FIRE-IN

Project Number: 740575

FIre and REscue Innovation Network

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SAFE Cluster

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 740575

‘Breaking the walls’

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Main Objective

Improve the national and European Fire & Rescue capability development process

Activities

main lines:

(i) identification and harmonisation of operational capability gaps

(ii) scouting of promising solutions

(iii) definition of a Fire & Rescue Strategic Research and Standardisation Agenda

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FIRE-IN Partners

1. SAFE CLUSTER, France (SAFE)
2. Ecole Nationale Supérieure des Officiers de Sapeurs-Pompiers, France (ENSOSP)
3. Italian Ministry of Interior, Department of Fire Corps, Public Rescue and Civil Defence), Italy (CNVVF)
4. Bundesanstalt Technisches Hilfswerk, Germany (THW)
5. Global Fire Monitoring Centre, Germany (GFMC)
6. INERIS DEVELOPPEMENT, France (INDEV)
7. Fraunhofer INT, Germany (FhG-INT)
8. Fire Ecology and Management Foundation Pau Costa Alcubierre, Spain (PCF)
9. Catalonia Fire Service Rescue Agency, Spain (CFS)
10. Scientific and Research Centre for Fire Protection, Poland (SRC)
11. The Main School of Fire Services – Poland (MSFS)
12. Council of Baltic Sea States, Sweden (CBSS)
13. Civil Contingency Agency, Sweden (MSB)
14. KEMEA, Greece (KMEA)
15. Czech Association of Fire Officer, Czech Republic (CAFO)
16. GAC group

Thematic working Groups
+ involvement of Associated Experts

A. ***Search and Rescue (SAR) and emergency Medical Response***

CFS,

SAFE, ENSOSP, CNVVF, CAFO

B. ***Structures fires***

CNVVF

ENSOSP, CAFO, SGSP

C. ***Landscape fires***

PCF

CFS, SAFE, KEMEA

D. ***Natural hazards***

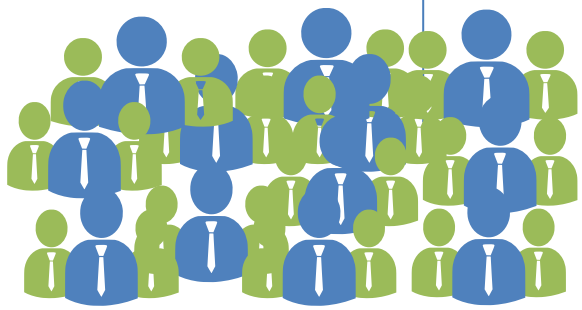
THW

CNVVF, CFS, KEMEA

E. ***CBRNE***

CAFO

ENSOSP, SGSP, KEMEA, CNVVF



FIRE-IN
Associated Experts (AE) community

(international community including key thematic practitioner experts from public, private, NGOs bodies, and representative of thematic working groups from existing networks)

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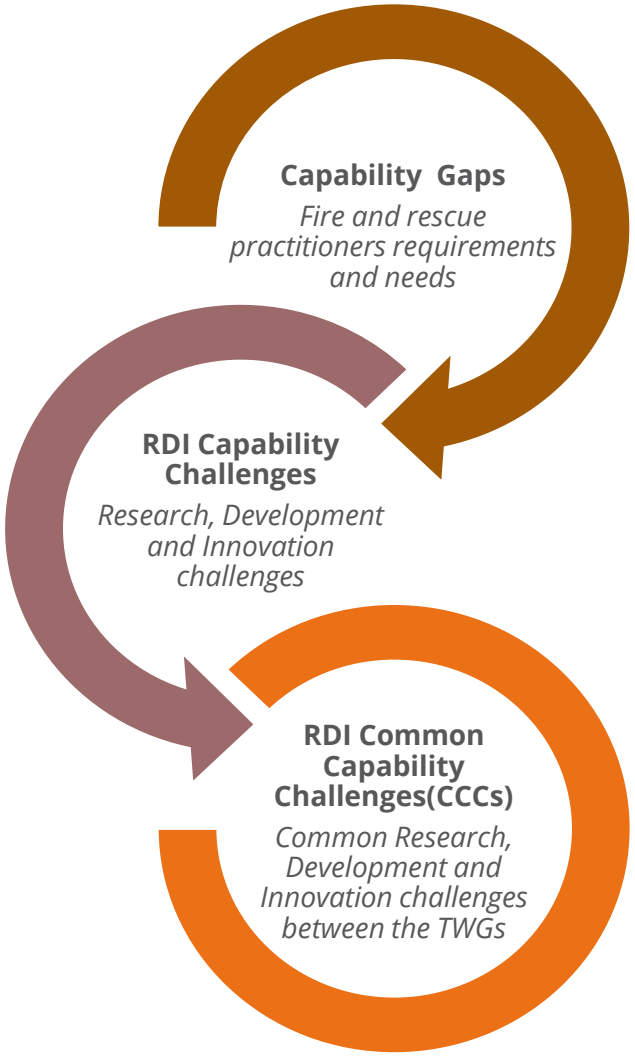
Methodology

