

Statement for the Record

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Introduction

On September 11, 2001, thousands of American citizens died at the hands of terrorists. The tragic events of that day clarified the critical importance of effective first responder communication systems. As Chairman Putnam, in company with Chairman Davis and Chairman Shays observed recently,

The inability of first responders – police officers, fire fighters, emergency medical service personnel, public health officials, and others – to communicate effectively over wireless systems with one another as needed during an emergency is a long-standing and widely recognized problem in many areas across the country. Reports have shown that when first responders cannot communicate effectively as needed, it can literally cost lives of both emergency responders and those they are trying to assist. Thus, effective communications between and among wireless communications systems used by Federal, State, and local public safety agencies is generally accepted as not only desirable but essential for the protection of life and property.¹

The Government Accountability Office (GAO), at the direction of Chairmen Davis, Shays, and Putnam, recently completed an examination of the interoperability problem. We are heartened that the GAO report validates our efforts, activities, strategic plan, and overall guiding philosophy.

Today's testimony will focus on the Department of Homeland Security (DHS) efforts to improve communications interoperability in both the near and long-term for public safety first responders, SAFECOM, managed by the Science and Technology Directorate. Much of SAFECOM's efforts are focused on long-term strategic initiatives without which the nation will never solve the interoperability problem. However, the Secretary of DHS has directed that SAFECOM also undertake measures to achieve immediate interoperability sufficient to meet the most likely near-term emergencies. We will also discuss DHS' efforts to develop and launch the Office for Interoperability and Compatibility (OIC), which will build on the SAFECOM model to address interoperability needs related to training and equipment as well as to communications.

As noted in the GAO report, "Public safety agencies have historically planned and acquired communications systems for their own jurisdictions without concern for interoperability."² The story is not dramatically different for Federal wireless systems, so SAFECOM was created to help bring order to the nation's public safety wireless communications systems at all levels of government. More importantly, it provides a single coordinating point for the country, since many agencies have either been directed by Congress – in response to the tragic experiences of 9/11 – to address interoperability, or have taken it upon themselves to do so. Under the Homeland Security Act, for example, three DHS' entities are charged with addressing interoperability. The Office of Domestic Preparedness is charged with "coordinating or, as appropriate, consolidating communications and systems of communications relating to homeland security at all levels of government."³ Section 502 (7) of the same act charges the Emergency

¹ Government Accountability Office (GAO), (July, 2004), *HOMELAND SECURITY: Federal Leadership and Intergovernmental Cooperation Required to Achieve First Responder Interoperable Communications*, p. 1.

² GAO, (July 2004), p. 9.

³ Section 430 (c) (2).

Preparedness and Response Directorate with “developing comprehensive programs for developing interoperative communications technology, and helping to ensure that emergency response providers acquire such technology.” Section 232 (b) (7), again of the same Act, directs an agency of the Department of Justice to “administer a program of research, development, testing, and demonstration to improve the interoperability of voice and data public safety communications.” In late May, 2003, in cooperation with the Commerce and Justice Departments, we assembled representatives from 60 different programs either inside the Federal Government, or funded by or partnered with a Federal agency, all of which touched in some way on interoperability. By coordinating and leveraging the vast range of interoperability programs and related efforts spread across the Federal Government, SAFECOM is reducing unnecessary duplication of programs and spending and ensuring consistency across Federal activities related to research and development, testing and evaluation (RDT&E), standards, technical assistance, training, and grant funding related to interoperability. The new Office for Interoperability and Compatibility will do the same across the Department of Homeland Security. Much as has SAFECOM, OIC will face significant challenges, but we are confident that with the high level of Executive and Congressional support we have enjoyed to date, and the support of local, state, and Federal partners, we will continue to see extensive improvements in public safety interoperability.

SAFECOM Background

Interoperability is not a new issue; it has plagued the public safety community for decades. It was a problem in Washington, D.C., when the Air Florida flight crashed into the Potomac River. It was a problem in New York City when the Twin Towers were first attacked in 1993. It was a problem when the Murrah Building was destroyed in Oklahoma City, and finally, interoperability was an issue in the Columbine school shooting spree. The reality is that today, too many agencies cannot communicate by radio because their equipment is still incompatible, or the frequencies they are assigned are different. They operate on numerous frequency bands and run communications systems which are often 30 years old, in an era when the technology lifecycle is only 18 to 24 months. But national efforts to fix the problem, one which had long vexed public safety, were erratic, uncertain, and uncoordinated. With the attacks on September 11, 2001, we recognized we must take a more aggressive approach to correct the problem.

