



Horizon 2020 Secure Societies WP 2018

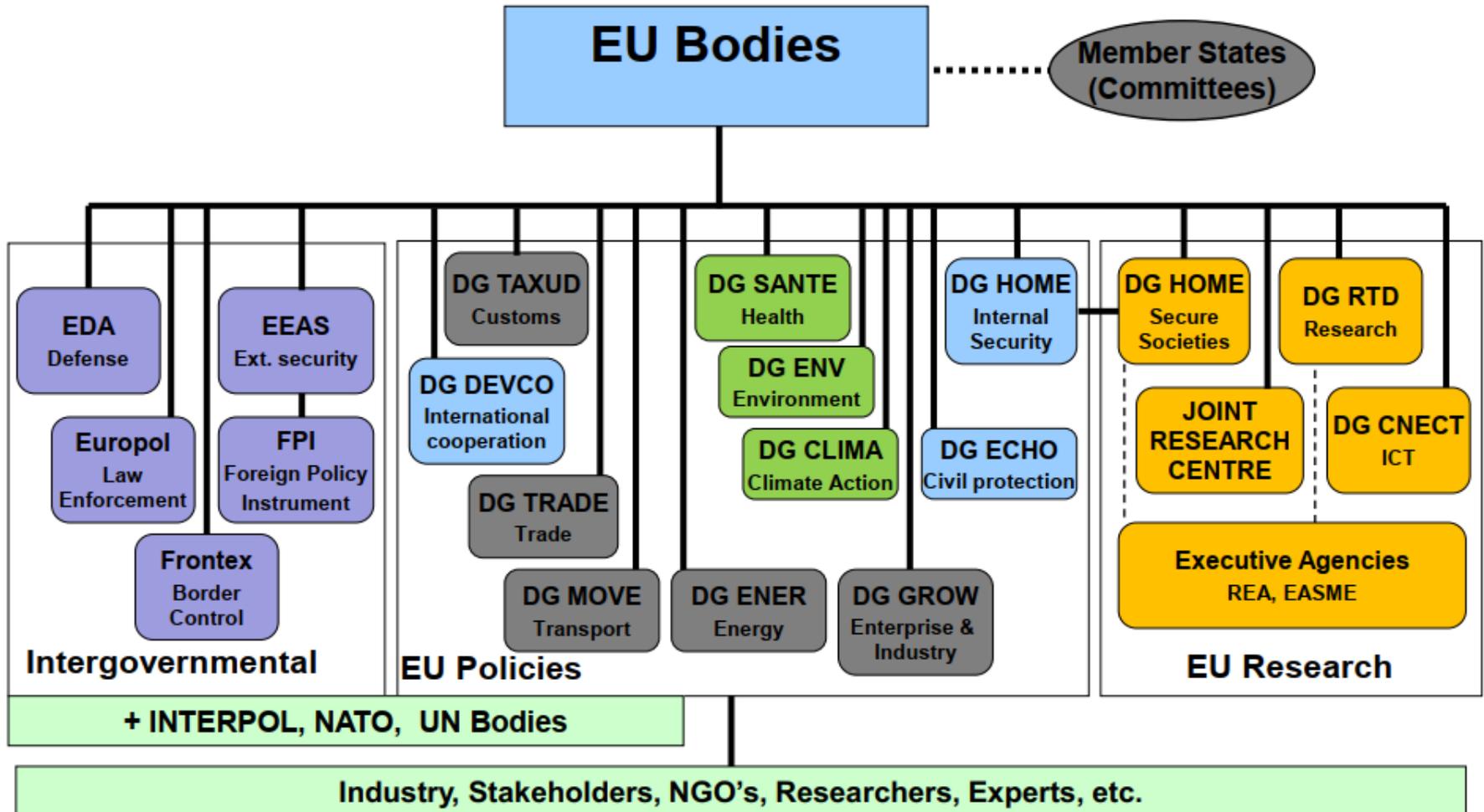
DRS call 2019

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

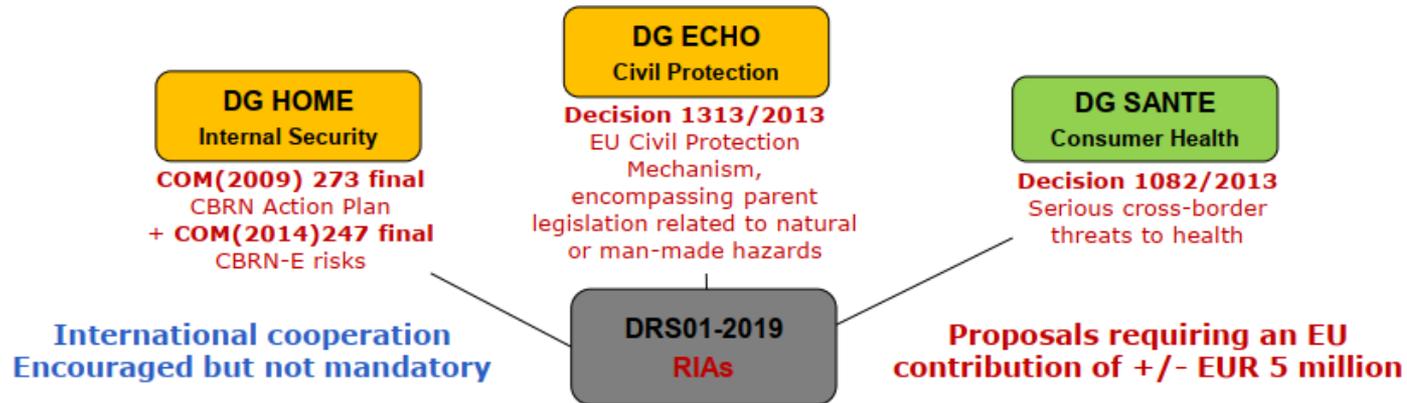
Joint Investment
Programme / EFC

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

