



EUROPEAN COMMISSION

Community of European Research and Innovation for Security (CERIS)

**COMMUNITY OF EUROPEAN RESEARCH AND INNOVATION FOR SECURITY (CERIS)
DISASTER RESILIENT SOCIETIES (DRS) – STATE-OF-PLAY**

07-10TH NOVEMBER 2022

Hybrid (physical attendance + ZOOM) Meeting

BAO Congress Centre
Rue Félix Hap 11, 1040 Brussels

DRAFT AGENDA

MONDAY 07th November

Disaster Resilience and Insurance

Workshop under the coordination of **ETH Zurich**, supported by the projects EU-Hybnet, InfraStress, SecureGas and SmartResilience. The workshop is a place for exchanging ideas, experiences and stakeholders' expectations related to new developments in the area of managing and pricing of disaster risks with a focus on: **Climate change-related and natural disasters**, focusing on emerging extreme threats ("**x-threats**" or **XTs**), **Insurance**, and its interactions with public sectors and other stakeholders, and the **interconnectedness** of critical infrastructures.

- 9:00 Coffee, get together
- 9:15 Welcome address: Ph. Quevauviller (DG HOME), G. Sansavini (prof. chairman Risk Center, ETHZ) / A. Jovanović (vis. prof. Risk Center, ETHZ), G. Mariani (AON Insurance & Reinsurance brokers)
- 9:30 Speaker TBC
Role of insurance matters in the EU disaster management policies?
- 9:45-10:45 **Session 1: Current priorities and options in the insurance and reinsurance disaster management policies** – Chairs: C. Pani (AON), D. Shapira (Data4Risk)
- Governance approaches for non-quantifiable risks: need to develop more and better "soft tools", R. Sachs (Sachs-Institute)
 - Assessing probabilities and impacts of extreme events for the needs of insurance under climate change, O. Haug (Gjensidige Insurance Group / NRS)
 - Insurance in an Emerging Risk Complex; Socio-Ethical Observations, M. Mullins (Univ. of Limerick)
 - Priorities and strategy for insurance related to extreme threats, G. Mariani (AON Insurance & Reinsurance brokers)
 - Discussion and short contributions (ytbc)
 - Position of brokers and insurers:
UNIQA, Zürich, Marsh, Allianz

- Position of reinsurers and insurers' associations:
CCR, SwissRe, MunichRe, Geneva Association, ČAP
- Open discussion

10:45-11:00 BREAK

11:00-12:30 Session 2: **Extreme threats – Data, analysis; risks, forecasting** – Chairs: J. Karvonen, G. Sansavini

- Defining and characterizing extreme threats and estimating their impacts, A. Jovanović, H. Schernberg (ETH Zürich)
- Systems science for understanding the complexity of extreme threats: Case study of cyber insurance, M. Jalali (Harvard Univ.)
- D4Home and D4Weather solutions for Insurance, D. Schapira, S. Dafis (Data4Risk)
- Hybrid threats as a possible trigger and amplifier of extreme threats (EU-Hybnet project), P. Mattila (Univ. of Laurea)
- Example of COVID as an “extreme threat” for health infrastructure, P. Klimek (CSHV)
- Discussion and contributions (ytbc):
 - Ubimet, IREQ Canada, WSL-SLF: Extreme weather and infrastructure
 - Space Applications: Modelling the workflows in managing risks and impacts of extreme event
 - Open discussion

12:30-13:30 BUFFET LUNCH

13:30 -15:00 Session 3: **Resilience assessment and insurance** – Chairs: E. Pelgen, R. Sachs

- Engineering resilience in critical infrastructure exposed to extreme threats, G. Sansavini (ETH Zürich)
- Digital twin technology platform to orchestrate and interact resilience resources – data, information and tools for optimized collaboration and action, O. L. Sawicki-Kacprzyk (Ortelius)
- Resilience (Tool)-as-a-Service: Use case in insurance sector, S. Chakravarty (Steinbeis EU-VRi, SmartResilience project)
- Integrating risk, situational awareness and resilience, G. Giunta (ENG, InfraStress project)
- Assessing resilience of different levels in the society: national, regional, communities, cities, single infrastructure, C. Fuggini (RINA, SecureGas project)
- Discussion and contributions (ytbc):
 - ETHZ: Stress-testing resilience
 - Lombardi: Use of advanced technologies for ensuring resilience of critical infrastructures
 - Open discussion

15:00-15:15 BREAK

15:15-16:00 Session 4: **Aligning insurance and resilience-related practices and policies** –
Chairs: P. Mattila, D. Schapira

- Partnership in disaster management - Search & Rescue exercise Vienna, E. Pelgen (Johanniter)
- Assuring resilience against extreme events at national and regional level, Ch. Sommade, C. Menon (HCFRN Resilience France):
- DIN SPEC standardization of stress-testing resilience – an example, S. Akkoub (DIN, InfraStress project)
- Discussion and contributions (ytbc):
 - AFNOR: International standardization for EU projects on risk and disaster management
 - Comune die Milano: Assuring resilience of big cities against extreme events
 - ANL (USA): Ensuring resilience internationally
 - JRC: Ensuring active knowledge management and re-usability of EU DRS project results

16:00-16:30 Conclusions, Discussion

Moderators: A. Jovanović (ETHZ), Ph. Quevauviller (EC, DG Home)

- M. Brandt (EC, DG Home, CER directive)
- I. Kavvadas (EC, DG ENV, Flood Directive) TBC
- Open discussion

16:30 End of the workshop

Proceedings: Apart for the usual dissemination channels provided by CERIS (web availability of presentations, etc.), the extended abstracts of selected papers are intended to be published in the special issue of the Steinbeis Transfer Magazine (<https://transfermagazin.steinbeis.de/?lang=en>).

