Interoperability & Emergency Communications News Clips
May 15, 2009 – May 29, 2009

SPECIAL REPORT: DHS creates bonds among first responders

May 29, 2009
Federal News Radio
By Jason Miller
URL: http://www.federalnewsradio.com/index.php?nid=35&sid=1685307

When first responders across the country have a technology need, they do not turn to vendors for help.

These police, fire, emergency medical services and many others depend on the Homeland Security Department's Science and Technology Directorate's Office of Interoperability and Compatibility (OIC).

Luke Berndt, the office's chief technical officer, says OIC has grown into its role as a facilitator.

"We can bring together communities and help them come up with a good description of what kind of capability they want," Berndt says. "It has to be broad enough to cover the larger community, and allow for different companies to provide the capabilities and allow for the community to have access to those products."

Berndt adds that OIC also provides a common place for first responders and vendors to agree on standards and governance issues.

"Through our Safecom grant guidance, we recommend best practices for procuring equipment and operating it," he says. "We like to unify requests through grants or request for proposals, and then work with industry to meet those requirements."

Berndt says OIC didn't always play this facilitator role, He says at one time DHS and the first responder community thought a one-size fits all approach was best.

"What has been gained is a better understanding of what the problem space is, and what is needed to solve the problem," he says. "It is not necessarily one technology or one training course. It is all of us working together holistically."

One example of this process coming together is OIC's lead role in developing the P25 land mobile radio standard, Berndt says.

"We serve as the technical representative for public safety workers, and we are writing standards in that space," he says. "What we are heavily focused on is different testing standards as a key component in developing successful systems."

Many public safety agencies are buying P25 compliant radios now, in part, to ensure interoperability among different systems.

"We have developed a process which P25 equipment will be tested against by individual labs," Berndt says. "So people procuring systems will have more and better information available to

them. They will know it has been tested against different equipment for interoperability and done in standard format."

Berndt says along the same lines is another project, a multi-band radio system, that DHS has a lot of expectations for.

So much in fact that OIC will fund a pilot this fall in several areas-both rural and metropolitan cities-to test a radio that can, with a turn of the dial, be used across different spectrums.

"Now public safety gets assigned to different frequency bands across the spectrum and because of that many radios can't communicate with each other--even if they are following standards," Berndt says. "This type of product can communicate on all different types of frequencies and bridge them just by turning a dial."

Berndt says the goal of the pilot, like many of OIC's programs, is not just to test the technology, but to see if the radio's really meet the first responders' needs.

The office also is working on several other longer term projects that may take three-to-five years to be viable.

Berndt says these include radio over wireless broadband, and the convergence of voice, video and data systems.

"The best and most functional solutions are not developed in vacuum," he says. "We have to consider what technology is currently in place and we have to integrate new technology with what exists already. We know good solutions are not developed in lab, but they are developed by working with users."

<p align="center">###</p>

Mutualink's MICP Interconnects 22 N.J. Health Centers for Pandemic Preparedness

May 28, 2009
TMCNet
By Vivek Naik
URL: http://healthcare.tmcnet.com/topics/healthcare/articles/56930-mutualinks-micp-interconnects-22-nj-health-centers-pandemic.htm

Mutualink has announced that 22 hospitals and health facilities across northern New Jersey are interconnecting with each other by deploying Mutualink's Multimedia Interoperable Communications Platform as an important part of its hazards preparedness drive to guarantee communications continuity during pandemic outbreaks, hurricanes, earthquakes, war, unforeseen emergencies, alien invasions, and terrorist attacks.

"We selected Mutualink because of its ease of use, ease of deployment, low cost and full featured capabilities," said Mary Danish, Corporate Director for Emergency Preparedness for

Saint Michael's Medical Center. "Mutualink enables us to create a large scale, real time interoperable emergency communications network today at a reasonable cost while getting best of breed features and capabilities."

In the aftermath of the disasters caused by Hurricane Katrina and the twin towers going down, citizens as well as the government identified interoperable emergency communications on National scale were the topmost priority since people had methods to communicate, but could not due to technological incompatibility.

Preparedness plans, say officials, have been drawn by the National Response Framework (NRF), National Incident Management System (NIMS) and National Infrastructure Protection Plan (NIPP) for an all hazards, scalable response capability that relies majorly on all public and private agencies virtually teaming up and remotely executing tasks as per the directives of a coordinated command and control center via robust communications.

Officials at Mutualink say that the solution will make sure that communications among hospitals, public safety, law enforcement, and other related government agencies are continuous and smooth irrespective of differing radio and telephone systems, and enables direct, live video streaming at all times.

