

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	PS Docket No. 06-229
Implementing a Nationwide, Broadband, Interoperable Public Safety Network in The 700 MHz Band	)	WT Docket 96-86
	)	
The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010	)	

**REPLY COMMENTS OF THE NATIONAL PUBLIC SAFETY  
TELECOMMUNICATIONS COUNCIL**

The National Public Safety Telecommunications Council (NPSTC) submits these reply comments addressing the Commission’s Ninth Notice of Proposed Rulemaking (Ninth NPRM) in these proceedings.<sup>1</sup> The Ninth NPRM proposes a centralized interoperable public safety national broadband network that will be shared with commercial interests. It proposes to use the 12 MHz wideband segment currently allocated to the public safety service in the 700 MHz band.

The benefit and need for a public safety broadband network is endorsed by cellular carriers, equipment manufacturers, public safety agencies and organizations. While embracing this essential objective; the comments diverge regarding how to attain the goal. The divide centers on whether public safety agencies need additional spectrum. Cellular carriers, pursuing the remaining 60 MHz of the 700 MHz band through the auction process, oppose any additional allocation; asserting that public safety’s current allocation is adequate.

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<sup>1</sup> Implementing a Nationwide, Broadband Interoperable Public Safety Network in the 700 MHz band and In the Matter of the Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, *Ninth Notice of Proposed Rulemaking*, PS Docket No. 06-229, WT Docket 96-86, FCC 06-181 (December 20, 2006).

NPSTC believes that additional spectrum is crucial to meeting public safety's expanded responsibilities. It is critical to the technical and economic viability of the Commission's proposal. The Commission should reject the static position that denies the enormous expansion of domestic defense and emergency response responsibilities. It should pursue a path providing additional spectrum for a broadband network capable of delivering improvements paralleling today's challenge.

### **Summary of Comments**

Interests supporting the Ninth NPRM's premise that 12 MHz is sufficient for a public/private network include cellular carriers, broadband equipment providers and their trade associations.<sup>2</sup> Several oppose any additional spectrum for public safety communications.<sup>3</sup> These interests also recommend relocating current public safety narrowband voice channels but object to the proposal of guard band licensees to provide additional channels to public safety.<sup>4</sup>

In contrast, public safety agencies and other interests state that 12 MHz is inadequate to support public safety operations and cannot additionally accommodate commercial interests, reflecting, as APCO indicates, the proposal's "fatal" flaw.<sup>5</sup> Many public safety comments emphasized that eliminating the wideband channels diminishes the options and flexibility afforded to local officials.<sup>6</sup> Secondary operation by commercial interests on the 12 MHz public safety segment was strongly challenged.<sup>7</sup> The guard band licensee proposal to provide public

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<sup>2</sup> Comments of Verizon Wireless, AT&T, MetroPCS Communications, Alcatel-Lucent, the Cellular Telecommunications Internet Association (CTIA) and Consumer Electronics Association (CEA).

<sup>3</sup> Comments of AT&T, MetroPCS Communications, CTIA and CEA.

<sup>4</sup> Comments of Verizon, AT&T, Alcatel and CTIA.

<sup>5</sup> Comments of the City of Philadelphia, Region 22 Planning Committee, Metropolitan Washington Airports Authority, Association of Public Safety Officials, International (APCO), Northrop Grumman, GEOCommand, RCC, Spectrum Coalition and Cyren Call.

<sup>6</sup> Comments of the City of Philadelphia, Region 22 Planning Committee, Dataradio, M/A Com, Motorola, Northrop Grumman, Spectrum Coalition and APCO.

<sup>7</sup> Comments of the Telecommunications Industry Association.

safety additional channels was endorsed.<sup>8</sup> Several comments challenged the ability of the commercial radio service (CMRS) model to meet public safety standards of universal coverage, redundancy, diversity and reliability.<sup>9</sup> Several parties noted that the Public Safety Broadband Trust (PSBT), in contrast to the Ninth NPRM, is a viable technical and economic proposal.<sup>10</sup>

Equipment manufacturers Dataradio, M/A Com and Motorola discussed the importance of flexibility for local operations and addressed these requirements in the context of band alignment. Northrop Grumman stated that the viability of the proposal is so tenuous it would delay access to the 700 MHz band. Cyren Call reiterated its PSBT proposal that would use 30 MHz of the yet to be auctioned 700 MHz band for a public/private broadband network; Frontline Wireless proposed that a new E Block of 10 MHz be established from this spectrum to serve public safety agencies and carriers.

