

**STATEMENT OF THOMAS B. WORDEN
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Before the
UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON GOVERNMENT REFORM
SUBCOMMITTEE ON TECHNOLOGY, INFORMATION POLICY,
INTERGOVERNMENTAL RELATIONS AND THE CENSUS
September 8, 2004**

Good afternoon, Mr. Chairman and distinguished members of the Subcommittee. I wish to thank you for the opportunity to speak before your subcommittee today.

I come to you with a somewhat different perspective than most of the other witnesses you are hearing today. As Chief of the Telecommunications Branch of the Governor's Office of Emergency Services for the State of California, I approach issues first as part of the State agency charged with coordinating California's planning for, response to, and recovery from emergencies. We focus significant effort on bringing public safety professionals together from all levels of government. We also operate several public safety radio systems and administer the licenses of several statewide families of channels.

California is proud of its long-standing success in developing both single discipline mutual aid radio systems and cross discipline systems, and in both cases developing approaches to both local and statewide use. These systems were built up by teams of public safety professionals, both operators and technicians who shared experience from the various regions of the state. Their diverse backgrounds helped to develop plans that have met the test of time. When we considered discussing those plans in this forum, we wondered if the old signature dates on these plans would cause readers to discount their value. It is in reality those dates that trumpet their value.

These teams of experts brought together:

- Urban, suburban, and rural communities;
- Coastal, foothill, valley, and alpine environments;
- City, county, special district, regional, state, Federal, and sometimes tribal organizations; and
- Management, dispatch, response, and communications technical personnel.

The plans that they wrote have served for decades, and in fact are the national interoperability models for two major FCC efforts, the Public Safety Wireless Advisory Committee and the 700 MHz National Coordination Committee. In the Fire Services these plans have risen to the level of doctrine that drives training and equipping decisions not only in California, but nationwide. These plans also provided part of the foundation that has enabled us in cooperation with the SAFECOM Program to implement the objectives of the RapidCom9/30 project to ensure the availability of command level interoperability within one hour at an incident site in San Francisco and Los Angeles by the end of September. As I go through my remarks I will continue to refer to this project and the SAFECOM Program's approach to it as an example of where

they are today and how local – state – Federal partnerships can achieve results that are both valid and rapid.

Under DHS, the SAFECOM Program has been configured properly to build upon the fact that interoperability is locally driven, from the bottom up. As evidenced by their “Statement of Requirements” document released this last spring, and their recently released (and practitioner developed) Interoperability Continuum chart that is attached to my written testimony, SAFECOM understands the complexities of interoperability. The coordination needed to achieve interoperability is not something that can be mandated from the Federal level, or even the state or regional level. Local officials already have the wealth of knowledge of the challenges they face. These challenges vary widely. What is a critical stumbling block to one area may be an engineering footnote in another.

The issues include:

- The hazard environment (weather, hazardous materials, sources of crime, and other dangerous conditions),
- The organizational environment (overlapping jurisdictions in the same discipline, dissimilar responsibility areas across disciplines, operational doctrines and practices, levels of training, and existing multi-agency or regional partnerships),
- The political environment (diversity of jurisdictions, relative wealth or tax base of jurisdictions, existing political partnerships, and pressures from regional, state, and Federal agencies), and finally
- The signal environment (geography, weather, competing signal sources, and the variety of density and types of development)

In California we have seen the development of very successful regional public safety systems often built around the need to resolve communications issues. These partnerships invested major efforts in determining how, when, and why the participants needed to talk to one another long before they started buying equipment. These discussions of communications issues drove discussions of operational issues. From the design of a “pursuit channel” among neighboring jurisdictions to the development of a command level coordination net, the operational requirement drove the technical solution. The RapidCom9/30 project found both California cities well on their way to implementing the technology. Both cities had hosted several testing operations to examine the use of interoperability gateways to enhance already existing operational partnerships.

Technology is only a small part of the interoperability solution. With the notable recent introduction of the Interoperable Communications Technical Assistance Program within ODP’s UASI grants, Federal programs to provide communications equipment under the WMD or Homeland Security umbrella have generally ignored the requirement to develop operational procedures and governance before equipment is procured and installed. Planning, the type of detailed operational and technical analysis I am discussing here, seems to be resisted as too time consuming and frustrating. It is both. In many cases, these funding programs have asked for evidence of such planning, but will not fund the planning effort as a component of resolving the problem. Further, when they do call for the existence of a plan they contain little or no guidance on what constitutes a valid plan and who can help the applicant achieve that goal. Current

Federal funding cycles do not allow for stable planning environments in state and local entities. The time from grant announcement to grant guidance to funding commitment through procurement to reimbursement assumes a well-developed idea of the requirement and solution before the “approved purchase list” for the grant cycle is announced. In too many instances jurisdictions adopt solutions on the list because they are on the list, not because they were selected in a valid planning process. Manufacturers are quick to tout how their solution meets the requirements of one or more paragraphs in the grant guidance and their ability to deliver and invoice within the grant cycle. The SAFECOM Program personnel who have been working with our mostly local partners in RapidCom9/30 have devoted a good part of their efforts to the governance documents that will prescribe when, why, how, and by whom the interoperability systems will be employed. These documents are the outgrowth of a well-developed planning process. We have asked them to focus on developing governing document language in the two cities that is similar enough in its format and style to serve as a model for other regions as well.