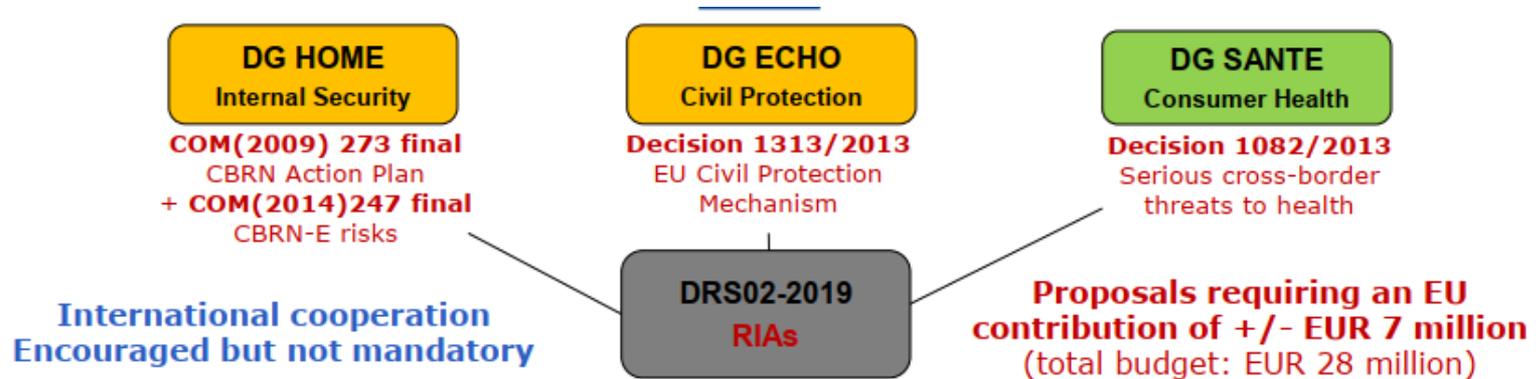
SU-DRS01-2019



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.



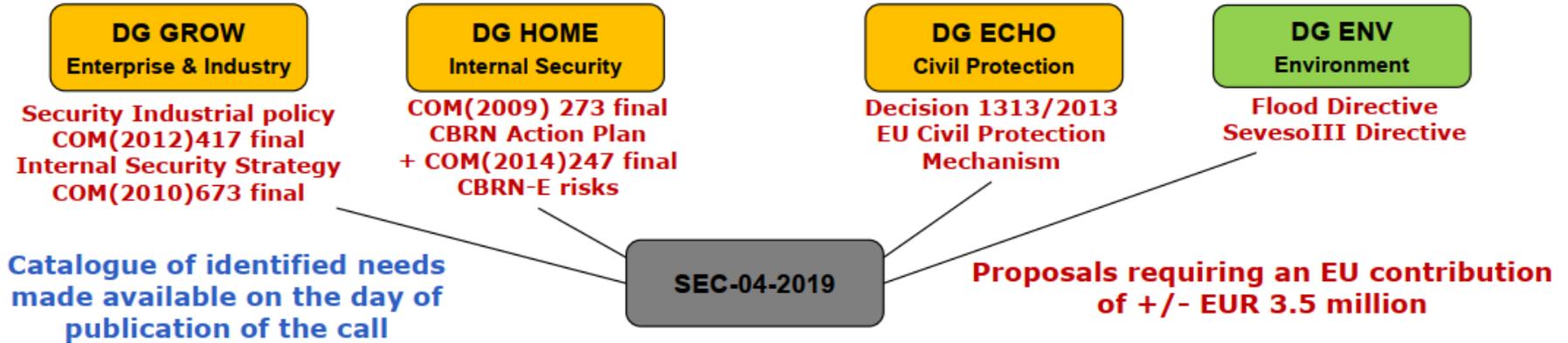
Pre-normative research and demonstration for disaster-resilient societies

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.

