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

In the Matter of	)	
Reallocation of 30 MHz of 700 MHz Spectrum (747-762/777-792 MHz) from Commercial Use	)	RM No. 11348
Assignment of 30 MHz of 700 MHz Spectrum (747-762/777-792 MHz) To the Public Safety Broadband Trust for Deployment of a Shared Public Safety/ Commercial Next Generation Wireless Network	)	

COMMENTS OF THE NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL

The National Public Safety Telecommunications Council (NPSTC) submits these Comments addressing the Petition for Rulemaking filed by Cyren Call Communications, Inc. (Cyren Call).' Cyren Call proposes that 30 MHz of spectrum in the 700 MHz band, currently scheduled for auction, be committed to public safety communications for a nationwide interoperable broadband network. It proposes that a Public Safety Broadband Trust ("PSBT") be established to administer these channels and provide funding to build the network. Cyren Call envisions that private entities will lease the spectrum in a shared government/commercial environment. The leasing revenue will provide the funding to build the network.

---

[1] 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 *(747-7621777-792* MHz) From Commercial Use (October 30, 2006).

Modern communications is the linchpin to effective public safety operations. The objective of a nationwide network allowing all public safety agencies to communicate via voice, video and data in an open standards environment will be lost forever unless the Congress, Administration and Commission act now. Law enforcement, fire, emergency medical and all public safety services must have communications capability parallel to their responsibilities. The current direction, where the remaining 700 MHz band is scheduled to be sold to the highest bidder, forfeits this unique opportunity. Instead, the bifurcated, under-financed and congested public safety bands of the radio spectrum will not have the capacity to meet the new demands on the nation's public safety agencies. The result will be an ever widening gap between the enormous responsibilities of federal, state and local agencies for domestic security and emergency preparedness and the communications resources needed.

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

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).

Public Safety Communications

The September 11, 2001 attacks, Hurricane Katrina, the western wildfires and the thousands of incidents occurring daily illustrate the challenge facing the nation's public

safety operations. Dispatching the right resources in the most efficient way requires modem technology and a pervasive ability to communicate across agencies. Redundant networks transmitting video, photographs, building plans and voice communications are critical to assisting victims, deterring illegal conduct and apprehending those responsible. The analysis inevitably following a prominent incident conveys clearly how inadequate and fragile the current environment is without significant enhancements.

In an era where government preparedness is crucial, there is no nationwide public safety network to manage and coordinate response. There is no wide scale broadband technology capability to expedite analysis and information sharing critical to emergency assistance, investigation and apprehension. Not only is the current public safety spectrum so congested as to constrain voice--much less permit broadband use for video and data, limited funding hinders the incremental improvements that can be made and which are only pursued on a system by system basis. That which is possible in communications today and what public safety agencies have available reflects an enormous divide. The result is tangible: slowed and hindered response across all services.

Although legacy systems will continue to play an important role in public safety communications, the opportunity presented by the yet to be auctioned 700 MHz channels is emphatic. Without this additional spectrum, there can be no national public safety network connecting all agencies. Using broadband technologies to transmit information across agencies and miles immediately will be the exception. Public safety communications will come up short in meeting its challenges.

The Cyren Call Petition for Rulemaking

30 MHz of spectrum in the 700 MHz band (747-762/777-792 MHz) is scheduled to be distributed and licensed by auction to the highest bidder. This remaining segment of 700 MHz spectrum, like the rest of the 700 MHz band, has been used by broadcasters and presents premium propagation characteristics that promote highly efficient signal delivery. The other segments have already been auctioned or dedicated to public safety operations. The planned auction's receipts have been incorporated into the Treasury's estimates for federal government revenues.

Cyren Call proposes that instead the 30 MHz be assigned for public safety use to create a nationwide, interoperable broadband public safety network. The spectrum would be licensed to a Public Safety Broadband Trust ("PSBT") that would direct network deployment and use by all public safety agencies, federal, state and local. It would promote private/public use of the network thorough commercial leasing of the network's capacity. From its borrowing authority and lease proceeds the PSBT would fund the capital to construct the infrastructure and pay the Treasury an agreed sum against the predicted revenues had the spectrum been auctioned. The PSBT would establish the technical parameters of the network to ensure public safety standards, pervasive interoperability among agencies and open architecture.

The 700 MHz Band Will Afford Public Safety Access to Spectrum and Technology Consistent with its Responsibilities

The severe challenges public safety communications face is well documented. Agency radio operations, often within the same jurisdiction, are located in several segments of the spectrum, with extremely limited and inefficient capability to communicate with another. But the addition of a pervasive broadband system would

significantly reduce the high barrier to dispatching the correct resources expeditiously. Without low-latency means to communicate-- access to instant resources and shared data- the investment in hard assets and personnel is squandered. Cross band technologies face limited resources and the complexities of proprietary equipment. Intense congestion saturates all urban and suburban areas. However, enhancing the existing infrastructure with a broadband "overlay" system will overcome many of the existing congestion and interoperability issues. Combining the core obligation that communications encompass all of an agency's geographic area and not just those densely populated with the enormous expansion of responsibilities since the September 11, 2001 attacks brings to the forefront how the existing infrastructure requires enhanced capabilities that could be provided by the 30 MHz at 700 MHz.