Since 2001, more effort has gone into solving the interoperability problem than at any other time in history. DHS’ Federal Emergency Management Agency (FEMA) and the Department of Justice’s Community Oriented Policing Services (COPS) office have partnered to coordinate more than \$230 million appropriated by Congress for grants specifically to address interoperability. Additionally more than \$1.1 billion has been provided in grants to states for use for a variety of preparedness initiatives, including interoperability. Two major interoperability initiatives – for the first time in the nation’s history – have been or are being established at the highest levels to solve the interoperability problem: SAFECOM two years ago as a Presidential E-Gov Management Initiative (and a DHS responsibility since the summer of 2003), and the Office for Interoperability and Compatibility within the Science and Technology Directorate of the Department of Homeland Security, to be stood up officially this year.

The foundation of the SAFECOM Program and the driving force behind its success has been the support of local, state, and Federal public safety practitioners. For the first time there are new and invigorated partnerships among local, state, and Federal public safety practitioners and

agencies. SAFECOM firmly believes that any effort to improve communication interoperability must be driven from the bottom up. The involvement of public safety practitioners ensures that solutions are realistic and can actually be implemented.

Communications interoperability refers to the ability of public safety agencies to talk across disciplines and jurisdictions via radio communications systems, exchanging voice and/or data with one another on demand, in real time, as authorized. Unfortunately, the nation is heavily invested in an existing infrastructure that is largely incompatible. Currently, efforts within the Federal government to address the interoperability problem are being coordinated by SAFECOM to incorporate the needs of local, state, and Federal practitioners. However, there remain many challenges, both technical and cultural, facing the improvement of public safety communications and interoperability. As the Government Accountability Office (GAO) acknowledged in its July 2004 report, communications interoperability is a long-term problem with no one-size-fits-all solution.

SAFECOM's mission is to serve as the umbrella program within the Federal Government to help local, tribal, state, and Federal public safety agencies improve public safety response through more effective and efficient interoperable wireless communications. SAFECOM has focused on three key areas: the creation of an Architectural Framework, the development of standards, and the coordination of federal activities. Over the last year, SAFECOM has made significant progress in achieving both its short-term goals as well as building the foundation for a longer term, comprehensive interoperability program.

The Creation of Architectural Framework

The creation of an architectural framework is the foundation of the SAFECOM long-term strategic plan for improving communications interoperability. As GAO recognized, "[o]ne key barrier to the development of a national interoperability strategy has been the lack of a statement of national mission requirements for public safety – what set of communications capabilities should be built or acquired – and a strategy to get there."⁴

SAFECOM's architectural framework, the first version of which we expect to publish in the third quarter of FY 2005, will determine priorities for the development of standards, is driven by the Statement of Requirements, and will encompass successful techniques used by local, State, regional, or Federal integration networks. This framework will reflect a system-of-systems approach to develop interface standards to help improve the problem of communications interoperability.

Although the architectural framework is a long-term goal, SAFECOM is working aggressively, partnering with key local, State, and Federal public safety practitioners, to complete the first steps in the architectural framework process. The SAFECOM Statement of Requirements (SoR) version 1.0 was completed and released in March of 2004. We have also initiated efforts to develop an accurate assessment of the current baseline of public safety communications interoperability, which is essential to understanding where the nation is now and in measuring our progress over the life of the Program. A Request for Proposals (RFP) was released several weeks ago and proposals were due in yesterday, September 7, 2004. Work on the baseline is

⁴ GAO, (July, 2004), p. 53.

expected to begin not later than the first quarter of FY 2005 and will be completed as quickly as possible. Once the architectural framework is completed, it will then be possible to conduct a gap analysis to determine what will be required to move us from where we are now to a state which meets the requirements identified in the SoR.

