Safeguarding Our Future: Building a Nationwide Network for First Responders

Testimony of
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Good morning Chairman Rockefeller and Ranking Minority Member Hutchison. I am Al Gillespie, Chief of the North Las Vegas Fire Department and First Vice President of the International Association of Fire Chiefs (IAFC) on whose behalf I appear. The International Association of Fire Chiefs represents the leadership of over 1.2 million firefighters and emergency responders. IAFC members are the world's leading experts in firefighting, emergency medical services, terrorism response, hazardous materials spills, natural disasters, search and rescue, and public safety policy. Since 1873, the IAFC has provided a forum for its members to exchange ideas and uncover the latest products and services available to first responders.

My testimony today is in support of S. 28 (the Public Safety Spectrum and Wireless Innovation Act). A top priority for all public safety – law enforcement, fire and emergency medical services – is to build a nationwide, public safety, wireless, interoperable, broadband network. This urgent need is recognized in many studies such as the 9-11 Commission and Hurricane Katrina reports. Mr. Chairman, S. 28, the legislation you introduced, will allow public safety to realize its nationwide communications goal by providing both the spectrum and funding which is required. This bill also has the support of the Public Safety Alliance, an organization of nine national public safety organizations, including the IAFC, and with the support of a diverse range of entities from both the public and private sector. Indeed, our goal is supported by the seven national organizations representing state, county and local government, as well as many of the leading technology integrators, telecommunications carriers and equipment manufacturers.

We are very appreciative of the recently announced support from the Obama Administration. The President's Budget, announced earlier this week, contains provisions for allocation of the D Block to public safety and methods for funding. We look forward to working with the administration as well as Congress to make possible a nationwide public safety broadband network bringing public safety communications into the 21st Century to better serve America's citizens.

Over the past fifty years, America's domestic defenders have been allocated thin slices of spectrum in each new band as it became available. That is why, today, we have over 55,000 public safety agencies each operating their own mission critical radio system over six or more different bands. This makes our goal of interoperability both difficult and expensive. After numerous major events and other significant disasters, it is clear that a new model is necessary: a national architecture for public safety wireless communications. To achieve a nationwide, public safety, wireless, interoperable, broadband network, key elements need to be in place.

The network must have sufficient capacity. To achieve a nationwide public safety broadband network - connectivity coast to coast, border to border - 10 MHz of D Block spectrum, currently slated for FCC auction, must be added to the current 10 MHz of spectrum licensed to Public Safety in order to build out a 20 MHz network. The currently licensed public safety spectrum abuts the D Block and is perfect for public safety. Only with this particular spectrum configuration, and none other, can public safety be assured that it will have the ability to build the network it needs now and into the future. S.28 will accomplish this one-time opportunity to get it right.

Public safety must control the network. Local control of the network by public safety agencies is critical. Utilizing a single technology with sufficient spectrum will ensure nationwide interoperability and allow us to effectively manage day to day operations, as well as any major incident. We cannot have commercial providers deciding what is or is not an emergency and what is the priority. Public safety transmissions have to go through without delay. A "no service" signal is not an acceptable element of emergency operations. The lives of firefighters, the lives of medics, the lives of law enforcement officers depend on this. It is our responsibility.

Public safety expects to work with others and enter into public-private partnerships. We will work with state, county and local governmental agencies, federal partners, utilities and others who respond to emergency incidents. But, public safety must have control over the operation of the network in real time. It cannot rely on commercial operators to provide its critical governance needs. Network control will give public safety assurance that it will have full, pre-emptive priority over its spectrum on a when-needed basis.

The network must be mission critical at the outset. In the beginning, this system will handle only data and video. At some future time – years away – we believe there will be a transition to mission critical voice. We all need to take a long term view – to start out with sufficient spectrum so that we will have the ability to migrate to mission critical voice. This will happen when the technology is developed, public safety has confidence in it, and its cost is affordable. Here are the key elements of "mission-critical:"

- The network must be hardened to public safety requirements. This means towers must be able to withstand the elements that might disable them. Towers in hurricane-prone areas and tornado alleys must be designed accordingly. Back up electrical power must be available 24/7. Redundancy is necessary.

- The public safety mission critical voice network must have the ability to broadcast and receive "one-to-one" and "one-to-many" and the ability to broadcast and receive without the network infrastructure being operative. This is called "talk around" mode – also known as simplex. This is a command and control imperative. You know well that we operate under extremely hazardous conditions. If the network, for any reason, cannot provide connectivity, then we need the capability to communicate without the network. This means communicating in the simplex mode. This is the essence of public safety communications.

- The network must have back up capabilities in the event of network loss and at a public safety standard. We envision satellite capability for the network to be available when a tower is disabled or other crippling malfunction. Satellites also can cover remote areas that do not have towers. Our mission is geography-oriented whereas commercial carriers are concerned with population.

Funding is important for the build-out of a public safety broadband network. State and local government budgets are challenged. The broadband network needed by public safety cannot be built without federal funding support. S. 28 recognizes this fact and offers a solution. And, this network, much like current 700 and 800 MHz Land Mobile Radio (LMR)

systems, must also be accessible to federal public safety users nationwide as well as "second responders," such as utilities and highway agencies. Both a Construction Fund and a Maintenance and Operation Fund will be created and authorized to a maximum of $11 billion for both funds. These funds will provide matching grant programs at the U.S. Department of Commerce to build the network and at the FCC to operate and maintain the network. The bill will fund the Construction Fund by auctioning, at a minimum, 25 megahertz of contiguous spectrum at frequencies located between 1675 MHz and 1710 MHz.

It is important to recognize how this public safety broadband network will revolutionize the fire and emergency medical services. Examples of applications include: live video to provide instantaneous situational awareness for mass casualty incidents (e.g. Tucson shootings), major hazardous materials spills, and real time situational awareness to incident command as well as elected officials and other decision makers. In the area of emergency medical services we envision digital imaging, portable EKGs, portable ultrasounds, field blood work with a direct link to the hospital's emergency department. This would put a virtual physician in the back of the ambulance with the Emergency Medical Technician to expedite the proper life saving treatment. This will be especially critical in rural areas where transit time to the hospital is longer. These types of applications for fire and EMS are only possible with broadband capability.

Mr. Chairman, the IAFC and public safety support S. 28. This bill provides public safety with what it needs to begin the task of building out a nationwide public safety broadband network. S.28 is the vehicle for finally securing this critical asset, and we look forward to continuing to work with you and your colleagues in the Senate to further refine this legislation in order to enact the best possible bill into law. The 10th anniversary of the tragic events of September 11, 2001 will be marked in about seven months. Thus, we urgently need to move forward on a plan to develop the envisioned public safety broadband communications network. We thank you for your personal attention and leadership on this issue and will continue to work with you and the committee to assure prompt passage. I am available to respond to any questions you may have.