

Deploying Communications Technologies to Improve Emergency Response: An Emergency Communications Prototype

Executive Summary

COMCARE is a national non-profit alliance dedicated to **advancing emergency response**. It promotes the adoption of modern, interoperable emergency systems and the development of new procedures, training, and tools to maximize their value for emergency responders. It encourages cooperation across professional, jurisdictional and geographic lines, seeking to improve effectiveness through solutions that integrate emergency response professions, government, the public, and private industry. COMCARE's 100+ organizational members represent the wide diversity of the emergency response community.

COMCARE needed to develop and deploy an Emergency Messaging Service Prototype that allows COMCARE to demonstrate how emergency messages can easily be exchanged among disparate systems through the use of a routing directory of emergency agencies, the Emergency Provider Access Directory (EPAD), and standard data sets. The EPAD Connect prototype has been used in several emergency communications demonstrations and has helped the emergency response community to better understand and apply interoperability standards.

Business Challenge

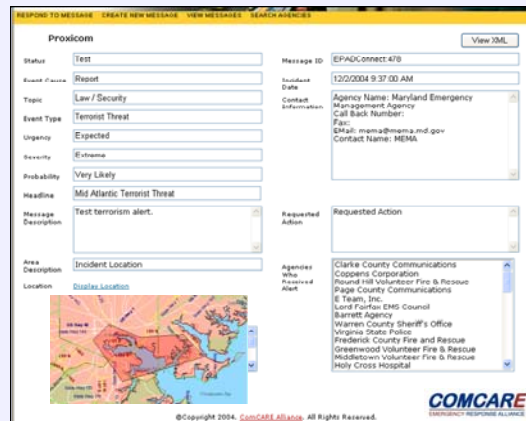
COMCARE's early system initiatives focused on creating directory services that would allow agencies to take a direct role in determining when and how they want to be notified about an emergency event. The Emergency Provider Access Directory allows local, state, and federal emergency authorities and public service providers to register for specific notifications by the type of emergency incident that has occurred and since EPAD is geospatially-enabled, agencies also have the ability to indicate the notification areas for which they have an interest.

While the directory prototype enjoyed some early success and use, wide-spread adoption requires further demonstrations and expressions of the value of EPAD for routing messages during actual emergencies. To show the true value of a routing directory, COMCARE required a system that could send and receive messages based on the information and business rules in that directory.



The Solution

The EPAD Connect prototype is a Web-based, geospatially-enabled messaging and communications system. EPAD Connect allows authorized agencies and individuals to send standardized alert messages without previously knowing the specific names and addresses of recipient agencies. EPAD Connect interoperates with EPAD, which evaluates message incident and location information and returns valid recipient information back to EPAD Connect. EPAD Connect then sends messages directly to the agencies that have requested notification. EPAD Connect also allows agencies to respond to incident alerts, query and view stored alerts, and provides an interface in which EPAD information can be queried and reviewed. It uses the new EDXL data standards facilitated by the Department of Homeland Security.



Through EPAD Connect, COMCARE can demonstrate the true value of interoperability in emergency situations. EPAD and EPAD Connect together enable instant, interoperable communications and accurate notification of emergency events and related situations.

Project Snapshot

Industry
Public Sector
Emergency Response

Solution
EPAD Connect
Prototype

Technical Components

Software

- MS Windows 2003 Server
- MS .Net Framework
- MS IIS 6.0
- MS SQL Server
- ArcWeb Geocoding and Map Service
- Moxi Media IMF
- Web service (SOAP) messaging

Standards

- CAP
- VEDS
- EDXL

COMCARE
For more information about COMCARE, please call 202-429-0574, email us at info@comcare.org or visit our website at www.comcare.org.