Information Sharing with Unified Incident Command & Decision Support (UICDS™)

What is UICDS?

UICDS™ is a Department of Homeland Security, Directorate of Science and Technology, initiative for information sharing to support the National Response Framework and the National Incident Management System (NIMS).

UICDS is free **"middleware"** which means that it enables your software applications to talk to other agency software applications. It allows organizations to share and receive just the right fraction of data that they need during an incident to coordinate their effort with other agencies. Results: organizations have more complete information and improve decision making.

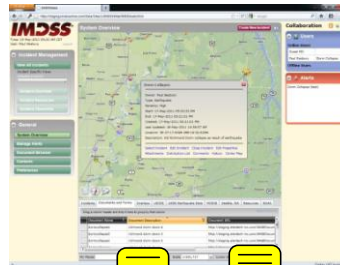## Information Shared Through UICDS

- ✓ **Incident Data** (Type, Date/Time, Location, Description)
- ✓ **Alerts** (Identifier, Sender, Date/Time, Status, Type, Scope, Category, Event, Urgency, Severity, Certainty)
- ✓ **Map Data** (Geospatial Data, Layer Data, Title, Model Results)
- ✓ **Incident Command** (Organization Name, Type, Role/Position, Person in Charge)
- ✓ **Tasking** (Task List, Responsible Person, Description, Priority, Assignor, Accepted, Date/Time)
- ✓ **Resource Management** (Resource Name, Type, Quantity, Schedule, Location)
- ✓ **Sensor** (Sensor Name, Description, Location, Measurement)
- ✓ **Incident Action Plan** (ICS Forms and Next Period Plan)

NLE 11 "UICDS in the Cloud" Technology Showcase

Employing several UICDS deployments, including a UICDS deployment to the Cloud, the UICDS NLE 11 Technology Showcase showed the scalability of the UICDS peer-to-peer architecture and the accessibility of many information technologies to the UICDS middleware. Sharing occurred among cores located from coast-to-coast and among governments, private sector organizations, and non-governmental agencies.
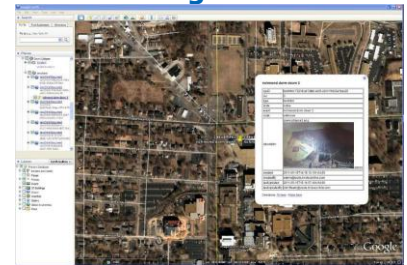
No matter what the source application, using recognized standards UICDS can collect and share data among authorized and authenticated applications in a one-to-many, two-way exchange that assures collaboration about the important content of an incident.

Local Forces Become Information Sources

The Incident Management Decision Support System™ (IMDSS™) from ElanTech™ not only consumed incidents from many applications through UICDS but also was used to create incidents to share with UICDS, here a dormitory collapse at Murray State University caused by the earthquake.

Mobile Phone Damage Photos Shared Through UICDS

IMDSSMobile™ from ElanTech provided images from the dormitory collapse of damages and the associated response activities. These were shared through UICDS to connected and authorized applications to provide important information to other agencies.

Other Resources Committed with EDXL-RM for Earthquake Response

In other NLE 11 simulated incidents, the Emergency Data Exchange Language-Resource Messaging (EDXL-RM) standard allowed applications to request and commit resources. Here we committed resources from the Federal Government shared by UICDS to applications, including this ESRI™ Flex Viewer.

UICDS Brings Together NGO and Public Response Resources

Direct Relief International™ distributes donated medical and pharmaceutical supplies. DRI identified needed supplies from UICDS incidents and then staged a response using their SAP™ logistics system by providing EDXL-RM Commit Resource messages through UICDS, here seen on the DRI ESRI Flex Viewer.

For more information see www.UICDS.us