NPSTC's position is more than a simple plea for additional spectrum for public safety. It recognizes the technical challenges pervading the band yet the opportunities and efficiencies presented by broadband technology. We have pursued policies throughout the 700 MHz proceedings that promote not only the coexistence of services but a complementary environment benefiting all interests. While our review of the comments is biased toward those presenting positive contributions to public safety's challenges, an important element is the benefits that can accrue across all users.

### **Additional Spectrum is Integral to a Nationwide Public Safety Broadband Network**

Assertions that public safety has adequate spectrum are insulated from the reality facing the nation's emergency services. The cellular deployment experience has neither the history nor

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<sup>8</sup> Comments of Region 39 700 MHz Committee, Region 22 Planning Committee, Dataradio, Access Spectrum/Pegasus, Missouri Highway Patrol, Frontline Wireless.

<sup>9</sup> Comments of Dataradio, Northrop Grumman, RCC, Spectrum Coalition.

<sup>10</sup> Comments of APCO, Region 22 Planning Committee

the challenges and should not serve as the justification to deny public safety additional spectrum. No commercial carrier has channels spread over ten frequency bands that vary widely in propagation characteristics, and often needing the use of multiple bands simultaneously at an incident scene. Nor has any carrier faced an almost 50 year history of regulatory direction to reduce channel size, a direction counter to broadband delivery. In their comments for this proceeding, the Consumer Electronics Association and High Tech DTV Coalition have made reference to the Criterion Economics paper released on February 6, 2007 and entitled “Improving Public Safety Communications: An Analysis of Alternative Approaches.” This paper, prepared at their expense, was developed to primarily support their assertions that public safety does not need more spectrum and distorts facts concerning the history and intended purpose of the 24 MHz of public safety spectrum allocated by Congress in the Balanced Budget Act of 1997. We urge the Commission to review the March 7, 2007 report of Cyren Call Communications entitled “Setting the Record Straight: A Critique of Criterion Economics’ Improving Public Safety Communications: An Analysis of Alternative Approaches.”<sup>11</sup> In our view this paper does an excellent job of explaining the true history of public safety communications and the vast difference of needs between public safety and commercial systems.

Unlike the cellular carriers, public safety agencies face widely varying geographic and population requirements where they must provide service. Broad geographic areas must be covered efficiently for a small number of users, requiring relatively high power handsets or other mobile receivers as compared to the cellular environment. Public safety cannot tolerate denied access, garbled transmissions or dropped calls. These values translate to substantially higher standards of reliability for the infrastructure and equipment. The cost is not only additional

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<sup>11</sup> *Setting the Record Straight: A Critique of Criterion Economic’ “Improving Public Safety Communications: An Analysis of Alternative Approaches”* prepared by Cyren Call Communications Corporation (March 7, 2007).

investment, which is consistently under funded, but often results in diminishing of network capacity. The result is an achieved value and not an indication that public safety uses its spectrum inefficiently.

Added to this environment is that today's first responder works in a world transformed by the September 11, 2001 attacks and the recent hurricanes. The 9-11 Commission's recommendation of additional public safety spectrum was not misinformed but grounded on the enormous enlargement of state and local government responsibilities. It recognized the widening gap between the responsibilities of local, state and federal agencies for domestic security, emergency preparedness and radio resources. Of the many policy and technical decisions faced by the Commission in this proceeding, the amount of spectrum dedicated to public safety is the key to meeting these challenges.

The current structure of the public safety services, including the 700 MHz public safety allocation, provides local governments, who must pay for the networks capital and operating costs, wide discretion. This is consistent with the national framework committing the management and financing of public safety responsibilities to local government. Contentions that the CMRS history should be either a model showing inefficient public safety spectrum use or the path to deliver public safety services are wrong. Instead, what emerges is a blind allegiance to commercial control of the remaining 60 MHz of 700 MHz and a deep discounting of what this spectrum can provide to emergency response.

