

**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)	

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

The National Public Safety Telecommunications Council (NPSTC) submits these comments in response to the Commission’s Ninth Notice of Proposed Rulemaking (Ninth NPRM) in the above proceedings.¹ The Ninth NPRM proposes rule changes that the Commission believes would promote deployment of a centralized public safety nationwide broadband network utilizing the 12 MHz wideband segment channels in the 700 MHz band currently allocated to local and state agencies through the regional planning process. The network would encompass Internet Protocol based system architecture and be administered by a nationwide licensee.

It has become increasingly apparent to NPSTC that deployment of a nationwide public safety broadband network is enormously important for emergency responders at all levels of government: local, state and federal. It will be an essential tool for addressing the expanded

¹ 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).

domestic defense and emergency response obligations of all public safety agencies. Such a proposal is not a substitute for present land mobile assignments, including the current 700 MHz narrowband spectrum, that provide for public safety mission critical voice communications. However, a data network will serve growing critical needs if it meets the expectations that the 700 MHz public safety segment has portended; it must encompass advanced data services that will also include Voice over Internet Protocol (VoIP) capabilities that will provide a vital backup to public safety mission critical land mobile voice systems; it must conquer the historical public safety challenge of satisfying the most critical communications requirements with highly limited or no resources; and it must be available to all agencies, small or large, wealthy or poor, rural, suburban or urban.

NPSTC believes that these attributes translate to five principles which the Commission must address if it is to provide a meaningful response to the current public safety communications situation: universal access by all agencies, sufficient spectrum to ensure commercial investment and public/private coexistence on a shared data network, a modern data network built to public safety standards and able to accommodate changing requirements, a governance structure ensuring public safety community control and standards and protection of mission critical voice spectrum from interference. We do not believe these attributes can be realized if public safety is limited to the 12 MHz of its existing 700 MHz allocation as proposed in the Ninth NPRM. Also, we do not believe that secondary use of the narrowband spectrum provides any meaningful spectrum supplement for broadband use because the areas of the country where there will be the greatest demand for broadband are the same areas where the narrowband voice channels will be fully utilized once the spectrum is cleared and systems are

implemented. We also have serious questions regarding the near-term viability of the cognitive technologies that would be necessary for such broadband/narrowband spectrum sharing.

The Commission, Congress, Administration, public safety and private interests now have a short opportunity to enact and structure a nationwide broadband network that will satisfy the five principles identified above. Unless these principles prevail, the opportunity will be lost and public safety communications will deteriorate further, with many agencies left behind. Set forth below is NPSTC's path to a nationwide broadband network that will improve communications dramatically and bring the unity that is vitally necessary to public safety operations.

The National Public Safety Telecommunications Council

NPSTC serves both as a resource and advocate for public safety organizations in the United States on matters relating to public safety telecommunications. NPSTC is a federation of public safety organizations dedicated to encouraging and facilitating, through its collective voice, the implementation of the Public Safety Wireless Advisory Committee (PSWAC) and the 700 MHz Public Safety National Coordination Committee (NCC) recommendations. NPSTC explores technologies and public policy involving public safety agencies, analyzes the ramifications of particular issues, and submits comments to governmental bodies with the objective of furthering public safety communications worldwide. NPSTC serves as a standing forum for the exchange of ideas and information for effective public safety telecommunications. The following 13 organizations participate in NPSTC:

American Association of State Highway and Transportation Officials

American Radio Relay League

American Red Cross

Association of Fish and Wildlife Agencies

Association of Public-Safety Communications Officials-International

Forestry Conservation Communications Association

International Association of Chiefs of Police

International Association of Emergency Managers

International Association of Fire Chiefs

International Municipal Signal Association

National Association of State Emergency Medical Services Officials

National Association of State Telecommunications Directors

National Association of State Foresters

National Association of State Telecommunications Directors

Several federal agencies are liaison members of NPSTC. These include the Department of Agriculture, Department of Homeland Security (SAFECOM Program and the Federal Emergency Management Agency), Department of Commerce (National Telecommunications and Information Administration), Department of the Interior, and the Department of Justice (National Institute of Justice, CommTech Program).

Current Proposals Addressing Broadband

The Ninth NPRM is the most recent in a series of Commission proceedings that address the optimal use of this critical portion of the spectrum. In addition to this proposal for deployment of a nationwide broadband public safety network, the Commission also has open proceedings in which it is examining the structure of the 700 MHz public safety allocation, the reallocation of certain 700 MHz guard band segments and service rules for the yet-to-be auctioned 700 MHz commercial allocation. These converging proceedings present a pivotal opportunity to propose the 700 MHz capacity needed to support an economically viable,

sustainable, nationwide, broadband public safety network, if sufficient spectrum is made available to do so. By examining these proposals one can discern a path that reflects the principles identified herein and that will thereby unify public safety communications while providing commercial interests a viable opportunity to invest in and use the network.

