

# ATTACHMENT B

Motorola, April 28, 2005, WT Docket No. 05-157:

. . . we are now in the early stages of a transition where emergency responders will need instant access to high-speed broadband and wideband wireless services for the improved dissemination of video and graphic images necessary to defuse dangerous and/or violent situations. These more bandwidth-intensive applications will only be possible with adequate allocations of dedicated spectrum.

. . . Motorola believes that the need for broadband data capability on a wide-area basis and the need for federal government agencies to have access to this broadband data are the most significant considerations facing the Commission in determining the spectrum needs of Public Safety.

First Response Coalition, April 28, 2005, WT Docket No. 05-157:

Furthermore, the current spectrum allocated for use by public safety departments will not be adequate for use with next generation technologies. While new technologies, such as wireless broadband networks and satellite global positioning systems (GPS), enable greater communications features, they require additional bandwidth and capacity. Examples of these technologies include handheld police video gear that can capture, send, and receive images from a crime scene and car-mounted navigation units that don't just pick up traffic reports, but receive street-by-street data and calculate alternative routes for drivers.<sup>1</sup> The patchwork of spectrum frequencies currently in use limits the capacity of first responders to utilize these new devices and services. In addition as new equipment incorporates additional features and capabilities, first responders will need access to more of the higher frequency bands, further dispersing public safety communications across the frequencies.

<sup>1</sup>Clark, Drew. "Spectrum Wars," National Journal's Technology Daily, February 18, 2005. <http://nationaljournal.com/about/njweekly/stories/2005/0218njsp.htm>

Unfortunately, spectrum alone will not overcome the communications obstacles faced by first responders. The equipment and training needed to utilize the additional spectrum and achieve interoperability require significant financial resources. Local communities are already faced with budget shortfalls, and first responders are not receiving the funds they require.

Federal Partnership of Interoperable Communications, April 28, 2005, WT Docket No. 05-157

The FPIC submits that the unauctioned portion of the upper 700 MHz band is more valuable to the Nation as a Federal/State/Local public safety interoperability band (National IO band). Such an opportunity to enhance the Nation's ability to better serve public safety first responders will provide increased interoperability

among all users, added capacity for Federal, State, Local, and Tribal Critical Infrastructure integrated voice and high speed data/video systems, and improved safety for all first responders and the public that additional interoperability and capacity brings.

Los Angeles County Sheriff's Department, April 28, 2005, WT Docket No. 05-157

Current public safety spectrum allocations in both the 700 MHz and the 4.9 GHz band do not sufficiently meet the needs of large public safety entities like LASD. The additional spectrum in the 700 MHz band would be used to relieve congestion of existing systems and to address a pressing need for a new, county-wide, broadband mobile communications system. Emergency personnel spread across LA County need the ability to transmit and receive high speed data and real-time video images to and from mobile units during major emergency events. Specifically, this additional spectrum would be used to establish networks that would assist tactical command centers during these events.

Commonwealth of Pennsylvania, April 28, 2005, WT Docket No. 05-157

The Commission should halt the proposed auction of the remaining 36 MHz of spectrum available at 700 MHz and reallocate this valuable resource to the identified needs for first responders. The allocation of this resource could solve interoperability issues between the federal homeland security response agencies, state and local emergency response agencies, and critical infrastructure response entities.

City of New York, April 28, 2005, WT Docket No. 05-157

Moreover, from the standpoint of the New York City's somewhat unique radio propagation and geographical coverage needs, this 700 MHz band spectrum represents an especially desirable allocation – as this frequency transmits well in “canyon-like” urban environments, provides enhanced in-building penetration and carries radio signals over relatively long distances.

Andrew M. Seybold, President, Outlook4Mobility

I believe that an additional spectrum allocation in the 700-MHz band is absolutely necessary and now is the time to act on this. The 700-MHz spectrum is far better suited for metro and wide-area communications voice and data services than spectrum at 4940-4990.

Speights Telecom, Inc., April 27, 2005, WT Docket No. 05-157

STi submits that the unauctioned portion of the upper 700 MHz band is more valuable to the Nation as a federal/State/local public safety interoperability band than as a commercial radio service band or for any other use. In the interest of ensuring and enhancing interoperability among all providers of public safety services, the Congress, the Commission, and NTIA must realize the benefit to homeland security by reallocating these bands and creating a new ***National Interoperability Band*** (National IO Band). Such an opportunity to enhance our ability to better serve first responders will provide:

- Added capacity for federal, State, local and Critical Infrastructure (CI) integrated voice and high speed data/video;
- Increased Interoperability among federal, State, local and CI users;
- Improved Safety for first responders and the public that interoperability and additional capacity brings;
- Compatible equipment designed for Mission Critical use across the larger combined federal, State, local and CI base of users.

GOVEXEC.com, March 24, 2006

First responders aren't blind to the advantages of Internet protocol, especially when it is extended to the hand-held level, not just the backbone. Craig Jorgensen, project director for Project 25, a public-private standards-making body for land mobile radios, imagines a world in which first responders have access to Internet-transmitted video, data from field sensors, "the ability to send robotic terminals into a building and assess what's taking place . . . without having to send people in."

National Public Safety Telecommunications Council, February 6, 2006, WT Docket Nos. 05-157 and 96-86

NPSTC has noted previously that public safety's need for broadband capability and other requirements will not be resolved by the 700 MHz band no matter what its structure, it is not adequate to meet current or future demands.

United Telecom Council, May 11, 2005, WT Docket No. 05-157

Commercial technologies and a nationwide allocation are both concepts that could meet the increasing wireless needs of CI industries; however, control must remain in the hands of the emergency response community, which builds more robust and reliable infrastructure designed specifically for its own needs.

Joshua Marsh, “Secondary Markets in Non-Federal Public Safety Spectrum”

. . . command-and-control allocation with market determined use, the public safety agency is still granted spectrum from the government, however, they are allowed more flexibility in its use. Public safety agencies could determine which technology to use in that spectrum and could lease that spectrum to secondary users. This model would protect public safety’s spectrum allocations while introducing market-based efficiency incentives . . .

Lynnette Luna, Mobile Radio Technology, April 1, 2006, “Project MESA reaches a Crossroad”

“We need spectrum outside of anything we have today, including 4.9 and 700 MHz,” Jorgensen said. “And the reason is the amount of bandwidth it takes to push data through.”

“These systems from the onset have to be cooperative, whether that’s on a public/private basis or multiple jurisdictional basis,” he said. “At some point in time, we’ll have to force that issue.”

The Spectrum Coalition for Public Safety, April 28, 2005, WT Docket No. 05-157

Our first responders need better tools than the terrorists already have, and this starts with sufficient spectrum available to support modern, scalable dedicated and secure broadband wireless networks for public safety. With sufficient spectrum in place, the next step will be to architect a network-of-networks, each with autonomous roaming and that can be configured locally to meet the needs of each municipality.