

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
Implementing Public Safety Broadband Provisions	)	PS Docket No. 12-94
Provisions of the Middle Class Tax Relief and	)	
Job Creation Act of 2012	)	
	)	
Implementing a Nationwide, Broadband,	)	PS Docket No. 12-94
Interoperable Public Safety Network in the 700	)	
MHz Band	)	
	)	
Service Rules for the 698-746, 747-762 and 777-	)	PS Docket No. 06-229
792 MHz Bands	)	
To: The Commission		

**REPLY COMMENTS OF OCEUS NETWORKS**

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Oceus Networks hereby submits these reply comments in response to the Commission's Notice of Proposed Rulemaking ("Notice")<sup>1</sup>, which seeks comment on certain proposals to implement provisions of the Middle Class Tax Relief and Job Creation Act of 2012 ("Act")<sup>2</sup> governing deployment of a nationwide public safety broadband network ("NPSBN").

## **I. INTRODUCTION**

Oceus Networks, Inc. is a Reston, Va.-based provider of 4G LTE wireless broadband solutions for U.S. military, other security customers, and public safety. Oceus Networks is engaged in several trials within the Department of Defense (DoD) and other federal and state entities. These trials demonstrate the practical feasibility of 4G LTE for mobile tactical users. Further, Oceus Networks is assessing the technological capabilities of deployable aerial communications architecture (DACA) platforms to support emergency communications during the first 72 hours of a disaster.<sup>3</sup> This DACA trial responds to an FCC Notice of Inquiry proceeding initiated last year.<sup>4</sup> At the conclusion of our tests in July of this year, Oceus Networks, along with Space Data Corporation, will submit these results to the FCC's record.

Oceus Networks' work with DACA, DoD, and other federal and state entities provides unique perspectives on how to maintain highly survivable networks through flexible communication architectures for public safety. When flexibility is built in upfront to the FirstNet

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<sup>1</sup> Implementing Public Safety Broadband Provisions of the Middle Class Tax Relief and Job Creation Act of 2012, PS Docket Nos. 12-14, 06-229 and WT Docket No. 06-150, Notice of Proposed Rulemaking, FCC 13-31, 28 FCC Rcd 2715 (Mar. 8, 2013).

<sup>2</sup> Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156 (2012).

<sup>3</sup> Oceus Networks Press Release, "Oceus Networks to Demonstrate Rapidly Deployable Networks for Public Safety," May 24, 2012.

<sup>4</sup> Utilizing Rapidly Deployable Aerial Communications Architecture in Response to an Emergency, PS Docket No. 11-15, Public Notice (rel. May 24, 2012) ("DACA NOI").

network architecture, the network can achieve an even wider range of public safety communication requirements and objectives. These reply comments are provided from that perspective.

## **II. DISCUSSION**

### **A. Technical Service Rules For the National Public Safety Broadband Network**

The Notice sought comment “on the development of a unified set of rules for the expanded public safety broadband allocation” after the Middle Class Tax Relief and Job Creation Act of 2012 (“Public Safety Spectrum Act” or “Act”)<sup>5</sup> directed the Commission to reallocate the 700 MHz D-Block (758-763 MHz/788-793 MHz) to public safety.<sup>6</sup> Oceus Networks supports the comments of Ericsson and other manufacturers to bring the 700 MHz public safety D block frequencies under Section 90.542(a) and to delete as redundant the parallel provisions of Section 27.50(b).<sup>7</sup>

### **B. Power and Antenna Height Limits**

The Notice sought comment on implementing power and antenna height limits for the public safety broadband network. Oceus Networks agrees with the comments of those supporting the Commission’s proposal to use power strength and antenna height limits set forth in Section 90.542(a) across the expanded public safety broadband allocation.<sup>8</sup> Oceus Networks supports

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<sup>5</sup> Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156 (2012).

<sup>6</sup> See Notice at ¶ 18.

<sup>7</sup> Comments of Ericsson, p 3. Comments of General Dynamics C4 Systems, p 3. Comments of Harris Corporation, p 7. Comments of Alcatel Lucent, p 2.

<sup>8</sup> Comments of Ericsson, p 3. Comments of General Dynamics C4 Systems, p 3. Comments of Motorola Solutions, p 7.

maintaining the ERP limits for mobile stations and portable stations at 30 Watts ERP and 3 Watts ERP respectively.

As noted above, Oceus Networks has been supporting the work of the Commission in exploring the use of DACA for the first 72 hours after a disaster in the event communications are unavailable. Oceus Networks' experience deploying communications on an aerial platform demonstrate the technology's promise. Since Oceus Networks is still in the experimentation and analysis phase, Oceus Networks will defer recommending any specific changes to power or antenna height at such time as the Commission launches a formal rulemaking.

### **C. Equipment Certification FCC Freeze**

Oceus Networks strongly supports the comments by manufacturers<sup>9</sup> who urge the Commission to move expeditiously on finalizing technical rules to allow for new equipment authorizations for devices in the band. Oceus Networks has witnessed firsthand the desire by a wide range of public safety agencies to participate in the new network. To help prepare for the availability of the NPSBN, equipment will need to be developed well in advance of its deployment.

### **D. Commercial Standards**

Oceus Networks strongly supports Ericsson's comments that urge the Commission to adhere to commercial standards as the rules are finalized.<sup>10</sup> In developing LTE-based systems for the U.S. military, Oceus Networks understands that deviation from standards will impact the

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<sup>9</sup> Comments of Motorola Solutions, p 13. Comments of Ericsson, p 6. Comments of Harris Corporation, p 7.

<sup>10</sup> Comments of Ericsson, p 3.

availability of devices, increase costs, and prevent public safety users from fully leveraging the commercial industry's research and development investments. Also, failure to adhere to commercial standards will prevent public safety's ability to to cost-effectively take advantage of future iterations of LTE and standard commercial technologies.

### **III. CONCLUSION**

For the foregoing reasons, Oceus Networks urges the Commission to consider its recommendations as it finalizes rules pursuant to this proceeding. We urge the Commission to retain a commitment that public safety use commercially standardized products to maximize the benefits of LTE. Oceus Networks applauds the Commission for its efforts helping FirstNet achieve the long-awaited goal of providing our nation's first responders and citizens with a world-class wireless broadband network.

Respectfully submitted,

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