

**COMMITTEE ON SCIENCE AND TECHNOLOGY  
SUBCOMMITTEE ON TECHNOLOGY AND INNOVATION**

**Statement of Marilyn Ward, Executive Director  
National Public Safety Telecommunications Council (NPSTC)**

**March 8, 2007**

**Chairman Wu, Ranking Member Gingrey and Members of the  
Subcommittee:**

**On behalf of the National Public Safety Telecommunications Council (NPSTC), it is a privilege to appear before the Subcommittee in its examination of the Department of Homeland Security's Research and Development Activities. NPSTC's mission is devoted to improving the communications capabilities of local and state public safety agencies. With heightened domestic defense and emergency response demands, the work of the Department of Homeland Security in this area is vital.**

NPSTC was created in 1997 as a volunteer federation of associations representing state and local public safety telecommunications to advance communications capabilities, including interoperability, of first responders, through one collective voice for public safety communications. NPSTC serves both as a resource and advocate for public safety organizations in the United States on matters relating to public safety telecommunications. The technical capability and capacity of radio communications and the coordination of these resources across all agencies are fundamental to our core mission, that of speeding response to the citizen facing an emergency.

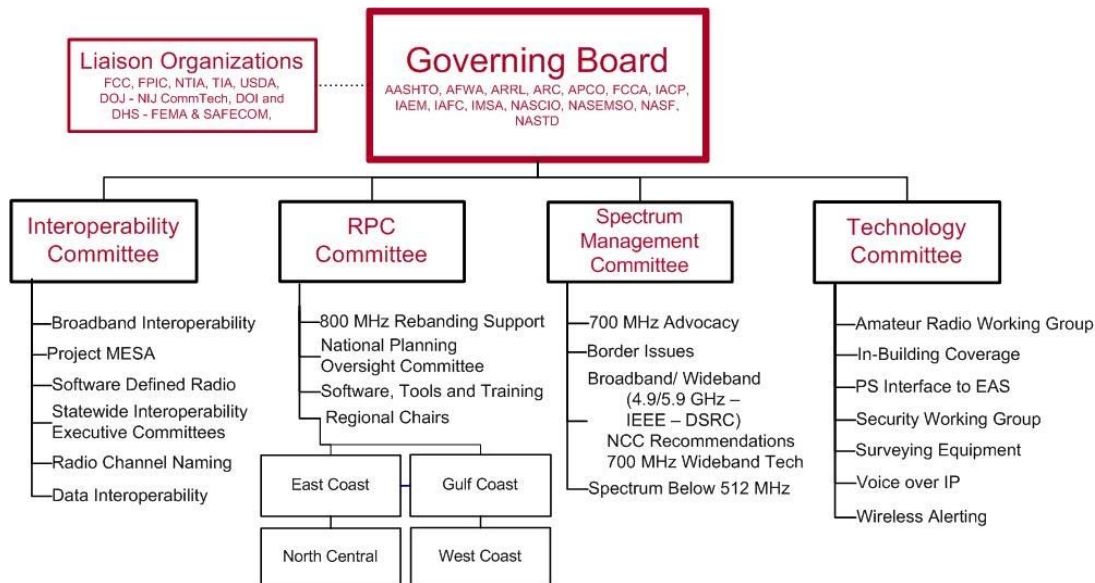
NPSTC is dedicated to encouraging and facilitating, through its collective voice, the implementation of the Public Safety Wireless Advisory Committee (PSWAC), and the 700 MHz Public Safety National Coordination Committee (NCC) recommendations. NPSTC explores technologies and public policy involving public 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 14 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 Chief Information Officers  
 National Association of State Emergency Medical Services Officials  
 National Association of State Foresters  
 National Association of State Telecommunications Directors

Several federal agencies are liaison members to 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, the Department of Justice (National Institute of Justice, CommTech Program), and the Federal Communications Commission (FCC).

Below is an illustration of the NPSTC organization, its four operational committees and multiple working groups. It is clear that there are many topics to be resolved that impact public safety communications and NPSTC is active in developing positions and advocating for state and local first responders.



NPSTC IS AN ADVOCATE FOR PUBLIC SAFETY COMMUNICATIONS IN THE FOLLOWING WAYS:

NPSTC is the **only national consensus forum for major public safety associations** that facilitates an open dialog and exchange of information on critical public safety telecommunication issues.

NPSTC **provides the SAFECOM Program local and state public safety communications** input to science and technology research and development projects and related standards efforts.

NPSTC critically examines **technical and regulatory** implications regarding radio spectrum utilization and management.

NPSTC **provides comments to the FCC on critical public safety issues** upon receiving consensus from its 14 member associations, representing over 250,000 public safety responders.

NPSTC's members include **the four FCC certified public safety frequency coordinators**.

NPSTC includes **liaisons from the federal government** that ensure feedback to and from practitioners and policymakers.

NPSTC **provides an open forum for our members, guests and the community for discussion** and dispute resolution, including the ability for people who cannot travel to attend the meetings by calling into a teleconference bridge.

NPSTC actively **engages in securing and protecting spectrum** for states and localities: 700 MHz for Wide Area Voice and Data, 800 MHz Rebanding, continued VHF & UHF availability and 4.9 GHz for on-site broadband.

NPSTC actively **monitors key technology-related issues having long-term implications on public safety interoperability** by actively participating in Software Defined Radio forums (SDR), International Association of Electrical and Electronics Engineers (IEEE) meetings, and international public safety standards efforts, such as Project MESA.

NPSTC addresses public safety spectrum issues along the U.S. border by participating in related State Department efforts.

NPSTC **provides the SAFECOM Program a forum to monitor the pulse of the public safety community** and determine needs to improve interoperability.