The Development of Standards

As part of its long-term strategy for improving communications interoperability, SAFECOM will closely coordinate the development of interoperability standards with the DHS Standards Executive, in partnership with local, State, and Federal public safety organizations to define the requirements for first responder interoperability at all levels. Both SAFECOM and GAO are in strong agreement that standards are a key element of the long-term solution to interoperability. SAFECOM, building upon the SoR developed earlier this year and the Architectural Framework discussed above, will support ongoing efforts or, when necessary, initiate the creation of standards to address gaps where identified. SAFECOM efforts, and OIC once established, will draw on existing institutions such as the National Institute for Standards and Technology (NIST) and the National Telecommunications and Information Administration (NTIA) and will build on ongoing efforts such as the P25 standards cited by the GAO report.⁵

Federal Coordination

As the umbrella program in the Federal Government with the mission to coordinate Federal activities related to communications interoperability, the SAFECOM Program has established the Federal Interoperability Coordination Council (FICC), made up of all the Federal agencies with programs that address interoperability. Members of the FICC include those agencies that provide grants to state and local agencies (such as DHS and the Department of Justice), those that need to interoperate with each other or with state and local agencies (e.g., DHS, Justice, Agriculture, Interior, Defense and others), and standards-making and regulatory organizations (e.g., the Federal Communications Commission and the National Institute for Standards and Technology).

GAO recognized the need for an entity responsible for the coordination of various Federal programs related to interoperability and has emphasized the importance of establishing Memorandums of Understanding (MOUs) by SAFECOM with its Federal partners. The Program now has ten MOUs signed (United States Department of Agriculture, Department of Energy, Department of Defense, Department of Justice, Health and Human Services, Department of Homeland Security, National Institute of Justice, Community Oriented Policing Services, National Institute of Science and Technology, Office for Domestic Preparedness), up from one at the time of the last GAO report. In addition, SAFECOM has created charters with its various committees and partners for those cases where partners (particularly state and local partners) may see formal MOUs as burdensome bureaucratic documents.

The creation of common grant guidance is another step SAFECOM has taken to coordinate Federal efforts related to interoperability. With input from the public safety community, SAFECOM has created a coordinated grant guidance which outlines eligibility for grants, the

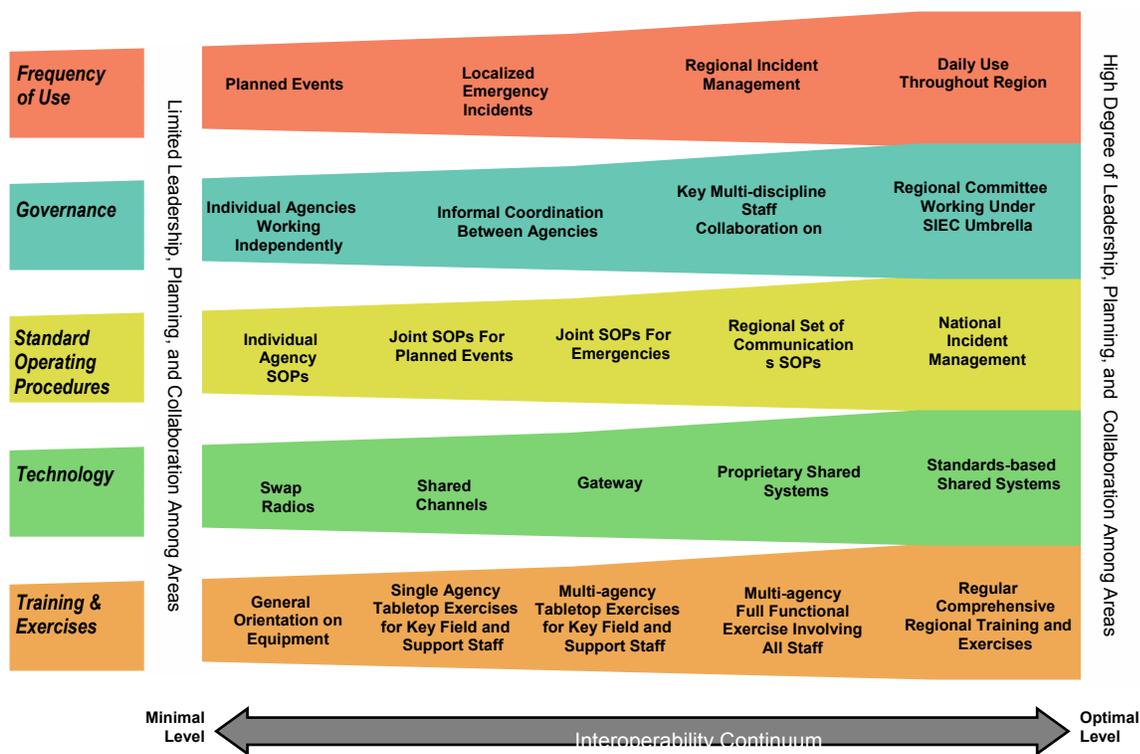
⁵ P25 refers to the suite of standards under development and led by the Association of Public Safety Communications Officers (APCO).

purposes for which grants may be used in support of interoperability, and guidelines for implementing a wireless communication system. This guidance was included as part of the COPS and FEMA grants in FY 2003 and was incorporated into the COPS Interoperability grants and Office for State and Local Government Coordination and Preparedness (OSLGCP) state grants in FY 2004. Grant guidance is an important step toward improving national interoperability because it helps to align public safety communications related grant dollars with the national effort to improve interoperability at all levels of government.