"The solution provides us with real time situational awareness and multi-partner communications capabilities during times of emergency," said Brian Dolan (News - Alert), Director of Disaster Preparedness for the University of Medicine and Dentistry of New Jersey Hospital. "Being able to communicate in real time and securely share information during a crisis is a major priority in achieving an enhanced state of readiness and response capability that can save lives. This deployment helps us meet revised and improved advanced emergency preparedness and readiness standards established under the National Preparedness Goal, as articulated in National Response Framework (NRF) and under National Incident Management System (NIMS)."

The new interoperable emergency communications network is being funded by grants from the U.S. Department of Health and Human Services (HHS) for pandemic planning under the Pandemic and All-Hazards Preparedness Act of 2006, says Mutualink.

"Mutualink's platform creates multimedia interoperability among 22 hospitals and healthcare facilities and the first responders of the numerous New Jersey cities that have already deployed Mutualink," said Mark Hatten, Chief Executive Officer, Mutualink. "It is a positive step in the goal of meeting all hazards, all disciplines interoperability."

The World Health Organization has declared that the Influenza A (H1N1) virus has progressed to Phase 5 status, reported TMCnet, which indicates that the pandemic could be in grave danger of sweeping through the nation. This uncertain air of expectancy is stressing hospitals, schools, businesses and communities to finalize their pandemic response plans, and is forcing the nation to look at possible alternative methods to continue workflow.

The U.S. federal government's National Strategy for Pandemic Influenza Implementation Plan, a report says, highlights the significant advantages of using telecommunications and broadband

connectivity related solutions to continue working remotely and avoid physical proximity, and therefore slow down the disease spread.

"Pandemic influenza, bioterrorism and large scale natural and manmade disasters have the potential to cause catastrophic damage to our communities and strain local resources," said Danish. "These threats and hazards are real. In case of a large scale event, ensuring on-demand surge response capability through the cooperation of our local partners, and our state and federal resource partners is essential to mitigating harm and quickly meeting demand. Establishing an interoperable communications capability is a vital component in facilitating real time, flexible and accurate information sharing to provide an effective and scalable response,"

It may be noted that at the inauguration of President Barack Obama in Washington, D.C., security agencies used Mutualink's multimedia sharing platform, as TMCnet reported, to communicate easily over incongruent radio and telephone systems and share direct live video surveillance feeds.

Mutualink had earlier demonstrated comprehensive compatibility with the Bridging Systems Interface (BSI) specification, reported TMCnet, which is a VoIP interoperability specification supported by SAFECOM, a communication program within the Department of Homeland Security focused on interoperable communications for emergency response agencies.

<div align="center">###</div>

New York City Wireless Network Goes Live Citywide
May 22, 2009
Government Technology
By Andy Opsahl
URL: http://www.govtech.com/gt/690241?topic=117699

New York City first responders have high-speed wireless connectivity anywhere across the city's more than 300 square miles, thanks to the newly deployed New York City Wireless Network (NYCWiN). The price tag was $500 million, paid to vendor Northrop Grumman to build the network, then operate and maintain it over the next five years. The New York City Department of Information Technology and Telecommunications (DoITT) initiated the project with the vendor in 2006.

NYCWiN allows responders to transmit large file transfers, including fingerprints, mug shots, city maps, automatic vehicle location and full-motion streaming video. As a fully interoperable, IP-based network, NYCWiN links the various responder disciplines to that information wirelessly. This means New York Fire Department and New York City Office of Emergency Management workers could utilize video being shot by the New York City Police Department (NYPD), explained Nicholas Sbordone, director of external affairs for the DoITT. The officials commanding the responders do so from remote sites using the real-time data and video feeds.

The DoITT and NYPD plan to install wireless modems in 1,800 patrol fleet vehicles, enabling officers in the field to access applications previously available only from their desktops. Mug shots and moving traffic violations information are prime examples, according to the DoITT.

Unlike many of the citywide wireless networks proposed in the past using Wi-Fi, NYCWiN is powered by a Universal Mobile Telecommunications System (UMTS). New York's UMTS uses radio towers built throughout the city that keep a user connected as he or she moves from tower to tower. Wi-Fi, by contrast, would require users to reconnect as they move from one transmitter's field range to another's, explained Steve Harte, associate commissioner of wireless technologies at the DoITT. He said UMTS towers were similar to cell phone towers.

"We covered the city with 380 cell sites. If we did Wi-Fi it would have taken 20,000 Wi-Fi transmitters," Harte said.

Placing the UMTS towers required approval by zoning bureaucracies throughout the city.