NPSTC recently **developed a common radio channel naming plan** to standardize the radio channels to read the same display no matter where the responder is located in the U.S.

NPSTC is currently **developing a dispute resolution procedure for 700 MHz Regional Planning Committees** when conflicts occur among adjacent regions.

NPSTC **monitors 4.9 GHz and 5.9 GHz testbeds** and communicates the information to the state and local public safety community.

NPSTC **communicates the impact and solutions of nationwide reviews of in-building radio coverage** to the public safety community.

NPSTC promotes a national forum where **Amateur Radio and public safety work together** on nationwide public safety wireless communication issues.

As the founding Chair and current Executive Director of NPSTC, I would like to convey to the Subcommittee how important its work is and relate our appreciation for inviting us to speak on the issues that impact our members and their constituents in the first responder community. As you requested, the focus of my testimony is on the impact of the Department of Homeland Security, Science and Technology Directorate (DHS S&T Directorate) on our nation's public safety communications. The issues that I have been asked to address are listed below. I want to emphasize that in addressing these issues I will be largely focusing on the communications and interoperability issues, although I will also address the larger context of DHS support for the first responder community and localities.

- The role DHS should play in helping localities prepare for security threats and disasters
- How well the FY 08 budget request for DHS S&T supports the development of technology for first-responders
- DHS collaboration with state and local governments and the first responder community on standards development and how the first-responder community uses the results of DHS technology testing and evaluation and standards.
- The principal technological needs of the first-responder community
- DHS' planning and priority-setting mechanisms and the communications needs of first responders
- A reflection on the General Accounting Office Report of 2004 and the progress made to assist the first responders with interoperability

Protecting the public is a key responsibility of all levels of government. From federal agencies down to local fire protection districts the public depends on us. DHS plays a key role in this effort by supporting the 55,000 local public safety agencies in their daily challenges and during major disasters where it and other federal agencies provide direct response and service. DHS funding is a critical element that helps state and local public safety meet daily and catastrophic challenges. Communication is critical to meeting those challenges and DHS funding encourages all levels of responders to work together to promote better communications systems, including solving interoperability and other public safety communications issues.

## **The National Incident Management System (NIMS)**

DHS programs such as the National Incident Management System (NIMS) started out as a guide for major events, but local agencies now find that the NIMS structure is also effective during everyday events from fires to hostage situations. DHS supported the implementation of NIMS through the grant process and has been successful at encouraging local public safety to embrace and use NIMS during joint responses to emergencies. It is important to note that one of the reasons that NIMS works is because it was developed with input from the state and local practitioner community. As a result, DHS was able to both draw upon best practices from the people that do this work daily as well as obtain “buy-in” for the final product.

DHS guidelines are now requiring local agencies to develop joint plans for multi-agency responses. Part of this challenge is that local agencies have long delayed sitting down and working together. With DHS funding directed at regional or cross jurisdictional responses, there is significant incentive to finally come together to share resources and manage incidents effectively.

### **Interoperability**

The heart of any coordination of an incident, large or small is communications. In this regard, the next round of federal grant dollars requires that states must develop statewide communications plans that also include counties, cities, and local districts. The guidelines for these statewide plans were developed by the SAFECOM Program located within the DHS Office of Interoperability and Compatibility’ (OIC), with the participation of local responders and public safety communications officials.

The significance of the national guidelines is they require prior planning and, at the same time, ensure that grant funds are spent on specific solutions in accordance with those plans. When the major issues are addressed at the local level, it also means they are addressed at the national level. The challenge is to ensure that the overall objectives meld into the state and local operational environment to enhance effective response.

Interagency communication problems have been identified in every major incident over the last 10 or more years. Solving this issue is not as easy as it might seem. State and local jurisdictions have invested billions of dollars in non-compatible communication systems that are operating in different bands of spectrum. The solution most often involves building new infrastructure which is very expensive. While the development of regional systems make sense, building them is also very expensive and requires a heightened level of cooperation among agencies. It also involves knowledge of best practices that is not always available at the local level. What has emerged is not only an emphasis on infrastructure and equipment, but the planning and cooperation needed to make use of these resources effectively across all agencies.

The DHS Office of Interoperability and Compatibility's SAFECOM Program has been one of the true successes in providing assistance to state and local agencies to meet these challenges. SAFECOM provides research, development, testing and evaluation, guidance, tools, and templates on communications-related issues that improve emergency response through more effective and efficient interoperable wireless communications.

The key to the success of SAFECOM is that it is a practitioner-driven program and has developed a process to facilitate the input of local and state emergency response practitioners. SAFECOM, working with its Executive Committee, the Emergency Response Council, and organizations in the practitioner community, like NPSTC, developed a national plan to enhance interoperability, a Statement of Requirements for communications equipment, systems, and tools to assist jurisdictions to develop governance structures and planning; and, consequently, helped facilitate the quicker adoption of standards and grant guidance for communications-related grant programs, among other things.

Most recently SAFECOM completed a national Baseline Study of Interoperability to learn what the problems were at the local level. DHS also developed a Scorecard of Interoperability in designated Urban Areas (UAs) using public safety practitioners in the process. A key next step will be to develop a scorecard on standards compliance testing at the local level, something sorely needed to assist state and local jurisdictions in making the right procurements.

The "scorecard" reviews of the UAs focused on three main areas: Governance (leadership and strategic planning); Standard Operating Procedures (plans and procedures); and Usage (use of equipment). The evaluation criteria was derived directly from the SAFECOM Interoperability Continuum and Interoperability Maturity Assessment Model that depicts the key components of interoperability — governance, standard operating procedures, usage, technology, and training and exercises.