The Commission first began to explore how to provide broadband capability for public safety from the current 700 MHz wideband and guard band segments while preserving local discretion in choosing whether the spectrum would be utilized for broadband or wideband applications.² Public safety input to that proceeding was clear that the Commission needs to provide the option to choose wideband or broadband solutions within the current 700 MHz data spectrum as requirements dictate. Under the Access Spectrum/Pegasus proposal,³ the current 4 MHz B Block guard band would be eliminated, with 3 MHz placed in the public safety segment and 500 kHz paired channels moved to the A Block guard band, which would be relocated adjacent to the spectrum added to the public safety segment. This spectrum is from two sources: of the 52 B Block licenses, 42 are held by the Commission as a result of the 800 MHz reconfiguration, having originally been licensed to Nextel, with the remaining 10 licenses held by Access Spectrum, Pegasus, and others, who seek compensation for relinquishing these licenses.

A consensus among public safety organizations has emerged embracing the Access/Pegasus proposal while recognizing its inherent limitations. NPSTC believes this

² 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, *Eighth Notice of Proposed Rulemaking*, WT Docket 96-86, FCC 06-34 (March 21, 2006) and In the Matter of Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commissions Rules, WT Docket No. 06-169 and Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements through the Year 2010, WT Docket No. 96-86, *Notice of Proposed Rulemaking* (NPRM), FCC 06-133 (September 8, 2006).

³ Access Spectrum and Pegasus are current holders of 700 MHz guard band licenses.

proposal should be adopted, regardless of the licensing structure ultimately chosen for the existing data spectrum because it helps minimize interference to the 700 MHz narrowband voice spectrum. However, even with the reconfiguration that Access Spectrum and Pegasus have proposed, the resulting spectrum is still far short of that needed for a nationwide broadband network and the regulatory structure proposed by the Commission would not support deployment of such a network. As noted above, local officials need the discretion afforded by the regional planning process to use the current 700 MHz data segment for either broadband or wideband operations, as addressed in responses to the previous Eighth NPRM. It preserves for local officials, whose governments must assume associated capital and operating costs, the decision whether to pursue a more resource-demanding broadband network or more cost efficient wideband network. The discretion is particularly important to rural agencies facing large coverage and topology challenges where the costs for local governments makes implementation of wideband coverage more achievable than the advanced services broadband will provide.

By contrast, any nationwide broadband network, of necessity, must be uniform in design and deployment. It must be available to all agencies; otherwise it will not unify public safety but further divide it. For this reason, it must be in addition to, not a replacement for, the systems that will be deployed on the current 700 MHz wideband segment, as enhanced by the Access Spectrum/Pegasus proposal.

It is in this context that NPSTC, and the public safety community, has embraced the Public Safety Broadband Trust (PSBT) proposal.⁴ The PSBT proposes that 30 MHz of the yet-to-be auctioned spectrum in the upper 700 MHz band be committed to public safety

⁴ Consumer & Governmental Affairs Bureau Reference Information Center, *Petition for Rulemakings Filed*, Report No. 2794, RM 11348, Part 27, Cyren Call Communications Inc., In the Matter of Communications Reallocation of 30 MHz of Corporation 700 MHz Spectrum (747-762/777-792 MHz) from Commercial Use (October 30, 2006), Dismissed, *Order*, DA 06-2278 (November 3, 2006).

communications for a nationwide interoperable broadband network. A trust, organized, populated and controlled by the public safety community, would be established to administer these channels and develop funding sources to build and maintain the network. To that end, private entities would lease access to the spectrum from the trust in a shared government/commercial environment; the leasing revenue would fund building, maintaining and upgrading the network and also repay monies borrowed against Federal loan guarantees to compensate the Treasury for foregone auction revenue. The PSBT would establish the technical parameters of the network to ensure public safety standards, pervasive interoperability among agencies and open architecture. It presents a governing body embracing public safety representation and a management structure promoting public/private spectrum use.

Critically, the PSBT approach presents a path toward a nationwide public safety broadband network because it addresses the systemic under-funding of government radio systems on an ongoing basis. It will be able to do so, however, only if there is sufficient spectrum to attract commercial interest to invest in a shared government/commercial network. The shared environment that would emerge provides adequate spectrum to protect all interests and a funding base to construct and maintain the network, a forceful incentive for coexistence. It is this essential element that is absent in the Ninth NPRM which proposes only 12 MHz of already allocated public safety 700 MHz spectrum for this critical purpose.

