

Interoperability & Emergency Communications News Clips
March 6, 2009 – March 20, 2009

Communications System First State to be Given on the Federal Spectrum	2
Interoperability: Surmounting the Tower of Babel.....	2
Lieberman Seeks More Money for Homeland Security	4
Lawmakers want more interoperability in emergency comms	4
DHS plans enhanced interoperability standard.....	6
DHS Emergency Communications Office Focuses on Implementation of NECP, State Plans	7
First Responders: Random Antenna Arrays Boost Emergency Communications.....	8
Emergency workers: "can you hear me now?\".....	9
Claire Bailey, Arkansas Chief Technology Officer, Discusses State's Wireless Information Network.....	11
Interoperable Communications Biggest State Challenge in Homeland Security, says NGA Survey	12
FEMA requests comments on alert standard	13
Emergency Responders Need Equipment Compatibility, DHS Official Says	14
Police change over to 800-MHz radio system	16
First Responder IPT to be Heavy in Practitioners	17
Obama nominates Genachowski to head FCC.....	20
DHS Official Stresses Importance of Training First Responders on Equipment	21

Communications System First State to be Given on the Federal Spectrum

March 18, 2009

Little Chicago Review

URL: http://www.littlechicagoreview.com/pages/full_story?page_label=home&widget=full_story&content_instance_id=2100980&open=&

Cheyenne – On February 5, 2009, Wyoming’s emergency communications system became the first in the nation to be awarded space on the federal spectrum.

The Public Safety Communications Commission (PSCC) has been working closely with the Departments of Interior and Homeland Security to secure this certification from the National Telecommunications and Information Administration (NTIA).

This certification represents a shift in policy by the NTIA in allowing frequency use by a state.

“This is a huge accomplishment,” said Robert Symons of the PSCC. “This will finally allow Wyolink to work effectively across all agencies.”

Wyoming will still be required to obtain Federal Communications Commission (FCC) licenses to operate on the frequencies at all 58 WyoLink radio sites. According to Symons, it will take some time to secure the licenses but there are no foreseeable obstacles.

“I am encouraged by the cooperation and coordination from our federal partners,” Gov. Dave Freudenthal said. “This action will result in improving public safety and communications among all law enforcement entities. Gaining this certification allows the state to take full advantage of the WyoLink system that we have worked so hard to establish.”

###

Interoperability: Surmounting the Tower of Babel

March 18, 2009

FederalNewsRadio

By Max Cacas

URL: <http://www.federalnewsradio.com/?nid=35&pid=&sid=1627118&page=1>

One of the enduring findings of the 9/11 report was the fact that first responders on the ground in New York were unable to communicate readily with reach other in the first hours after the crisis. Congress responded by approving funds for an envisioned nationwide emergency communications system, but now lawmakers are wondering if taxpayers will ever get a truly interoperable system to solve the problem.

One of the big topics on Capitol Hill these days, interoperability was the focus of an oversight hearing by the House Appropriations Subcommittee on Homeland Security. Here's the crux of the hearing, boiled down to this frustrating reality voiced by Kentucky Republican Hal Rogers, ranking member of the subcommittee, who rankles at the one billion dollars appropriated thus far by Congress to improve first responder interoperability: "Over the last three fiscal years, only

6.4% has been spent. That means there's more than \$997 million that could be out on the streets helping our first responders meet their interoperability needs."

And just to underscore things, Rogers told the three representatives from the Department of Homeland Security testifying on the issue of interoperability that recent weather related crises in his home state made the ability of first responders to communicate a matter of life and death.

Kentucky, just a month ago, had that terrible ice storm, that covered the entire state. Huge amounts of ice that devastated the state. But the main initial impact was there was no communications. The governor of the state didn't know if anyone in any part of the state was injured. There was no communications. The towers went down, the wires were broken, electric power was cut off, there was no communications to the rest of the state. And yet this money is laying here, waiting for the state to pick it up.

Rogers wasn't the only member of the subcommittee with that complaint and a palpable level of frustration. Members of the subcommittee from North Carolina, California, New York and Texas all vented their questions about why interoperability isn't as far along as it should be after three years.

The answer, says Chris Essid, Director of the Office of Emergency Communications at DHS, is not as cut and dried as one might think.

We're coordinating with FEMA's Grants Directorate to do everything we can to inform folks what grants are out there, to get feedback on what could be improved in the grants process so money can be drawn down faster. But some of these projects they're applying for are very technical in nature. Like procuring a state-wide (communications) system, for example. That system purchased in Virginia, that they didn't spend any (federal interoperability) grant funds on, it took them six years to move from the initial idea to actually purchase equipment. And Ross Ashley, Assistant Administrator for the Grants Program Directorate at FEMA, says the solution is not as simple as approving huge pots of federal grant money.

Just because the money is sitting in the federal treasury doesn't mean its not being used. Projects are out there in every state that are being executed today. It just takes time for the states to draw down funding. Some states only draw down funds once a year. They actually reconcile their books, and then draw down from the federal government.

Ashley goes on to say that if the availability of a grant is not carefully timed to the budget process in some states, it is possible that the state would not be eligible for the funds for as long as 23 months.

The consensus among the subcommittee is that DHS and FEMA are making steady, but slow progress on the road to interoperability. North Carolina Democrat David Price, the subcommittee chairman, offered this assessment of the hearing.

