Dear IFAFRI Community,

Most likely, you have noticed recently that our website https://www.internationalresponderforum.org/ was under construction. We apologise for this inconvenience. We have upgraded the "Events Calendar" and implemented a News section, where you can find news from IFAFRI members. Please get in touch with the IFAFRI Project management office (PMO) if you want to share events and news with the IFAFRI community. Moreover, we have updated IFAFRI information and IFAFRI library items. Upgrading the website is ongoing and will likely be finished by the end of 2022.

We hope you enjoy the new website experience.

Update Committee Chairs

Ad-hoc Committee

In September 2021, the ad-hoc committee was founded after Germany took over the IFAFRI chairmanship. The committee, consisting of nine parties, develops an IFAFRI strategy for the upcoming three years. We developed a questionnaire shared with all IFAFRI point-of-contacts and committee members to evaluate the knowledge and use of IFAFRI products and services in the past years.

SEC Committee

The Stakeholder Engagement Committee (SEC) met on Feb 24th, to discuss activities planned for 2022. First Technology Showcase in 2022 took place at the end of April. Planning has started for possible SEC participation at INTERSCHUTZ in June. We plan to create QR codes to hand out at INTERSCHUTZ to direct performers to the IFAFRI website and the Solution's Tool. We are also looking at other ways to promote performers that have provided data on their technical solutions including short submissions for publication in the IFAFRI Newsletter.

IFAFRI Solutions submission tool.

On the IFAFRI web-page, interested organisations can submit a solution to address selected Common Global Capability Gap. The solutions presented in this issue are related to ongoing research focused on the needs of Ukrainian emergency responders as they continue to conduct life-saving missions in hazardous combat zones.

HIGHLIGHTED SOLUTIONS BASED ON THE 2022 WAR IN THE UKRAINE

GAP 6 : The ability to obtain critical information remotely about the extent, perimeter, or interior of the incident

INA intervention app by Gemsotec

Point of Contact: Stefan Rutyers, Co-founder

Gemostec has developed the INA Intervention Application (app), which provides an overview of the scene and creates a unique channel for each incident. INA combines a communications channel with a GIS-enabled map to create better situational awareness for firefighters. This software solution can be used on any type of mobile device or computer. Data from public and private sources, including existing data sources (e.g., fire dynamics modelling), responder geolocation and hazard data, digital building blueprints, indoor and outdoor infrastructure data (e.g., location of hydrants), maps, are integrated into the platform for emergency responders to access while in the field while also allowing them to share information across teams and with the command center.

While aid is being sent from several countries in terms of protective gear for firefighters, they are facing dangerous situations where technological solutions would benefit them tremendously. Most notably, Ukrainian firefighters extinguished a fire at Europe's biggest nuclear plant, which was ignited by a Russian attack. While no radiation was released in this fire, the Ukraine's state nuclear regulator stressed the importance of being prepared for handlings these situations to prevent a situation that could have been potentially worse than the Chernobyl disaster of 1986. Advanced technology could have further assisted firefighters in approaching this situation efficiently and safely.

GAP 7: The ability to conduct on-scene operations remotely without endangering responders

Dronut Tactical sUAS by Cleo Robotics Inc

Point of Contact: Omar Eleryan, CEO

The Dronut is a compact unmanned aerial vehicle (UAV) that can locate targets or threats via a handheld operator control. It is designed for operation in confined spaces and GPS denied environments for use by emergency responders in clearing buildings in emergency situations. This drone is the first bi-rotor ducted drone, and it is designed with no exposed propellers, making it collision tolerant and an effective solution for investigating dangerous and confined spaces. The controls are integrated into an Android smartphone app, and they can be modded onto a Playstation controller.

Ukrainian paramedics are acting heroically, with several ambulances taking fire and EMTs being killed in the process. UAV drones like the Dronut could scan emergency situations for additional threats prior to sending aid into the area, which could reduce the number of injuries and fatalities among responders.