The findings identify gaps and areas for improvement. Key findings included:

- Plans for interoperable communications are now in place in all 75 urban and metropolitan areas, but implementation is now needed.
- Regular testing and exercises are needed to effectively link disparate systems and facilitate communications between multi-jurisdictional responders, including state and federal agencies.
- Cooperation among first responders in the field is strong, but formalized governance (leadership and strategic planning) across regions is not as advanced.

In my opinion, these are important findings and should apply to all areas of public safety nationwide, not just the Urban Areas.

There also needs to be an examination to determine the level of interoperability in the non-urban areas of our nation. This will provide a better idea of where we stand and the basis for determining future costs. Since 2003, DHS has awarded \$2.9 billion in funding to enhance state and local interoperable communications efforts; this is a small amount, given that experts estimate an \$18 billion infrastructure nationwide that is not interoperable and the equipment is outdated. We will continue to see an interoperability improvements only if there is adequate funding and grant guidance to promote regional and statewide planning and systems.

## **Compliance Testing**

Compliance testing of radio equipment is one item best done at the national level. Local agencies do not have the facilities, experience, or the type of equipment to do in-depth compliance testing. For example, at the present time there is only one national standard for radio equipment, commonly referred to as P25 and relating to interoperability. While several manufacturers make claims that their products are P25 compliant; testing is necessary to validate their claims.

There is a need for a federal agency to perform these compliance tests and DHS SAFECOM, along with their partners at the National Institute of Standards and Technology (NIST) and the National Telecommunications and Information Agency (NTIA) Institute for Telecommunication Sciences (ITS) fill this role. This is especially true in that the Department of Defense (DoD), other federal departments and state and local agencies are now all using P25 radio equipment. There is no real magic in which agency does the testing; it just needs to be done.

The NIST Office of Law Enforcement Standards (OLES) technical staff has been involved with NPSTC for many years, and they have included our volunteers in the development and review of the SAFECOM Statement of Requirements (SOR) for public safety technology. They have worked closely with NPSTC as it develops consensus positions on the best technology use for first responders and provides a welcome check and balance to their work.

## **Broadband**

An example of our collaboration occurred last month when NIST/OLES in Boulder, Colorado worked with NPSTC to develop user's needs in broadband. The effort expanded the input of 57 practitioners who had provided input into the needs study. With NPSTC support, 627 practitioners agreed to provide input to the project. Such collaboration is mutually beneficial to both the local and federal communities. The SAFECOM Program provides an important mechanism for this collaboration.

The focus on new and innovative technology today is in broadband for public safety. Ten years ago the public safety community could not have imagined that broadband technology would have advanced as it has today and have the potential to provide so much. The concern today is that broadband was not planned for nationwide use, and yet to ensure interoperability that is what we need, a nationwide broadband network that is controlled by and built to public safety standards. The testimony to the Senate on February 8, 2007, of Chief Harlin McEwen representing the International Association of Chiefs of Police (IACP), the Association of Public Safety Communications Officials-International (APCO), the Major Cities Chiefs Association (MCC), the National Sheriff's Association (NSA), and the Major County Sheriff's Association and NPSTC along with the testimony of Chief Charles Warner representing the International Association Of Fire Chiefs (IAFC) regarding broadband for public safety is attached to this document. This testimony is supported by all of the major public safety associations and NPSTC.

The SAFECOM Interoperability Baseline survey was sent to 22,400 randomly selected law enforcement, fire response and emergency medical services (EMS) agencies. Findings indicate that roughly two-thirds of emergency response agencies across the nation use interoperable communications in varying degrees. Agencies tend to be more developed in technology than they are in standard operating procedures and exercises. Cross-discipline and cross-jurisdiction interoperability at the local level tends to be more advanced than between state and local agencies. In addition, law enforcement, fire response, and EMS agencies reported similar levels of development in most areas of interoperability.

To date, no national survey has addressed broadband systems owned by public safety since there is currently little or no available (700 MHz or 4.9 GHz) spectrum for this use. The 700 MHz block of spectrum that will become available with the digital television transition will be the first opportunity for local public safety to use these new technologies. Many local agencies have developed and filed their plans with the FCC for local and regional use of the broadband spectrum. The transition and release of this spectrum to public safety remains critical.

SAFECOM, in conjunction with NIST/OLES, recently brought together key stakeholders from both industry and the public safety community to discuss and clarify the varying perceptions of Voice over Internet Protocol (VoIP's) role in public safety communications. This technology has the potential for significant impact on public safety communications. Yet there must be the ability to test its use for mission-critical activities and ensure its robust nature before marching into nationwide acceptance on local networks.



## **Funding Levels and Priorities**

Of great concern to the public safety community is that despite the critical work being done by OIC's SAFECOM program, it has never been adequately funded. In Fiscal Year 2007 OIC's entire budget was \$27.2 Million to fund SAFECOM and other programs of importance to the first responder community. The Interoperable Communications Technical Assistance Program (ICTAP) run by the Grants and Training Office (G&T) only received \$10 Million. The newly created Office of Emergency Communications (OEC) has received no funding to date. Given the critical nature and magnitude of the challenge, this is woefully inadequate. The expectation of other agencies transferring portions of their budgets to fund the DHS OEC is time consuming and creates concern among the other federal agencies. It has also caused confusion and uncertainty amongst the state and local community.

DHS needs to continue to more broadly encourage the development of regional systems that are multi-jurisdictional, multi-disciplined, and interoperable for all responders. With over 55,000 public safety entities in this nation, each supporting their own systems and political jurisdiction, as I noted earlier, the estimate to upgrade and/or replace communications equipment is over \$18 billion dollars.