Project duration is 5 years (+extension). Work is organized in 3 cycles



1. Example of **capability gap** : The ability to know the location of responders and their proximity to risks and hazards in real time
2. Example of corresponding **RDI capability challenges** :

   Indoor (Above and Below Ground) Responder Geolocation, Outdoor Responder Geolocation, Maritime (Above and Below Water) Geolocation, Infrastructure Standards for Technology Integration

Challenges and resources

The FIRE-IN Common Capability Challenges	High flow of effort in hostile environment	Low frequency, high impact	Multiagency / multileadership environment	High level of uncertainty
Incident Command Organization	**TOP CHALLENGE** Focus on sustainability of safe operations	**TOP CHALLENGE** Anticipate vulnerability, and communicate to the public	**TOP CHALLENGE** Distribute decision-making	Strategies choosing safe, resilient scenarios, and maintaining credibility
Pre-planning	Pre-plan a time-efficient, safe response, minimizing responder's engagement	**TOP CHALLENGE** Negotiate solutions with stakeholders for anticipated scenarios	Pre-plan interoperability and enhance synergies	Focus on governance and capacity building towards more resilient societies
Standardization	Establish specific procedures and guides facilitating operations	**TOP CHALLENGE** Standardize capabilities in front of pre-established scenarios	Establish an interagency framework	Build doctrine for resilience in emergency services and societies
Knowledge cycle	Train specific roles and risks	**TOP CHALLENGE** Organizational learning focusing efforts in key risks and opportunities	**TOP CHALLENGE** Build a shared understanding of emergency and train interagency scenarios	Focus on capacity building towards more resilient societies
Information management	Information cycle	Manage key information focused on decision-making	Define common information management processes between agencies	Provide an efficient, flexible flow of information for a shared understanding
Community involvement	**TOP CHALLENGE** Develop public self-protection to minimize responders exposures	**TOP CHALLENGE** Involve communities in preparing population for the worst scenario before it happens	Not identified at this stage	Cultural changes in risk tolerance and resilience
Technology	**TOP CHALLENGE** Use technology to assess risks and minimize responder's engagement	Forecast and simulate complex scenarios	Technological tools to support data sharing	Get a clear picture of the risk evolution

Future activities of FIRE-IN

- Identification of capability gaps and priority setting for research, standardization and innovation

Use of Traffic light system: green-yellow-red :TLS is a classification scheme specifically designed for characterizing/classifying the **CCCs and FCCCs** as "*covered*" (green light), "*in progress*" (yellow light), and "*still a gap*" but with a future trend (red light).