Social: Get-together evening foreseen with participants of the Societal Resilience day and participants from the insurance workshop.

TUESDAY 08th November

Societal Resilience day

09:00 – 09:10 Welcome, **Nicolas Bessot** (Head of Unit Cluster 3, DG HOME)

09:15 – 10:15 **Resilient Europe and Societies by Innovating Local Communities**

- Introduction to the RESILOC project, by **Karsten Uhing**
- RESILOC Solution Tools and Methods, by **Uberto Delprato**

10:15 – 11:00 PANEL – **From scenario to recommendations on local resilience strategies** (moderated by **Karsten Uhing** tbc)

- Tetovo-Bulgaria, by **Nikolay Todorov** (Bulgarian Red Cross)
- West Achaia, by **Marios Didachos** (Municipality of West Achaia)

11:00 – 11:15 BREAK

11:15 – 12:00 PANEL – **Community journeys, from scenario to recommendations on local resilience strategies** (moderated by **Karsten Uhing** tbc)

- Community Journey Catania, by **Marco Romano** (Civil Protection Catania) **TBC**
- Community Journey Gorizia, by **Paola Lorenzoni** (TBC)

12:00 – 12:15 Q&A

12:15 – 12:30 Conclusions and next steps

12:30 – 14:00 BUFFET LUNCH

14:00 – 14:15 **CERIS/CMINE** – Introduction to the Societal Resilience, by **Jon Hall**

14:15 – 15:30 PANEL – **Societal Resilience**

- Social Media and Crowdsourcing in European Disaster Risk Management, **Nathan Clark** (LINKS)
- How technology can improve disaster management through better community engagement, **Martina Ragosta** (ENGAGE)
- Facilitating collaboration between citizens and civil protection agencies to increase resilience, by **Maike Vollmer** (RiskPACC)

15:45 – 16:00 BREAK

Parallel Session – Main Hall

16:00 – 17:30 PANEL – **Societal Resilience – Risk scenarios and management**

- Service for multi-hazard systemic vulnerability and dynamic risk scenarios with and for first and second responders, and other stakeholders, by Cees van Westen (PARATUS)
- A decision-support system (DSS) for disaster risk management, by Ivan Van Bever (MEDIATE)
- Understanding metrics with respect to disaster scenarios. How to measure, control and mitigate the impact particularly on vulnerable groups, by Paolo Capuano (CORE)
- Building European Communities' Resilience and Social Capital (BUILDERS)? **TBC**

Parallel Session – Basement Room

15:45 – 17:30 **Societal Resilience PROJECT TO POLICY EVENT (by invitation)**

➤ 15:45 Details to follow – Involving RESILOC, LINKS & ENGAGE

17:30 Conclusions & Close

Participants are invited to leave the main room just at the end of the session for logistic reasons (rearrangement of the room, musical sound check)

17:30 – 18:30 Cocktail

18:30 – 21:00 Evening Event (buffet dinner, musical entertainment)

WEDNESDAY 09th November

CBRN session

09:00 – 09:10 General introduction – **Philippe Quevauviller & Policy DG TBC** (DG HOME / ECHO)

09:10 – 10:30 PANEL (5-10 min per project followed by Q&A) – **CBRN (Technical)**

- the establishment of validated procedures for the detection and identification of biological toxins by **Brigitte Dorner** (EuroBioTox)
- Deep Learning Powered Holographic Microscopy for Biothreat Detection on Field by **János Pálhalmi** (HolozCan)
- Testing common approaches between European safety and security practitioners, in particular Law Enforcement Agencies (LEAs) and CBRNe First Responders by **Laura Petersen** (PROACTIVE)
- Detection of multiple threats amongst which CBRN threats or pandemic viruses are present by **Manuel Lozano** (NEST)
- Q&A

10:45 – 11:00 BREAK

11:00 – 12:30 PANEL (5-10 min per project followed by Q&A) – **CBRN (Training & Networking)**

- develop and deploy a harmonised chemical, biological, radiological and nuclear training curriculum for first responders and medical staff by **Carlos Rojas Palma** (MELODY)
- Developing a Federation to provide a common framework to standardize access to CBRN facilities by **Luigi De Dominicis** (INCLUDING)
- Development of a European Network Of CBRN Training Centers by **Col Wolfgang Reich** (E-Notice)
- Taking an integrated approach to conflicts and disaster relief by virtualization and simulation of CBRN defence training by **Massimo Migliorini** (VERTIgO)
- Making CBRN Standards relevant to first responders using worked examples by **Jon Hall** (PEERS)

