

International Association of Fire Chiefs

Resolution

Adopted October 26, 2006

Board of Directors

Support for proposal to allocate to public safety an additional 30 MHz of radio spectrum in the upper 700 MHz band to allow for development of a new nationwide public safety broadband network.

Whereas, the fire service and public safety personnel require access to the most advanced communications services that are available and increased public safety and emergency response needs require access by public safety to the latest broadband technologies and services being developed for commercial network customers, and;

Whereas, the broadband communications needs of public safety have become more clear and compelling in recent years, the existing spectrum allocations to public safety have been recognized as inadequate for those purposes, and it is in the public interest to provide public safety access to sufficient suitable spectrum to encourage the development of a next generation broadband nationwide public safety network, and;

Whereas, the scheduled availability of recovered analog spectrum in the upper 700 MHz band affords the nation a unique opportunity to secure sufficient contiguous spectrum to support a new, truly national broadband network that would be built, maintained and operated for the primary benefit of public safety and the citizens whose lives and property they are tasked to protect, and;

Whereas, a proposal has been filed with the Federal Communications Commission which would provide for a Public Safety Broadband Trust of radio spectrum for a nationwide, seamless, next generation broadband network capable of integrating broadband data services such as text messaging, photos, diagrams and video not currently available in existing public safety land mobile systems using 30 MHz of spectrum at present scheduled to be auctioned by the FCC, and;

Whereas, our nation has a one-time opportunity to take advantage of the clearance of a nationwide block of 30 MHz of contiguous frequencies in the 700 MHz spectrum band which is adjacent to spectrum currently allocated to public safety and is spectrum perfectly matched for the establishment of a next-generation broadband nationwide network because of its unique physical properties, and;

Whereas, our nation will lose a tremendous opportunity to improve public safety communications through enhanced interoperability and perhaps its last meaningful chance of creating a fully interoperable, advanced nationwide public safety

communication system, capable of linking each and every local, tribal, state, and federal emergency responder, and necessary to securing and defending the homeland, if a debate is not initiated to license this spectrum to public safety for a nationwide broadband network before the spectrum is auctioned off and lost forever;

Now, Therefore, Be It Resolved that the International Association of Fire Chiefs supports the allocation of 30 MHz of spectrum in the upper 700 MHz band to be held in trust for public safety to create a nationwide public safety network, and;

Be It Further Resolved, that the board of directors of the International Association of Fire Chiefs and its membership actively engage their respective governmental executive and legislative components, and coordinate their efforts to achieve the goal of developing a nationwide broadband public safety communications network for the fire service and public safety community.



Public Safety Broadband Trust

Statement by
Fire Chief Charles L. Werner

before the

Committee on Commerce, Science & Transportation

United States Senate

February 8, 2007

INTERNATIONAL ASSOCIATION OF FIRE CHIEFS
4025 FAIR RIDGE DRIVE • FAIRFAX, VA 22033-2868
TEL 703.273.0911 • FAX 703.273.9363

Good morning Mr. Chairman and members of the committee. I am Charles Werner, Fire Chief of the Charlottesville Fire Department in Virginia and a member of the Communications Committee of the International Association of Fire Chiefs IAFC). I am appearing today as the representative of the International Association of Fire Chiefs whose 12,000 members represent the leadership of America's fire and rescue service from small, rural, volunteer fire departments to the large, urban, metropolitan fire departments. Last year America's fire service responded to over 23 million fire and emergency calls covering incidents of structure fires, wildland/urban interface fires, emergency medical situations, hazardous materials incidents, technical rescues, and natural disasters. We are prepared, as well, to respond to the aftermath of terrorist attacks. I appear today to address a specific and growing communications need for America's fire service – broadband technology. Our testimony also reflects the views of the Association of Public-Safety Officials International, Inc.