The very testimony they've given about some of the progress they've made raise our expectations for the future, in terms of how these systems are working out and the ability to get them to

communities that need them, so that we don't have these horror stories of disasters occurring and emergency responders not being able to talk to each other.

###

Lieberman Seeks More Money for Homeland Security

March 17, 2009

Wall Street Journal Blogs

By Cam Simpson

URL: <http://blogs.wsj.com/washwire/2009/03/17/9236/>

Sen. Joe Lieberman, chairman of the Senate Homeland Security Committee, said the 6.5% increase in discretionary spending proposed by the Obama administration for the Department of Homeland Security won't be enough.

In a letter released by his committee staff Tuesday, Lieberman said he's particularly concerned that too little is being targeted to combat growing drug violence along the Mexican border.

"We do not yet know in any detail how the Administration proposes to allocate this modest increase in funding among the Department's many needs," Lieberman wrote to Senate Budget Committee Chairman Kent Conrad. "What is clear is that there are still areas in which we will need to invest more if we are to adequately meet the challenges of securing our homeland."

Of the \$42.7 billion in the administration's budget outline for the department in the fiscal year beginning Oct. 1, only about \$45 million is designated for border enforcement. Lieberman notes that the president's plan "offers few details concerning border security programs and does not establish a baseline for Customs and Border Protection (CBP) or Immigration and Customs Enforcement (ICE) funding in FY 2010."

Lieberman wants to see increases of \$390 million for CBP and \$90 million for ICE, with at least \$100 million dedicated to countering Mexican drug lords now battling along the border. "I am greatly concerned about the rapid increase in violence involving the drug cartels in Mexico," Lieberman wrote.

Drug-trafficking routes into the U.S. are becoming more valuable as border security tightens, and drug organizations, armed with guns smuggled from the U.S., are growing increasingly violent to keep — or gain — control of these routes. They're also fighting beefed-up Mexican law enforcement and military forces in northern Mexico.

###

Lawmakers want more interoperability in emergency comms

March 17, 2009

Federal Computer Week

By Ben Bain

URL: <http://fcw.com/articles/2009/03/17/fema-location.aspx>

Leaders of a key House subcommittee today expressed frustration with efforts to ensure the interoperability of communications devices used for emergency responses. Meanwhile, some lawmakers and the Homeland Security Department's inspector general said the Federal Emergency Management Agency (FEMA) should remain part of DHS.

FEMA has problems ensuring that state, local and federal emergency communication devices are interoperable across jurisdictions, Rep. Henry Cuellar (D-Texas), chairman of the Homeland Security Committee's Emergency Communications, Preparedness, and Response Subcommittee Rep. Mike Rogers (R-Ala.), the subcommittee's ranking member, told reporters today. Their panel held a hearing today on FEMA's efforts to implement congressional requirements relating to its preparedness and response mission.

"We have spent a fortune on these communications devices," Rogers said, adding that the efforts have not led to the needed interoperability of state, local and federal communications systems.

"It appears to me that money obviously isn't going to be the answer, it's going to be having to force legislatively some coordination on interoperability," Rogers added. "Otherwise people will continue buying the latest gadget that they personally like, or that somebody can convince them they like, and it's not going to meet their interoperability needs."

Cuellar also said lawmakers should push officials to make sure they are moving to address the problem of interoperable communications.

"It is a problem and we need to push them harder to make sure that we do this as soon as possible," Cuellar told reporters after the hearing.

During his testimony, Corey Gruber, the acting deputy administrator for FEMA's National Preparedness Directorate, said the agency is addressing the problem of interoperable communications through regional working groups. Guber said FEMA was making progress, but added that making sure communication devices around the country were interoperable posed a great challenge.

In a related area, Cuellar and Rogers said FEMA should remain part of DHS. Experts and officials have been debating removing FEMA from DHS and again making it a separate agency.

FEMA was formed as an independent agency during the administration of President Jimmy Carter. It existed that way until it was consolidated with other agencies to form DHS in 2003.

Richard Skinner, DHS' inspector general, told the panel that as result of recent efforts to reform the agency, FEMA is currently stronger than it was in 2005 and than it was before joining DHS. In addition, he said that although Hurricane Katrina "put the spotlight" on FEMA, the agency had never been ready to handle a catastrophic disaster of that magnitude. He said that if FEMA were an independent agency during its efforts to respond to Hurricane Katrina, the results would not have been better.

Skinner said he supported updating the 20-year-old law that authorized FEMA's federal disaster response activities but urged against again reorganizing FEMA and said the agency now had a clear direction.

"It's time to let the dust settle," Skinner said.

###

DHS plans enhanced interoperability standard

March 12, 2009

Federal Computer Week

By Alice Lipowicz

URL: <http://fcw.com/articles/2009/03/12/dhs-working-on-enhanced-interoperability-standard.aspx>

The Homeland Security Department expects to complete an enhanced version of its Bridging Systems Interface technical standard in the this summer to better enable interoperability among emergency response agencies, a senior official said at the GovSec conference today.

The enhanced standard will allow for better connections between systems that link disparate radio systems, said Luke Berndt, chief technical officer for DHS' Office of Interoperability and Compatibility. It also will provide for better linkages with different types of first responder radio systems.

The office and its partners developed the bridging system interface during the past two years to enable more effective use of Voice over Internet Protocol (VOIP) digital radio systems. In theory, those systems could be easily patched together. However, depending on how the systems were configured, they often were not working together effectively as a result of different manufacturers and different linkages.

Communities use patchworking boxes to link the VOIP radio systems.

