting on commercial services or even admitting that those services would be carried by a radio other than the NHTSA DSRC radio.

In addition, PK noted that the Department of Justice has formed a think tank to consider the national security implications of connecte devices, and has explicitly singled out connected cars as a potential threat to national security.[2] As the head of the DoJ National Security Division, Assistant Attorney General John Carlin, explained, "the internet on wheels . . . clearly is going to present national security risks as this transformation takes place."[3]

In light of this explicit concern about connected cars raised at the highest level of official counter-terrorism planning, opponents' insistence on ignoring or, at most, casually belittling the concerns raised by four major auto safety organizations and nearly 20 other public interest advocacy groups, is extremely disquieting. In addition, the Department of Justice action emphasizes the need to have every federal agency engaged on cybersecurity issues. It is absurd to imagine that the FCC, the agency explicitly charged with maintaining the reliability and safety of all means of communications by wire and radio[4], does not have the responsibility, let alone the authority, to ensure that all providers of licensed communications services are cognizant of cybersecurity and have plans to address this evolving threat. Even if one accepts the assurances that DSRC is not merely secure itself, but that using DSRC to connect extremely vulnerable cars to one another, and to the Internet at large (through commercial applications) does not simply

[2] *See* Dustin Volz, "Justice Department Group Studying National Security Threats of Internet Linked Devices," Reuters (Sept. 9, 2016).

[3] *Id.* (Ellipses in original.)

[4] *See* 47 USC § 151.

create a secure channel of communication for the transmission of malware, this says nothing as to how DSRC licensees plan to address inadvertent vulnerabilities, address future threats, or keep their systems updated to meet current and future cybersecurity challenges.

Assistant Attorney General Carlin pointed to the truck attack in Nice, which killed 81 people, as an example of the kind of damage a hacked car could do. Yet DSRC licensees object even to submitting a plan for how they will address cyberthreats on DSRC,and insist that the warnings of Petitioners and consumer advocates are little more than 'nonsense rhetoric.'

At the same time, PK stresses that the Commission should not delay the ongoing proceeding regarding spectrum sharing in the 5.9 GHz band. As noted repeatedly by PK, the concerns raised by our DSRC Petition are distinct from the issues raised in the 5.9 GHz Sharing Proceeding. Accordingly, PK recommended the following Commission actions:

1. The Commission should move promptly to issue a full Notice of Proposed Rulemaking. This NPRM should seek comment on whether any use of exclusive portions of the band for commercial services serves the public interest. Comment should also be sought regarding whether general concerns with regard to spectrum windfalls - in addition to privacy and cybersecurity concerns raised by Petitioners - justify eliminating the authorization for commercial services.
2. The Commission should issue an interim rule prohibiting use of DSRC spectrum for commercial applications or services, pending resolution of the NPRM proceeding. It should also warn DSRC licensees that any devices deployed will ultimately need to comply with any future rules adopted by the Commission.
3. The Commission should propose rules consistent with those proposed by Petitioners in comments filed August 24, 2016.
4. The Commission should use the information gathered in ET Docket No. 13-49 to inform the rulemaking, but should not delay any action in Docket No. 13-49 pending resolution of the rulemaking initiated as a result of this petition.

**LTE-U/LAA**

LTE-U and LAA were discussed with Edward Smith, and with Julius Knapp and members of the Office of Engineering & Technology.

Qualcomm and other supporters of LTE-U continue to obstruct efforts at coexistence testing by Wi-Fi Alliance and others. The Commission should make it clear that it will not certify devices where equipment manufacturers act in bad faith to undermine the Commission's responsibility to manage the public airwaves in the public interest.

In this regard, it is useful to contrast Qualcomm's behavior with that of AT&T, which is adopting License Assisted Access (LAA) instead of LTE over unlicensed. AT&T has adopted a technology developed by a recognized and reputable standard setting body – 3GPP. In its process, 3GPP engaged in coordination with the IEEE 802.11. Qualcomm, by contrast, created its own "standard body," the LTE-U Forum, and has restricted membership to a handful of industry allies. Additionally, AT&T has voluntarily sought an STA for co-existence testing with Wi-Fi and Bluetooth. All of these are positive indicia that AT&T respects the complex spectrum environment of today

At the same time, however, the Commission has an ongoing duty – both before and after device certification, to protect the overall functionality of the spectrum commons and to prohibit any deliberate anti-competitive action. In this regard, the Commission should carefully follow the coexistence testing currently being conducted by ETSI in addition to the data AT&T will submit as a result from experiments conducted under its STA. If ETSI finds that LAA does not coexist with Wi-Fi and prohibits its use, the Commission should view this information with concern. Additionally, if the Commission certifies LAA devices for manufacture and operation in the U.S., it must be prepared to act if unanticipated problems emerge, or if carriers seek to disrupt competing services using Part 15 devices.

The Commission should issue a statement clarifying the Commission's continuing, ongoing authority to directly address anti-competitive use by licensees of Part 15 devices in combination with licensed spectrum, as well as the authority to require remediation if deployment of new Part 15 certified devices causes widespread unanticipated destructive interference for other Part 15 devices beyond the usual parameters expected from simply adding more devices. Issuing a general statement clarifying the Commission's authority will help to assuage concerns as licensees continue to incorporate unlicensed spectrum into their licensed service offerings.

**Microsoft Petition Regarding Off-Campus Use of Existing E-Rate Supported Connectivity**

During the meeting with Julius Knapp and the Office of Engineering & Technology, Public Knowledge mentioned the Petitions recently placed on Public Notice by the Commission, filed by Microsoft and others. PK expressed its support for the Petitions.

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 dockets. Please contact me with any questions regarding this filing.

Sincerely,

/s/ John Gasparini
Policy Fellow
Public Knowledge

Cc: Edward Smith
Erin McGrath
Julius Knapp
Jamison Prime
Rashmi Doshi
Howard Griboff
Geri Matise