SEREN4

SU-DRS01 webinar

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

19/05/2020 -10 am CET

Speakers

Jean-Claude Masy (French Embassy in the Republic of Korea)

Paul-Henri Richard (Crisis Management chair at UTT)

Armand Nachef (CEA) **– webinar moderator**

with the participation of

Philippe Quevauviller (European Commission) **– Q&A session**

Disaster-Resilient Societies (DRS) call in Horizon 2020

Challenge

All societal functions are exposed to disasters, whether natural or man-made
It is imperative to act in order to make societies more resilient to the resulting disaster issues

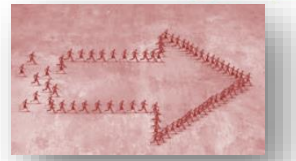
Main objective

- Consider one or more disasters, including from climate-related weather events, earthquakes and volcanic events, space weather events, industrial disasters, crime and terrorism threats
- Then develop and advance innovations (including organisational processes) in the society, and among first responders
  - to reduce the loss of human life
  - to reduce environmental, economic and material damage
  - and to make the society more resilient to the considered disaster

2018 to 2020 Call topics

- SU-DRS01-2018-2019-2020: Human factors, … for disaster-resilient societies (today's webinar – 10am CET)
- SU-DRS02-2018-2019-2020: Technologies for first responders (tomorrow's webinar at 10am CET)
- SU-DRS03-2018-2019-2020: Pre-normative .. demonstration for disaster-resilient societies (tomorrow's webinar at 2pm)
- SU-DRS04-2019-2020: Chemical, biological, radiological and nuclear (CBRN) cluster
- SU-DRS05-2019: Demonstration of novel concepts for the management of pandemic crises (closed call)

Characteristics of Horizon 2020-Secure-Societies



- Follows a **mission-oriented approach**

- Builds **Multidisciplinary projects**
  - Integration of technological research and development with research into political, social and human sciences

- Takes more into account the **Societal Dimension**
  - Respect of privacy and civil liberties

- Strengthens the involvement of the **end-users in project definition and execution**
  - bring together at European level the ‘demand’ and ‘supply’ sides

- Reinforces the **role of the Member States’ authorities** (programme committee)

PRESENTATION OF

SU-DRS01-2018-2019-2020: HUMAN FACTORS, AND SOCIAL, SOCIETAL, AND ORGANISATIONAL ASPECTS FOR DISASTER-RESILIENT SOCIETIES

https://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-security_en.pdf

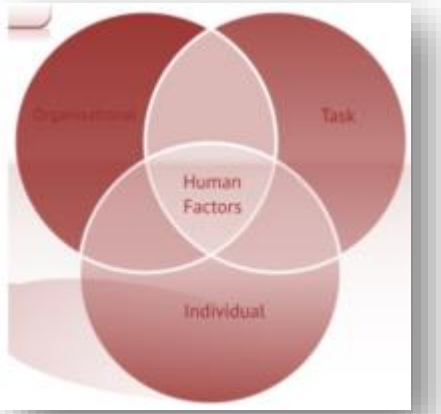
Armand Nachef (CEA)

- **Type of Action** Research & Innovation Action
- **Output TRL** not specified
- **Project duration** not specified
- **Budget per project** **5 M€**
- **Total budget** 5 M€ in 2020
- **Eligibility conditions** **At least 3 first responders responders' organisations or agencies** from at least 3 different EU or Associated countries
  International cooperationin R&I is encouraged but not mandatory
- **Deadline** **27 Aug 2020**

5M€

Human-centric

- **Challenge**
  1. **Resilience of societies heavily rely on how their citizens behave individually or collectively**
  2. **Recent disasters have shown gaps in the level of preparedness of European society for disasters, and highlighted the importance of increasing risk awareness among people and decision-makers**
  3. **Building resilience requires a better understanding and implementation of new technologies and media**
  4. **There is much to learn from some countries with a high level of disaster risk**



Objective *of SU-DRS01 project (1/2)*

1. **Analyze the current situation** and contribute to the understanding of society's awareness to risks
   - Provide comparative analysis of **European diversity regarding citizen risk-perception and vulnerabilities**
   - Provide comparative analysis of **different approaches to risk preparedness** in different countries (within and outside the EU), and among communities in precarious socio-economic conditions
   - **Identify existing tools and guidelines** for an improved prevention, preparedness, alert systems and their recognition by citizens, responses using citizen's competencies and local knowledge, and recovery

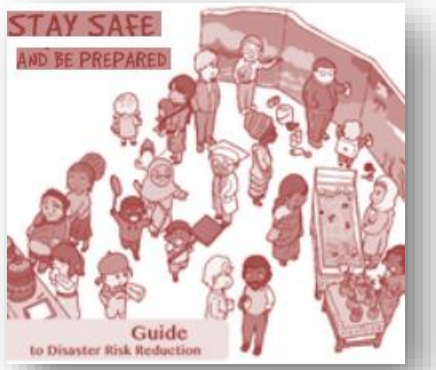
2. **Facilitate the sharing of information and of good practices**
   - Enable improved **information exchanges among different actors involved**, including first responders, local authorities, schools, and citizen representatives
   - Enable intensive **sharing of good practices and of learnings resulting from citizen-scientist interaction**s