In winter 2008, DHS tested the standard in tying together a half dozen radio patchworking boxes. Next week, it will demonstrate the standard with 12 patchworking boxes, Berndt said. "With VOIP, there are lots of standards and people are implementing it differently," Berndt said. "There are different technologies, standards and configurations."

To simplify things, the bridging systems interface suggests standardized basic settings, coding, channel labeling and transport methods.

Eventually, the goal is to leverage the power of the standard to transmit radio information and data. "The system can be leveraged to connect more advanced devices into the radio system," Berndt said.

###

DHS Emergency Communications Office Focuses on Implementation of NECP, State Plans

March 11, 2009

TR Daily

Paul Kirby

URL: Not Available

The Department of Homeland Security's Office of Emergency Communications (OEC) is working on establishing ways to measure progress in meeting milestones of the National Emergency Communications Plan (NECP) while helping states and territories carry out their interoperability communications plan, the office's director said today.

"We think we've got some pretty good ideas," Chris Essid, director of OEC, said during a session at the collocated Government Security Expo & Conference and U.S. Law Conference & Exposition in Washington. He said that working groups are developing criteria for reporting data to assess whether benchmarks in the NECP are being met.

The 83-page NECP, which DHS issued in July 2008, establishes goals and make recommendations to ensure a minimum level of interoperability for federal, state, and local agencies. The document, mandated by Congress, is the nation's first strategic plan designed to improve emergency communications.

There are dozens of milestones in the document, but the NECP lays out deadlines to meet three broad strategic goals to achieve minimum interoperability levels for communities in urban and other areas by 2010, 2011, and 2013.

Mr. Essid also said that OEC has received requests from 50 states and territories to hold workshops to help them implement their interoperability plans, which all states and territories were required to complete by December 2007. "Developing a plan and implementing a plan are two totally separate things, and that's what they're finding out," he said. "So we're doing . . . these implementation workshops across the nation to help them with these challenges." He said the workshops are customized to the specific interoperability gaps that states and territories have identified and range from focusing on governance and training to conducting exercises.

Mr. Essid said his office has also been busy providing technical assistance to states. In fact, it has 220 technical assistance requests for the current year - twice what it has the budget for. "So we have to prioritize this stuff," he added, saying OEC has asked states to prioritize the top five technical issues they have identified in their state plans.

Mr. Essid also said that while the Interoperable Emergency Communications Grants Program has been funded at only \$50 million a year in the past two fiscal years, the money has helped drive action at the state and local level in governance, training and exercises, and standard operating procedures - areas many agencies don't focus on when they acquire new equipment. "We're really starting to make some strides," he said, adding that the funding has enabled the hiring of full-time interoperability coordinators and has been used to pay for travel by public safety

officials to governance meetings. He said that ensuring interoperability is “10% technology, 90% coordination.”

Mr. Essid also stressed that the NECP will change over time, including getting more specific on spectrum issues, but he called it “a great starting point.” He said, for example, that the document was “kind of vague” on the development of a nationwide broadband network for public safety with the FCC still mulling action in that arena. “We’re waiting like everybody else to see how this thing plays out,” he said. “We couldn’t put something in the plan without a lot of these things running their course. . . . Once something’s decided, then we will put [out] our plan on where we need to go.”

He also said that his office had presented recommendations on ways to build out the stalled Integrated Wireless Network (IWN) - which began as a project of the Justice, Treasury, and Homeland Security departments - to include other federal agencies and state governments that are building statewide interoperable systems. “Since we got on the scene, we started asking questions, ‘Why’s IWN only those three groups? What about everybody else?’” Mr. Essid said. “We don’t want to build a tower across the street from somebody else who’s just built a tower because it’s easier, we can’t share, we can’t partner. You all would be surprised [at] the roadblocks and the barriers that are in the way to partnership, true partnership. . . . There are a lot of roadblocks - administratively and legal . . . - that stop people from doing what’s inherently common sense - working together.” For example, he said there are restrictions on a federal agency placing a repeater on a tower owned by state or local government.

“We think the partnership and coordination amongst all the different agencies is the way to go - not just those three,” he added. “We’re very hopeful that this approach is going to take hold.”

Asked a follow-up question about why the IWN has had such problems, he replied, “If you ask 10 people what IWN is today, you’ll get nine different answers. It’s because it wasn’t clarified up front, it didn’t have central project management. . . . It’s hard to work on a project when everybody has a different idea about what the outcome is.”

Mr. Essid also said that his office, which has been short staffed since it opened its doors in April 2007, was continuing to beef up its resources. He said it has about 30 employees currently with another eight people in the process of being hired. The office is authorized at 47 employees, including 10 regional coordinators - the positions for which are about to be advertised. “We’re making a lot of progress in that, but it is a slow process, to say the least,” he said, citing government hiring procedures, including obtaining security clearances for workers. He also said the OEC uses contractors to provide technical assistance to states and for other purposes.

###

First Responders: Random Antenna Arrays Boost Emergency Communications

March 11, 2009

Science Daily

URL: <http://www.sciencedaily.com/releases/2009/02/090225151337.htm>

First responders could boost their radio communications quickly at a disaster site by setting out just four extra transmitters in a random arrangement to significantly increase the signal power at the receiver, according to theoretical analyses, simulations and proof-of-concept experiments performed at the National Institute of Standards and Technology (NIST).

