



## Distributed Information Acquisition and Decision Making for Environmental Management (DIADEM)

The main objective of the DIADEM project is to create an ICT system for collaborative situation assessment and decision making that supports effective protection of the population and the environment against chemical hazards in industrial areas.

The resulting methods and tools will support environmental management in industrial settings through a seamless integration of (i) robust gas detection and monitoring systems and (ii) advanced decision support methods which facilitate rapid, high-quality decision making based on rich domain expertise and large quantities of relevant information.

### The Expected Impact

The resulting systems will contribute to safer and healthier environment by facilitating:

- Mitigation of consequences of potentially catastrophic chemical incidents through quick and reliable gas detection, monitoring and efficient decision making
- Prevention of chemical air pollution in industrial areas. Through reliable and timely detection of pollution sources, environmental protection agencies can enforce stringent regulations.
- Prevention of catastrophic chemical incidents and pollution through collaborative planning.

### The DIADEM Approach

Environmental management involves inherently complex information management and decision making processes that have to be carried out in an accurate, efficient, and dependable manner across different systems, organizations, geographic areas and time scales. This will be achieved through a combination of various tools and methods:

- Advanced approaches to gas detection and gas distribution models.
- A novel service-oriented approach to collaborative information processing spanning multiple organizations.
- Seamless integration of human-based and automated processing supported by multi-criteria decision analysis and advanced human machine interfaces.
- Integration of existing decision support tools into collaborative processes.

### Consortium

The DIADEM consortium consists of nine partners from six countries:

1. Thales-NL (Coordinator)
2. DCMR Milieudienst Rijnmond (NL)
3. Danish Emergency Management Agency (DK)
4. Karlsruhe Institute of Technology (D)
5. University of Orebro (S)
6. University of Amsterdam (NL)
7. University of Craiova (RO)
8. Prolog Development Center (DK)
9. Space Applications & Services (B)

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Web: [www.ist-diadem.eu](http://www.ist-diadem.eu).

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