



# **Horizon 2020 Secure Societies WP 2018**

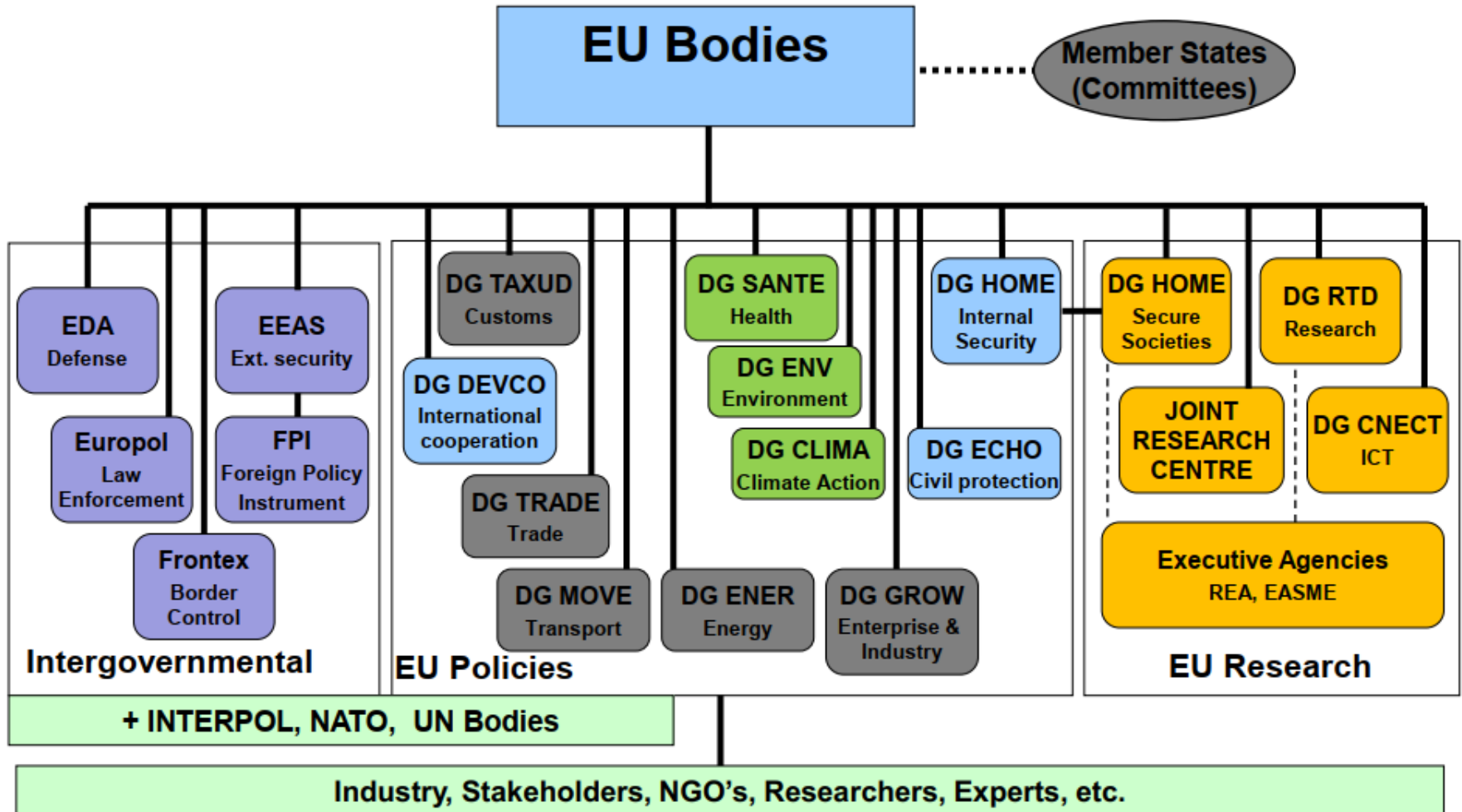
## **DRS call 2019**

DG Migration and Home Affairs



# Disaster Resilient Societies

A complex policy landscape



# EU Policy context

## Disaster Resilient Society

**DG HOME**

Internal Security

**COM(2009) 273 final**

CBRN Action Plan

+ **COM(2014)247 final**

CBRN-E risks

+ **European Agenda on Security**

**DG ECHO**

Civil Protection

**Decision 1313/2013**

EU Civil Protection

Mechanism

## Environmental threats

**DG ENV**

Environment

**Decision 1386/2013**

Environment Action

Programme

**Directives:** Seveso III,  
Water Framework, Floods

## Climate threats

**DG CLIMA**

Climate action

EU Climate Adaptation

Strategy

## Health threats

**DG SANTE**

Consumer Health

**Decision 1082/2013**

Serious cross-border

threats to health

**DG ENER**

Energy

**Regulation 347/2013**

Tran-European Energy  
Infrastructure

**Directive 2009/7/EU**

Safety of nuclear  
installations

**DG MOVE**

Transport

**Decision 661/2010**

Tran-European Transport  
Network

**DG TAXUD**

Customs

**EU Custom policy** for  
supply chain security and  
use of customs detection  
technology for CBRN-E

## International

**DG DEVCO**

International  
cooperation

CBRN-E Centres of  
Excellence

**EEAS**

Ext. security