The NIST work may provide a practical solution to a common problem in emergency communications. The vast amount of metal and steel-reinforced concrete in buildings and rubble often interferes with or blocks radio signals. This was one factor in the many emergency communications difficulties during the response to the attacks on the World Trade Center on Sept. 11, 2001.

Antenna arrays have been studied and used for years, but the latest NIST work provides several new twists. Unlike the typical case in which antenna arrays boost signals to or from a distant target, a first responder's radio would be relatively close to the portable transmitters, ideally within the perimeter of the array. More importantly, since disaster sites rarely allow for niceties of design, NIST studied the benefits of a fast and imprecise technique—randomly placed antennas combined with coarse signal matching. The signals produced by the radio and portable transmitters need to operate at the same frequency and roughly in phase, such that the radio waves are fairly well synchronized and thus build on each other. Phase-matching was performed manually in the experiments but might eventually be possible remotely.

The NIST experiments covered a range of communications scenarios, using up to eight transmitters at different locations as well as objects such as concrete blocks that scatter radio waves. Across all experimental scenarios, researchers observed at least a 7 decibel median power gain—roughly a five-fold increase in the median received power—when splitting the power among four in-phase transmitting antennas, compared to using just a single transmitter. More important, researchers observed a 2.5 to 4-fold increase in the median signal at the radio receiver when using four in-phase transmitters instead of four randomly phased transmitters. More than four extra transmitters offered diminishing returns. (Unlike conventional repeaters, which re-send signals to maintain transmission strength across long-distance networks, the antennas in the NIST scenarios transmit the same signal at the same time to multiply its strength.)

Project leader Chris Holloway envisions portable transmitter devices shaped like hockey pucks, incorporating a small antenna and phase-shifting electronics, which could be thrown on the ground or stuck on a wall with the antenna always upright. “The idea is that someone, or even a robot, would have a bag of these things and would drop them off as they go through a building,” Holloway says. Other authors include a guest researcher from Sandia National Laboratories and a collaborator from the University of Colorado at Boulder. The work was funded in part by the Office of Community-oriented Policing Services of the U.S. Department of Justice.

###

Emergency workers: "can you hear me now?"

March 11, 2009

Effect Measure

URL:

http://scienceblogs.com/effectmeasure/2009/03/emergency_workers_can_you_hear.php?utm_source=sbhomepage&utm_medium=link&utm_content=channellink

We've all heard stories about how emergency workers (aka first responders) have had trouble communicating at disaster sites because their equipment was not "interoperable," that is, operated at different frequencies or use incompatible methods. But disasters in big cities have other problems, even when the interoperability one is solved. There are so many physical obstacles -- buildings, steel girders, possibly rubble or wreckage -- that create barriers or echoes or other problems that prevent workers from speaking to each other even when they are close by. An article, still in press at IEEE Transactions on Antennas and Propagation by Young et al., the National Institute of Standards and Technology (NIST), proposes a novel solution to the problem: a random antenna array. Since the paper is not yet published I haven't read it (and anyway, realistically I not much of an antenna expert), but there is a good account of it via ScienceDaily. It is just the kind of idea I like: solving one problem, in emergency services, using an approach from a very distant discipline (antenna engineering).

Here's the idea. Use an array of small antennas connected to low power signal repeaters that are synchronized with each other and the transmitter used by the first responder. Where would you put these smaller antennas? The surprising answer: wherever. "Wherever" is my colloquial version of "randomly," although in the sense I get from the paper's method, it really means, "unsystematically". Synchronized here means "in phase," that is, each of the random array antenna-repeater combinations have to be sending out the exact same part of the signal at the exact same time. When there are a lot of echoes from signals bouncing around, that is not a given, so some kind of phase matching circuitry will be required in the little repeater-antenna combo.

In simulations and experiments the NIST engineers were able to demonstrate that unsystematic dispersal of as little as four of these little guys produced a 5 fold increase in median received power compared to a single transmitter of equivalent power. Making sure the signals were in-phase made a real difference, somewhere between 2.5 and 4 fold difference in median signal compared to unsynced signals. If you have a hard time envisioning what this system might look like, the project leader supplies this description:

Project leader Chris Holloway envisions portable transmitter devices shaped like hockey pucks, incorporating a small antenna and phase-shifting electronics, which could be thrown on the ground or stuck on a wall with the antenna always upright. "The idea is that someone, or even a robot, would have a bag of these things and would drop them off as they go through a building," Holloway says. (ScienceDaily)

The unsystematic placement of the four repeaters is an important element, not because it performs better than a systematically designed one but because in an emergency situation putting these things "wherever" is probably the best you can do. What this work shows is that it works if you roughly match the signals. If you don't, it doesn't work or works poorly. The matching of phases allows the signals to reinforce each other, leading to the boost in received power.

Maybe you have to be geeky to take pleasure in this (I plead guilty), but the underlying problem for emergency workers at a physically challenging disaster scene is deadly serious. This is the kind of relatively simple, innovative and clever solution that saves lives. These little phase-matching repeater devices shouldn't be expensive to make and may have many other uses, including routine low power communication within physically complex settings.

My favorite kind of technological solution: cheap and effective.

###

Claire Bailey, Arkansas Chief Technology Officer, Discusses State's Wireless Information Network

March 10, 2009

Government Technology

By Jim McKay

URL: <http://www.govtech.com/gt/625962>

Under CTO Claire Bailey's leadership, Arkansas has made notable progress toward interoperability by implementing its Arkansas Wireless Information Network (AWIN). This 700/800 MHz system has greatly improved interoperability and eliminated some of the stovepipes that existed between public safety agencies and jurisdictions.