For example, I come from Orange County (Orlando) Florida. Our county radio system cost \$21 million in 1992 when it was built, and new sites continue to be added to accommodate growth, at a cost ranging from a quarter of a million to a million dollars per radio site. This is one system in one of Florida's 67 counties. Within Orange County, there are several small cities and the City of Orlando which maintain individual systems. I was with the City of Orlando where I retired after 27 years with the Police Department. During that time we built a \$10 million dollar system while the county was building their \$21 million dollar system. We pursued joining the County and building one system but were unable to cross the barriers to make that happen. This is common around the U.S. Incentives are needed to eliminate duplication and waste of taxpayer money.

NPSTC was formed for the sole purpose of bringing the multitude of public safety disciplines together to address communication issues. In this area we have found that DHS, primarily through SAFECOM, not only consults with our community on issues, but solicits our participation in helping them develop planning and priorities. It embraces the objective of making improvements in public safety communications with the important recognition that local and state participation is crucial. A cooperative working relationship has been established over the years and our community values the input and assistance that we receive not only from DHS, but from the several federal agencies that interrelate with us on a regular basis.

The success of homeland security depends in large part on the success of local public safety. Local public safety relies on the support and guidance it receives from its federal partners. The Department of Homeland Security should continue

to facilitate a robust and substantive intersection between the federal government and the response community.

In addition to the Office of Interoperability and Compatibility, we are currently working with the NIMS Integration Center and other offices to update the National Incident Management System and the National Response Plan. We also work with the Office of Grants and Training. The success of working together is critical to ensure that policies and procedures are operationally driven and able to be realistically implemented on the ground.

Areas that need continued enhancement of the federal-public safety relationship include critical infrastructure protection and information/intelligence sharing offices. There is evidence of movement in information and intelligence sharing, but the emergency services' role in critical infrastructure protection continues to be challenging – due, in part, to emergency services unique role as both protector of sectors and a sector to be protected.

A final note, and on a larger scale, intersections between local, state and federal entities cannot be identified nor trusting relationships built if the landscape and personnel are constantly changing. DHS's impending re-organization will prove another test – but also an opportunity – to form relationships between the federal government and first responders.

### **The 2004 General Accountability Office Report**

In September 2004, the GAO released a report on interoperability and testified before the Subcommittees on technology, Information Policy, Intergovernmental relations, and Census, House of Representatives titled *Federal Leadership Needed to Facilitate Interoperable Communications among first responders*

Set forth below is what the GAO determined and our view of the progress 3 years later:

GAO: (1) In a recent report on interoperable communications, we recommended that the Secretary of DHS (1) continue to develop a nationwide database and common terminology for public safety interoperability communications channels;

[Progress to date: With the support of the SAFECOM Program, NPSTC recently completed a forum and methodology for responders to work toward common nomenclature. NPSTC has made progress and has a consensus on several key issues. A report has been distributed for review and comment, and we will be making a final recommendation to our Governing Board in June 2007. Federal support and adoption by the FCC is now needed to formalize the use of common channel naming across the nation.](#)

GAO: (2) help states assess interoperability in specific locations against defined requirements;

Progress to date: Through DHS Grants and Training grant awards, 75 Urban Area Security Initiative (UASI) locations began developing plans and were accessed by a standardized scorecard developed by SAFECOM and member associations. This is important progress and must be extended statewide beginning in 2007.

GAO: (3) through federal grant awards, encourage state action to establish, and support a statewide body to develop and implement detailed improvement plans;

Progress to date: The SAFECOM Program created grant criteria, which were placed in the DHS Grants; however it has taken until March 2007 for the first national meeting hosted by the National Governors Association (NGA), SAFECOM, and NPSTC to begin statewide planning. This process will request states to voluntarily provide an “interoperability coordinator” statewide and provide guidance for states to begin developing statewide plans.

GAO: (4) require that grant applications be in compliance with statewide interoperability plans, once they are developed.

Progress to date: Several states have made good progress to complete their plans, however many are just beginning. The Grant guidance prepared by SAFECOM, supports this recommendation.

GAO: GAO also recommended that the Director of OMB work with DHS to review SAFECOM’s functions and establish a long-term program with appropriate authority and funding to coordinate interoperability efforts across the federal government.

Progress to date: In the opinion of the public safety community which I represent, the SAFECOM Program has never been funded at an appropriate level. The fluctuation in budgeted funds belies any attempt for long-term programs to be successful. Short quick fixes become the norm and the possibility for a long-term strategic plan that stays the course until it is completed is threatened when funding fluctuates in these extremes. In addition to the tools and critical studies (Baseline Study, etc.), SAFECOM also tests and evaluates technologies, conducts pilot programs, and funds the standards compliance testing. None of these efforts have adequate resources.

GAO: The current wireless interoperable communications capabilities of first responders nationwide have not been determined. To assess these capabilities, a set of requirements is needed that can be used to assess “what is” compared to “what should be.” The Office of Management Budget (OMB) has established the Wireless Public Safety Interoperable Communications Program, SAFECOM, within the Department of Homeland Security (DHS) as the focal point for coordinating federal efforts to improve interoperable communication.

In April 2004, SAFECOM issued a document designed to serve as a set of baseline requirements and is working to develop a baseline of current capabilities by July 2005.

Progress to date: The baseline was published in 2006 and UASI scorecards were published in 2007.

GAO: The federal government can take a leadership role and provide support for developing:

(1) a national database of interoperable communication frequencies,

Progress to date: This remains a challenge, the closest version is the 700 MHz "notebook of frequencies" developed by NPSTC and funded and maintained by the National Institute of Justice (NIJ).

