



Interoperability Pavilion*

Data Standards Descriptions



OASIS Common Alerting Protocol (CAP) is a simple, flexible data interchange format for collecting and distributing "all-hazard" safety notifications and emergency warnings over information networks and public alerting systems. In 2004, CAP version 1.0 was adopted as an OASIS standard; CAP 1.1 was formally adopted in October 2005. It is being adopted and used by a growing number of organizations.



The **Emergency Data eXchange Language (EDXL)** is a growing suite of specific message standards developed by emergency practitioners in a project sponsored by the Department of Homeland Security's Disaster Management E-Gov Initiative. After emergency practitioners develop detailed requirements for each needed message, and leading technology companies (through the Emergency Interoperability Consortium – EIC) are consulted, they are submitted to an official standards development body. EDXL messages are designed for IP (Internet Protocol) data communications between all emergency professions. EDXL is compatible with most existing and planned networks and data systems at the federal, state, local and tribal levels. The following three draft standards have been developed thus far:



- The primary purpose of the **Distribution Element (DE)** is to facilitate the routing of any properly formatted XML emergency message. The Distribution Element may be thought of as a "container". It provides the information to route "payload" message sets (such as Alerts or Resource Messages), by including key routing information such as agency type, geography, incident type, and sender/recipient ID's. The Distribution Element continues to be demonstrated during interoperability field tests. It currently is in the OASIS public comment process with hoped for release as an official standard in early 2006.



- The **EDXL Resource Message (EDXL RM)** effort has created a series of messages that allow local, tribal, state, federal and non-governmental agencies, stakeholders, and systems providers to rapidly share information on incident and event management resources. The Resource Message set facilitates requests, orders, and requests for information, demobilization and tracking of all types of resources (human resources, vehicles, equipment, supplies, and facilities, as well as packages/ teams composed of many of these) – and seeks to support machine to machine communication, and thus avoid multiple entries of the same information. Resource Messaging facilitates coordination of multiple resource requests across multiple incidents or events (i.e. management of scarce resources). The Resource Messaging standard set of seven messages has been submitted to the OASIS Emergency Management Technical Committee for consideration. A concurrent effort is underway to field test the draft messages to ensure validity with both practitioners and technology vendors that will be implementing the standards.



- **Hospital AVailability Exchange (HAVE)** is a draft XML specification that allows the communication of the status of a hospital and its resources to other emergency agencies, including bed capacity and availability, emergency department status, the available service coverage, and the status of a hospital's facility and operations. The draft specification is now before national organizations in the medical, EM and EMS domains to solicit additional input. Following this review, the specification will be submitted to EIC (Emergency Interoperability Consortium) and then to the OASIS standards organization for its consideration and promulgation as a standard. Simultaneously, demonstrations are planned to validate it from a technical standpoint.



*Sponsored by IAEM, COMCARE, EIC and Roaming Messenger.