Q: How did Arkansas break out of the stovepipe scenario, where agencies and jurisdictions don't communicate?

A: After 9/11 it was decided by a key group within our leadership to look at funding mechanisms and start moving forward with an interoperable communication system.

The [Arkansas] Department of Emergency Management conducted a survey. Through that, they asked to the locals questions and got feedback from them to identify what they thought their priorities are. There are always so many priorities that exist. So we worked really hard to put together a committee that was representative of the people carrying the radios. Particularly with public safety, our goal was to listen to the people who carry the devices.

Q: How did you get all the stakeholders to the table?

A: We recruited people who were recognized across the state for their leadership. In particular, we talked to our Association of Arkansas Counties and we reached out to our County Judges Association and the Emergency Management Association. From there, we asked them to nominate who they wanted on the steering committee.

We complemented that group with the technology group -- that's the group I represent. Then our director of security management, who is also the homeland security officer for the state, and representatives from the governor's office, state police and [the technology group] formed the steering committee. We've since grown that group because now we are out of that implementation phase and into the operational aspects of it.

We also engaged an independent quality assurance group that does not work for the state. We did a request for proposal to find one that specifically engineers radio systems across the nation, and I use that in a degree of risk mitigation because -- from a state perspective, in the state-paid plan system -- I cannot hire at the salary that would compensate for the level of individuals I would need that we could get for that quality-assurance group.

Q: What hurdles did you have to sidestep during deployment?

A: For many people, the system we had been investing in had not worked, in their minds, and didn't support the state. So there was a lot of concern that we were going to create a new system and spend a lot of money on a technology that would not meet their needs. That made me realize how important it was to explain the differences between analog and digital to a live community of people who may or may not understand that process. We really had to make the system perform.

###

Interoperable Communications Biggest State Challenge in Homeland Security, says NGA Survey

March 9, 2009

Government Technology

URL: <http://www.govtech.com/gt/articles/625780>

The National Governors Association Center for Best Practices (NGA Center) today released the results of its fifth annual survey of governor's homeland security advisors.

The 2008 survey provides an overview of the homeland security landscape at the state level, both in terms of how states have structured themselves for their homeland security missions and in the issues and challenges that dominate their agendas, and offers a clear assessment of the DHS-state relationship. Among the key findings from the survey:

- * More than 75 percent of respondents expressed satisfaction with their communication with the U.S. Department of Homeland Security (DHS), a significant increase compared to the 42 percent satisfaction rate reported in 2007
- * According to survey respondents, developing interoperable communications is the issue for which states most need federal assistance -- in the form of funding and guidance
- * Survey respondents use their fusion centers as the primary method for sharing information with DHS
- * All respondents either have or are in the process of coordinating their homeland security plans with owners of privately-held critical infrastructure
- * More than 80 percent of respondents have determined the homeland security roles and responsibilities for their National Guard personnel.

"During the past five years, states have adjusted their governance structures and priorities to meet changing threats and better align federal grant program requirements," said John Thomasian, director of the NGA Center.

The survey targeted members of the Governors Homeland Security Advisors Council (GHSAC), which is comprised of the top homeland security directors as designated by each governor in all states, territories and the District of Columbia. The survey included questions related to organizational structures, state priorities, interstate relations, federal grant programs and other salient issues. Forty-three homeland security directors, or approximately 80 percent of the GHSAC, responded to the survey in whole or in part.

According to the homeland security directors, five priorities emerged as key to sustaining an enhanced level of security, including coordinating the efforts of state and local agencies; developing interoperable communications for emergency responders; identifying and protecting critical infrastructure; developing a state intelligence fusion center; and strengthening citizen preparedness.

###

FEMA requests comments on alert standard

March 09, 2009

Federal Computer Week

By Alice Lipowicz

URL: <http://fcw.com/articles/2009/03/09/fema-submits-emergency-alert-standard.aspx>

The Federal Emergency Management Agency is asking for comments on its proposed technical standard for emergency alert messages in the Integrated Public Alert and Warnings System (IPAWS).

IPAWS is the next-generation public warning capability being developed FEMA to create an integrated public and private system capable of delivering warnings through television, radio, telephone, e-mail messages, text messages and other technologies.

FEMA submitted its 53-page Emergency Alert System proposed message profile requirements for IPAWS to the Organization for the Advancement of Structured Information Standards (OASIS) on Dec. 12, 2008. The organization is considering the emergency alert profile as a possible subcategory of the organization's existing Common Alerting Protocol Version 1.1 Extensible Markup Language Standard.

FEMA on March 3 asked emergency management industry executives, state and tribal leaders, and first responders to comment on the emergency alert system profile at OASIS. The comment period is open through May 2.

"Arriving at standards and protocols that work for everyone is a complex process," Walter Florence, IPAWS program manager, said in a statement. "We encourage industry, and our public and private stakeholders to participate in this important venue to help us meet this challenge."

FEMA's federal partners in developing the federal CAP profile include the National Weather Service, Federal Communications Commission, the Emergency Interoperability Consortium and Homeland Security Department's Science and Technology Directorate Command, Control and Interoperability Division.

IPAWS will initially design the capability to pass alerts and warnings to the emergency alert system, the profile requirements state. Additional warning systems, such as the National Oceanic and Atmospheric Administration's HazCollect and the Federal Communications Commission's Commercial Mobile Alert System, will be added in the future.