"You have to go out and make multiple presentations to community boards, the elected officials across the city council and the outer-borough presidents to get approvals for some of the sites. That was the most challenging, but it also brought them into the process. It enabled us to really express the benefits of the network to the communities that the first responders and public service agencies serve," Harte commented.

DoITT Commissioner Paul Cosgrave considered the most challenging aspect of deployment to be alleviating community health concerns regarding the UMTS towers, which transmit radioactivity. Cosgrave explained that the towers transmitted radioactivity at a level far below the maximum permitted by the FCC.

"There is no more radioactivity coming out of a cell site than coming out of a microwave oven. In fact, people might be more exposed by having a cell phone at their heads all day," Cosgrave said.

The DoITT resolved the concerns with community education outreach efforts.

While Northrop Grumman will handle the daily operation and maintenance of NYCWiN, agency IT staff will be responsible for securing the network. Employees, like building inspectors, have already begun using mobile applications enabling them to submit inspection data from the field. Saving inspection employees from bringing that information back to the office physically has quadrupled their productivity, according to Sbordone.

"The same security rules and policies that are established for an end-user logging on to their desktop computer, whether they're accessing agency databases or the Internet or intranet, all of those rules apply to handhelds that are deployed in the field," Sbordone said.

6

Florida trains communications experts for upcoming hurricane season
May 22, 2009
Florida National Guard
By Tech. Sgt. Thomas Kielbasa
URL: http://www.ngb.army.mil/news/archives/2009/05/052709-Florida.aspx

CAMP BLANDING JOINT TRAINING CENTER, Fla. – The torrential rains in Florida gave a realistic backdrop to National Guard training this week, as Soldiers and Airmen prepared their emergency response efforts for the upcoming hurricane season.

More than 100 members of the Florida National Guard completed three week-long courses in northeast Florida May 5-22, learning how to operate mobile Regional Emergency Response Network (RERN) systems.

The systems are capable of providing high-speed Internet connectivity to computers and laptops, and signal strength for hand-held radios.

The RERNs use a variety of frequencies to provide defense support to civilian authorities in times of state-wide emergency, helping them assist in disaster recovery.

This is the fourth year the RERN classes have been held here at Camp Blanding.

Despite the soggy weather, the trainees studied all aspects of the systems, including troubleshooting, basic repair, and responding to the communications needs of their "customers" in the field.

The course even included a "night operation" where the Soldiers and Airmen set up and operated the systems in the dark.

The Florida National Guard currently has 17 RERN systems available for emergency response missions. They have been used by Florida National Guard members in disaster recovery operations in Florida, Texas, Louisiana and Kentucky, and even during the Presidential Inauguration ceremony in Washington, D.C., earlier this year.

According to 290th Joint Communications Support Squadron Commander Lt. Col. Loretta Lombard, nearly 90 percent of her squadron has attended the training and about half of her Airmen have actually operated the systems during missions.

"It's a mission they enjoy, and we're very happy to help Florida and other states," Lombard said. "We're hoping for a quiet (hurricane) season, but we're very prepared for whatever it might bring."

Hurricane season 2009 begins June 1.

<p style="text-align:center">###</p>

Technology's Role in Disaster Mitigation

May 22, 2009
Government Technology
By Corey McKenna
URL: http://www.govtech.com/gt/690392

Lt. Gen. Russel Honore believes that the key to mitigating the effect of disasters lies in being prepared for them. As the commander of Joint Task Force Katrina responsible for coordinating military relief efforts across areas of the Gulf Coast impacted by Hurricane Katrina, Honore faced many challenges that could have been made considerably easier if people had been prepared with the help of technology.

Hurricane Katrina killed more than 1,800 people. In contrast, Hurricane Ike killed fewer than 30 people, Honore told the audience at the U.S. Department of Homeland Security Science and Technology Stakeholders East 2009 Conference in Washington, D.C., last week. That's largely because people were warned and evacuated ahead of time.

Following Hurricane Katrina, treating patients who were evacuated from New Orleans was tremendously difficult because medical personnel didn't know what medications they were taking and their medical records weren't available.

"There are some science and technology opportunities there," he said. One of them has to do with sharing electronic medical records and sending records with patients on CDs or thumb drives. "When they arrive at the next station [without medical records] they are costing the United States government an enormous amount of money, because now we have to go in and do blood tests to try to figure out what's wrong with all these elderly patients," he said. Later adding, "This didn't just happen during Hurricane Katrina. It also happened during Hurricane Ike last year."