**Failing to Provide Additional Spectrum While Eliminating Current Flexibility and Discretion in the 700 MHz Public Safety Segment Presents Significant Risks**

Removing the 12 MHz from its intended use and mandating a broadband network will come at significant cost and create substantial risk. It will remove local officials with primary responsibility for public safety from determining how radio resources should assist their

operations. Comments in support of the Ninth NPRM ignore that wideband is appreciably more affordable and effective for many agencies, especially in less densely populated areas. This is particularly critical when the only funding comes from local, state and federal taxpayers. The comments also improperly discount the proposal of the guard band licensees to increase flexibility and discretion to shape communications to respond effectively.

The importance of the guard band licensee proposal is in what it provides and in its underpinnings. It adds crucial flexibility allowing local agencies to choose more cost efficient wideband channels or the expanded services accompanying broadband. Underlying the proposal is an extensive technical analysis demonstrating its ability to protect against interference between and among services while promoting more efficient use for public safety and commercial users. It presents a fundamental premise of how services cannot only coexist but complement one another.

Significantly, contrary to comments urging only the relocation of the public safety narrowband channels to obtain purported adjacent channel compatibility, the guard band licensee proposal resolves challenges from Canadian broadcast operations to US border agencies. The opposing comments do not, and in failing to do so present severe interference challenges to border agencies in the use of the 700 MHz narrowband voice interoperability channels.

The risk accompanying simply redesignating the 12 MHz as broadband becomes more profound by the uncertainty of private sector participation and investment. Its fragile and tentative state is starkly shown as not one commercial interest filed a comment stating that it will use the band or invest in it. Similarly, no comment supporting the proposal addressed or refuted the several objections that commercial broadband operations, with secondary authority throughout the public safety segment, present serious interference challenges, particularly to

public safety's narrowband voice channels. Much diluted local discretion, substantially increased interference challenges, and an economic model that is not viable, go in a direction opposite of the important goal of an interoperable broadband network providing advanced services to all agencies.

### **The Justification for Additional Spectrum**

NPSTC urges the Commission to pursue assisting public safety in efforts to rescue spectrum from the yet to be auctioned 700 MHz. We do not believe a viable network can be deployed and used without it.

The path commences with adopting the guard band licensee proposal to add channels to the public safety segment. It requires analyzing not only coexistence but how infrastructure and equipment across various services can complement one another to the benefit of all. The PSBT proposal is at the forefront of how to approach this challenge. The Frontline Wireless proposal should also be given further close examination. While we are waiting for additional details from the proponents, we believe there are a number of issues that, from our perspective, need to be addressed. Under the Frontline proposal, the selection of the operator for a nationwide public safety broadband network would not be made by public safety and not by Congress or the FCC; rather it would be a matter of who puts the highest dollar number on the table. It seems to us that a vitally important decision is being left to chance. Without regard to whether this operator understands the unique requirements of public safety, the operator would be given exclusive rights to share capacity on public safety's 12 MHz. If the operator runs into financial trouble, public safety could be sitting across the table bargaining with an operator with the sole objective of recovering the highest percentage of their money. The Frontline proposal seems to permit the outcome that if no agreement is reached after negotiations with public safety, the E block

licensee would then have the chance to build out “commercial only” facilities on whatever basis it chooses, thus defeating the purpose of the “set aside” in the first place. The commercial operator would be the spectrum licensee of the E block, the system operator, and it would have the exclusive right to access the public safety spectrum on a shared basis. This combination would give too much negotiating leverage when it bargains with public safety to discuss shared facilities. Particularly since it has a great chance of keeping and using the spectrum if no deal is reached, the winner will have no incentive to bargain in good faith with public safety.

NPSTC urges the Commission to cross the barrier so clearly delineated in the comments and move public safety and commercial interests to higher standards. What is presented is the opportunity to provide the spectrum resources parallel to the magnitude of responsibility public safety faces while preserving the opportunities to commercial interests the band presents.

### **Conclusion**

NPSTC urges the Commission to address the need to provide public safety agencies at all levels of government the additional spectrum in the 700 MHz band required for a viable nationwide broadband network that can assist all agencies. It should reject the myth of those challenging the needs of public safety and who would prefer to keep the value of that spectrum for their own interests.

Respectfully submitted,

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