Beneficiaries: Funding programs (Horizon Europe and national), industries, RDI organizations, suppliers and… practitioners (long term)

Products: Strategic Research Innovation Standardization Agenda

	High flow of effort in hostile environment (HF)	High Impact, Low Frequency (HILOF)	Multiagency / Multileadership (ML)	High level of uncertainty (UN)
Incident Command Organization	CCC-1. Organize to sustain safe operations	CCC-2. Anticipate and prioritize avoiding the collapse of the emergency system	CCC-3. Build interoperability for a distributed decision-making based on a shared understanding of the emergency	FCCC-4. Strategic management focused on proactively reducing sources of uncertainty and building robustness and resiliency.
	T	T	T	T
	R	R	R	R
	S	S	S	S
Community involvement	CCC-5. Develop public self-protection and awareness	CCC-6. Involve communities and key stakeholders as active actors in risk management	FCCC-7. Negotiate the values with communities before the emergency	FCCC-8. Cultural change towards risk tolerance and resilience.
	T	T	T	T
	R	R	R	R
	S	S	S	S
Knowledge Cycle	CCC-9. Train specific roles and risks and invest in a robust knowledge cycle	FCCC-10. FRS empowered to innovate and build organizational learning	CCC-11. Build a shared understanding of the emergency, and train interagency scenarios	FCCC-12. Focus on capacity building towards more resilient societies
	T	T	T	T
	R	R	R	R
	S	S	S	S
Decision Making Cycle	CCC-13. Make operational decisions based on building an understanding of the emergency and its evolution	CCC-14. Choose a strategical scenario of resolution, and distribute tactical decision-making	CCC-15. Build a shared understanding of the scenario to synchronize decision-making	FCCC-16. Create certainty and shared vision of emergencies.
	T	T	T	T
	R	R	R	R
	S	S	S	S
Risk reduction	CCC-17. Focus encouraging self-capacities and safety	CCC-18. Negotiate solutions with stake holders for anticipated scenarios	FCCC-19. Integrate risk prevention and safety into other policies and actors	FCCC-20. Focus on governance and integral risk management.
	T	T	T	T
	R	R	R	R
	S	S	S	S
Preparedness	CCC-21. Pre-plan a time-efficient, safe response, minimizing responder's engagement	CCC-22. Plan in a more integral way	FCCC-23. Pre-plan interoperability and enhance synergies	FCCC-24. Focus on governance and integral risk management.
	T	T	T	T
	R	R	R	R
	S	S	S	S

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Interactions between solutio

Interactions with RDI and stand

Dissemination

e-FIRE-IN Platform

TOOLS

- **SUBMIT YOUR SOLUTION**: Solution providers (companies or research centers) can submit a solution
- **SEARCH FOR THE SOLUTION YOU NEED**: Practitioners can search the catalog of submitted solutions
- **NEWS**: on homepage, articles about solutions or other relevant information
- **CALENDAR**: date of events for EU or international workshops and conferences
- **NETWORKING**: forums for interactions between practitioners and solutions providers

Dissemination: FIRE-IN National Hubs

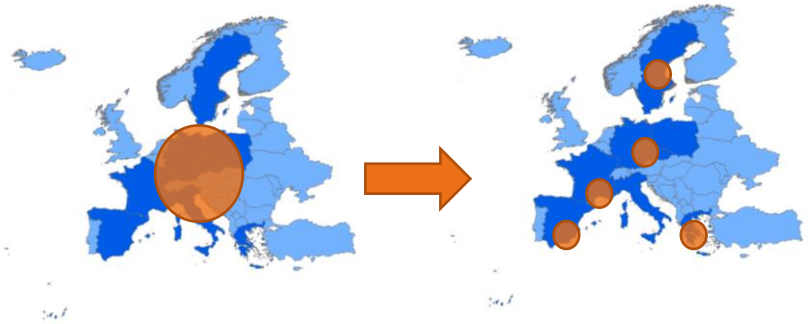
The concept

What exactly is "FIRE-IN National Hubs" ?

The National Hubs Concept is a proposition of FIRE-IN consortium in order to overcome the limitations of COVID-19 meetings and travelling.

Instead of organizing or participating to large European or International events, a series of smaller more local (national) events will be organized.

What are the objectives of "FIRE-IN National Hubs"?



To make FIRE-IN aware to as many people as possible

To boost dissemination

To gain feedback and discuss the Strategic Research and Standardization Agenda with as many experts as possible

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FIRE-IN DOSSIER

Quick situation assessment

FIRE-IN

Thank you!

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