

French advanced reachback capability in support to R/N security

In France, the fight against illicit trafficking of radioactive and nuclear materials as long as the suitable operational response is part of the national security organization and doctrine. More widely, an efficient response to R/N terrorist threats requires coordinated actions from various authorities, such as security and control forces (mainly police and customs) or specialized units (fire brigades, ...), supported by R/N experts.

In the framework of this national organization, the military division of CEA (Commissariat à l'énergie atomique et aux énergies alternatives) is in charge of aspects related to R/N threat in different contexts, ranging from radiological and nuclear security of major public events and critical infrastructures to radiological and nuclear monitoring of national points of entry. For decades, CEA has provided expertise for the definition of suitable technical equipment depending on the operational context, operated fixed R/N detectors, deployed specialized operational teams, provided support and expertise to field teams and conducted research in R/N detection.

Due to that long-term experience, CEA was entrusted by the National Security and Defense Secretariat (Secrétariat Général de la Défense et de la Sécurité Nationale - SGDSN) to create a national reachback center at CEA to support authorities as technical experts in the management of R/N events. The first objective while facing a R/N event is to discriminate between situations related to health issues or malevolent threats, and thus scale the operational response depending on the type and level of threat.

The presentation will focus on **operational missions of the national reachback center** in :

- **assistance to first responders** (fire brigades, ...), in terms of radiation protection and analysis of data from spectrometric detectors, via the French TRIAGE, a remote analysis response specially designed to help any first responders facing R/N problems,
- **contribution to the Inter-ministerial Central Detachment for Technical Intervention (DCI_IT)**, a structure dedicated to support the authorities in charge of a crisis. Depending on the categorization of the threat, specialized operational teams from DCI_IT (including teams from CEA/DAM) might be deployed to guarantee a suitable response to the event,
- **monitoring of critical infrastructures or entry points** (major public events, maritime ports, ...).

In particular, several relevant events and exercises will be presented, including the dual JRC/CEA demonstration performed at the "Magic Maggiore" GICNT workshop (Ispra, 2017).

These examples will illustrate the benefits of such centralization of expertise (minimization of infrastructure and maintenance costs, minimization of specialized manpower needs and associated training, ...) and minimal guidelines (adequation between deployed technologies and reachback level, 24h/24 network supervision to guarantee operational response, ...).

State

France

Gender

Male

Authors: MASSE, Daniel (CEA); PETITGUILLAUME, ALICE (CEA); SCHOECH, Hubert (CEA)

Presenter: MASSE, Daniel (CEA)

Track Classification: MORC: Detection technology development and performance testing