###

Emergency Responders Need Equipment Compatibility, DHS Official Says

March 9, 2009

Government Technology

By David Boyd

URL: <http://www.govtech.com/gt/articles/625804>

The question from the 1984 Ghostbusters film -- "Who ya gonna call?" -- is a loaded one around here. One of my jobs as the director of the Command, Control and Interoperability Division at the U.S. Department of Homeland Security's Directorate for Science and Technology is to ensure that our heroes -- emergency responders -- can talk to one another. The buzzword is interoperability. I hear it daily, and there's no question it's critically important.

There's also no doubt in my mind that interoperable technologies already exist. Of course, we can spend years making them better, faster and more powerful than ever before, but here's the reality: We can buy technology that meets most of our needs now, while we continue to work on making the better stuff available. However, before we can begin implementing the technology, we must face a bigger issue: cultural differences.

The Human Factor

Some emergency response agencies remain rooted in turf battles that make collaboration nearly impossible, while other agencies simply don't consider collaboration in their planning. Without collaboration, interoperability can't occur. Command structures, procedures, protocols and shared agreements must be established among regional agencies for responders to provide swift, coordinated support during incidents.

As we know all too well, a lack of communications interoperability has plagued the emergency response community for decades. After the 1995 Oklahoma City bombing, many responder agencies told the government that they couldn't communicate with responders from other agencies. This problem came to light once again following 9/11. In the following months, unions representing New York firefighters cited inadequacies in the emergency radio communications network as a major contributing factor in the death of more than 100 firefighters. Having failed to find a way to communicate with his on-site commander, a firefighter trapped in one of the towers was forced to call home and beg his wife to phone his firehouse and communicate his

location to incident command. The scale of the 9/11 attacks raised the issue of communications interoperability to a national level not seen before. In these incidents, equipment incompatibility was only part of the problem. Far bigger issues were of a more human nature.

In crises requiring multiple response agencies -- including fire, police and emergency medical services -- the questions are fundamental: Is there a standard operating procedure for the communications equipment being used? Has the equipment ever been used and tested? Have all responding practitioners been trained on the technologies? Have there previously been practice exercises among the agencies involved? Do responders from these agencies know the governance procedures -- who can talk with whom, when, where and on what frequencies? Is there a common language being used? (For example, "10-6" may mean "I copy" to one agency, and "officer down" to another.)

Each of these questions relates to human interactions in the field, and each becomes an area of concern before the first boot hits the ground. Every argument, from "I'm not going to have that cell tower put up in my backyard," to "My team doesn't talk to the fire chief's team," to "We never had the money in our community budget to buy new radios," serves as a major roadblock to interoperability. More importantly, human interactions can significantly impact the way an incident response plays out. Without unified efforts and support within and among participating agencies, response won't improve.

A Bottom-Up Approach

We advocate a bottom-up approach to addressing and strengthening communications interoperability nationwide. In other words, the federal government can't and won't mandate how a state or local community organizes incident response activities. Those decisions are standard operating procedures, training, exercises, governance and equipment usage can be shared with the emergency response community. The Department of Homeland Security's Office of Interoperability and Compatibility is doing just this by providing guiding principles that may help solve an individual community's problems, depending on that community's budget, manpower, need and other factors.

In this vein, we asked the emergency response community to help us develop solutions, including a strategic approach described in the Interoperability Continuum, is a tool that helps response agencies and policymakers plan and implement solutions. The continuum also serves as a guide to help agencies reach optimal levels of communications interoperability. This tool emphasizes that all critical elements of interoperability must be addressed together to develop a sophisticated solution. Even more importantly, this approach represents the combined wisdom of emergency responders at all government levels nationwide.

Improving the Technology

Outside of frameworks and strategies, we are working directly with emergency responders to identify the capabilities they need and with industry leaders to ensure that developing technologies meet those needs. We're currently partnering with manufacturers to demonstrate the first portable multiband radio (MBR) prototype. The MBR will let responders communicate with other agencies regardless of the radio band on which they operate. Equal in cost, size and weight

to existing portable radios, the MBR provides the nation's responders with cutting-edge communications capabilities.

While we're making great strides in strengthening communications interoperability, all the goblins won't be tackled immediately. We have only to recall our great U.S. interstate highway system: Once it was decided upon, it was built almost immediately, but it took 40 years for us to agree on signage from state to state.

We aim to do better than that.

###

Police change over to 800-MHz radio system

March 08, 2009

The Daily Reflector

By Michael Abramowitz

URL: <http://www.reflector.com/news/police-change-over-to-800-mhz-radio-system-477457.html>

The Greenville Police Department added its link last month to complete the emergency communications chain in Pitt County, officials said.

The move makes Pitt the first county in the state to have all of its key emergency response agencies tied to one “interoperable” communications system, administrative coordinator Capt. Cheryl Curtis said.

“It's a major achievement for public safety in Pitt County,” Chief William Anderson said.

The bulk of the cost for the hardware and software package was paid primarily with a series of federal and state grant funds dating back to the mid-1990s, with some matching city and county funds for the respective agencies, Curtis said. “This grant opportunity is the result of a Community Oriented Policing Services grant,” she said.

The heart of the communications system is an 800-megahertz digital radio system called VIPER, an acronym for Voice Interoperability Plan for Emergency Responders.

It provides one channel for all public safety agency personnel to communicate voice and data on demand and in real time, without the need to relay calls through a communications center, according to the National Task Force on Interoperability.

