

**STATEMENT OF GLEN NASH
PRESIDENT, ASSOCIATION OF PUBLIC-SAFETY COMMUNICATIONS OFFICIALS-
INTERNATIONAL, INC. (APCO)
Before the
UNITED STATES SENATE
COMMERCE, SCIENCE AND TRANSPORTATION COMMITTEE
COMMUNICATIONS SUBCOMMITTEE
March 6, 2002**

Thank you, Mr. Chairman

My name is Glen Nash. I am the President of the Association of Public-Safety Communications Officials-International, Inc. (APCO), and I am here today on APCO's behalf. I have over 29 years experience in the design, installation and maintenance of public safety communications systems and currently serve as Senior Telecommunications Engineer with the State of California Department of General Services. Please note, however, that I am here today on APCO's behalf, and not in any official capacity for the State of California. I also currently serve as Chair of the Technology Subcommittee of the FCC's Public Safety National Coordination Committee (NCC), and I was an active participant in the joint FCC/NTIA Public Safety Wireless Advisory Committee (PSWAC).

APCO, founded in 1935, is the nation's oldest and largest public safety communications organization. APCO has over 15,000 members, most of whom are state or local government employees who manage or operate communications systems for police, fire, emergency medical, disaster relief, and other public safety agencies. APCO is certified by the FCC as a frequency coordinator for public safety mobile radio channels, and has long played a major role in public safety radio spectrum and wireless E9-1-1 issues before the Commission.

The events of September 11 have forced all of us to re-examine our nation's priorities,

especially those related to our police, fire, EMS and other agencies charged with the protection of life, health, and property. These “first responders” literally are the frontline troops not only in the domestic war on terrorism, but also in the day-to-day reality of living in a less than perfect society.

Today, more than ever, our nation’s public safety agencies must have the tools they need to perform their critical tasks. Communications is at or near the top of the list of those essential tools. Public safety communications, in turn, depends upon an adequate supply of appropriate radio spectrum dedicated for public safety use.

Public safety agencies use radio communications not only to dispatch personnel to the scene of an incident, but also as a link between field personnel and a resource center so that they can request additional assistance and/or information to properly handle the incident. Of particular importance is on-scene portable radio communication between various public safety personnel responding at the scene of a crime-in-progress, fire, flood, explosion, vehicle accident, or other emergency. This is true whether we are talking about the events such as those of September 11; emergencies associated with floods, earthquakes and weather-related emergencies; or day-to-day responses to crime, fire, accidents and medical emergencies. Now, with new Homeland Security responsibilities being placed upon state and local public safety agencies, the need for effective radio communications is heightened even more.

Unfortunately, for far too many years, public safety agencies across the nation have faced a severe shortage of radio spectrum available for their communications systems. These shortages were documented in 1996 by the Public Safety Wireless Advisory Committee (PSWAC), a blue-ribbon committee created by NTIA and the FCC. The PSWAC Report, which was adopted on September 11, 1996, determined that public safety users would require an additional 97.5 MHz of radio spectrum

by 2010, and would need approximately 24 MHz within five years of the Report. Unfortunately, exactly five years later, on September 11, 2001, that 24 MHz was still not available for nationwide public safety use, for reasons that I will discuss in a moment.

The lack of sufficient radio spectrum for public safety has several significant consequences. In many metropolitan and other densely populated areas, public safety agencies face dangerous congestion on their radio systems. In some instances, public safety agencies operate with hundreds of users per channel, far more than is safe under “normal” day-to-day circumstances, let alone major emergencies. Demand for channel capacity has been increasing with population growth and density. Now, with new Homeland Security responsibilities being placed on public safety personnel, there will be even greater demand for public safety spectrum. Inadequate spectrum also prevents public safety agencies from implementing new communications tools, such as wide area mobile data systems that can provide law enforcement officers, firefighters, and EMS technicians with a wealth of critical on-scene data. This includes not only high speed text delivery (such as criminal background information), but also, with sufficient spectrum, high resolution images such as mug shots, fingerprints, and building diagrams. While the FCC recently allocated spectrum in the 4.9 GHz band for certain public safety data and video functions, use of that band will be limited to relatively short distance transmissions. The 4.9 GHz band is not expected to provide a spectrum home for wide-area, mobile data systems.