**Intergovernmental**

**+ UN Bodies, NATO**

Nuclear non-proliferation treaty  
Chemical Weapons Convention  
Biological Weapons Convention

**DG GROW**

Enterprise & Industry

**Security Industrial policy**

COM(2012)417 final

**Internal Security Strategy**

COM(2010)673 final

**European Agenda on Security**

**DG TRADE**

**Regulation 428/2009**

Transit of dual use items

**HORIZON**

2020

**EU Research**

**EDA**

Defense

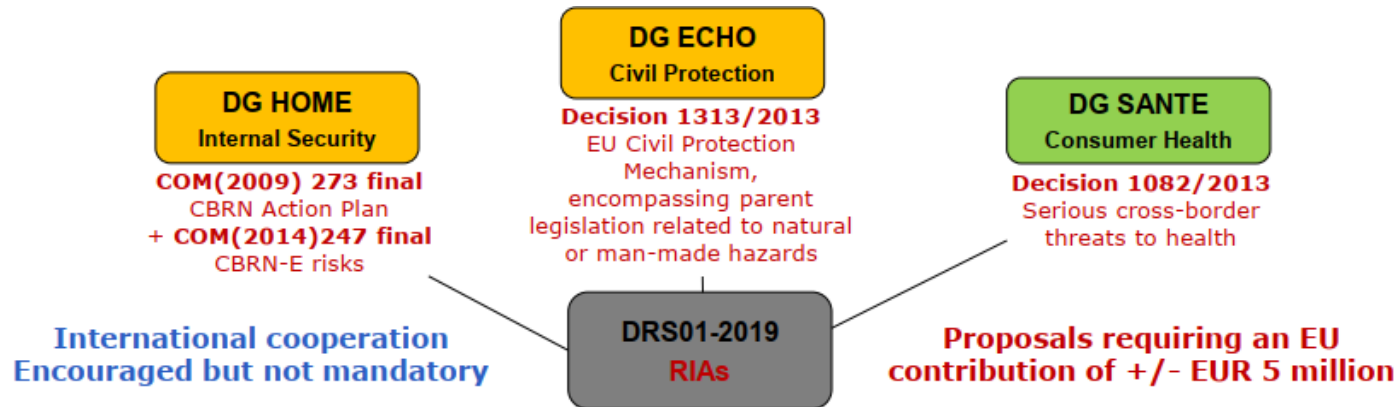
Joint Investment  
Programme / EFC

### **2018-2020 DRS Call**

Advancing innovation in the society at large, and among first responders, to reduce the loss of human life and to reduce environmental, economic and material damage from natural and man-made disasters, including from climate-related weather events, earthquakes and volcanic events, space weather events, industrial disasters, crime and terrorism threats.

- SU DRS01-2018-2019-2020: Human factors, and social and societal, and organisational aspects for disaster-resilient societies
- SU-DRS02-2018-2019-2020: Technologies for first responders
- SU-DRS03-2018-2019-2020: Pre-normative research and demonstration for disaster resilient societies
- SU-DRS04-2019-2020: Chemical, biological, radiological and nuclear (CBRN) cluster
- SU-DRS05-2019: Demonstration of novel concepts for the management of pandemic crises