PUBLIC SAFETY SPECTRUM NEEDS

At the request of Congress, the National Telecommunications and Information Administration (NTIA) and the Federal Communications Commission (FCC) established the Public Safety Wireless Advisory Committee (PSWAC) to define and document the critical need for communications resources and the spectrum to support public safety through the year 2010. The final report was released on September 11, 1996. Three key problem areas were identified in the report:

- First, radio frequencies allocated to public safety had become highly congested in many, especially urban, areas. Usable spectrum for mobile operations is limited making it difficult to meet existing requirements much less to plan for future, more advanced communications needs.
- Second, the ability of agencies within and between jurisdictions to communicate with one another is limited. Yet interoperability is desirable for success in day-to-day operations as well as larger scale operations in dealing with both man-made and natural disasters.
- Third, public safety agencies lack the spectrum to implement advanced communications features. A wide variety of technologies – both existing and under development – hold substantial promise to reduce danger to public safety and achieve greater efficiencies in the performance of their duties. Specifically mentioned in the 1996 report were broadband data systems, video systems for better capabilities including use of robotics in toxic and hazardous environments, and better monitoring and tracking of both personnel and equipment.

To implement the requirements identified, the advisory committee determined that more spectrum was required, as follows:

- Immediately, 2.5 MHz of spectrum for interoperability from new or existing allocations.
- Within five years approximately 25 MHz of new public safety allocations are needed. The report suggested using spectrum from television broadcast channels 60–69 as soon as possible.
- Over the next 15 years (e.g. through 2011) as much as an additional 70 MHz will be required to satisfy the mobile communications needs of public safety.

These were the needs and recommendations addressed in the PSWAC report of 1996. Then, in December 2005 the FCC sent a Report to Congress On the Study to Assess Short-Term and Long-Term Needs for Allocations of Additional Portions of the Electromagnetic Spectrum for Federal, State and Local Emergency Response Providers. This report was submitted pursuant to P.L. 108-458, The Intelligence Reform and Terrorism Prevention Act of 2004. In its conclusion, the FCC stated: “First, as to the operation and administration of a potential nationwide interoperable broadband mobile communications network based upon input from federal, state, local and regional emergency response providers, emergency response providers would benefit from the development of an integrated, interoperable nationwide network capable of delivering broadband services throughout the country. Second, as to the use of commercial wireless technologies, while commercial wireless technologies and services are not appropriate for every type of public safety communication, there may now be a place for commercial providers to assist public safety in securing and protecting the homeland.”

For the above stated reasons, the National Public Safety Telecommunications Council [a resource and advocate for public safety organizations in the United States on matters relating to public safety telecommunications] has filed comments with the FCC in support of reallocating 30 MHz of spectrum in the upper 700 MHz band, currently slated for auction, to create a public/private nationwide broadband network to be managed by public safety for the benefit of public safety. The filing states: “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 which puts lives at risk and property in danger.

“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 IAFC is a member of the governing board of NPSTC and an active participant in all of its proceedings. The IAFC fully concurs with the statements of support by NPSTC for the establishment of a nation-wide, public/private, broadband network that will harness the innovative power of the private sector but be managed by public safety for the benefit of public safety.

PUBLIC SAFETY BROADBAND REQUIREMENTS

In 1997, Congress addressed part of the issue of additional spectrum by directing the FCC to allocate 24 MHz in the upper 700 MHz band for use by public safety. As a result of the Deficit Reduction Act (P.L. 109-171), which passed last year at this time, this spectrum will finally become available for our use in February 2009. As was originally intended, it is to provide, for individual licensees, 12 MHz of voice channels and 12 MHz of wideband data channels. Fire and police departments are now in the planning process of building communications systems utilizing this new spectrum.

Broadband capability for public safety, identified in the 1996 PSWAC report, is a vital and growing need for fire and police agencies. It is the next step following the allocation and implementation of the 24 MHz designed to alleviate current spectrum congestion and provide interoperability. To meet the broadband need for public safety, the following requirements are established:

- A nationwide, broadband network covering 99% of the population, 65% of the land mass, most of the critical infrastructure, and a network that supports urban, suburban and rural communities.
- A network large enough to draw commercial support which is requisite for a nationwide network to be affordable for public safety.
- A network built using next generation technology.
- A network built to public safety ruggedness specifications to ensure reliability under severely adverse conditions.
- A network governed by public safety.
- A network which ensures priority access for public safety.

