



# AREVE Lightweight CBRNe reconnaissance

The development of the chemical, biological, radiological and nuclear arsenals by a number of countries, coupled with the increasing tendency of terrorist groups to use potentially these agents in their attacks, has brought home the need to adequately protect the general population from CBRNe menace. Increasingly, critical infrastructures such as airports, underground stations, and railway hubs are being targeted by terrorists, an attacks of this nature on a large population centre could have devastating consequences.

In addition to terrorist and military CBRNe threats, industrial activity often entails dangers for nearby population centers. An accident could easily generate a toxic cloud or contaminate the water supply to nearby populated areas, putting thousands of lives in danger.

An adequate response to a CBRNe attack or incident must ensure that (a) threats can be rapidly detected, (b) the nature and scale of the threat can be identified, and (c) appropriate protection and decontamination measures can be taken.

Indra's Lightweight CBRNe Reconnaissance Vehicles are suitable for onsite detection of Chemical, Nuclear-Radiological and Biological compounds, allowing detection and first identification of threats, enabling a quicker, more decisive response to the threat.

Our solutions may be manufactured either over military or civilian vehicles, and are fitted with a Laboratory Indra Control Unit (LICU®) which is responsible of the entire Information Management Process within the Reconnaissance Vehicle.

## Applications

- Tasked to detect and identify the CBRNe threat using advanced detection equipment and procedures.
- This vehicle is triggered when an alarm is produced.
- The reconnaissance vehicle is fitted with a set of automated sampling system.
- AREVE vehicle would produce the corresponding Analysis Report status of the contamination and disseminate it in real time through the C2 system. The incident commander and reach-back cell would have immediate access to results for decision making.
- Samples and evidences are properly referenced, tracked and stored (keeping custodian chain) for further analysis.



### Main capabilities

- Nuclear and Radiological detection.
- Chemical detection and identification.
- Biological detection and sampling.
- Meteorological station.
- CBRNe protection system.
- Sampling system. Air, liquid and solid samples.
- Remote detection. Use of an UGV for remote mission via cable or wireless control (under requirement).
- Support system.
  - GPS.
  - Communications (according customer specs).
  - Decontamination system (crew and vehicle) HVAC.
  - Power system.

### Reconnaissance Information Management system (LICU®)

LICU® comprises the hardware platform and software application for a holistic reconnaissance information management. LICU® is responsible of the following main activities:

- Samples and evidence codification.
- Samples traceability management.
- Gathering and collection of results from the detection equipment.
- Displaying of the values during measurement.
- Uploading and assignment of additional information from analytical processes to the samples.
- Automated generation of reports (ATP 45, Customized reports, etc.).
- Messaging and Data transmission.
- Management of telecommunication means.
- Control and management of Reconnaissance support systems (LAN, Security system, HVAC, Filtration System, etc.).

This equipment enables a quick detection of volatile and non-volatile toxic and dangerous chemicals, including midspectrum chemical from environmental samples and interaction products, radiological material and biological agents such as bacteria, viruses and toxins, always confirming to international regulations.

Our vehicles carry out detection, sampling and a first identification of toxic and dangerous substances in the field, whether they stem from industrial accidents, terrorist action or military conflict.



AREVE detects and achieve a first identification any CBRNe threat using advanced detection equipment and procedures