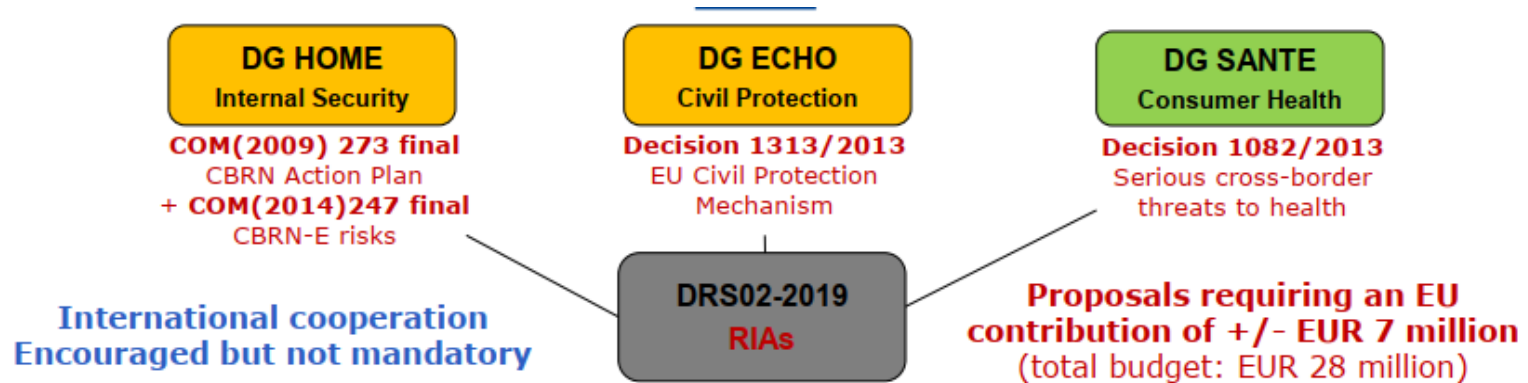
# SU-DRS01-2019



## Human factors, and social, societal, and organisational aspects for disaster-resilient societies

- Research and innovation in support of improved preparedness and risk awareness related to natural or man-made disasters from a societal viewpoint in view of creating a resilient society in Europe
- Research to assess social media and other crowd-sources data in emergency situations for different disaster scenarios (positive and negative impacts)
- Research encompassing the whole **risk management** cycle (from prevention and preparedness, communication, to response and recovery) with focus on risk awareness and response

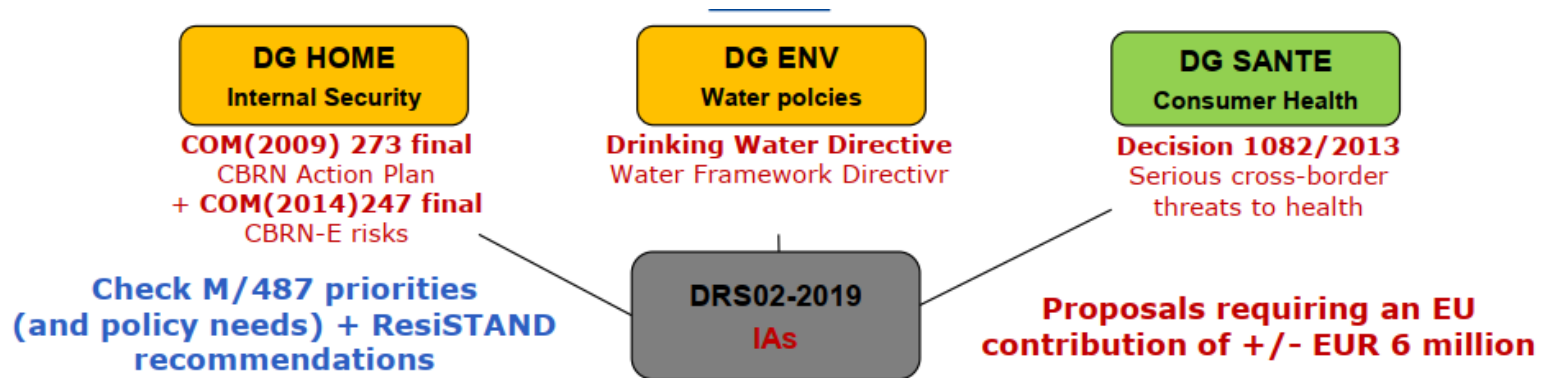
Addressing diversity in **risk perception**, vulnerabilities, understanding, better transfer of research outputs to meet citizen expectations regarding risk acceptance and awareness.... **Multidisciplinary teams** with CSOs, first responders, (national, regional, local, city) authorities and involving citizens representative of **European diversity** for different types of disasters : development of a culture of improved preparedness, adaptability and resilience to risks, including the use of social-media and crowdsourced data, and the **involvement of citizens** in the investigations and possible **validation of tools and methods**.