PUBLIC SAFETY USES OF NATIONWIDE BROADBAND NETWORK

The Public Safety Broadband Trust proposal provides public safety with enormous potential that does not currently exist.

A hardened public safety network would make possible nationwide roaming and interoperability for public safety agencies at the federal (e.g. U.S. Coast Guard), state (e.g. highway patrol), and local (e.g. police, fire/EMS) levels. It would give public safety access to satellite services where terrestrial services either do not exist or are temporarily out of service. The network build-out would give rural areas – for the first time – broadband coverage and provided public safety there a communications tool that would be virtually impossible because of cost under any other scenario. In addition, this new network will protect nuclear power plants, dams, railroads and pipelines and other parts of the nation's critical infrastructure in rural areas.

There are a number of technologies that are available today that fire departments would use – more will be developed, especially if an affordable broadband network is available. Some examples are:

- Transmitting video, photographs, blueprints and other information both to and from an incident command post.
- Advanced paging systems particularly useful for summoning volunteer firefighters/medics.
- Mesh enabled architecture (MEA) for non-GPS broadband location system.
- Fireground accountability systems – biometrics as well as location.
- Smart building downloads enroute to an alarm.
- Enhanced GIS mapping capability for building locations, critical infrastructure, target hazards, water systems, transportation systems, etc.
- Personal Area Networks linking a portable radio carried by a firefighter to many useful and lifesaving accessories including a helmet video camera, video viewing device, health monitor, wireless self contained breathing apparatus (SCBA) microphone and speaker, or a handheld computer.
- Vehicular Area Networks that could link a vehicle's radio to laptop computers, printers, remote headsets, bar code readers, and cameras.
- Medical video and high-resolution image transmissions from the scene of an incident to the emergency department of a hospital where physicians can assess patient status and give on-scene and enroute treatment instructions.

- PDAs for fire department leaders or for all firefighters.

A ONE-TIME OPPORTUNITY TO DO THE RIGHT THING

Senator McCain has announced his intention to introduce legislation to establish a Public Safety Broadband Trust. The trust will be composed of public safety organizations to hold a single license for 30 MHz of broadband spectrum to create a nationwide, public/private broadband network. The trust also will be the management group to oversee the policies, procedures and practices of the network. In other words, the public safety trust will run the network for the benefit of public safety.

The 30 MHz of spectrum that is being considered is immediately adjacent to the 24 MHz of spectrum allocated to public safety in 1997 and which will be available in 2009. This has considerable advantage over any other spectrum since radio communication devices can be dual purpose with the spectrum so close. This spectrum in the upper 700 MHz is also near existing public safety which is being relocated in the lower 800 MHz band.

This 30 MHz of spectrum is currently slated for auction. The Deficit Reduction Act of 2005 requires the FCC to auction this spectrum by January 2008. Without legislation taking this out of the auction and allocating it for the public safety trust, this one-time opportunity will be lost forever.

CALL FOR ACTION

The Congress of the United States has a one-time opportunity, in the near term, to provide public safety with a nationwide, broadband network. In order to be affordable for public safety, the network would have to have viable commercial capacity of about 30 MHz of spectrum. The network would be built to public safety ruggedness specifications. A Public Safety Broadband Trust would be created to hold the single license from the FCC for the 30 MHz of spectrum and would oversee management of the network. While the network volume would be largely commercial, public safety agencies would use what it needed with a built-in priority status. Commercial use also ensures that sufficient capital will be available for maintaining the system and upgrading and refreshing newer technologies when they come along.

We urge the members of this committee to take the first action to create this Public Safety Broadband Trust by promptly reporting legislation to take 30 MHz from the pending auction and direct the FCC to reallocate it to public safety. We cannot suggest too strongly the urgent and identified need for broadband capability that public safety can use with assurance that it will work when needed, be available when needed, and is affordable. With a global war on terrorism being fought daily and homeland security interest at an all-time high, public safety, in defense of the homeland, should be operating on 21st Century technology. Thank you for the opportunity to address the committee. We appreciate your consideration of this most important public safety issue.