



Around the Region in Homeland Security

March 2009

The Northwest Regional Technology Center (NWRFC) is a virtual resource center, operated by the Pacific Northwest National Laboratory (PNNL), to support regional preparedness, response, and recovery. The center enables homeland security solutions for emergency responder communities and federal, state, and local stakeholders in the Northwest. This monthly status report summarizes activities related to Homeland Security in the Pacific Northwest, and this issue highlights

- A demonstration of new information technologies for emergency responders
 - A new name and focus for the Regional Technology Initiative
 - An upcoming conference in emergency preparedness.

Northwest Emergency Response Stakeholders View New Technologies

On February 18, leaders from the U.S. Department of Homeland Security (DHS) Science and Technology Directorate's (S&T) Command, Control, and Interoperability Division journeyed to Seattle to host a demonstration for northwest stakeholders. The division uses a practitioner-driven approach to create and deploy information resources to enable seamless and secure interactions among homeland security stakeholders.

Division Director David Boyd showcased the latest DHS-funded technologies in information sharing, visual analytics, and communications. One of those technologies is the Critical



Infrastructure Inspection Management System (CIIMS), a low-cost intelligence-based information collection tool that allows airborne inspection of critical infrastructure and key resources. Data from the inspection are returned to a central location for intelligence analysis. The tool, which was developed by Johns Hopkins University Applied





Physics Laboratory, is currently being developed through a partnership with the Maryland State Police and was recently deployed to support the Academy Awards.

Two other technologies that were demonstrated were the Fused Analytic Desktop Environment (FADE) and the Law Enforcement Information Framework (LEIF), both funded by DHS S&T developed by PNNL.



FADE enables analysts to bring data from a myriad of sources into an analysis environment and organize it in unique and meaningful ways, thereby increasing situational awareness and the opportunity to detect terrorist or other criminal activity. LEIF is part of a new generation of “lightweight” analytic components that scale across use contexts – from hand-held devices to desktop to collaborative setting

–that enable analysts to rapidly detect patterns, trends, events, and entities of interest in streaming incident data.

The RealEyes technology was also demonstrated. RealEyes is a prototype software system that allows first responders and law enforcement officials equipped with Personal Digital Assistants (PDAs) to send and receive live video and geospatial coordinates, view video from fixed or mobile cameras, and receive data (video, photos and text) from a field command post using basic cellular technology.

In the area of improved communications, one of the technologies demonstrated was the Multi-band Radio, which seeks to solve the problem of radio interoperability among first responders. Thales Communications, Inc., developed the prototype, which is capable of operating in the primary public safety bands, public broadcasting, and, when authorized, the Department of Defense bands and two federal government bands. This capability represents a significant step for allowing interoperability among federal, local, tribal, regional, and state agencies.

Dr. Boyd also shared the status of another communications tool, Voice Over Internet, which also seeks to improve interoperability by overcoming the compatibility gaps among various Voice over Internet Protocol (VoIP) radio systems. The Voice Over Internet project is assisting in the development of VoIP specifications in partnership with the Public Safety VoIP Working Group, comprised of emergency responders, industry representatives, and the National Institute of Standards and Technology's Office of Law Enforcement Standards. Each VoIP specification will identify the standards and settings necessary for VoIP-based devices to connect with one another—reducing costs for system design and installation.

State and local stakeholders who attended included staff and leadership from emergency management agencies such as Bellingham Air and Marine Operations, Everett Emergency Management, King County Emergency Management, Pierce County Department of Emergency Management, and Seattle Emergency Management; law enforcement agencies such as the Lynnwood Police Department, Pierce County Sheriff's Department, Seattle Police Department, Washington State Patrol, and Whatcom County Sheriff's Department; Ports of Everett, Seattle, and Tacoma;

Washington State Department of Health; Seattle City Light; and communications groups such as King County Radio Communications Services, SNOCOM Emergency Communications, SNOPAC Emergency Communications, and Snohomish County Emergency Radio System. Federal stakeholders included DHS Protective Services, the Federal Bureau of Investigation and its contractors, U.S. Coast Guard, Law Enforcement Support Agency, Federal Emergency Management Agency Region 10, and leadership from the DHS Command, Control, and Interoperability Division.

The technologies will be demonstrated again in focused meetings as well as test beds. Individuals interested in learning more were asked to identify themselves and the specific technology. The licensing process is also currently under way with vendors.

Participants agreed that the demonstrations benefitted the region and that they would like to see additional technologies in the future. They also appreciated the ability to provide input directly to DHS. One participant recommended the addition of a self-teaching tool using the KISS principle, in this case, "Keep it stupid, simple."

Long-Time Regional Project Gets New Name, Focus

Emergency response agencies in the Seattle urban area are well familiar with the Regional Technology Integration (RTI) Initiative and its impact on the region. From its beginnings, the Seattle portion of the national program developed a blueprint for future investment in communications systems and addressed known gaps, such as the need for high-speed mobile data and two-way mobile video. RTI Seattle also addressed incident credentialing to provide a capability for the commanders to identify, track, and locate responders in a timely fashion and helped consolidate regional information with new sources in an interoperable data portal for situational awareness.

Work under the RTI initiative is now transitioning to the Advanced Incident Management Enterprise System (AIMES) under the DHS S&T's Infrastructure and Geophysical Division. AIMES will develop the next-generation incident management system that will revolutionize the way responders handle incidents. It builds on the Unified Incident Command and Decision Support (UICDS) architecture and Training, Exercise & Lessons Learned (TELL) framework by providing an integrated, interoperable, and unified common operating picture. This operating picture helps responders understand incident information, resources, the environment, the supply chain, response and recovery plans, methods, tactics, and policies.

AIMES is a technology leap to integrate all elements of the incident management enterprise and provide a secure, scalable, interoperable, and unified situational awareness to the responder community.

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WSU to Host Emergency Preparedness Conference in Tacoma

On April 14 and 15, Washington State University's Center for Distance and Professional Education will host Partners in Emergency Preparedness at the Greater Tacoma Convention and Trade Center. The Conference is the largest regional emergency preparedness conference in the Pacific Northwest, with nearly 700 attendees expected to represent business, schools, government, the nonprofit sector, emergency management professionals, and volunteer organizations. The event is sponsored by the American Red Cross, Seattle Public Utilities, Puget Sound Energy, Washington Emergency Management Division, and Washington State Emergency Management Association. Industries Costco Wholesale, James Lee Witt Associates, Nor E, and Sacket, Inc. are also supporting the conference.



One of the sessions highlights work for the Interagency Biological Restoration Demonstration, a joint project between DHS and the Defense Threat Reduction Agency, in the area of the private sector and private property owners requirements for recovery and restoration from a disaster. Continuing Education Units are available from Western Washington University. Washington State Clock Hours are also available.

Online registration closes on March 26. For more information, please contact Siri McLean, Conference Chair, at: 206-897-8081 or siri@partnersinemergencypreparedness.com

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Upcoming Events

April 14-15, 2009

Partners in Emergency Preparedness Conference
Tacoma

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Pacific Northwest
NATIONAL LABORATORY

steve.stein@pnl.gov or 206-528-3340, Deputy Director Mary Peterson at mary.peterson@pnl.gov or 509-372-4655, or see the website at <http://nwrtc.pnl.gov>.

Around the Region in Homeland Security is a monthly report from the Northwest Regional Technology Center, operated by the Pacific Northwest National Laboratory. The goal of the NWRTC is to bring together major stakeholders from across the region that have a vested interest in homeland security issues and provide a collaborative environment that addresses Northwest regional homeland security requirements, needs, and challenges. For more information, contact Director Steve Stein at