Each agency communicates within its own part of the system on a separate talk group and each can join the 800 MHz trunk when a situation warrants.

The main communication towers and infrastructure for the statewide system were funded by the Department of Homeland Security.

“Prior to this, some local agencies operated separately on either UHF or VHF frequencies, while others were operating on the state-operated system,” Curtis said. “The grants gave us the funds to purchase the necessary equipment and establish five different communications centers in Pitt County.”

The state system has 24,000 users in 73 counties currently in the network, managed and coordinated by the Department of Crime Control and Public Safety, through the State Highway Patrol.

The Greenville Police Department, Pitt County 911, Pitt County Sheriff's Office, East Carolina University Police Department and the Pitt County Memorial Hospital Police Department operate the five main console centers. PCMH is standing by to come onto the live system while it completes construction of a new communications center, where its console will be housed, Curtis said.

“Before this system, when another agency provided assistance to GPD at an emergency situation or an event like the annual Halloween festival, deputies had to be paired with officers because we couldn't communicate by radio,” Curtis said. “Greenville Fire-Rescue couldn't communicate with police when both agencies were working at the same location.

“Now, when two or more of these agencies come together at one event, they can communicate as one talk group,” she said.

The Pitt County Sheriff's Office was the first agency in the county to make the move to the 800MHz trunking system, in 2005, but Sheriff Mac Manning had been wanting the system for years, he said in 2007.

“I've been beating this drum since Hurricane Floyd and the floods of 1999,” Manning said. “During that time, we had all this mutual aid coming in to help, but command and control was a big issue. This will allow all agencies to be on the same page in those types of situations,” he said.

Several municipal law enforcement agencies, including Ayden, Bethel, Farmville, Grifton, Simpson and Winterville also participate in the system. Partners also include several state universities and federal law enforcement agencies.

Of the 238 sites planned for the state system, 125 are now completely funded and on the air, according to a Crime Control official.

###

First Responder IPT to be Heavy in Practitioners

March 7, 2009

Government Technology

By Corey McKenna

URL: <http://www.govtech.com/gt/articles/625613>

When a disaster strikes, it's the local government and first responders on the ground who must respond, not to mention the emergency firefighters, emergency medical technicians and police officers respond to on a daily basis. And by their own admission, the Department of Homeland Security Science and Technology Directorate (DHS S&T) needs to do better job of reaching out to this community. To that end, DHS S&T is in the process of forming an integrated product team dedicated to serving the technology needs of first responders.

"We're leaving out a really important part of the homeland security enterprise and that's the first responders who are day to day out there securing the homeland with many other things that first responders do," Brad Buswell, undersecretary for science and technology at the U.S. Department of Homeland Security, told a group of first responders at a recent stakeholders' conference. "So we're looking at a 13th [integrated product team], the First Responder IPT."

"The function of that group is to feed into the federal decision makers that will then apply resources--federal resources--or help to bring private sector resources to bear, help to bring commercial off the shelf products to solve problems," Buswell said.

"The concept that we're going with is to make this organization heavy in practitioners," Randy Zeller, Director of Interagency and First Responder Programs with the DHS S&T Directorate, said. "Right now, the sector coordinating council is all associations. There are ten associations that make up the group. We're going to go to them and say 'we're the government coordinating council. We'd like to set up an RDT&E working group.' We want two thirds of the membership to be practitioners. In my mind it's seven EMTs, seven law enforcement and seven fire and then ten to eleven being associations. But we don't want associations to dominate. We want practitioners actually flown in from the field on this. We're going to pay the freight. Doing these meetings is going to take some travel, so if we're bringing in the police chief from Omaha, we'll bring him or her in to the IPT with us."

Each of the critical infrastructure sectors has an emergency services coordinating council, Zeller said. "Our intention is to leverage off the fact that emergency services has a sector coordinating council and a government coordinating council we're proposing with the infrastructure protection folks to stand up a first responder research, development and test and evaluation coordinating" working group."

"We're going to stand up a small committee called the First Responder IPT coordinating council. That will be our customer," he said. On that will be a law enforcement representative, an EMT representative and the head of the U.S. Fire Administration as the fire representative.

"This will meet probably quarterly. Certainly every six months," he said. The idea will be to get out ideas on what the IPT should be working on.

In addition meetings with first responders face-to-face, officials, panelists and attendees expressed interest in using social networking to connect first responder communities of practice as well as the private sector to aid in developing technology requirements. "We have a proposal from a local Seattle IT developer to give us a software and a process that might link this group

together virtually," Zeller said. This network, conceivably, could also link first responders to private technology providers in order to facilitate the process of getting from capability gap to commercialization.

Jose Vasquez, director of first responder technology at DHS S&T, announced the launch of www.first-responder.gov, a new Web resource that will be a repository for all the information available to first responders from across the federal government. This Web site also contains a link to the TechSolutions page where first responders can submit a capability gap for consideration as a target of technology development.

"You can go into any mall in America, and looking at the directory and the site map you can find the store that you want. You don't ever to have stepped a foot in there, but by looking at the syntax, you know you have a syntax that is normally Womens, Mens, Childrens, Electronics, Food, Other and Accessories. Looking at the directory you can get there. Firstresponder.gov is a similar thing," Vasquez said. "You have police, fire, bomb disposal, EMS and then there is a tree that will hopefully take you to the information that you are looking for.