The lack of spectrum also has a direct and significant impact on interoperability. All too often, public safety personnel from different agencies responding to the same emergency cannot communicate with each other, because they operate on incompatible, non-interoperable radio systems. The lack of interoperability is generally the result of different agencies being forced to operate on different radio

frequency bands. The most effective way to address that problem is to migrate agencies in the same geographic area to common, or at least compatible, radio frequency bands. Unfortunately, that's not possible in many areas as there is not enough spectrum in any one band to accommodate all, or even most, of the public safety users in the region. New allocations, especially if adjacent to an existing public safety spectrum allocation, would greatly enhance interoperability with existing users, while at the same time providing capacity for new, multi-agency, multi-jurisdictional radio operations.

Congress tried to address some of these issues in 1997, when it required the FCC to allocate 24 MHz of spectrum for public safety purposes from the 746-806 MHz band (TV channel 60-69). This was consistent with the 1996 recommendations of the Public Safety Wireless Advisory Committee. The FCC then did its part. It reallocated TV channels 63, 64, 68, and 69, for public safety and adopted rules to promote interoperability among all users of the band and the adjacent 800 MHz public safety bands. Indeed, the Commission allocated approximately 10% of the new band for nationwide public safety interoperability, and required that all radios in the new band be capable of operating on the interoperability channels. The Commission also adopted a digital interoperability standard (Project 25) for the band, to ensure that digital equipment from different manufactures would still be interoperable.

However, in most of the nation's largest metropolitan areas, the new spectrum allocated for public safety was not available on September 11, and will not be available until TV broadcasters on channels 63, 64, 68, and 69 (and in many cases the adjacent channels), release those channels as part of the digital television (DTV) transition. The problem facing public safety is not only that the spectrum is not currently available nationwide, but also that there is no firm date for when the spectrum will become available. The 1997 Balanced Budget Act, which required the FCC to allocate spectrum for

public safety, allows incumbent broadcasters to continue operation on TV channels 60-69 until December 31, 2006, or until some uncertain, future date when at least 85% of the households in the relevant market have access to DTV signals.

That 85% provision creates uncertainty as to when (or if) the spectrum will become available, and makes it impossible for most state and local governments to plan, fund, or construct systems using the spectrum allocated for their public safety operations. For example, the State of California has a tremendous need to upgrade the radio systems for its own agencies, but we cannot build a statewide system that does not include the Los Angeles and San Francisco Bay areas. Unfortunately, those are among the metropolitan areas where TV stations block use of the newly allocated public safety spectrum. Many other large public safety agencies across the country face the same dilemma.

APCO has therefore joined with the International Association of Chiefs of Police, the International Association of Fire Chiefs, the National League of Cities, the National Association of Counties, the U.S. Conference of Mayors, and other organizations to urge that Congress establish an early and firm date for the newly allocated public safety spectrum to become available for actual operations.

There are also important steps that the FCC needs to take. For example, we remain deeply concerned about the rules adopted to protect future public safety users of the new spectrum from interference caused by new commercial mobile radio services in the same band. These are commercial users who would receive licenses pursuant to the 700 MHz band auctions currently scheduled by the FCC. We do not believe that the interference provisions are adequate, based upon studies conducted by the Telecommunications Industry Association, and have petitioned the FCC to reconsider its rules.

The interference that we fear in the 700 MHz band is similar in some respects to current interference problems that many public safety agencies already face in the nearby 800 MHz band. The FCC is about to initiate a proceeding on that issue, which includes a proposal that would also provide additional spectrum relief for public safety agencies in that band.

Finally, I want to note that many public safety agencies will continue to operate in the UHF (450-470 MHz, plus, in some areas, portions of 470-512 MHz) and the VHF High Band (150-170 MHz) for the foreseeable future. Indeed, due to the low cost of equipment and good propagation characteristics, the VHF High Band is the most heavily used public safety frequency band. However, that band is extremely overcrowded and is in desperate need of “breathing” room to relieve congestion and facilitate wide-area interoperability plans. In that regard, we were pleased that Congress required the Department of Defense to study the potential for sharing of its nearby 138-144 MHz band, which we understand is lightly used in at least some portions of the nation. DOD has submitted a classified study to the Congress on this issue, and we look forward to learning more about the results of that study, and moving as quickly as possible towards actual sharing of the band with state and local government public safety agencies wherever feasible.

In closing, I want to thank you Mr. Chairman and members of your Subcommittee for conducting these important hearings, and for providing me an opportunity to discuss the critical communications problems facing public safety agencies in these difficult times. APCO stands ready to work with the Congress, the FCC, and other interested parties in resolving these issues as quickly and efficiently as possible.