That is something that needs to be fixed, he said, because the Health Insurance Portability and Accountability Act gets in the way of sharing medical records during disasters. And while that's largely a policy issue there are also opportunities for technology to be part of the solution. Possible solutions include the public carrying identification cards securely encoded with their DNA, blood type and other basic medical information. Another solution might be wearing a bracelet or necklace that contained that information, so medical personnel could better do their jobs and save lives.

Another challenge officials face during disasters has to do with people tracking. During Katrina children were evacuated via medical helicopters and aircraft carriers and rescued from the tops of houses and had to be separated from their parents. Later, reuniting those children with their parents took as long as 30 days. Smart cards, bracelets and necklaces would speed up that process.

Smart airplanes equipped with computers that alerted flight attendants of ill passengers could go a long way too. "How do you make a computer, put it on an airplane and tell the pilot that before he lands at Dulles [International Airport] that the person sitting in F22 has a fever?" Honore said.

"The plane lands and you also see three people on both sides of this person have a fever now. That wasn't the case when they took off on this 14-hour flight. The plane lands and the flight assistants come out and they take something that looks like a ballpoint pen that you all have developed, put it in their mouth and if yours comes out green, you get off the plane. If it's red, you stay on the plane with the dude sitting in F22."

The fact that pathogens must be flown to the Centers for Disease Control and Prevention for analysis during an outbreak, such as the recent episode with swine flu, scares Honore. "That technology needs to be in every hospital in America, because if we don't that flu, that virus, that pandemic could move at the speed of an airplane," he said.

Why don't we have a standard alarm that alerts people to disasters in the middle of the night, Honore asked. What would happen if every rental property was required to be equipped with an alarm that told residents they had a half hour to get out of harm's way?

And the policy vehicles exist to mandate these changes, but it's going to take more than policy. It's going to take industry seeing the silver lining in preparedness and dedicating its resources to the problem. It's going to take clever marketing and peer pressure.

He was talking to a major defense contractor recently, who was waiting for the army to order another tank, and suggested taking that company's scientists and investing in technologies that make people safer in their homes. "Right now all of our technology has been focused so that DHS, state and local government can talk, get early warning. Think about developing technology so everybody can have it in their home."

Technology can play a vital role in establishing a culture of preparedness. "We've got to up the size of that science and technology page in America and it may have to come out of a cultural shift where we put science and technology and innovation at the same level we've got sports, or maybe just a little bit bigger than sports," he said.

FDNY Chief Cassano: Is New York ready for another 9/11?
May 21, 2009
Urgent Communications
By Mary Rose Roberts
URL: http://urgentcomm.com/mobile_data/commentary/nyc-new-york-ready-emergency-20090521/

It's been nearly eight years since 9/11, and I wondered if New York was prepared for another large-scale incident. So I called New York City Fire Department Chief Salvatore Cassano and asked him point blank: Can the city respond to another terrorist attack?

Cassano said the FDNY will operate at full capacity if the city again is the target of a terrorist attack. He said a lot has changed since 2001. Overseeing all incidents in the city wasn't an option pre-9/11 because technology was not in place to support large-scale emergency operations.

When the planes hit the Twin Towers, the FDNY command center consisted of only a couple of phones and a couple of screens, he said. Response efforts also were hampered by a general inability to share information across local, state and federal agencies.

"It just was totally inefficient to handle any type of large-scale event. It was basically a notification center, so if something happened they would notify people but that was it. There was no major system," he said. "We had very little information to send to the site at the World Trade Center, and I was getting very little information from the site to us to see what we could do for them. So we realized that it was totally inefficient — we knew that we needed a much better, improved state-of-the-art operations center for future events."

Even if such technologies had been in place, it was the on-the-fly decisions that had to be made that was the most challenging aspect of that day, Cassano said. The city's public-safety officials had only 102 minutes to make decisions. In that time, two planes crashed into two 100-story buildings, causing their collapse. Just think of the myriad decisions that had to be made during such a short period of time.

So the department made changes over the last eight years. Two way radios often fail because in-building coverage is insufficient. Now teams carry 25-pound, 45 W radios into high-rise buildings that officers use to communicate with command. In addition, the city has invested $18 million to build a new emergency operations center, where the chief can oversee operations within the five city boroughs and monitor each incident from a centralized location. The operations center connects all of the stations, as well as the FDNY to local, state and federal agencies. It also controls an advanced vehicle location system that tracks all fire department apparatus and stores that information at headquarters. The chief now can tell where all of his units are deployed and the type of incident — across the entire city — from one location. The EOC lets the chief get the most accurate, real-time information out to his field officers and firefighters at incidents, Cassano said.

The department also holds joint drills and table-top exercises.