GAO: (2) a common nomenclature for those frequencies,

Progress to date: NPSTC continues to commit significant work on this issue. SAFECOM has included a grant guidance principle to encourage common channel naming.

GAO: 3) a national architecture that identifies communications requirements and technical standards,

Progress to date: This is an in-progress task undertaken by the SAFECOM Program. This is a very technical and expensive process that does not have adequate resources at this time.

GAO: (4) statewide interoperable communications plans.

Progress to date: This process began in 2007.

GAO: State and local governments can play a large role in developing and implementing plans to improve public safety agencies' interoperable communications. State and local governments own most of the physical infrastructure of public safety communications systems, and states play a central role in managing emergency communications. States, with broad input from local governments, are a logical choice to serve as a foundation for interoperability planning because incidents of any level of severity originate at the local level with states as the primary source of support.

However, states are not required to develop interoperability plans,

Progress to date: States are not required to develop interoperability plans; however States must have a plan to qualify for federal communications grant funds.

GAO: there is no clear guidance on what should be included in such plans.

Progress to date: SAFECOM is providing planning guidance to the states at the March 2007 meeting and funding is being made available to support the development of statewide planning assistance.

It is NPSTC's view that the DHS SAFECOM Program has worked diligently to meet the goals identified in the GAO report and has provided support to the local communities, recognizing that it must be a practitioner-driven program. SAFECOM has achieved interoperable communications at the command level, defined as communications within 1 hour of a major event, in the 10 highest threat urban areas, as part of its Rapid COM 1 initiative. It has published a step-by-step planning guide for developing a locally driven statewide strategic plan for interoperable communications and facilitated regional communications interoperability pilots that assist local officials in the implementation of their statewide plans.

In addition to the practitioner input SAFECOM seeks from NPSTC and the practitioner community, SAFECOM seeks advice from the first responder community through its Executive Committee (EC) and the Emergency Response Council (ERC). The SAFECOM EC is comprised of representatives from local and state emergency response agencies and professional associations, as well as contributing federal agencies. Working through the associations is critically important to ensure state and local collaboration with the federal government. The EC serves as the primary steering group for the SAFECOM Program. Montgomery County, Maryland, Council chairwoman Marilyn Praisner, National Association of Counties (NACo), serves as EC Chair, and Mr. Glen Nash, Past-President, Association of Public-Safety Communications Officials, International (APCO), serves as Vice Chair.

Representatives from the following organizations also serve on the EC:

- Association of Public Safety Communications Officials - International, Inc. (APCO)
- Department of Homeland Security (DHS) Chief Information Officer (CIO)
- Department of Justice (DOJ) Chief Information Officer (CIO)
- International Association of Chiefs of Police (IACP)
- International Association of Fire Chiefs (IAFC)
- Major Cities Chiefs Association (MCC)
- Major County Sheriffs' Association (MCSA)
- National Association of Counties (NACo)
- National Association of State EMS Directors (NASEMSD)
- National Governors Association (NGA)
- National Institute of Justice Communications Technologies (NIJ CommTech)
- National Institute of Standards and Technology (NIST)

- National League of Cities (NLC)
- National Public Safety Telecommunications Council (NPSTC)
- National Sheriffs' Association (NSA)
- Office of Management and Budget (OMB)
- US Conference of Mayors (USCM)

The SAFECOM ERC provides a mechanism for individuals with specialized skills and common interests to share best practices and lessons learned so that interested parties at all levels of government can learn from one another's experience, perspective, and expertise. Its membership, which comprises representatives from the local, tribal, state, and federal emergency response and policy maker communities, is a key resource for the improvement of emergency response communications interoperability.

Representatives from the following organizations serve on the ERC:

- American Association of State Highway and Transportation Officials (AASHTO)
- American Public Transportation Association (APTA)
- Automated Regional Justice Information System (ARJIS)
- Capital Wireless Integrated Network (CapWIN)
- Community Oriented Policing Services (COPS)
- Council of State Governments (CSG)
- Department of Agriculture (DoA)
- Department of Commerce (DoC)
- Department of Defense (DoD)
- Department of Energy (DoE)
- Department of Interior (DoI)
- Department of Health and Human Services (HHS)
- Environmental Protection Agency (EPA)
- Federal Communications Commission (FCC)
- Federal Emergency Management Agency (FEMA)
- Federal Partnership for Interoperable Communications (FPIC)
- InterAgency Board (IAB)
- International Association of Emergency Managers (IAEM)
- International City/County Management Association (ICMA)
- International Municipal Signal Association (IMSA)
- Joint Tactical Radio System (JTRS)
- National Aeronautics and Space Administration (NASA)
- National Association of Regional Councils (NARC)
- National Association of State Chief Information Officers (NASCIO)
- National Association of State Telecommunications Directors (NASTD)
- National Association of State EMS Directors (NASEMSD)
- National Association of Telecommunications Officers and Advisors (NATOA)
- National Criminal Justice Association (NCJA)
- National Emergency Management Association (NEMA)

- National Emergency Number Association (NENA)
- National Guard Bureau (NGB)
- National Institute of Standards and Technology (NIST)
- National Native American Law Enforcement Association (NNALEA)
- National Public Safety Telecommunications Council (NPSTC)
- National Telecommunications and Information Administration (NTIA)
- Office of Domestic Preparedness (ODP)
- Office of Management and Budget (OMB)
- SEARCH
- Telecommunications Industry Association (TIA)
- USDA Forest Service

## **Summary**

The work of the Department of Homeland Security in public safety communications is vital if we are to meet the expanded demands of domestic security and emergency response. We believe that DHS, its SAFECOM program and other component agencies diligently pursue this responsibility and recognize the critical importance of meaningful local participation.