Against this background is the huge leap broadband technology is now delivering. What was non existent only a few years ago-- transmitting video, photographs, blueprints and other information to and from an incident-- is now available with spectrum and financial resources. Yet public safety has no opportunity to benefit from these advances. It has neither the spectrum nor capital to build the infrastructure and purchase the equipment to use broadband.

When agencies cannot speak to one another, when modern technology is not available, operations are thwarted. The substantial resources directed to improve emergency preparedness and response by federal, state and local governments are diluted by this communications gap. Yet, while the challenge is well documented, the remedy remains illusory. A national "overlay" network where all public safety agencies can

communicate seamlessly and use modem technology remains strangely farfetched. This should not be.

Of particular note is the possibility of solving the currently intractable challenge of seamlessly sharing communications between FCC-based and NTIA-based Public Safety agencies. While Federal (NTIA) assignments may be made without regard to population density and difficult propagation topography, local governments might never be able to deploy any spectrum over 220 MHz without incurring costs unsustainable by tax revenues of rural and mountainous areas. A public/private consortium is the only pragmatic way to fund broadband rural deployment.

The allocation and administration of spectrum and the networks now deployed predate the demands of emergency preparedness and domestic security that have ensued since the September 11, 2001 attacks. This is true even of the yet to be universally deployed 700 MHz public safety segment. While an important contribution, it was allocated and planned to respond to the demand for narrowband voice and wideband data channels. That much recent effort by the Commission, public safety, and private interests has been dedicated to restructuring the band and providing limited broadband capability on a regional basis reflects the limited alternatives in the public safety bands.' With domestic security and emergency preparedness now resonating as a national priority, the individual system model for spectrum allocation and administration, licensing and deployment must be supplemented to respond to the breadth of the new challenges.

[2] See 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).

Public safety's ability to meet these expanded responsibilities suggests the need for new approaches to spectrum management and administration. As the remaining 30 MHz approaches the auction block, there is opportunity to address public safety requirements. Missing the opportunity means that the present environment of congestion, limited resources and confined use of modern technology will be the standard. Improvements will be incremental if at all.

Each state and local agency now has enormous additional responsibility of a national character- promoting domestic security and deterring terrorism. Additionally, this responsibility has altered irreversibly how preparedness, investigation and detection are managed; it must be an integrated effort. Coordinating resources across all agencies is a national priority. These initiatives assume communications across all agencies and jurisdictions with broadband technology as the backbone.

The PSBT approach presents a path to enable public safety communications to raise its capabilities to parallel its challenges. A national network will connect virtually all agencies. It will provide public safety access to broadband technologies. It will address the systemic under funding of government radio systems while accommodating the revenue predictions for the Treasury if the band had been auctioned. It will promote open standards technology shaped to public safety specifications. Significantly, the 30 MHz of the 700 MHz band would present a new model of shared public/private spectrum. Commercial entities' ability to operate effectively will be entwined with public

---

3 Pending before the Commission is the proposal of 700 MHz guard band licensees to restructure the guard band and public safety segments. NPSTC supports this proposal. Any consideration of the 30 MHz remaining to be auctioned for public safety communications should be enlarged to include these guard band channels. 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).

safety needs to construct infrastructure and pay the Treasury, creating a forceful incentive for the interests to coexist.

NPSTC's work centers on local and state government communications. Analyzing the requirements and challenges encompass respect for local authority, the diverse range of responsibilities across jurisdictions and agencies and that effective communications only happens when those with operational authority have a determining role in how networks perform. The demands and standards of public safety communications, diversity, redundancy and universal coverage, are integral elements of these principles.

Pursuing these principles is frequently tempered by the reality of the current environment, limited finances, confined and congested spectrum, and the legacy of how networks are licensed and constructed. Substantive and technical issues are often examined in the context of protecting this fragile framework so communications are not compromised. Within such a confined setting, large scale and meaningful reform and innovation capable of delivering more services more efficiently is not possible.

The opportunity now afforded by the 700 MHz band presents the ability to envision what is possible, to enhance the capabilities of legacy systems and provide previously unavailable new services. NPSTC urges the Commission, the Congress, the Administration and commercial interests to pursue the possible and commit the 700 MHz band to a national public safety communications network that will connect virtually all agencies through the use of modern broadband technology and finance its infrastructure by providing a shared environment for government/commercial use.

Summary

The National Public Safety Telecommunications Council recommends that the PSBT approach outlined by Cyren Call Communications, Inc. to commit 30 MHz of 700 MHz to establish a nationwide public safety communications broadband network be pursued. Unless concepts of this nature are pursued, the severe challenges facing state and local public safety communications will endure.

Respectfully submitted,

Vincent R. Stile, Chair
NATIONAL PUBLIC SAFETY
TELECOMMUNICATIONS COUNCIL
91 Southpark Lane, Unit 205
Littleton, Colorado 80120-4641

November 29, 2006