"We have learned a tremendous lesson in interagency cooperation, sharing of information, being able to talk to each other," he said. "We've been doing it for seven years so if an event happens the response will be automatic."

Cassano hopes New York City won't suffer another terrorist attack, but if it does, "we will be ready," he said.

<p style="text-align:center">###</p>

Emergency responder ID program progresses
May 21, 2009
Federal Computer Week
By Ben Bain
URL: http://fcw.com/articles/2009/05/21/web-fema-interoperable-card.aspx

Officials say standardizing credentials will help emergency response

Federal Emergency Management Agency officials hope a pilot program demonstrated today to make first responders' credentials interoperable across jurisdictions will expand nationwide.

Run by FEMA's Office of National Capital Region Coordination (NCRC), the program encourages state and local officials and the companies that run critical infrastructures to ensure that their credentials comply with Federal Information Processing Standard 201. Officials say credentials that conform to that personal identity verification standard will give emergency responders and others quick access to secure areas after a disaster by allowing them to prove who they are.

FIPS 201 is the standard for interoperable smart identification cards that agencies are required to issue to federal employees and contractors under Homeland Security Presidential Directive 12.

Michelle Benecke, chief of staff at NCRC, said the program provides the "interoperable capability for first responders to move quickly through jurisdictions and for incident commanders to have the information they need quickly to integrate those first responders into the disaster response effort."

Benecke said the program, begun in 2006, cost about $2 million through fiscal 2008 and is projected to cost about $1.7 million for the rest of the pilot phase, which is slated to continue through fiscal 2010. The plan is to have a national rollout of the program in 2011.

Today's event was meant to show that the credentials are effective for uses such as relocating government personnel, issuing credentials to emergency response officials who arrive on a scene at the last minute, overseeing citizen evacuation and re-entry, and identifying officials from other jurisdictions.

"If you remember 9/11, people would show up to the Pentagon or to the [World Trade Center] and say, 'I'm here, I'm a doctor, and let me in so I can do whatever I need to do.' In many cases, there was not really any kind of process for seeing whether or not that person should be able to enter," said Chris Willey, interim chief technology officer for Washington, D.C. His office helped stage the event in Arlington, Va., today.

"The whole vision here is that in a scene like that, now I've got the software tools and the hardware tools to verify you are who you say that you are and that you also have the credentials or the attributes to say, 'Yes you're a doctor. Yes, you're a bomb technician. Yes, you're a…firefighter,'" Willey said.

<p style="text-align:center">###</p>

Oregon Wireless Network deserves an upgrade
May 19, 2009
The Oregonian
By Jeffrey Johnson

URL:

After 30 years in the fire and emergency medical response business, I've learned that the cost of this service worries people until the emergency becomes personal. At that point, "whatever it takes" to save a life or protect a home becomes the expectation.

Nothing is more fundamental to providing quality emergency service than a dependable, easily accessible radio communications system. Unfortunately, Oregon's state public safety providers have just the opposite.

Our children and grandchildren text friends across town or across the globe from the dinner table. By contrast, state police, prison guards, transportation crews and foresters struggle to communicate using four obsolete and incompatible radio systems built in the 1950s. That's not only dangerous for them, it's dangerous for us.

In 2002, the Oregon Legislature acknowledged the problem and voted for a single integrated statewide radio communications system. In 2005, they established the Oregon Wireless Network -- known as OWIN -- and directed state officials to seek partnerships with local governments to build a system that meets state and local needs.

Today, more than $60 million in resources from counties, cities, tribes, state agencies, the federal government and special districts has been committed to the OWIN project. In addition to these financial partnerships, communication towers and other hardware are being shared, and technical expertise is being focused on a common communication system. This "interoperable" approach gives Oregon taxpayers the best return on investment, can meet federal deadlines for upgrading communications and will build a radio system that allows all emergency and non-emergency responders to talk to each other.

Unfortunately, the recession gripping Oregon threatens to derail OWIN. During the current budget process, some suggest that building a dependable and shared radio system is a low priority. I respectfully disagree. Even if we have to slow the pace of construction, it is critical that OWIN keep moving forward. To do otherwise when we know that systems are failing is irresponsible.

It's a credit to our men and women in uniform that some question the need to build OWIN. For five decades, these public safety professionals and their predecessors have found ways to make do with the communication systems in use today. But how many of us rely on 50-year-old technology in our homes or offices? Upgrading our emergency communications system will increase the efficiency and effectiveness of our public safety providers every day. And when a big disaster hits -- and it will -- nothing will be more critical to our ability to respond than quality, interoperable radio communications.