3. Thanks to the cross-fertilisation of concepts and of approaches developed by partners in the proposals, and to the studies that will assess the value of raising awareness about relevant research among citizens **Provide recommendations** for
   - the **development of a culture of improved preparedness**,
   - **adaptability**,
   - and **resilience to risks**, including **the use of social media and crowd-sourced data**, and the involven of the citizens in the investigations and possible validation of tools and methods.

Objective *of SU-DRS01 project (2/2)*

4. **Propose** strategies, processes, and methods to **help citizens accessing research results related to disaster resilience**
   Test such strategies, processes, and methods **with citizens and communities representative of European diversity and for different types of disaster** to assess the:
   - individual **capacities of citizens** for disaster management
   - **participation of citizens in the verification and validation of tools, technologies** and processes for disaster management

5. **Enable multi disciplinary teams** with civil society organisations, first responders, (national, regional, local, and city) authorities **to**
   - **Prepare the ground for exercises involving citizens**
   - **Prepare for field-validation of different approaches** related to different disaster risks involving the above actors, in representative urban and non-urban environments, including in areas where precarious socio-economic conditions prevail



Field-level Validation

Scope *of SU-DRS01 (1/3)*

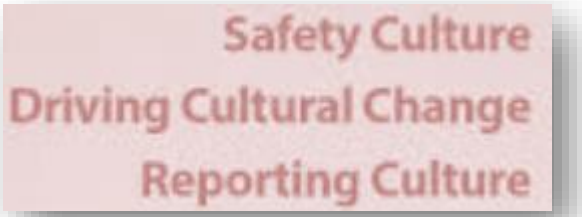
1. **Research on risk awareness should encompass the whole of the disaster management cycle**,
   a) **prevention** (e.g. through education)
   b) **preparedness** (knowing how to react),
   c) **emergency management** (collaboration and communication before and during an event),
   d) **response** (empowering citizens to act efficiently by themselves according to more effective practices and following established guidelines),
   e) **and recovery** (knowledge to build back better).

2. **Research should take into account tangible and intangible cultural heritage**, traditional know-how, land use, construction technologies, and other local knowledge in order to:
   – prevent the creation of new risks,
   – reduce existing risks,
   – prepare for and to respond to disasters
   – look into how to implement the concept of ‘Building Back Better’ of the Sendai Framework

Scope *of SU-DRS01 (2/3)*

3. **Research should address diversity** in risk perception and in vulnerabilities in order to propose new approaches,
   with a particular **emphasis on the use of new technologies**,
   - for community awareness,
   - for leadership,
   - and for crisis readiness and management.

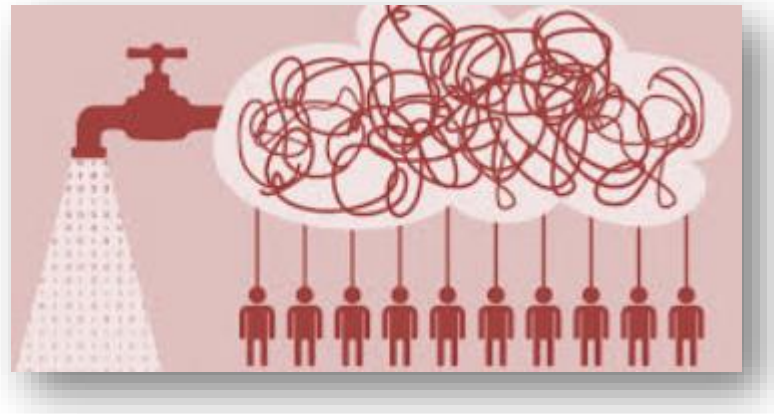
4. **Research should address cultural changes** among individuals, business managers, government officials, and communities, which can create a resilient society in line with the Sendai Framework for Disaster Risk Reduction



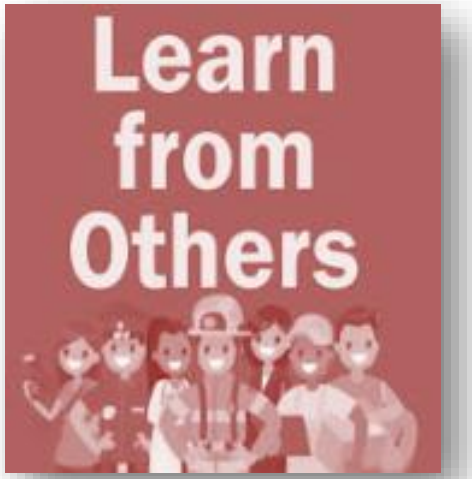
5. **Research should assess the use of social media for different disaster scenarios** (natural hazards, industrial disasters, terrorist threats) involving different actors, including first responders, city authorities and citizens
   - Many solutions using social media and crowd-sourced data in crisis situations have been studied and deployed.
     However their impacts are not well known
   - Social media may not always be available as it relies upon the functioning of critical infrastructure such as phone networks