## Technologies for first responders

Novel solutions improving the protection of first responders against multiple and unexpected dangers, or enhancing their capacities by addressing related research and innovation, in particular in 2018:

- **Sub-topic 2:** Innovation for rapid and accurate pathogens detection: novel technologies required by first responders for rapidly detecting pathogens, as well as tools for joint epidemiological and criminal risk and threat assessment and investigation.
- **Open Sub-topic:** Other technologies for use by first responders (involving a large number of organisations) on e.g. communicating and smart wearables, light-weight energy sources, situational awareness using UVA and robots etc. (see text of call), the list is not exclusive. Requirement for testing and validation of technologies / methodologies not only in labs but also in training installations and in-situ deployment. Interdisciplinary teams to be involved. Participation of first responders in a systematic manner and new methods on how to involve them and organise their interactions with researchers.



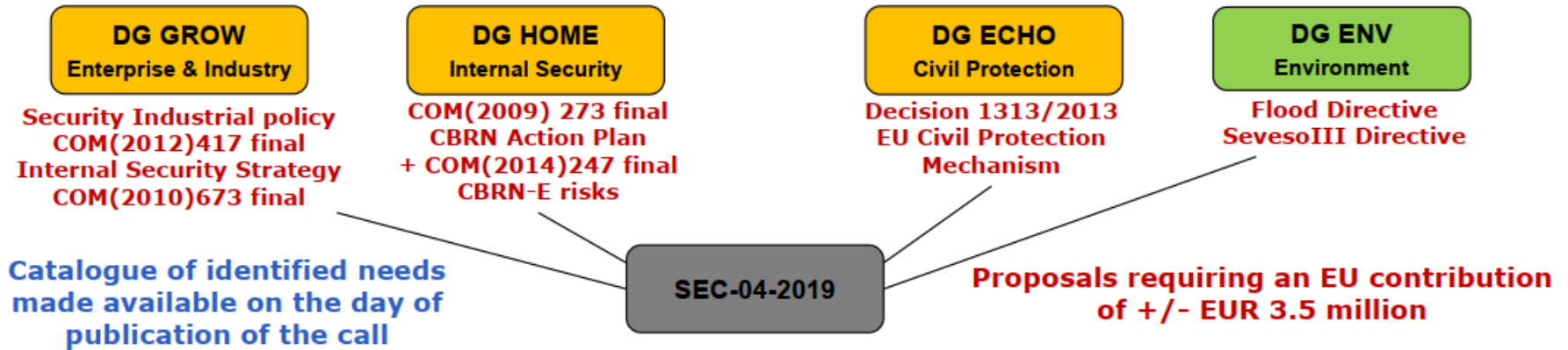
## Pre-normative research and demonstration for disaster-resilient societies

Insufficient harmonisation and standardisation hampers interoperability of equipment and procedures implemented by first responders, also leading to market fragmentation. Pre-normative research may address this issue effectively. In 2018, focus will be on:

- **Sub-topic 2 – Pre-standardisation in crisis management (including natural hazard and CBRNE emergencies):** Development of standards for civil protection in the areas of crisis management (including for systems, tools and services related to natural hazards and CBRN-E emergencies) to increase interoperability of equipment and procedures. IAs to bring validated and positively assessed practices into standards within or outside current standardisation processes. Participation of Sops required. Complementarity with EDA-supported activities in the CBRN-E area.

Expected impact: standards for interoperable equipment and procedures in support to operations involving international crews.

# SU-DRS04-2019



## Chemical, biological, radiological and nuclear (CBRN) cluster

Technologies and innovations in the field of CBRN developed by companies which often face difficulties in bringing them to markets.

List of technologies added to ENCIRCLE platform 2019 call opened to RIAs led by SMEs building up an agreement with ENCIRCLE for support to the exploitation of research outputs and integration in the platform.

Where applicable, complementarity to be demonstrated with activities supported by EDA

