Ad-Hoc Routing for Rural Public Safety Final Report Approved by IEEE

The Command, Control and Interoperability Division's Office for Interoperability and Compatibility (OIC) funded the recently published report, *QoS Enhancement and Performance Evaluation of Ad-Hoc Routing Protocols for Rural Public Safety*. When an emergency incident occurs in a rural location without an ad-hoc routing protocol in place, emergency communications are limited. Due to the large distances and treacherous terrain that accompanies rural regions, responders cannot communicate across disciplines and jurisdictions. To address this communications gap, Montana State University partnered with public safety groups to conduct case studies and field tests to explore the feasibility of using Mobile Ad-Hoc Network for rural public safety. These findings will provide the emergency response community with a framework to determine the protocols needed for each state's rural regions. These efforts will allow multiple mobile networks to be established throughout states, which in turn, will improve interoperability nationwide. The report was recently accepted by the Institute of Electrical and Electronics Engineers, Inc (IEEE) and will be published in IEEE's document database, Xplore, following the IEEE International Conference on Communications in June 2009.

MBR Acceptance Testing and Presidential Inauguration Demo

On January 12, 2009, representatives from OIC and the Institute for Telecommunication Sciences (ITS) attended the critical design review, demonstration, and acceptance testing of the multi-band radio (MBR) prototype at the Thales, Inc. facility in Clarksburg, Maryland. Acceptance testing ensures that the MBR has basic functionality, interoperability, and compatibility prior to distribution. In the next phase, the MBR will be delivered to various sites for additional laboratory and operational testing and evaluation (T&E). DHS and its local, regional, state, and Federal partners will focus on testing the radio across multiple bands and modes, systems, and agencies as the MBR is capable of operating in the various public safety radio bands. Six organizations will participate in the lab T&E, including the Institute for Telecommunication Sciences, Port Authority of New York and New Jersey, Fire Department of New York, New York Police Department, National Interagency Fire Center, and Boise Fire Department. Following lab T&E, DHS will conduct short-term operational demonstrations of the MBR with five organizations—the New York City Office of Emergency Management, New York City Department of Information Technology and Telecommunications, Michigan Emergency Medical Services, Boise Fire Department, and Murray State University.

On January 20, 2009, emergency responders demonstrated an MBR at the Public Safety Communications Center in Washington, D.C. One D.C. emergency responder noted that the MBR—when fully programmed—would be extremely beneficial in linking disparate radio systems across the National Capital Region in support of events such as the inauguration. The emergency responder also made positive comments about the MBR's size and ease of use. Currently, lab T&E and additional short-term operational demonstrations of the prototype radios are underway.

New Secretary of DHS Named

On January 21, 2009, former Governor Janet Napolitano was sworn into office as the Secretary of DHS. Secretary Napolitano is no stranger to government service; her credentials include five years as the U.S. District Attorney for Arizona, four years as Attorney General of Arizona, and—most recently—six years as the Governor of Arizona. Secretary Napolitano's history reflects an interest in immigration reform and improved information sharing. One of her keynote projects, the 2-1-1 program, helps the State of Arizona better communicate with the public. Created in 2004, this statewide system provides the public with access to community, health and human service, and homeland security information. Emergency bulletins are posted on a 2-1-1 Web site and can be accessed via mobile devices. Secretary Napolitano's efforts to improve mobile alerting systems and public outreach align with many of OIC's initiatives, such as the Project 25 Compliance Assessment Program and the Emergency Data Exchange Language standards.

San Francisco Explores the Use of P25 CAP and ISSI

As one of the largest jurisdictions in the Nation, the San Francisco Bay Area has experienced its share of emergency communications issues. In an effort to improve interoperability between local jurisdictions, emergency response leaders gathered together to form the San Francisco Bay Area Regional Interoperability Committee. Over the past year, OIC has been working with the Committee to educate officials on the various tools and methodologies DHS has to offer. In July 2008, OIC hosted an in-depth training session in Boulder, Colorado during which Committee members were briefed on the uses of the Project 25 (P25) Inter-RF Subsystem Interface (ISSI). The ISSI is a specification that ensures land mobile radio (LMR) systems use proprietary protocols that can communicate with other manufacturers' LMR systems. In January 2009, OIC held a follow-up session with Committee members to discuss the P25 Compliance Assessment Program (CAP) and how it affects the ISSI. Ultimately, these sessions will provide practitioners with the information needed to purchase and implement interoperable equipment.

Save the Dates

- The first annual Video Quality in Public Safety conference will be held from February 4-6, 2009, in Boulder, Colorado. Hosted by OIC, the National Institute of Standards and Technology's Office of Law Enforcement Standards, and ITS, this conference will gather public safety video users, technology manufacturers, and Federal Government officials. The conference serves as a forum to coordinate efforts in establishing quality requirements for video use in public safety applications.

- The 2009 DHS Science and Technology (S&T) Stakeholders Conference West will be held from February 23-26, 2009, in Bellevue, Washington. This conference will provide a forum for the S&T Directorate to engage with emergency responders, industry representatives, and government officials to discuss capability gaps and technology requirements for the emergency response community. Additional event information is available at http://www.ndia.org.

The U.S. Department of Homeland Security established the Office for Interoperability and Compatibility (OIC) in 2004 to strengthen and integrate interoperability and compatibility efforts in order to improve local, tribal, state, and Federal emergency preparedness and response. Managed by the Science and Technology Directorate's Command, Control and Interoperability Division, OIC is committed to developing technologies and tools—methodologies, templates, models, and educational materials—that effectively meet the critical needs of emergency responders in the field.

The Interoperability Bulletin provides updates about OIC-related initiatives, accomplishments, and opportunities. This Bulletin is distributed to stakeholders monthly.

To subscribe: click here.
To unsubscribe: click here.