NPSTC recognizes that the PSBT concept will require Congressional approval not to auction the 30 MHz of the 60 MHz of commercial 700 MHz spectrum. It will require Congressional enactment allowing the PSBT to borrow monies to pay the Treasury the revenues that would have come from auction. While the concept is opposed by commercial interests that seek to purchase the spectrum, the PSBT proposal presents the best path to unify public safety

services, its premise being to offer a new, exciting and achievable path to solving the challenges of future public safety communications.

The Ninth NPRM has some of the same characteristics as the PSBT. However, there are also several important and decisive differences. Most critically, instead of 30 MHz, the nationwide network proposed in the Ninth NPRM would consist of only 12 MHz. With a spectrum segment so small, it provides no realistic means to build and maintain an advanced broadband network. Its pay-as-you-go format continues the status quo in a sector that is perennially under-funded. Its Commercial Mobile Radio Service (CMRS) model approach ignores and would dangerously compromise the diversity, redundancy, security and universal obligations of public safety communications. Its reliance on cognitive technologies is untested in any public safety scenario.

The inadequacy of spectrum in this proposal culminates in its most serious flaw. NPSTC is firmly convinced that commercial interests will have no incentive to invest in the network. NPSTC has made inquiries of private interests regarding commitments to invest and use the spectrum under the circumstances proposed by the Ninth NPRM. Responses were negative and premised on the lack of adequate spectrum to coexist with public safety given the preemptible status of commercial service on the network. The use of 12 MHz simply will not provide even the capacity to accommodate the enormous expansion of domestic defense and emergency responsibilities of local, state, and federal government agencies, much less present viable opportunities for shared commercial usage.

Without commercial investment to support the build-out and maintenance of the network, the burden will fall to state and local governments under the pay-as-you-go format. Faced with ever-increasing burdens to protect our homeland this is neither realistic nor achievable. Under

the Ninth NPRM concept no nationwide public safety broadband network will ever be built. Deploying and maintaining a nationwide broadband network consistent with public safety standards, generating revenues to assure universal access, promoting public/private use and possessing the ability to respond to emergent circumstances requires a focused and accountable structure that the Ninth NPRM cannot deliver.

The Opportunity

NPSTC believes that within the PSBT concept, the Access Spectrum/Pegasus guard band proposal, and the Ninth NPRM is a path to a nationwide public safety broadband network that will improve quality and coverage and unify public safety. The path embraces universal access, sufficient spectrum to ensure commercial investment and participation, capital and operational resources ensuring an enduring modern nationwide broadband network and a governance structure ensuring public safety community control, emergency response standards and management expertise and efficiency. The foundation for the path is the dedication of spectrum that is adequate to support the initiative.

This path requires action by the Congress, Administration and the Commission. The public safety controlled PSBT must have the requisite statutory or regulatory authority to assume daily management of the spectrum, finance the deployment and pay the Treasury for the value of spectrum intended for auction, with discretion to take such action as necessary to respond to expanded or emergent needs, all subject to the Commission's regulatory authority and to Congressional oversight.

The interests of all parties desiring access to the 700 MHz band can converge to secure this short-lived opportunity. Public safety can be convinced to embrace a shared environment if the nationwide broadband network is available to all agencies for the full range of uses and

environments that agencies encounter daily and if operations are protected. Private investment and commercial use will ensue where adequate capacity and reliability is present. An accountable PSBT can ensure through supervision and incentive, that cognitive radio technology is eventually possible in both public and commercial environments, subject to appropriate testing. For the first, and perhaps last time in our history, adequate spectrum resources combined with concepts the Commission has under consideration make a nationwide public safety broadband network possible.

Summary

NPSTC recognizes the reality that the expectations and economic value of those pursuing the yet to be auctioned 700 MHz band compete with providing a nationwide public safety broadband network. The Commission's Ninth NPRM initiated an examination of how these seemingly competing objectives can be reconciled. NPSTC believes that the core principles enumerated above set the proper course and that these interests can ultimately converge.

NPSTC's plea is that the interests involved and the consideration by the Congress, the Commission and the Administration comprehend another reality. Current public safety operations are complex and difficult, hindered by lack of resources, where dangerous delays and disruption lurk. Congestion of public safety communications channels pervades virtually every

urban and suburban area. The improvements a nationwide public safety broadband network will afford will make an enormous difference to the effectiveness of deterrence, response and investigation. The greatest and most definitive benefit will accrue to the citizen who desperately needs help when confronted with an emergency.

Respectfully submitted,

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