In closing, I think there are two issues the Subcommittee should consider as part of the overall effort to improve public safety communications. First, the fluctuation in funding of the budget as it pertains to communications interoperability deters progress. A more stable environment with a better estimate of funding levels for a 3 to 5 year period would allow the planning and funding participation to be pursued. The result would be more participation and system improvements.

The second issue is a proposal to permit the creation of a Public Safety Broadband Trust in 700 MHz and reallocating 30 MHz of spectrum scheduled to be auctioned. This broadband trust would be a first for public safety. With a Congressional embrace, a nationwide broadband interoperable radio system could be built that would permit first responders to have everything from blackberry type messages to full motion video of incidents. It would be paid for by private funds as the system would sell excess capacity to non-public safety users. It is also a way to bring the advantages of broadband to rural areas that now have none. It would expand access to new technologies without burdening taxpayers. We urge members to examine this issue very closely; it would make a positive and important contribution to public safety communications.

Thank you again for the invitation to appear before the Subcommittee. I would be pleased to respond to any questions.

WRITTEN TESTIMONY OF

**Harlin R. McEwen**

Chairman, Communications & Technology Committee  
International Association of Chiefs of Police (IACP)

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Major Cities Chiefs Association (MCC)  
National Sheriffs' Association (NSA)  
Major County Sheriffs' Association (MCSA)

Before the

COMMITTEE ON COMMERCE, SCIENCE & TRANSPORTATION  
UNITED STATES SENATE

February 8, 2007

CURRENT AND FUTURE PUBLIC SAFETY COMMUNICATIONS

Thank you, Mr. Chairman, and distinguished members of the Committee for the opportunity to appear before you today.

My name is Harlin McEwen and I have been actively involved in public safety for almost 50 years. My career has been in law enforcement and I also have been a volunteer firefighter. I am the retired Police Chief of the City of Ithaca, New York, and am also retired as a Deputy Assistant Director of the Federal Bureau of Investigation in Washington, DC. I serve as Chairman of the Communications and Technology Committee of the International Association of Chiefs of Police (IACP), a position I have held for more than 28 years. I also serve as the Communications Advisor for the Major Cities Chiefs Association (MCC), the National Sheriffs' Association (NSA), and the Major County Sheriffs' Association. I am the Vice Chairman of the National Public Safety Telecommunications Council (NPSTC) and am a Life Member of the Association of Public-Safety Communications Officials-International (APCO). Today I speak on behalf of all of these organizations.

When I first became a law enforcement officer in 1957 police vehicles had tube type 6 volt analog mobile radios that dimmed the headlights when we pushed the microphone button. In those days there were no hand held radios. In my career I have witnessed many changes and advances in law enforcement and public safety communications. However, the advances for public safety have consistently lagged behind the advances of commercial services, primarily because of lack of funding and spectrum.

As you are aware, citizens rely upon their local and state police agencies, sheriffs' offices, fire departments, emergency medical services, and other emergency services like highway and public works and utilities to come to their assistance wherever and whenever needed. They respond whether it is a crime in progress, a civil disturbance, a building fire, a forest fire, an automobile accident, a health emergency, a natural



disaster, or, as we learned on 9/11, a terrorist attack. Today, citizens assume that those first responders will get the call and will have the communications tools they need to address emergencies quickly and efficiently. Unfortunately that is not always true.

I want to applaud the efforts of this Committee and the Congress in voting to clear the television broadcasters from the long promised 700 MHz spectrum. This will help us improve public safety radio communications, both operability and interoperability. The major cities and metropolitan areas of this country are still in desperate need of additional land mobile voice channels and are anxiously waiting for this spectrum to become available. Your efforts to designate \$1 billion derived from the auction of radio spectrum for public safety communications are also very much appreciated by the public safety community and will be very helpful. The introduction of S.385 by Senators Inouye, Stevens, Kerry, Smith, and Snowe is also helpful in giving direction to NTIA with respect to the \$1 billion grant program and we appreciate these efforts to have this funding program implemented in a timely fashion.

I am pleased to have the chance to discuss with this Committee an exciting new opportunity for Congress to take steps that will pave the way to reducing the dependence on local and federal tax revenues to maintain modern public safety communications systems. That is a proposal for a 700 MHz nationwide public safety broadband network. This proposed network can become a reality only if Congress authorizes creation of a public/private partnership, controlled by the public safety community, to hold a nationwide license for 30 MHz of spectrum in the upper 700 MHz band and further authorize us to deploy this network pursuant to a public sector-private sector partnership model.

I have studied the issue of public safety telecommunications for decades. I have been actively engaged in the efforts of the Federal Communications Commission, other Federal agencies, state and local government entities and individual departments to identify law enforcement communications requirements and provide our first responders with the necessary tools to meet those needs. Substantial time and significant taxpayer dollars have been devoted to those efforts, yet in 2007 the public safety community still is far behind commercial users in terms of wireless functionality. Our public safety users who should have the best, most advanced, and most robust capabilities too often must rely on systems that are inadequate for their needs today, much less the expanded responsibilities with which they will continue to be charged in the future. Without a fundamental change in the way we approach emergency responder communications, specifically without allocation of the additional 30 MHz of spectrum and adoption of the approach embodied in the Public Safety Broadband Trust (PSBT) proposal, I see no reason to ever expect substantial improvement.

The wireless voice systems public safety personnel use today are among the most important tools they have to do their job in a safe and efficient manner. However, these systems have in many cases been under funded, poorly maintained and generally not refreshed. As we look to the long term future, we need to look at new and better ways to improve public safety communications.