As evidenced by dozens of projects on our major highways, Oregonians have decided they don't want to wait for a bridge to collapse before we repair or replace our aging structures. OWIN is like a bridge -- linking us and with our public safety responders. While less visible, construction

of OWIN is also under way. Let's finish what we've started while we have the benefit of partnership money lowering the cost to all concerned.

<div align="center">###</div>

PSST responds to 700 MHz waiver requests

The Public Safety Spectrum Trust (PSST) — the nationwide licensee of public safety's 700 MHz broadband spectrum — recently told the FCC that it supports the idea of local and state entities building networks early on the frequencies, but existing rules need to be changed to make such deployments practical.

In separate waiver requests, the city of Boston, the state of New Jersey and the Bay Area cities — San Francisco, Oakland and San Jose — asked the FCC for permission to pursue the buildout of 700 MHz broadband networks on spectrum licensed to the PSST. In its reply, the PSST reiterated its support for early buildouts if they meet the technical and interoperability requirements of the planned national public-safety network that previously would have been built and maintained by a public/private partnership.

"We do not object to people doing it, as long as they meet the national requirements, so that whatever they do doesn't screw us up trying to have a nationwide system where you can roam from one place to another," PSST Chairman Harlin McEwen said during an interview with Urgent Communications.

But there are no technical requirements for 700 MHz public-safety broadband networks at the moment, McEwen said. While the FCC issued a notice of proposed rulemaking last year that suggested network requirements that were designed to attract a commercial partner, that proposal was never adopted. Thus, the only rules approved by the FCC for the PSST spectrum are those passed in 2007, prior to last year's failed D Block auction.

"The [2007] rules presume that there's going to be a public/private partnership with the D Block winner, and that hasn't happened. And, it presumes that there's going to be a network-sharing agreement, which hasn't happened," McEwen said. "The problem is that, under the current rules, they can't grant a waiver for early buildout, because there aren't any minimum standards, and there isn't a path forward until they decide what they're going to do next."

McEwen said the PSST is working to develop minimum requirements it would like to see adopted for the 700 MHz broadband spectrum but declined to speculate when the FCC — still without a permanent chairman, although nominee Julius Genachowski's nomination hearing is expected to be conducted as early as next week — might take action on the item.

Until technical standards are built, early network buildouts would be risky for local and state organizations, McEwen said.

"You don't know what it's going to cost you, if you go down the wrong path," he said. "If they pick WiMAX, and the decision is that the national network is going to be based on LTE, they're going to have to change everything."

Another factor that discouraged early network buildouts in the past was that there was uncertainty whether the entity building the network would be reimbursed for its financial commitments — a situation that continues to exist, McEwen said.

As chairman of the technology committee for the International Association of Chiefs of Police (IACP), McEwen will be meeting next week with representatives of other public-safety organizations in an effort to develop a consensus position for public safety regarding the future of public safety's 700 MHz broadband spectrum.

Interoperable Public Safety Networks Take Many Forms, but What Is Mission Critical?
May 18, 2009
Government Technology
By Bob Galvin
URL: http://www.govtech.com/gt/articles/689180

Interoperability takes many guises, but the basic concept of communicating between and within U.S. agencies and jurisdictions is an essential issue that's being worked out, albeit slowly. Public safety agencies typically have operated independently, but 9/11 and other events showed the importance of sharing vital information to enable more effective, rapid decision-making.

Unfortunately a large percentage of public safety communities may be woefully unprepared for major incidents. These include emergency medical events; hazardous material spills; terrorist attacks; natural and man-made disasters, such as industrial accidents or structural fires; search-and-rescue operations; and hostage crises. These require a large-scale, multiagency response.

"How well [agencies] work together is entirely dependent on what they've done to plan for major incidents well before they occur," said Alan Caldwell, governing board member of the National Public Safety Telecommunications Council (NPSTC). Caldwell was also a volunteer firefighter in Fairfax County, Va., for 30 years and operational fire chief for more than 20 years.

To achieve true interoperability, all communities ideally would have a public safety network that combines voice, data and video on an IP platform, say many public safety officials. This would enable all first responders to communicate with one another, share information and deploy assistance in a single jurisdiction or across county and state lines.

However, such networks usually come with huge price tags and may be a solution that many cities can only dream of having. So what other choices do cities have?

One alternative is to use available, affordable technology for information sharing as part of incident response. This doesn't constitute advanced interoperability, as a converged network would provide, but it's still a huge step forward.

