

May 31, 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 ("5.9 GHz")

IB Docket No. 13-213, Terrestrial Use of The 2473-2495 MHz Band for Low Power Mobile Broadband Networks ("Globalstar")

Dear Ms. Dortch:

On May 26, 2016, I spoke with Edward Smith, Legal Advisor to Chairman Wheeler, regarding the above-captioned proceedings.

5.9 GHz

I stated that Public Knowledge's concerns with regard to security and privacy on DSRC frequencies persist whether or not the FCC authorizes sharing in the band. In particular, I expressed concern with regard to non-life & safety related applications and services offered, such as mobile payments specifically suggested by the automobile industry as uniquely suitable to DSRC. Storage of payment data raises significant privacy concerns and cybersecurity concerns.

It does not appear that the NHSTA regulation addresses uses of the band other than those directly related to NHSTA's safety mandate. For profit services, such as mobile payments to gas stations and parking lots identified in Appendix C of the FCC's 2004 Order, fall outside NHSTA's statutory authority. As a result, only the FCC can address these concerns.

I also expressed the opinion that the automobile industry Petition for Reconsideration with regard to OOB authorized by the Commission for UNII-3 displays both a shocking lack of understanding of wireless system design and a *prima donna* attitude. The auto industry, which has yet to deploy actual working DSRC systems on anything approaching the scale of deployment in UNII-3, apparently believes that DSRC is a delicate and shy little thing, incapable of proper filtering (despite not needing to worry about the usual concern for weight inherent in hand-held mobile devices). Nevertheless, the delicate fragile flower is so vital to saving lives that the rest of the world must warp itself around the protective needs DSRC.

If DSRC is genuinely as fragile as the Petition for Reconsideration implies, one wonders how it can avoid self-interference as the technology is deployed over the next 20 years until it achieves the same level of efficacy currently provided by unlicensed car radar. Indeed, given the large number of processors included in automobiles generating RF fields, and the interference that naturally occurs when a big piece of metal (like a car) moves swiftly through the air, one wonders how DSRC will ever manage to function.

Fortunately, the Commission can resolve the question by requiring DSRC to relocate all Life and Safety traffic to the top 20 MHz of the band. The DSRC specification and the Commission's rules *require* that DSRC units be capable of such rechannelization as a built-in function, so this should impose no cost on DSRC licensees. The designation of the bottom 10 MHz (above the 5 MHz guard band channel, which the auto industry finds insufficient) for Life and Safety traffic was a convenience adopted by the Commission in 2006 to relieve anticipated future congestion. Needless to say, the congestion issues have failed to emerge. But more importantly, the designation did not in any way alter the requirement that all traffic be subject to the direction of the control channel, which must have the capacity to recognize life & safety traffic, prioritize it, and direct it to *any* channel.

Accordingly, even if we assume DSRC wireless communication is as fragile and subject to interference (and thus of extremely limited utility) as the auto industry claims, the solution is fairly straightforward and cost effective. Require DSRC to relocate their life & safety traffic further up the band.

Globalstar

I stated that even if the restrictions on deployment are relaxed and/or eliminated after the first year (and assuming no significant interference issues emerge), the Commission must make clear that it will act if additional deployments demonstrate destructive interference to unlicensed operations in the band. This mirrors the obligation imposed on Progeny to manage its systems in a way that still permits use of the band by unlicensed devices, even though no individual device is protected more than any other device in the Part 15 framework.

It is critical that the Commission make clear this important distinction. Unlike individual licensed devices, individual Part 15 devices are not protected from interference. At the same time, as the Commission recognized in Progeny and elsewhere, the strong public interest value in maintaining a useable spectrum commons means that no licensee can be permitted to effectively foreclose use of the unlicensed space.

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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/ Harold Feld
Senior Vice President
Public Knowledge

Cc: Edward Smith