"The next step for this is not just collecting the static information that others have available but moving to the communities of practice. That's what we're looking to do in the next year-to grow that so it becomes more dynamic and there is an exchange of information that's happening with the first responder community amongst themselves and with state and local and federal government entities.

"It's not .dhs. It's .gov. We were able to convince the CIO that at the end of the day when you're talking first responders and the federal response available to first responders it involves a lot of different entities. It also involves Health and Human Services, it involves [the Department of Defense]. It involves many others. This effort, although we have started it within DHS and much of what you see there is us trying to get the collective DHS to have one face, Vasquez said. "We are looking to expand that with CDC and DoD and have one face for the first responders so they can go and find the information they need," he said.

IPT Organization

IPTs are lead by the heads of the agencies concerned with the technology being developed who work with the appropriate division of the S&T directorate on the technology development and a management organization on the acquisition of the resulting technology. The Border Security IPT, for example, is headed up by the heads of Immigration and Customs Enforcement and Customs and Border Protection. Acquisition is divided between DHS S&T and the directorate's management organization, and the borders and maritime division of DHS S&T is the technology provider. In some cases actual practitioners may be invited to the meetings to provide their input.

IPTs meet on a quarterly basis-more frequently in some cases. There are about 250 technologies being worked on right now.

Already the directorate has established 12 such teams to focus on technology needs serving each of the operating components of the Department of Homeland Security. But there were, by some

estimates, 25 million first responders who were first to respond to fires, floods and other disasters as well as maintain public safety and health who the department wasn't engaged with as much as it could be.

"When you're talking about limited budgets, you don't want to reinvent the wheel," said Linda Vasta, Director of West Coast Operations, Interagency and First Responders Program Division, DHS S&T. "There are a phenomenal amount of resources available to us that we leverage into. The Undersecretary has the authority to leverage the work that is being done by the Department of Defense laboratories - also the Department of Energy laboratories. Within the Department of Homeland Security Science and Technology we also have four laboratories," she said.

"The key here is how do we get the technology out the door, leveraging the research that has already been done," Vasta said. "To do this, what our former undersecretary did was he took the laboratory alignment that was in place and those existing Department of Energy national laboratories and he aligned them and gave them the choice to align with three of the divisions so that the work being generated by the Department of Energy national laboratories is in alignment with our divisions."

###

Obama nominates Genachowski to head FCC

March 6, 2009

Urgent Communications

By Donny Jackson

URL: http://urgentcomm.com/policy_and_law/news/obama-genachowski-fcc-0306/

President Barack Obama this week officially announced plans to nominate Julius Genachowski as the new permanent chairman of the FCC.

Described by many Beltway sources as the "worst-kept secret in Washington," the nomination of Genachowski—a former Harvard law-school friend of Obama—to head the FCC was not a surprise, having been reported by multiple media outlets since December. If the nomination is confirmed by the U.S. Senate, Genachowski will replace Michael Copps, who has served as acting chairman of the FCC since Kevin Martin resigned in mid-January.

"Julius has the knowledge, experience and dedication to lead this agency forward as we tackle the many challenges confronting the country—and the commission," Copps said in a prepared statement. "I look forward to the prospect of working with him on a communications agenda focused on serving consumers and the public interest."

Genachowski was general counsel to FCC Chairman Reed Hundt during the Clinton administration before entering the private sector in a variety of roles, including co-founding startup incubator Launchbox Digital. Overall, various industry sources said Genachowski's background has been geared more toward commercial endeavors, so his positions on issues related to first-responder communications are largely unknown.

“I’m looking forward to working with him as he becomes the chairman,” Harlin McEwen, chairman of the technology committee for the International Association of Chiefs of Police (IACP) and chairman of the Public Safety Spectrum Trust (PSST), said during an interview with Urgent Communications. “I think we’re excited that we’re going to have new thinking at the commission, and we’re hoping to have a good relationship.”

Robert Gurss, director of legal and government affairs for the Association of Public-Safety Communications Officials (APCO), echoed this sentiment.

“We look forward to working with him,” Gurss said during an interview with Urgent Communications. “When he worked for Reed Hundt during the first Clinton administration, I always found him to be very responsive to public safety’s issues.”

###

DHS Official Stresses Importance of Training First Responders on Equipment

By Paul Kirby

URL: Unavailable

It’s crucial for first responders to become familiar with equipment before they use it in emergencies, a Department of Homeland Security official said yesterday during a session at the collocated Government Security Expo & Conference and U.S. Law Conference & Exposition in Washington.

“In an emergency, they will not use something they haven’t used all the time and are not comfortable with,” said David Boyd, director of DHS’ Command, Control and Interoperability Division, which is part of the department’s Science and Technology Directorate.

He stressed the importance of components of the interoperability continuum used by DHS’s SAFECOM program other than technology - governance, standard operating procedures, training and exercises, and usage. Of governance, he said, “That’s the tough nut to crack.”

Luke Berndt, chief technology officer in the Office for Interoperability and Compatibility, which is part of Mr. Boyd’s division, described efforts underway - both in the lab and the field - to improve interoperability among the more than 60,000 emergency response agencies in the U.S. For example, he said his office worked with government and industry partners to establish an interface that allows disparate voice-over-Internet-protocol systems used by public safety agencies to connect.

Doug Maughan, cybersecurity program manager in Mr. Boyd’s division, outlined various activities he and his colleagues are working on, including allowing entities from around the world to use its research test bed to test malicious software. So far, 167 entities have used the test bed, he said.

###