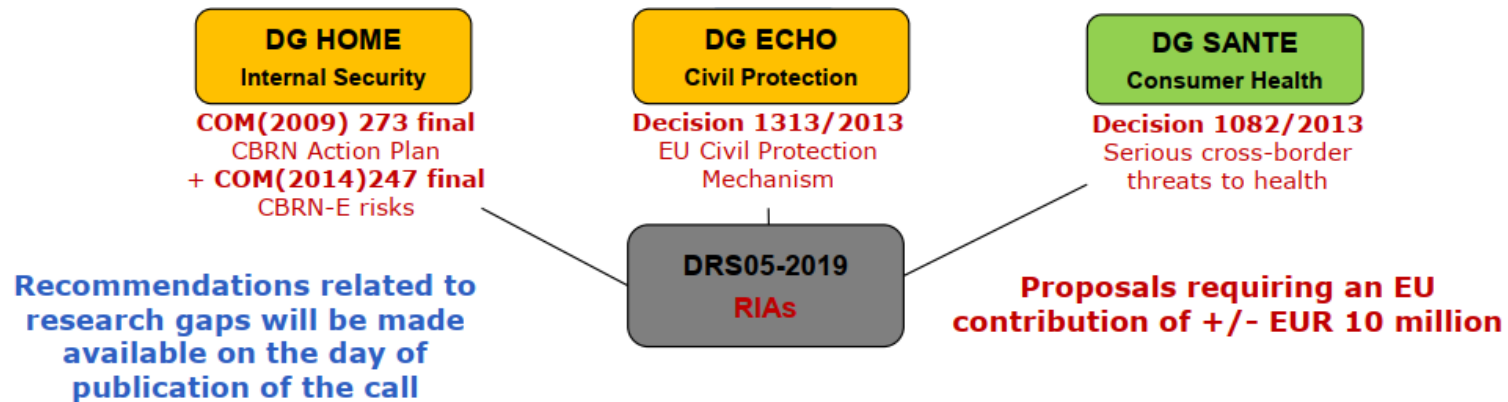


# ENCIRCLE

European Cbrn Innovation for the market  
CLustEr



## SU-DRS05-2019

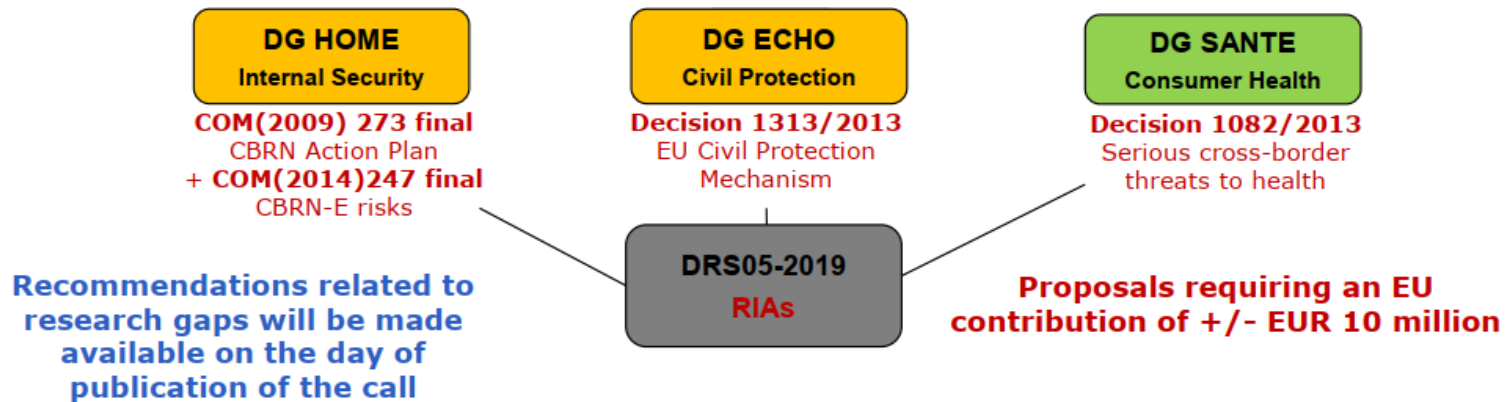


### Demonstration of novel concepts for the management of pandemic crises

- Large-scale pandemics need to be addressed internationally, with a large number of practitioners and stakeholders, from planners of national health systems to first responders.
- Exploratory phase (2014) addressing the feasibility of strengthening capacity-building for health and security protection issued a number of recommendations related to research gaps and proposed innovative concepts to better integrates existing tools and systems (to be made publicly available on the portal of the call)
- Demonstrations required to assess these novel concepts in support of cross-border emergency approaches, to strengthen preparedness and response to pandemics

Expected impacts: Novel concepts for health and security protection in case of large-scale pandemics validated by international organisations and a large number of EU Member States (with a commitment to share the concepts), prototype IT system integrating innovative tools and supporting existing emergency frameworks, and operational strategy for implementation of the concepts.

## SU-DRS05-2019



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**Thank you!**  
**Any Questions?**

