

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION**

Washington, D.C. 20554

In the Matter of)	
)	
Review of the Commission's Rules)	
Governing the 896-901/935-940 MHz)	WT Docket No. 17-200
Band)	
)	

To: The Commission

COMMENTS OF UNITED PARCEL SERVICE, INC.

Pursuant to Sections 1.415 and 1.419 of the Federal Communications Commission ("FCC" or "Commission") Rules,¹ United Parcel Service, Inc. ("UPS") hereby submits these Comments in response to the Commission's August 4, 2017, Notice of Inquiry ("NOI" or "Notice") in the above-captioned proceeding.² For the reasons set forth below, UPS generally supports the proposed Private Enterprise Broadband ("PEBB") realignment of the 896-901/935-940 MHz ("900 MHz") band, but urges the Commission to ensure that incumbent operations in the band are not

¹ 47 CFR §§ 1.415, 1.419.

² Review of the Commission's Rules Governing the 896/901-935-940 MHz Band, WT Docket No. 17-200, Notice of Inquiry, DA 17-743, released Aug. 4, 2017.

unduly impacted as a consequence of any such realignment or other change to the Rules.

INTRODUCTION

UPS is a global leader in logistics, offering a broad range of solutions including the transportation of packages and freight; the facilitation of international trade; and the deployment of advanced technologies to manage more efficiently the world of business. Headquartered in Atlanta, UPS has more than 434,000 employees (approximately 350,000 being in the U.S.) and serves more than 220 countries and territories worldwide.

UPS delivers 19.1 million packages and documents daily, carrying approximately six percent of the U.S. gross domestic product and two percent of global GDP in its trucks and planes to every corner of the globe, every day. This rapid, efficient, and reliable air cargo and express service is a critical element of the international infrastructure of commerce, and the nation's economic strength.

To provide this level of service, UPS operates from more than 7300 distinct retail and operations facilities. UPS relies on private land mobile radio ("PLMR") communications in many of these facilities, in support of mission-critical business communications and applications.

UPS is currently licensed to operate multi-channel trunked radio systems on 900 MHz business, industrial and land transportation ("B/ILT") channels at nine of our most-critical hub facilities: Louisville, Kentucky; Chicago, Illinois; Memphis, Tennessee; Rockford, Illinois; Columbia, South Carolina; Anchorage, Alaska;

Columbus, Ohio; Atlanta, Georgia and Lexington, Kentucky. With a total capital investment exceeding \$19 million, these 900 MHz trunked radio systems provide mission-critical push-to-talk voice communications. UPS relies on these systems to support reliable, time-critical communications related to employee health and safety; hazardous materials response; aircraft fueling; aircraft deicing; aircraft weight and balance; severe weather notification (e.g., "ramp bans", when employees are evacuated from aircraft ramp areas when lightning is present); plant maintenance; Customs compliance; Transportation Security Administration compliance; internal security; site escorts for local police, fire and ambulance services; and numerous other important business functions.

The 900 MHz systems operated by UPS are integral to the efficient operation of its package delivery business. As such, UPS is directly affected by any significant changes to the Commission's 900 MHz Rules, particularly any reorganization or repurposing of the band that has the potential to change its very nature and use. For this reason, UPS has been an active participant in previous proceedings regarding this band,³ and we welcome the opportunity to comment in the instant proceeding.

I. UPS GENERALLY SUPPORTS THE 900 MHZ PRIVATE ENTERPRISE BROADBAND
REALIGNMENT PROPOSAL

³ See, e.g., Comments of United Parcel Service, In the Matter of Amendment of Part 90 of the Commission's rules to Provide for Flexible Use of the 896-901 MHz and 935-940 MHz Bands Allotted to the Business and Industrial Land Transportation Pool, WT Docket No. 05-62, filed May 18, 2005.

UPS shares the Commission's stated desire in this proceeding "to ensure that the 900 MHz band is put to its best and highest use for the American public."⁴ To that end, and while recognizing that important details must still be worked out regarding, *inter alia*, the protection of incumbents, we believe the 3 x 3 MHz Private Enterprise Broadband ("PEBB") proposal put forth by the Enterprise Wireless Alliance ("EWA") and Pacific DataVision, Inc. ("PDV") (collectively "EWA/PDV")⁵ provides a solid foundational basis for achieving the "best and highest use" objective.