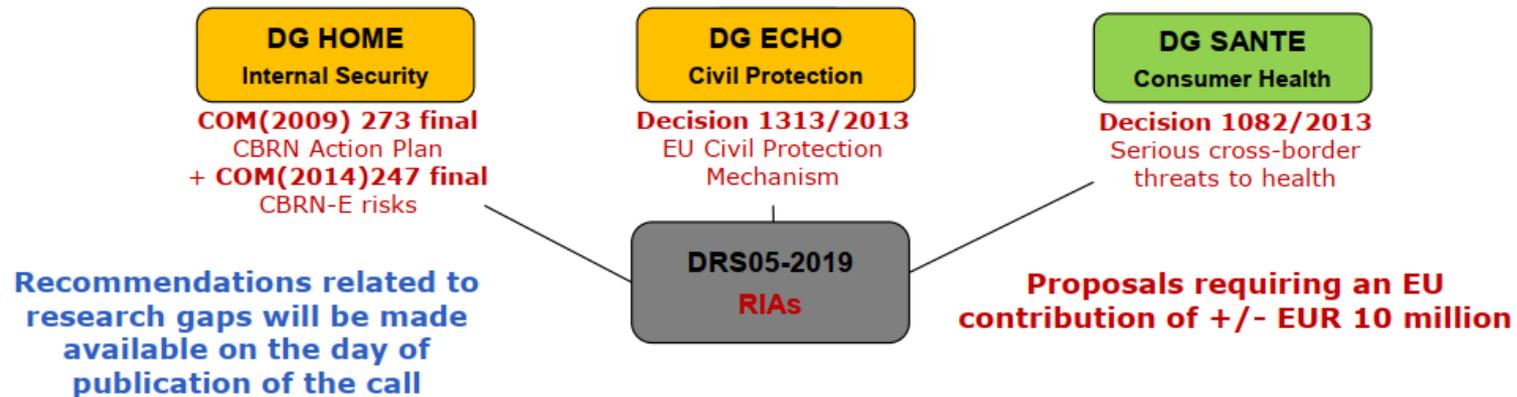
Where applicable, complementarity to be demonstrated with activities supported by EDA



ENCIRCLE

**European Cbrn Innovation for the market
CLustEr**

SU-DRS05-2019

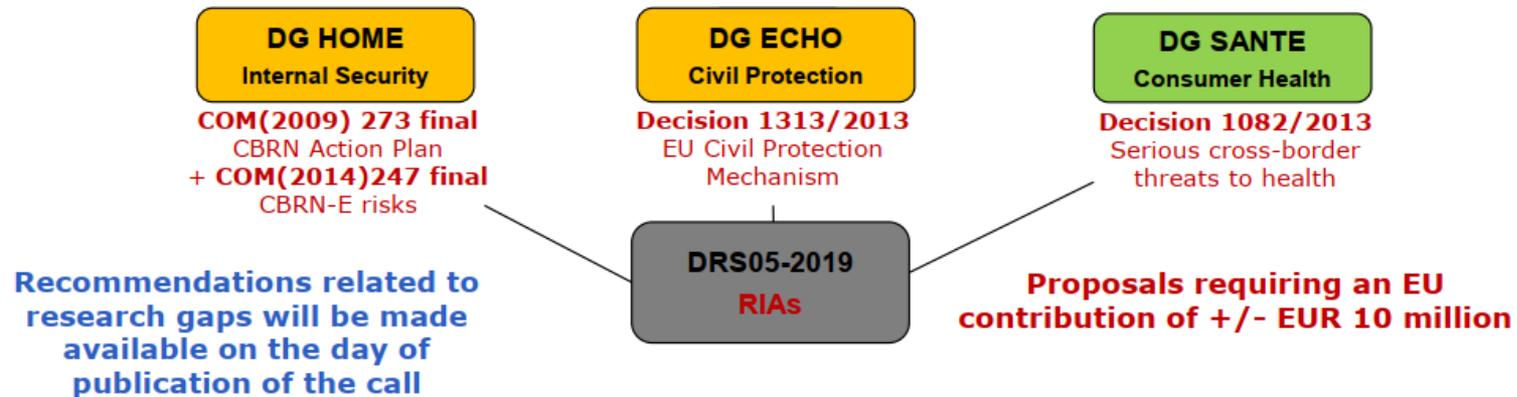


Demonstration of novel concepts for the management of pandemic crises

- 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?