European Commission

ERNCIP thematic group on
Radiological and Nuclear Threats to Critical Infrastructure

Expert support of field teams

Solutions are needed to mitigate the threat to critical infrastructure from radiological contamination. Issues needing to be addressed at EU-level include certification of radiation detectors, standardisation of deployment protocols, response procedures and communication to the public. Reference to standards would enhance existing techniques that support field teams deployed in the event of radiological contamination.

Remote expert support - *Reachback*

Information sharing in nuclear security plays a key role in cooperation between authorities and international agencies. It is more efficient to move data than moving experts or samples.

Non-expert field officers could send the data to off-site analysis centre, where the experts can follow in real-time the measurements and provide advice accordingly to the operational response users: e.g. law enforcement, response teams, operation centres.

The new approach provides a faster and more reliable response and requires less human resources. Real-time transmission of data to experts enables a focus on the core activity of the field mission: to provide accurate analysis and enable informed decision-making.

The analysis centres return key findings and other support in a format suitable for the field operation. This process is called remote expert support or *reachback*. Sometimes the term 'triage' is used in the same context (e.g. France, United States).

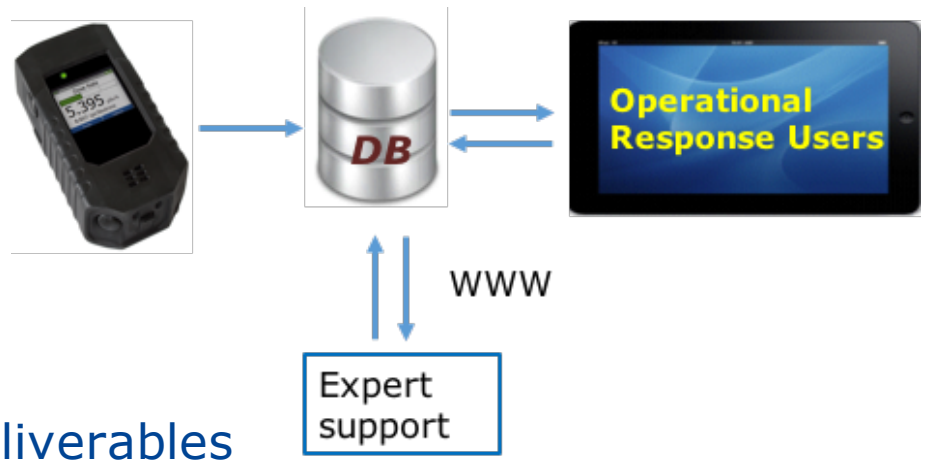
ERNCIP Thematic Area
Radiological and Nuclear Threats to Critical Infrastructure
ERNCIP thematic group coordinator
Harri Toivonen HT Nuclear Oy (Finland) Harri.toivonen@htnuclear.fi

https://erncip-project.jrc.ec.europa.eu/

New standard is needed

Not all EU Member States have the capability to process data provided by radiological detection instruments. Therefore, Member States should consider having coordinated capability available for a more efficient and comprehensive approach, in response to future radiological threats.

European Reachback centres could be built upon existing national facilities and expertise. They would provide analysis services for alarm adjudication and other security needs at the request of a Member State. However, efficient data processing is only possible if standard protocols are agreed:



Deliverables

In 2014-15, the Group reported on the *Remote expert support of field teams* (Report EUR 27099 EN) followed by a state-of-play report on *National reachback systems for nuclear security* (EUR 27626 EN). Further, a survey was conducted to assess the needs of the end-users for the standardisation of the data format in order to make Reachback more efficient - *Reachback*; *Information sharing in a nuclear security event* (EUR 27630 EN).

Contact

ERNCIP Office
European Commission • Joint Research Centre
Institute for the Protection and Security of the Citizen
Security Technology Assessment Unit
ERNCIP Project
Via E. Fermi 2749, I-21027 Ispra (VA), Italy
Email: erncip-office@jrc.ec.europa.eu

1 April 2016

Joint Research Centre