Sharing Preincident Plan

The Canby, Ore., Fire Department uses Fire Zone software from Beaverton, Ore.-based The CAD Zone to draw building layouts. It utilizes a library containing hundreds of predrawn building templates and fire industry symbols. Each layout shows the building's floor plan and key details, like type of roof, exits, rooms, presence of hazardous materials, hydrants, standpipe location and more. Fire Zone also imports digital photographs and converts two-dimensional prefire diagrams into three-dimensional views.

First Look Pro, a companion CAD Zone software program, retrieves building layouts created with Fire Zone, provides instant access to critical preplanning information, and allows instant viewing of the associated map, photos and other images. First Look Pro also has a separate user mode for police, so fire and police departments can share the same critical preincident planning information.

Val Codino, Canby fire captain and medic who also serves on the Canby Police Department's tactical entry team, decided that sharing Fire Zone and First Look Pro would benefit both fire and police personnel. "I approached my fire chief and the police chief about it, and coincidentally, our 911 center," Codino recalled. "We all decided this made a lot of sense and it was readily accepted."

Canby's collaboration paid off. Successful raids on methamphetamine labs at 300-unit apartment complexes have been launched as the city's fire, police, EMS personnel and 911 center communicated with one another by using the CAD Zone preincident planning software.

"You need to have good, solid information when you're en route [to an incident]," Codino said, "and when you're en route, you want to bring up that information quickly." So far, the software that Canby's public safety agencies are using meets this need. Codino said he believes a large-scale incident could be managed with the city's public safety agencies tied together via the preincident planning software.

'Operability' Is a Focal Issue

Helping public safety agencies achieve interoperability is a major priority for the Communications and Technology Committee of the International Association of Chiefs of Police. According to Harlin McEwen, the committee's chairman, interoperability is only one aspect requiring attention.

McEwen said many public safety response systems are older analog systems that must be replaced, and most often are converted to digital systems. "You can buy subscriber equipment from more than one vendor [to build a public safety response system]," McEwen said. "But this gets into the proprietary nature of the system installed." That leads to incompatibility among equipment used by public safety agencies located in the same jurisdiction or region.

McEwen, a retired police chief and former volunteer firefighter, feels the real goal to effectively achieve uniform interoperability is to establish a national broadband public safety network. In the meantime, he and his committee are working to ensure that there's adequate federal funding to support local and state agencies in their efforts to achieve some level of interoperability, and the FCC's spectrum requirements are in place for regulating the licensing and use of radio transmitters by local government public safety agencies.

GIS Good for Planning, Tactical Use

Wayne Senter, fire chief of the South Kitsap Fire and Rescue in Port Orchard, Wash., considers GIS to be an important technology for achieving interoperability. GIS captures, stores, analyzes, and displays location-referenced information, as defined by the U.S. Geological Survey.

Senter cites two trends in sustainable emergency service information systems. The first one points to GIS as a foundation for sharing information, and the second trend favors a Web-based model for updates and access. "There is so much data available within the public safety arena that if we stay on the same system of GIS, then we can connect our data," he said.

South Kitsap Fire and Rescue has 1,300 buildings identified in its jurisdiction that require a detailed prefire diagram. Senter said there are 10 key items that responders need to know before they arrive at the scene. All of these are placed on the prefire plan for each building.

"If we put this information in a [Microsoft] Visio format, which interfaces with GIS, we're able to locate buildings on a GIS map when crews are responding," Senter explained. "Often the automated map systems used by emergency responders are GIS-based, and this reinforces the need to integrate rather than use a different format that is incompatible. An icon that says 'prefire' comes up, they click it and then this drawing comes up," he said. "This is an inexpensive service, and yet you have the information available for planning and tactical use."

GIS also can work across a wide range of records-management systems. "We've got to get away from all the information being on a hard drive," Senter said. "Everything should be Web-based. [With this in place], the information is accessible by fire and law enforcement in the vehicle. Secondly we [fire and police] need to train together."

Wide-Reaching Network Is Ideal

There isn't an easy generalization to explain what type of public safety network a community should choose and how much to pay for it. "It all depends on how much interoperability a city wants to achieve," Caldwell said. "Do you want it just within your jurisdiction or in other

jurisdictions in surrounding counties?" This choice can mean a huge difference in both the capabilities and limitations of the public safety system, plus its cost.

What's important to remember is that large-scale incidents may easily affect an entire region, not just one isolated jurisdiction. Coordinated mutual aid can be essential. The IACP's McEwen and NPSTC's Caldwell agree on one point: "The most desirable option is an interoperable backbone," as Caldwell said.

Information sharing among public safety agencies is already under way in most communities. With public safety funding still a major hurdle for many communities, information sharing is a good start toward nationwide interoperability based on a wireless communication network.