The entrance of a 900 MHz PEBB licensee will provide a much-needed enterprise-grade provider in the marketplace for commercial LTE services, where current providers are understandably more focused on the typical consumer's needs. UPS is a heavy user of commercial LTE services throughout many parts of our business, but for mission-critical communications at many of our larger facilities, no existing LTE service provider to date has been willing or able to guarantee contractually the service levels we require. As a result, private trunked radio systems are the only option available today for meeting this critical business need. Whether or not we would ultimately choose to contract with a 900 MHz PEBB service provider in the future, simply making available such a viable option—with a clear focus on the

⁴ Notice at 18.

⁵ See Petition for Rulemaking of the Enterprise Wireless Alliance and Pacific DataVision, Inc., RM-11738, filed Nov. 17, 2014; and Ex Parte Comments, Proposed 900 MHz PEBB Allocation Rules, RM-11738, filed May 4, 2015.

specific needs of B/ILT users—would be a valuable improvement in the competitiveness of the marketplace for high-performance, highly-available communication solutions.

Today, UPS's trunked radio systems are typically designed only to provide coverage within the geographic boundaries of our facilities. That said, there are times when it would be advantageous for users on our private trunked radio networks to have the ability to "roam" onto a wide-area commercial network. We believe the PEBB concept offers a great opportunity for the development of dual-mode devices and related services providing exactly this kind of capability. In fact, we anticipate that a PEBB will likely drive improvement in the marketplace for 900 MHz radio hardware—both infrastructure and user equipment.

If the Commission decides to expand beyond the 3 x 3 MHz PEBB proposal, potentially allowing broadband deployment across the entire 5 x 5 MHz band, assignment of the additional 2 x 2 MHz sub-band should be achieved through a geographic overlay incorporating strong protection for incumbents. To accommodate new users and/or expansion of incumbent systems, the Commission should also allow for future site-based narrowband B/ILT assignments in the 2 x 2 MHz sub-band, subject to terms negotiated with the geographic broadband licensee.

II. THE INTERESTS OF 900 MHZ INCUMBENTS MUST BE PROTECTED DURING ANY RE-CHANNELIZATION PROCESS

Eight of the nine UPS 900 MHz trunked radio sites listed above (all except for the Columbus, Ohio, location) will require at least some re-channelization if the

Commission adopts the current PEBB proposal.⁶ While UPS was not impacted directly by the previous re-banding activities in the 800 MHz band, it is our hope that lessons learned from that effort can be applied to any future realignment of the 900 MHz band.

The timeline mandated for negotiation of a re-channelization plan must be long enough not to constrain or otherwise put incumbents at a negotiating disadvantage. Likewise, deadlines for actual implementation of re-channelization must be long enough to account for budgetary cycles, staffing constraints, operational constraints, equipment lead times, and numerous other factors. For example, UPS strictly prohibits any non-emergency changes to our technology infrastructure—including mission-critical radio systems—during our peak operating period from early November to early January each year.

In the same way, UPS urges the Commission to make clear in its Rules that incumbents must be fully reimbursed for all reasonable costs incurred during re-channelization, including internal and external labor costs. PEBBs must be required to escrow sufficient funds to cover these costs as a condition of the assignment of their broadband license.

⁶ That is to say, at these eight sites, UPS is currently licensed on channel pairs in the proposed 3 x 3 MHz broadband segment (898-901/937-940 MHz). Other proposed realignments, e.g., locating the broadband segment at the bottom or middle of the band, would actually have a greater impact in terms of required re-channelization for UPS systems.

III. 900 MHZ INCUMBENTS MUST BE SUFFICIENTLY PROTECTED AGAINST INTERFERENCE

The Commission asks whether the current distance separations between 900 MHz licensees as currently specified in section 90.621(b) of the rules⁷ remain adequate.⁸ In our view, it would be preferable to convert to contour-based channel coordination, as this clearly allows for more efficient use of the spectrum, while also providing a measurable standard for determining the presence (or absence) of interference.

A contour-based approach would also offer incumbents some degree of flexibility to relocate their transmitters or otherwise enhance their coverage within the limits of their contour. UPS supports the establishment of a 22 dBμV/m interference contour as the appropriate criteria for providing this flexibility, similar to the criteria currently set forth in section 90.693(b) of the Commission's rules.⁹ We believe such a standard would fairly balance the needs of incumbents and new commercial entrants into the band.

SUMMARY

For all the foregoing reasons, UPS generally supports the EWA/PDV PEBB proposal as the new foundational structure for the 900 MHz band, ensuring its future

⁷ 47 CFR § 90.621(b).

⁸ Notice at 25.

⁹ 47 CFR § 90.693(b).