The need for more efficient public safety data systems is growing and this has become the focus of much of our attention as we look to ways for public safety to take advantage of Third Generation (3G) and Fourth Generation (4G) technologies.

The implementation of a nationwide public safety broadband network can also be the beginning of the end to the problem of public safety interoperability. We have been asking for funding support for years to help us upgrade and replace mission critical land mobile voice systems that are built by different manufacturers, are of different vintages, and are generally incompatible and in many cases not compatible with the P25 standards, the only recognized national digital standards for land mobile public safety communications interoperability.

It is critical to understand that this is a one time only opportunity to solve many of the public safety communications requirements of today and the future. We recognize this is not an easy decision for the Congress. You must choose between solving the public safety communications problem and making sure our citizens have good public services, or allowing the spectrum required by public safety to be auctioned to commercial companies who want to expand their services and increase their profits. It seems simple to us that by your approval of this important step for public safety you will be doing the right thing for America. It will begin to take the burden off the taxpayers who must build and maintain increasingly expensive public safety communications systems.

The benefits from a nationwide public safety broadband network as set forth in the Public Safety Broadband Trust proposal are as follows:

1. Broadband data services (such as text messaging, photos, diagrams, and streaming video) not currently available in existing public safety land mobile systems.
2. A hardened public safety network with infrastructure built to withstand local natural hazards (tornadoes, hurricanes, earthquakes, floods, etc) that would include strengthened towers and back up power with fuel supplies to withstand long term outages of public power sources.
3. Nationwide roaming and interoperability for local, state, and federal public safety agencies (police, fire and EMS) and other emergency services such as transportation, health care, and utilities.
4. Access to the Public Switched Telephone Network (PSTN) similar to current commercial cellular services.
5. Push to talk, one to one and one to many radio capability that would provide a back-up to (but not replace) traditional public safety land mobile mission critical voice systems.
6. Access to satellite services to provide reliable nationwide communications where terrestrial services either do not exist or are temporarily out of service.

For those who argue that public safety already has enough radio spectrum to meet current and projected mobile requirements, I can only say that they purposely ignore the facts concerning public safety spectrum allocations and first responder communications requirements. As an example, the cellular industry, represented by CTIA, has grossly misrepresented the spectrum issue as recently exhibited in their press release critical of Senator McCain's announcement that he would be introducing legislation to establish a new nationwide, state-of-the-art public safety broadband network. The CTIA statement said "the basic facts of the matter should compel this important debate to be about providing first responders with funding, access to equipment and coordination, not more spectrum". CTIA

further stated "Right now, the public service community utilizes 47 MHz of spectrum to serve its public safety users. At the same time, there are wireless carriers that use roughly the same amount of spectrum to deliver voice, data and advanced information services to many times that number of subscribers. More spectrum is clearly not the answer".

Contrary to what the CTIA says, the REAL facts on spectrum allocations are as follows:

<b>STATE AND LOCAL PUBLIC SAFETY SPECTRUM ALLOCATIONS</b>		<b>COMMERCIAL SPECTRUM ALLOCATIONS</b>	
<u>Allocation</u>	<u>MHz</u>	<u>Allocation</u>	<u>MHz</u>
VHF Low Band (25-50 MHz) .....	6.3	Cellular .....	50
VHF High Band (150-174 MHz).....	3.6	Broadband PCS.....	120
UHF Low Band (450-470 MHz) .....	3.7	AWS .....	90
800 MHz Band (806-821/851-866 MHz).....	3.5	Broadband Radio Services .....	190
800 MHz Band (821-824/866-869 MHz).....	6.0	Lower 700.....	48
700 MHz Band (764-776/794-806 MHz).....	<u>24.0</u>	Upper 700.....	<u>30</u>
<b>TOTAL PUBLIC SAFETY.....</b>	<b>47.1</b>	<b>TOTAL COMMERCIAL.....</b>	<b>528</b>

But even these numbers do not tell the real story or explain why existing public safety allocations cannot be used for broadband operations. Historically, the FCC has allocated individual channels, not contiguous channel blocks, for public safety use. These channels are immediately adjacent to channels allocated for taxicab companies, truck operators and other businesses. The channels typically are no larger than 25 kHz bandwidth and more frequently 12.5 kHz, or a tiny fraction of each 25 MHz cellular system authorization. This allocation approach has permitted numerous governmental entities to secure licenses for localized, individual purposes, but precludes the public safety community as a whole from consolidating enough contiguous channels to deploy 21st century broadband technology networks. There simply is not sufficient contiguous bandwidth to support the text messaging, building diagrams, photos, streaming video and other transmissions that will be as essential to law enforcement officers during these perilous times as the weapons they carry.

While the 24 MHz public safety allocation in the upper 700 MHz band is contiguous, even that spectrum is subdivided in various categories designed for mission critical voice communications on both localized and state levels, as well as for wideband data applications. And that spectrum allocation, first promised to the public safety community in 1997, was intended to address the unmet needs and identified deficiencies in the spectrum resources available to public safety more than a decade ago. New technologies and new services have since been developed to respond to the ever escalating commercial appetite for more useful and sophisticated mobile communications tools and solutions – and appropriate new commercial spectrum allocations have been made available to commercial network operators to bring those improvements to their customers. Likewise, over the past decade, public safety's needs for access to these advanced technologies, services, tools and solutions has not stood still – although, unfortunately, the amount of appropriate spectrum allocated to meet them has.

