



PSHS Bulletin



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Reinvigorating the 4.9 GHz Band

By Zenji Nakazawa

In 2002 the Commission designated 50 megahertz of contiguous spectrum in the 4940-4990 MHz band (4.9 GHz band) for public safety use. This spectrum is ideal for temporary mesh networks that support data, voice, and video communications at the scene of emergencies; monitoring sensitive locations remotely with point-to-point video links; and setting up city-wide Wi-Fi networks to give first responders dedicated broadband access. But many experts in industry and government claim that the development and use of the 4.9 GHz has in reality fallen short of those initial expectations.

Almost ten years later, the Commission's licensing database indicates that not nearly as many eligible state and local entities use the band as could do so. Critics say that public safety users have failed to use the spectrum efficiently and that the Commission missed an opportunity to auction the spectrum and to make it available to commercial users.

It is against this backdrop that the Commission's action almost ten years since it first implemented initial rules for this band – adoption of a Fourth Report and Order and Fifth Further Notice of Proposed Rulemaking at its Open Meeting on June 13th – is significant. Through this action, the Commission is reexamining the 4.9 GHz band and considering how to amend its current policies and rules in order to reinvigorate use of the band as intended.

Specifically, the item sought comment on three core issues:

- Whether to establish formal coordination requirements in the 4.9 GHz band beyond the informal coordination procedures in place today.
- Whether to expand eligibility in the 4.9 GHz band to include critical infrastructure entities, such as utilities, and other commercial users, and if so, whether such use should be on a secondary basis subject to a shutdown feature to ensure public safety priority access.
- Whether and to what extent the 4.9 GHz band can complement the nationwide 700 MHz public safety broadband network to be deployed by FirstNet under the Spectrum Act, and whether FirstNet is or should be eligible to hold a 4.9 GHz band license, particularly in connection with the provision of backhaul links in support of the 700 MHz network.

Finally, the item corrected certain ministerial errors in existing Part 90 rules, and clarified the 4.9 GHz channel plan.

The public title for this rulemaking is Amendment of Part 90 of the Commission's Rules; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; Service Rules for the 698-746, 747-762 and 777-792 MHz Bands (FCC 12-61).

Kudos to Tom Eng of the Policy and Licensing Division for his superb work on this major project. ■



Tom Eng, Policy and Licensing, holding the 4.9 GHz 4th R&O and 5th FNPRM.

Interoperability Board Report Transmittal

By Brian Hurley

The Middle Class Tax Relief and Job Creation Act of 2012 (Spectrum Act), enacted February 22, 2012, sets forth a statutory framework for deployment of a nationwide interoperable public safety broadband network in the 700 MHz band. The Spectrum Act creates an independent authority within the National Telecommunications and Information Administration (NTIA) to oversee the construction and operation the network. This entity, the First Responder Network Authority (FirstNet), will hold a license for both the existing public safety broadband spectrum (763-769/793-799 MHz) and the spectrally adjacent D Block spectrum (758-763/788-793 MHz).

The Spectrum Act assigns a number of responsibilities to the Commission, the most pressing of which was the obligation to establish—within thirty days of enactment—an expert board that would develop interoperability standards for the network. The Technical Advisory Board for First Responder Interoperability (Interoperability Board) was charged under the statute with “develop[ing] recommended minimum technical requirements to ensure a nationwide level of interoperability for the nationwide public safety broadband network.” The fifteen-member Board comprised experts from the public safety community, State and local government and private

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Interoperability Board Report Transmittal, cont'd.

By Brian Hurley

industry. The Chairman appointed the Interoperability Board's fourteen voting members, who were joined by a fifteenth non-voting member appointed by NTIA.

The Spectrum Act required the Interoperability Board to complete its work and submit its recommendations to the Commission within ninety days of enactment of the statute. The Interoperability Board met this deadline, submitting its recommendations on May 22, 2012, in a report entitled "Recommended Minimum Technical Requirements to Ensure Nationwide Interoperability for the Nationwide Public Safety Broadband Network."

The statute then gave the Commission thirty days to approve and transmit the recommendations to FirstNet. The Commission completed this task on June 21, right on schedule. Under the statute, FirstNet must incorporate the recommendations "without materially changing them"

into its Requests for Proposals to construct, operate and maintain the network.

The recommendations will also come into play for any State that elects to "opt out" and pursue deployment of its own state network. The Spectrum Act requires states electing to opt out to submit alternative deployment plans for the Commission's approval, and such plans must demonstrate compliance with the Interoperability Board's recommendations as well as interoperability with the nationwide network.

The transmittal of recommended minimum technical interoperability requirements to FirstNet marks a significant milestone in the deployment of the nationwide network the Spectrum Act envisions. Bureau and ERIC staff are now focused on implementing some of the Commission's other responsibilities under the Spectrum Act, including D Block reallocation and the licensing of spectrum to FirstNet. ■

June Events:**Fairfax County 9-1-1 PSAP Tour**

June 5, 2012—David Turetsky, Chief, PSHSB and Patrick Donovan, Attorney, Policy and Licensing Division participated in a tour of the Fairfax County 9-1-1 Center.



Pictured above (left to right): Patrick Donovan, David Turetsky (PSHSB) and Steve Souder, Director, Department of 9-1-1/Public Safety Communications, Fairfax County, VA.

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US-Mexico Signing Ceremony at the 12th HLCC Meeting of Principals, State Department, Washington, DC

June 8, 2012—FCC Chairman Julius Genachowski participated in high-level discussions with US and Mexican telecommunications officials at the State Department where the United States signed two Protocols with Mexico for sharing spectrum in the 800 MHz and 1.9 GHz bands along the US-Mexican border. The signing of these documents marked the beginning of the final phase for rebanding in the 800 MHz band across the country. These actions will help support commercial broadband services and public safety mission-critical voice communications along the US-Mexico border and throughout the United States. A few highlighted moments from the day were captured in the photos below.



Upcoming Events

- July 19, 2012 - Open Commission Meeting, FCC Headquarters, Washington, DC

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Questions or Comments? Email your questions or comments concerning the content of this bulletin to Kim Anderson (kim.anderson@fcc.gov).