Discussion & Q&A

12:30 – 14:00 BUFFET LUNCH

WEDNESDAY 09th November

Health Risks session

14:00 – 14:30 PANEL (5-10 min per project followed by Q&A) - **Health Risks**

- Preparing Europe for future pandemics through innovations in training and building capacity between EU member states by **Jean-Luc Gala** (PANDEM-2)
- Strengthening the coordination capability of the first responders in handling waterborne pathogen contamination events by **Speaker TBC** (PathoCERT)
- Q&A

14:30 – 15:30 PANEL (5-10 min per project followed by Q&A) – **Medical Emergency Responses**

- A Novel Integrated Toolkit and Common Denominators towards enhanced triage and pre-hospitalisation services for emergency medical response by **Eleftherios Ouzounoglou** (NIGHTINGALE)
- Creating a pan-European network of emergency medical care practitioners, suppliers, decision and policy makers by **Luca Leonardi** (NO-FEAR)
- Developing innovative mixed-reality training technologies to combine real-world medical simulators with virtual environments to train medical first responders, **Speaker TBC** (MED1stMR)
- Procurement and assessment processes for innovative technologies, **Speaker TBC** (iProcureSecurity PCP)
- Q&A

15:30 – 15:45 BREAK

15:45 – 17:30 **PROJECT TO POLICY EVENT**

- Details to follow – Involving projects and DG SANTE / HERA

17:30 Conclusions & Close

Participants are invited to leave the main room just at the end of the session for logistic reasons (rearrangement of the room, musical sound check)

17:30 – 18:30 Cocktail

18:30 – 21:00 Evening Event

THURSDAY 10th November

Technologies for first and second responders

09:00 – 09:05 General introduction – **Philippe Quevauviller** (DG HOME)

09:05 – 10:15 PANEL 1 (5-10 min per project followed by Q&A) – **Responder Technologies Inventory updates** / Moderators: **Eleftherios Ouzounoglou & Anastasios Dimou**

- Next Generation Integrated Toolkit for Collaborative Response, increasing protection and augmenting operational capacity, **Eleftherios Ouzounoglou** (INGENIOUS)
- First-Responder-centered technology toolkits empowering and enhancing the operational capacity of First Responders, **Anastasios Dimou** (RESCUER)
- Increasing the resilience of seamless transport operation to extreme events, **Federica Genna** (RESIST)
- Addressing challenges associated with the protection of first responders in hazardous environments, **Anastasios Dimou** (FASTER)
- Assessing new technologies in operations, **Speaker TBC** (TeamAware)

10:15 – 10:30 Break

10:30 – 11:30 PANEL 2 (5-10 min per project followed by Q&A) – **Responders technologies, ctd.** / Moderator: **Olivier SALVI**

- Collecting needs, identify added value and ensure uptake of technologies, **Speaker TBC** (FIRE-IN)
- Technologies to protect and help First Responders (FRs) during the mitigation of large disasters (Natural or Man-made), **Federico Carvajal Rodrigo** (ASSISTANCE) On-line
- Interoperability amongst systems and equipment, training and awareness for responders, **Speaker TBC** (Search & Rescue)
- Providing new interaction between First Responders and research centres, **Speaker TBC** (RESPOND-A)
- Setting up a methodology for field validation of innovative technologies, **Speaker TBC** (INTREPID)

11:30 – 12:30: Panel discussion. Identified possible topics / *Moderator (TBC): INTREPID*

- Co-creation: how to have meaningful interaction with end users for successful workshops?
- Validation: how to assess that the technology is useful and will be used?
- Exchange: how to create a “community”/information exchange between users of a technology?
- Access: How to handle the issues of procurement and the cost for innovative technologies made in Europe?

IN PARALLEL (Rooms downstairs)

09:00 – 14:00 In parallel: poster session of technologies proposed to First Responders by projects

12:30 – 14:00 BUFFET LUNCH

THURSDAY 10th November

Standardisation session

14:00 – 15:30 PANEL – **Standardisation**

Moderator: **TBC**

- Ensuring first responders' safety and empowering their operational capacity through standardisation that may support next generation solutions and procedures, ensuring an effective and efficient collaborative response to crises, **Speaker TBC** (STRATEGY)
- Harmonization and Pre-Standardization of Equipment, Training and Tactical Coordinated procedures for First Aid Vehicles deployment on European multi-victim Disasters, **Juan Román Martínez Arranz** (VALKYRIES)
- Enhancing Standardisation strategies to integrate innovative technologies for Safety and Security in existing water networks, **Speaker TBC** (Aqua3S)
- A fresh approach to support cost-effectiveness resilience, and discussion involving other projects and CEN by **Tom Flynn** (PEERS)

Discussion & Q&A

15:30 – 15:45 BREAK

15:45 – 16:45 **PROJECT TO POLICY EVENT**

- Details to follow – Involving projects and DGs ECHO / CLIMA / DEFIS

16:45 Conclusions & Close