Allow me to emphasize these points by example, as the contrast between the spectrum resources available to commercial wireless network operators and to the public safety community could not be more striking. To begin with, commercial cellular and PCS licensees have access to large blocks of contiguous spectrum. Their allocations were specifically designed to support system architectures and technologies that would accommodate vast numbers of customers. To compare the number of subscribers that can be served on a 25 MHz cellular network with the number of police officers that can share a 12.5 kHz bandwidth channel, or even multiple channels, is as meaningful as comparing the size of watermelons to grapes. Compounding the imbalance is the absolute amount of spectrum that has been made available for commercial use in comparison to that which has been made available for public safety uses as detailed above. Just last year, the Commission made another 90 MHz of spectrum of Advanced Wireless Spectrum available for commercial operations, again in large spectrum blocks and expressly authorized for commercial mobile broadband uses.

In fact, it is the success of the cellular/PCS model that has convinced us that public safety must have a 30 MHz spectrum block on which to deploy an advanced technology broadband network. That model has persuaded us that the public safety community must join together in the Public Safety Broadband Trust, rather than seeking individual licenses for individually designed and deployed systems, if we are to achieve our objective: seamless nationwide roaming capability on a 21<sup>st</sup> century broadband 700 MHz network that is built and operated to satisfy increasing and demanding public safety requirements.

I stated previously that a nationwide broadband network solution needed to address both spectrum and funding, and to address them both at the same time and in the same context. The latter is just as critical as the former and requires an innovative approach given the extraordinary costs associated with building and operating a truly nationwide broadband network. Unlike purely commercial systems that have the luxury of limiting coverage to areas of denser population and transportation corridors, public safety users must have communications capability wherever there are people or property to protect. This mandate has the important consumer benefit of ensuring that a broadband network designed to meet public safety needs will be available in suburban and rural communities that remain outside the areas of commercial broadband deployment. However, I have substantial experience in the traditional funding sources for public safety communications and see no realistic possibility that the necessary monies will be made available even to build, much less maintain, operate and routinely upgrade a network of this scope if dedicated to purely public safety requirements.

The only solution that we consider viable is a public sector-private sector partnership as proposed in the Public Safety Broadband Trust. Under this approach, the PSBT would acquire a 30 MHz license at 700 MHz and would enter into leases of spectrum usage rights with commercial operators who would build a nationwide public safety network that (1) would be paid for by commercial operators using excess capacity, not by the public safety community or the taxpayer; (2) would be licensed and controlled by public safety representatives to ensure public safety priority access; and (3) would be refreshed with the latest technical improvements, funded by the commercial participants.

We do not support what some would call a “hosted” public safety network. While the term may have somewhat different meanings to different people, at its core it puts mission critical, emergency response communications in a position of dependence with respect to the host commercial provider. Moreover, it undermines or even negates the essential nationwide character of the network. With all due respect to commercial operators that might now express support for hosted systems, there is nothing in the over 20-year history of commercial wireless systems that would validate their reliability or availability for mission critical public safety needs. That is not an arrangement that the public safety community could endorse.

In regard to the 9th Notice of Proposed Rulemaking (NPRM) recently issued by the Federal Communications Commission, we have many concerns about the concepts set forth in that proposal. The 9th NPRM suggests that a nationwide broadband network could be built using the 12 MHz of spectrum currently allocated for local licensing of public safety wideband systems. This would take away from local licensing control the spectrum long promised for use by local agencies. In addition we believe the proposal is seriously flawed by failing to acknowledge the need for enough spectrum to attract investors to participate in a public/private partnership where private funds would be invested to build a nationwide network.

By contrast, the partnership outlined in the Public Safety Broadband Trust creates a symbiotic and balanced relationship, but one in which public safety always remains in control. It represents a win-win opportunity if sufficient spectrum is allocated to accommodate both public safety and commercial usage. Public safety cannot fund this network on its own, but also must be confident that the network is built to hardened public safety requirements with priority access that is adequate to respond to emergencies. Commercial operators will lease the spectrum and build the network to public safety specifications, but only if there is sufficient excess capacity to permit meaningful commercial service on a regular basis. The technical data supports the conclusion that a minimum of 30 MHz is needed to serve these complementary requirements.

The many public safety organizations and agencies that have supported the PSBT approach recognize that it will require removing some of the 700 MHz spectrum that currently is scheduled to be auctioned. The PSBT proposal includes a plan to make the federal budget whole. The PSBT would raise \$5 billion to pay the U.S. Treasury for the spectrum, using the revenues from the commercial users and the assistance of federal loan guarantees similar to those that have been made available to industries such as airlines, pipelines and automobile manufacturers. This financing arrangement would ensure that other federal public safety spending priorities, including the \$1 billion for other public safety interoperable communications needs, would not be affected.

Let me add that I and other supporters of the PSBT also endorse the commendable work being done by local and regional organizations such as the Capitol Area Region Broadband Project with respect to broadband. To the extent their efforts bring about public safety communications improvements, it is important work that deserves support. But we must remain mindful that the results will be, at best, a patchwork of improved, but incompatible, non-interoperable networks at a daunting per unit cost. They are doing what they can in light of the regulatory and financial environment in which they must operate, but this nation can and must do better.

I have dedicated most of my professional career to the advancement of public safety communications. From that perspective, I believe this Congress has an extraordinary time sensitive opportunity. Approval of the PSBT and the public sector-private sector partnership will catapult public safety to its rightful place in the forefront of communications capability while at the same time delivering broadband service to communities that continue to be bypassed by the commercial telecommunications revolution. I hope you will share my belief that this is an opportunity that must be seized for the benefit of the entire American public.



# Public Safety Broadband Trust

Statement by  
Fire Chief Charles L. Werner

before the

Committee on Commerce, Science & Transportation

United States Senate

February 8, 2007

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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.

PDA’s 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 21<sup>st</sup> Century technology. Thank you for the opportunity to address the committee. We appreciate your consideration of this most important public safety issue.