Training is as large an issue as planning. Every first responder trains regularly on the specialized tools of his or her trade (weapons, fire fighting tools, vehicle operations, etc.), but the vast majority of first responders do not receive ongoing training on how to use communications systems. More importantly, in daily operations and training exercises they rarely get to use the advanced features that may be engineered in to their systems to ensure that they are able to use them in crisis. An airline pilot endures two grueling training cycles in the simulator each year to ingrain the proper use of the emergency features of the aircraft and to learn the symptoms of system failure. Unless the need and the technique are included in realistic training, first responders may well forget during a crisis that a certain knob position or button push enables them to make a distress call on a channel that all will hear. Several cycles of the main funding programs specifically excluded training. SAFECOM Program’s approach to the RapidCom9/30 accelerated process has include the need to demonstrate the solution in a realistic, scenario-driven exercise environment where users can experience the effect of the system on their decision processes as well as hear the actual sharing of signals occur.

Having talked about planning and having talked about training, we come back to the issue of funding. Two issues bear attention. First, requiring state and local entities to expend their funds on the promise of being reimbursed is disruptive to ongoing local programs. For many jurisdictions these Federally supported investments represent a very large proportion of their discretionary budget. Anyone who has served long in a capacity to manage government budgets knows that the large majority of each year’s expenditures is resistant, if not immune, to management. Federal grant guidance prohibits either advancing funds to sub-grantees for expenses, or providing a direct payment system for the invoices that they present. The result is that some other expenditure, not related to the grant, may have to be postponed until the grant reimbursement comes in. Local governments live with rigid budget calendars just like Federal and state entities. While it is valid and important to maintain control processes to protect against malfeasance, those controls can be built on the assumption of honesty, rather than the assumption of dishonesty and structured to protect local, as well as Federal, coffers. Second, some of our most effective and vital regional radio systems include governance arrangements wherein participating jurisdictions concede some of their powers to a Joint Powers Authority and obligate themselves to provide a continuing funding stream to the system. This funding takes the form of both annual “per user” fees

and initial and recurring capital contributions. In most cases jurisdictions buy their own end-user equipment in conformance with system standards. The annual fee pays the costs of maintaining, operating, and in some cases replacing, the shared infrastructure. Often, Federal and state agencies are reluctant or restricted by laws and regulations from committing to these on-going funding arrangements. They become a special class of partners whose financial commitment is not as reliable. For interoperability to be effective, all parties must carry their share of the on-going financial load. It is important to note here that, while the recent surge in Federal grant support to communications system is welcome and sorely needed, this type of funding quietly ignores that each piece of equipment we buy now has a finite and largely predictable life. That life is shortened in many instances by the march of technology, wherein the outdated equipment become the limiting factor preventing modernization, and by regulatory change which sets a definite end to the usefulness of some equipment, serviceable or not. Grant funding as we have been doing the last several years does not address the need for long term funding innovation.

While there is an ongoing need for NTIA to remain separate from the FCC, there is also a need for cooperation in the management of some Federal frequencies to improve interoperability. The paradigms in which many Federal agencies operate (need for a high level of security mandating encryption) are much different from the local and state paradigms. As a result, these Federal entities are very reluctant to work with non-Federal first responder organizations on Federal frequencies without the non-Federal users having radio equipment with 'federal grade' encryption – which the Federal entities will not allow to be keyed to Federal systems as a matter of normal policy. First, the blanket imposition of encryption increases costs dramatically. In fact, we all know that most transmissions at the scene of an incident do not require encryption. The adversaries know what they did. They may be lurking in the shadows planning a second strike, but most, if not all, of what they hear on the public safety radio during the crisis will not change those already laid plans. On the other hand, locals need to know on which partners they can depend if the incident comes to their door. SAFECOM is properly positioned to act as the bridge between these two paradigms. The height of the incident is not the time to learn that a partner wants to help but can't because they don't trust you with an electronic key to secure information that doesn't need to be secure. Second, the incident command team needs a communications environment in which they can communicate freely. Therefore they need to know what organizations are partnering with them and which channels are linking which entities. Allowing local participants the use of certain identified Federal channels during crisis can speed the development of cooperation and the sharing of information. Until recently, Federal channels have been divided among agencies with little attention to shared frequencies except as negotiated by the agencies among themselves. That may leave the local incident with a relatively large number of connections to make to Federal partners and turn the local interoperability channel in to a Federal coordination channel. NTIA should continue efforts to develop shared channel plans, including designated non-encrypted channels, for both Federal agency coordination and Federal to local cooperation. The SAFECOM Program provides the forum and increasingly reflects the mid set to advance cooperation in this manner.

And while we discuss Federal spectrum regulatory agencies, the FCC has before it today a series of recommendations to improve interoperability as part of its ongoing 700 MHz proceeding. These recommendations, developed by local and state practitioners as part of a Federal Advisory Committee chartered by the FCC for this

purpose, are essential to the rapid and successful implementation of the “system-of-systems” approach to nationwide interoperability envisioned by SAFECOM. There are times when the FCC must establish some basic requirements of all public safety users in order to ensure interoperability, and these have been succinctly outlined in the final recommendations of this Public Safety National Coordination Committee to the FCC.

Finally I want to spend a minute on the Statewide Interoperability Executive Committee movement. The FCC offered the charter for these committees to operate at the state level, but including local and Federal partners. Their task is to plan for and manage new frequencies that are to become available when television moves out of the 700 MHz spectrum range. California, like several other states has decided to expand the SIEC charter to cover all the families of frequencies that public safety professional share across the state. We are going to consolidate those old system-specific plans I spoke about earlier. We are assembling a cross discipline team, as I described above, including law, fire, emergency medical, and emergency management professionals to rewrite the existing plans, hopefully using some of the language the SAFECOM Program is working on with the two cities. Those conversations will provide a background for a separate committee made up of the California state agencies that are significant users of public safety radio. Their charge is to develop a plan for modernization of state systems to replace obsolete equipment, achieve narrow-banding as soon as possible, and improve interoperability between state agencies and across levels of government.

Thank you again for the opportunity to speak before you. I look forward to our discussion.



SAFECOM

Interoperability Continuum

