

The EU's unique approach to tackling CBRN threats, with the support of the UN Interview with



Natalie Pauwels, Head of Unit, FPI, European Commission, Brussels



Marian de Bruijn, Programme Coordinator, UNICRI, Turin

In the Spotlight

+++ Research+++

Building up synergies between the different sectors involved

Horizon Europe – research to secure against CBRN risks

by Dr Philippe Quevauviller, Policy and Research **Programming Officer, DG Migration and Home** Affairs, European Commission, Brussels*

o set the scene, it is important to stress that CBRN research cannot be discussed on a solely scientific ground, i.e. research needs must be placed in a larger policy, industry and civil society context. Actions to secure against CBRN risks involve many different sectors and actors, such as policymakers and stakeholders, scientists, industry (including SMEs), training and operational units, civil society (including municipalities), and more generally the citizens!

Establishing a proper dialogue

One of the main challenges in this context is to ensure that a proper dialogue is established among them, both horizontally (among sectors and disciplines) and vertically (from the international to the national/local levels). In the first place, the policy landscape needs to be well understood in its overall complexity as it represents the main framework for CBRN risk management. It concerns various regulations set at international, EU or national level in the field of security, civil protection, consumer and health protection, environment and industrial

risks, energy and transport, customs, and is prone to international cooperation (e.g. through networking of CBRN Centres of Excellence).

While international and EU policies are developed in close consultation among the different sectors, in practice interactions are less obvious at the implementation level among sectors within the Member States. This is partly due to an insufficient sharing of information and joint actions. The dialogue hence needs to be designed to build up cross-disciplinary and cross-sectorial synergies, gathering and sharing knowledge from policies, scientific disciplines, industry/SMEs, practitioners (including first responders, police forces, civil protection units, etc) and risk management authorities (including municipalities).

A platform for success

Horizon Europe, the EU research and innovation framework programme (2021-27), provides a platform via EU research funding to contribute to these dialogue needs, in particular through the so-called Cluster 3 "Civil Security for Society" **programme**. Within this framework, various types of actions related to CBRN risk management are funded, namely research, innovation and networking (in particular practitioners' networks), which cover a range of issues related to CBRN risks, either accidental or due to deliberate actions, on technologies,

Dr Philippe Quevauviller



has been a Research Programming and Policy Officer in the Directorate General (DG) Migration and Home Affairs of the European Commission since 2015. Holding two PhD in oceanography and environmental chemistry, he was a researcher in chemical oceanography from 1984 to 1989. Dr Quevauviller then joined the European Commission, firstly as a Scientific Officer at the DG Research and Innovation, then as a Policy Officer at the DG Environment in

2002. In October 2008, he went back to the Research DG where he managed projects on climate change impacts on water systems/resources and natural hazards. In April 2013, Dr Quevauviller moved to the Secure Societies Programme (firstly at DG Enterprise, then DG Migration and Home Affairs since early 2015) where he is responsible for programming and managing security research projects, in particular on disaster risk and crisis management (natural catastrophes, accidents, terrorist threats).

While international and EU policies are developed in close consultation among the different sectors, in practice interactions are less obvious at the implementation level among sectors within the Member States."

methods, novel solutions to enhance or improve prevention, preparedness, response and recovery. CBRN is a cross-cutting issue which is covered by the five thematic areas of the programme, namely

- Disaster-Resilient Societies (DRS),
- · Fight against crime and terrorism (FCT),
- Infrastructure (INFRA),
- Border management (BM), and
- Support to Scientific Research and Innovation (SSRI).

Bringing the human dimension back

The work programme and related yearly calls for proposals are complemented by regular exchanges among different sectors and actors involved in the five thematic areas through the

Community of European Research and Innovation for Security (CERIS), which is the successor of the successful Community of Users (CoU) developed in the years 2014-2020. Since 2021, CERIS not only facilitates exchanges and synergy building between different research and capacity-building projects, it now moves to a more proactive participation of experts, calling for inputs and supporting the overall implementation of the Civil Security for Society programme.

An important feature is that this networking initiative brings the human dimension back into highly technical discussions, considerably facilitating working exchanges. An illustrative example of this is the willingness to join forces and establish synergies among projects that take place within the CERIS framework, including in the context of international side events such as the one that involved 13 projects (see box) at the CBRNe Research & Innovation conference held in Lille, France in early May 2022 (https://cbrneconference.fr/).

This very important CBRNe Research & Innovation Conference also discussed various features such as stakeholder engagement in CBRN preparedness (including the general public), multidisciplinary, multi-agency and civil-military cooperation, innovative CBRN technological solutions for CBRN agents detection, PPE, decontamination, testing and validation of technologies, scenario building, cross-border exercises, harmonisation of procedures in preparedness and response and, if required, standardisation, uptake of innovative technologies and market dimension, etc.

Web Horizon Europe https://bit.ly/3SucgYQ

*With thanks to Dr Olga Vybornova (UCL, Belgium) for her contribution to this paper.



European CBRN projects and initiatives

PROJECTS

PROACTIVE: PReparedness against CBRNE threats through cOmmon Approaches between security praCTItioners and the VulnerablE civil society

https://proactive-h2020.eu/

HoloZcan: Deep Learning Powered Holographic Microscopy for Biothreat Detection on Field

https://www.holozcan.com/

RESIST: REsilience Support for critical Infrastructures through Standardised Training on CBRN

https://project-resist.eu/

VERTIGO: Virtual Enhanced Reality for inTeroperable training of CBRN military and civilian Operators

https://cbrn-vertigo.eu/

EU-RADION: European sensor system for CBRN applications https://eu-radion.eu/

NETWORKING ACTIONS

eNOTICE: European Network of CBRN Training Centers

https://www.h2020-enotice.eu

INCLUDING: Innovative Cluster for Radiological and Nuclear Emergencies

https://including-cluster.eu/

NO-FEAR: Network Of practitioners For Emergency medicAl systems and cRitical care

$\underline{\text{https://no-fearproject.eu/}}$

FIRE-IN: Fire and Rescue Innovation Network

https://www.fire-in.eu/

PANDEM-2: Pandemic Preparedness and Response

https://pandem-2.eu

CAPACITY-BUILDNG INITIATIVES

ECCofEX: On the feasibility of the creation of a European CBRN Centre of Excellence

https://www.umu.se/en/research/projects/eccofex/

JA TERROR: Strengthened preparedness and response to biological and chemical terror attacks

https://www.jaterror.eu/

Bullseye: A Harmonised Response to Chemical and Biological

https://www.bullseyeproject.eu/