###

Hundreds respond to disaster drill in Lower Manhattan
May 17, 2009
Staten Island Real-Time News
By Staten Island Advance
URL: http://www.silive.com/news/index.ssf/2009/05/disaster_drill_is_held_in_lowe.html

In a huge security drill today at the World Trade Center PATH station, over 800 first responders were called to a fake disaster based on a mock explosion in the rail tunnel linking Lower Manhattan to New Jersey.

There haven't been as many responders at Ground Zero since the Sept. 11 terror attacks: Firefighters, police officers and members of other New York City agencies took part in the drill.

The 150 volunteers playing victims. wearing makeup simulating blood and grime, were brought up out of the tunnel by rescue workers.

To warn downtown residents of the drill, officials had placed TV ads and plastered train stations with posters.

PATH rail service was suspended this morning during the drill.

The New York City Office of Emergency Management and Port Authority of New York and New Jersey issued this statement on the operation:

"'The New York City Office of Emergency Management (NYC OEM) and Port Authority of New York and New Jersey (PANYNJ) today hosted Operation Safe PATH 2009, a full-scale, multi-agency exercise to test the City's and the Port Authority's response to an Improvised Explosive Device (IED) detonation on a New Jersey-bound Port Authority Trans-Hudson (PATH) train. The two-hour exercise was coordinated by the PANYNJ Public Safety Department, the PATH Corporation, and NYC OEM.

"'I am always impressed by the professionalism of our public safety personnel respond to challenging emergencies,' said Deputy Mayor for Operations Edward Skyler. 'Today's exercise was particularly important because it demonstrated the commitment our emergency personnel are making to training and to cooperation among both City agencies and other parts of government.'

"'Full-scale exercises like today's give us an opportunity to practice how to integrate the vast response resources available in New York City and establish a command structure under the Citywide Incident Management System (CIMS),' said NYC OEM Commissioner Joseph F. Bruno. 'I want to thank the Port Authority and all of the City's first response agencies for sharing their expertise and helping in the development and execution of this drill.'

"'These drills give our police the opportunity to work side by side with our partner agencies so that we can jointly respond to any incident that may arise in the future,' said Port Authority Executive Director Chris Ward.

"'Our top priority is the safety and security of our customers, which is why we've invested billions in security at our facilities,' said Port Authority Chairman Anthony R. Coscia. 'Today's drill will help PAPD and our partner agencies respond quickly and effectively in the case of a real emergency.'

"More than 800 emergency responders from the New York City Police Department (NYPD), Fire Department (FDNY), Department of Environmental Protection (DEP), Department of Health and Mental Hygiene (DOHMH), NYC OEM, the Port Authority Police Department (PAPD), PATH, and the Port Authority Office of Emergency Management (PANYNJ OEM) participated in the simulated response to two explosions on a train in one of the PATH tunnels between the World Trade Center and Exchange Place Stations.

"The exercise focused on the integration of PANYNJ and New York City assets and tested the decision making necessary to save lives and protect the public. Specifically, the exercise tested on-site incident management, search and rescue, mass casualty medical support, intelligence and investigation, and tactical interoperable communications.

"'These exercises help our members and all of the city's first-responders prepare for every possible situation,' Fire Commissioner Nicholas Scoppetta said. 'They also allow us to find ways to work cooperatively with other agencies in New York City and the region to make sure we're doing all we can to keep the public safe, no matter what.'

"Officials from participating agencies will evaluate the exercise based on six key objectives:

"The implementation of a Unified Command Structure in accordance with the Citywide Incident Management System (CIMS)

"The establishment and management of multi-agency tactical communications

"The formation of an Assessment Task Force to conduct a thorough scene assessment and form a Rescue Task Force to perform victim rescue and extrication operations

"The triage, treatment, and transport of patients from the incident site

"The implementation of a multi-agency security perimeter

"The management, coordination, and direction of investigation and intelligence operations

"In addition to the 800 first responders participating in exercise play, roughly 150 NYC OEM Community Emergency Response Team (CERT) members assisted in the drill by playing victims of the simulated incident. With evaluators, observers, and support staff, more than 1,000 people participated in Operation Safe PATH 2009.

"In 2007, NYC OEM conducted a simulated explosion on an Amtrak train at Penn Station. Past drills have also included a simulated response to a hazardous chemical spill, the set-up and break-down of a hurricane shelter, and the distribution of Strategic National Stockpile assets during a mock bioterrorist attack.

"Funding for Operation Safe PATH 2009 and other drills is provided by a federal grant through the Department of Homeland Security (DHS)."

For more information about NYC OEM's Training and Exercise programs call 311 or visit www.nyc.gov/oem.

###