



# Homeland Security

# ICBRNE

Integrated Chemical Biological Radiological Nuclear Explosive



## Overview

Local responders and Emergency Managers worked with the Department of Homeland Security to create the Integrated Chemical, Biological, Radiological, Nuclear and Explosive (ICBRNE) program.

This program in conjunction with Los Angeles Public Safety and private industry has implemented regional interoperable sensor systems that monitor live, report, display and alert appropriate officials in the event of a detection.

These systems enhance the safety of responders by providing live detection data to subject matter experts and Emergency Managers who can monitor, report and advise during emergencies.

System data is exchanged utilizing global standards for information sharing which allows interoperability across established incident management tools providing both a common operational picture and better situational awareness.

## Objectives/Deliverables/Attributes

- Provides an instantaneous way to share and collaborate CBRNE information across region, State, nation or beyond.
- Provides live incident data across response organizations regardless of their location. Responders do not have to be on scene to assist.
- Enhances responder safety by allowing instruments to report live reading back to expert freeing up the responder to focus on other critical tasks
- Eliminates the radio transmission of secure or possibly inaccurate instrument readings.
- Provides situational awareness alerts and notifications across its subscribers about CBRNE events through a complex policy filter assuring that the right person receive relevant information.
- Provides a Web GIS interface accessible both through the desktop and mobile platforms that allows command staff to see the location and other relevant detection data.
- Establishes field "hotspots" through and interoperable network communications platform for data sharing using mobile and portable network devices

## Customers/Users/Partners/Stakeholders

As of June, 2012 the ICBRNE Program enabled access to over 670 integrated instruments from 45 different brands, including 143 radiation sensors, 34 radiation isotope, 307 chemical, 62 chemical warfare agents, 50 particulate, 60 GPS instruments and 13 streaming video cameras. Over 40 agencies in the Los Angeles area are active participants, along with over 20 national entities.

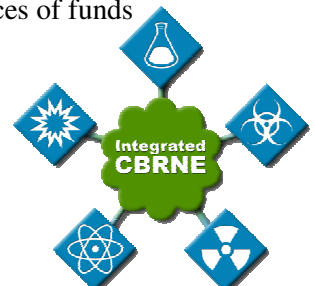
The ICBRNE Program participated in 30 exercises and drills and integrated capability across 8 partnering cities including New York, Los Angeles, Glendale, Burbank, Long Beach, Seattle, San Francisco, Boston, and soon to be in San Diego and Washington DC.

ICBRNE participants led the way in the promotion and development of OASIS Emergency Data Exchange Language (EDXL) standards, specifically utilizing Common Alert Protocol (CAP) as a core standard format. ICBRNE components were tested for interoperability through the FEMA NIMS program. ICBRNE collaborated with the DHS Domestic Nuclear Detection Office (DNDO) in the enhancement and pilot testing of the NIEM CBRN IEPD.

## Transition

The ICBRNE program is transitioning into the standard operating practices for CBRNE data sharing for its various local, state and federal users. The technology developer maintains the ICBRNE testbed servers and markets devices for integrating CBRNE instrumentation allowing for continuing program evolution. Users will access the technology to enhance their state of preparedness through the use of grants from DHS or other sources of funds

[www.icbrne.org](http://www.icbrne.org)



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