Near- term Solutions

While solving the nation's interoperability problem will take a long time, we recognize that we must ensure sufficient interoperability at all levels of government to meet emergencies of any kind, and we need to do it quickly. Begun by Secretary Ridge in early 2004, the RapidCom Initiative is providing assistance to 10 urban areas to strengthen their ability to respond to immediate emergencies. This effort is also serving as the catalyst for these areas to begin to institutionalize routine training and exercises, governance meetings, standard operating procedures, and more frequent use of interoperable communications in non-emergency situations, in order to better prepare themselves for emergencies. By working with public safety practitioners at the local level, SAFECOM is seeking to develop effective solutions to improve public safety communications and interoperability.

Fixing interoperability requires more than just the introduction of technologies. We have developed an "Interoperability Continuum" to illustrate the elements required to achieve interoperability. We believe that progression along the elements of the continuum is a parallel process, and that technology is only one of the elements. In other words, to gain a true picture of an area's interoperability, progression along all elements of the continuum must be considered. For example, if an urban area procures new equipment but has not conducted exercises to test procedures, concepts of operation, and policies, that urban area may not be fully prepared to make the best use of the new equipment. Worse, they may not recognize how little they are prepared to make use of the equipment.



Another near-term effort involves the SAFECOM’s work with the Commonwealth of Virginia to develop a strategic plan for statewide communications and interoperability. The methodology we used will be provided to any state or region as a model for how to develop a successful strategic plan for interoperability. We do not believe it is possible to develop a successful statewide plan – or a national strategy – without genuine buy-in from local agencies.

Practitioner Driven Philosophy

Over ninety percent of the nation’s public safety communications infrastructure is owned by localities and states. For that reason, as SAFECOM partners with other Federal agencies, we ensure that the program remains one designed by public safety for public safety and that it is based on creating interoperability solutions driven from the bottom up. The Federal Government, through the SAFECOM Program, has gained the support of all the major associations representing public safety officials (law enforcement and fire), State and local elected and appointed officials and public safety communicators. In January 2004, ten key public safety associations⁶ released a joint statement that declared “With the advent of the SAFECOM

⁶ Association Of Public-Safety Communications Officials – International (APCO)
 International Association Of Fire Chiefs (IAFC)
 International Association Of Chiefs Of Police (IACP)
 Major Cities Chiefs Association (MCC)
 National Sheriffs' Association (NSA)
 Major County Sheriffs' Association (MCSA)
 National Association Of Counties (NACO)
 National League Of Cities (NLC)

Program . . . public safety, state and local government finally have both a voice in public safety discussions at the federal level and confidence that the government is coordinating its resources.”

Conclusion

Over the last year, under DHS guidance, SAFECOM has made significant progress both in achieving its short-term goals and in building a foundation for a comprehensive longer term program. With strong executive and congressional support, it has established itself as the umbrella program within the Federal Government for coordination with local, State, and Federal public safety agencies to improve communications and interoperability. More importantly, it has been a catalyst for other interoperability groups and programs, and for new industry efforts to address public safety communications needs.

Our nation is heavily invested in an existing infrastructure that is largely incompatible. We must continue to pursue the current comprehensive strategy that takes into account technical and organizational issues associated with improving interoperability, and recognizes the challenges associated with incorporating legacy equipment and practices given the constantly changing nature of technology and cultural environments. Though many challenges remain, we believe we have accomplished a great deal in the short time DHS has managed the program.

Never before has there been a Presidential Management Initiative that addresses communications interoperability issues.

Never before has Congress made so much grant funding available for states and localities to improve their interoperability.

Never before has common grant guidance been applied across the entire Federal government.

Never before has a common national definition – a Statement of Requirements – developed by the nation’s first responders existed to help guide public safety agencies and industry.

We are confident that with your continuing support and the assistance of our many Federal partners, we will continue to work towards a world where lives and property are never lost because public safety agencies are unable to communicate.