Scope *of SU-DRS01 (3/3)*

6. **Research should analyse both the positive and negative roles of social media and crowd-sourced data** in crisis situations
   - \+ have been used to spread early warnings and important safety information
   - \+ offer a quick and easy way to relieve friends and family from worry
   - \- may be used to spread false statements and to overstate threats
     - ➢ so the validation processes of information should also be addressed.



7. **There is much that can be learned from certain countries with a high level of risk of natural disasters and where risk awareness is high**
   - ➢ e.g. Japan with high-levels of risks of earthquakes, volcanic events, and tsunamis



TESTIMONIAL

Dr. Jean-CLAUDE MASY

Head of energy and new technology service at the French Embassy of the Republic of Korea, In charge of the COVID-19 crisis management analysis

Summary:

The fight against COVID-19 heavily shows how disaster management depends on how the citizens behave individually or collectively and how governments and civil society organisations design and implement policies preparing for, reacting to, and overcoming disasters.

The spread of new technologies and media induced dramatic changes in how individuals and communities behave. Such technologies have a huge capacity to improve citizen understanding and awareness of risks, to enable an effective response from affected populations, and to increase the resilience of services.

Nevertheless, the implementation of such technologies will depend on cultures, people acceptance, and laws.

The example of the extensive use of novel technologies in South Korea as a response to the COVID-19 crisis deserves a deep analysis.
***Jean-Claude will testify on how the crisis was managed in Korea and how the country was able to minimize the pandemic**.*

4 QUESTIONS RELATED TO THE COVID-19 CRISIS MANAGEMENT

Dr. Paul-Henri Richard

SSH Research Engineer and volunteer firefighter officer

Administrator and animator of the Chair "Crisis Management"- University of Technology of Troyes

1) What is the needed research on cultural changes among individuals, business managers, government officials, and communities in order to create a better resilient society in Europe?

2) What is the needed research to make social media a strong ally in the fight against pandemics like COVID-19?

3) How communication between first responders and the victims and citizens in the affected areas can be enhanced ?

4) How civil society organizations, first responders, (national, regional, local, and city) authorities in the European union can cross- fertilize such concepts and consolidate the different pandemic management cycle approaches in Europe?

Answers of Paul-Henri Richard

Question: What is the needed research on cultural changes among individuals, business managers, government officials, and communities in order to create a better resilient society in Europe?

Answer key words:

Research on

- Decision making culture change during crisis
- Change from centralised crisis management to a logic of networks and collective participation during crisis
- Processes to receive, record, and take into account the initiatives of individuals who want to help during crises

Question: What is the needed research to make social media a strong ally in the fight against pandemics like COVID-19 ?

Answer key words:

Research on

- psychological dimensions of social networks - kind of emotions they are arousing - contribution to resilience
- measuring the social impact of solidarity and mutual aid initiatives such as neighbor support
- Defense against fake news, , their origins and the impact they have on people's behaviour

EUvs DiSiNFO

https://euvsdisinfo.eu/

VOST

Virtual Operations Support Team

Question: How communication between first responders and the victims and citizens in the affected areas can be enhanced ?

Answer key words:

Research on

- Warning and communication that must be multichannel, pragmatic and homogeneous
- Communication strategies of crisis cells
- Weak signals

eena 112
EUROPEAN EMERGENCY NUMBER ASSOCIATION

.be alert

VISOV
Volontaires Internationaux en Soutien Opérationnel Virtuel

Question: How civil society organizations, first responders, (national, regional, local, and city) authorities in the European union can cross-fertilize such concepts and consolidate the different pandemic management cycle approaches in Europe?

Answer key words:

Research on

- Cooperation and mutual learning operation between European countries. Note that civil security is essentially sovereign and structured differently from a country to another as it depends on administrative organisation, priorities and the culture, of each country
- Cooperation between local authorities and civil society for mutual support during the different phases of pandemic crisis management
- Understanding the reasons of the apprehension of the authorities and crisis managers to involve the population in crisis management
- multi-agent coordination, emergent conditions for collective action in crisis situations

Working together :

iLEAD INSPIRE TO LEAD

ILEAnet Innovation by Law Enforcement Agencies networking

driver+ Driving innovation for crisis management

FIRE IN The first European Fire and Rescue Innovation Network

Q & A

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Philippe Quevauviller (European Commission)

Q&A organisator

Geraud Canet (Ministry of research- France)