Autonomous Drone Search and Rescue by Unmanned Life

Point of Contact: Jorge Munoz, VP Business & Marketing

Emergency responders can carry out autonomous drone search and rescue missions by selecting an area to scan using Unmanned Life's central interface. Once a search region is selected, drones are sent to autonomously scan the given area with attached high-definition cameras, choosing the most efficient route in real-time based on proprietary artificial intelligence (AI). Unmanned Life's AI analytics then spot individuals in distress, which can then be confirmed by responders. This can then trigger deployment of an additional drone, generally with a heavy octo-copter carrying a life-saving payload, to autonomously launch. Once the individual is safe, all drones land and are ready for the next mission.

A similar type of technology is already being found useful in the Ukraine. A team from a Seattle-based drone maker, Brinc, trained Ukranian Emergency Services and military officers in utilizing their Lemur drones, which can push open blocked doors and enter confined spaces. They use a lidar radar as a less hackable alternative to a GPS. Responders can use this technology to assess a variety of dangerous areas for threats and survivors.

Team Digitale Verkenning - Nederland

Point of Contact: Robbert Heinecke, Team Leader

Team Digitale Verkenning augments incident management by using high-quality technological unmanned systems. The Digital Reconnaissance Team uses drones with advanced cameras to provide imaging of locations that are not safely accessible to emergency responders, which can assist them in safely and efficiently approaching a situation. The Team integrates information from outdoor drones, indoor drones, unmanned ground vehicles (UGVs), remote readable measurement devices, and bodycams and shares it with first responders and dispatch. This solution demonstrates the value of multiple forms of unmanned and digital exploration.

The International Committee of the Red Cross in the Ukraine is doing work in weapons contamination to help clear unexploded ordnance and mark hazardous UXO-contaminated areas. Technology like Team Digitale Verkenning's unmanned drone systems would allow incident command to assess whether a region is safe prior to entry by responders.

R&D Committee

The committee is currently in the process of changing the Chairmanship. More information will follow in the next IFAFRI Newsletter.

CGC Committee

As the capability committee is dormant, there are no recent activities.

Update IFAFRI Members

AUSTRALIA

Our friend and colleague Albert Zehetner has moved positions within his organization and as such will not be able to undertake further engagements with IFAFRI. A new contact will be appointed soon. We like to thank Albert for being part of the team and wish him all the best for his future endeavors. Good luck and farewell!

EUROPEAN COMMISION

As a follow-up to the fruitful meetings in the Disaster-Resilient Societies (DRS) Thematic Area held in 2021, the "Community of European Research and Innovation for Security (CERIS)", through the offices of DG HOME, encouraged thematic projects to join forces to co-organise a DRS event under the CERIS umbrella.

This Spring, some 20+ Horizon 2020 projects worked together to present an agenda covering a broad range of discussions on NATURAL HAZARDS and SOCIETAL RESILIENCE, CBRN-E CRISIS MANAGEMENT and STANDARDISATION finishing with and extensive look at TECHNOLOGIES FOR FIRST RESPONDERS and PANDEMIC CRISIS MANAGEMENT.

The group met at the iconic location of the BAO- Le bouche à oreille in Brussels, over the 3 days of 23-25 March. In addition to the 100 people attending in-person each day, nearly 300 more joined online at various times through multiple Zoom channels and a very popular YouTube stream.

A substantial part of the event focused on technologies for first responders and the international development being undertaken not just in Europe but also in USA and Asia. For half a day, the event was simultaneously broadcast in English and Japanese as some 60 partners from Japan and Korea joined from the research projects; FASTER, INGENIOUS, INTEREPID and CURSOR. The session compared disaster types and approaches across the world in the context of operations examining such aspects as disaster robotics and new wearable technologies.

A further session concentrated more on European developments and the activities of the Fire-In project FIre and REscue INnovation Network

IFAFRI was represented by Tiina Ristmae and Alexander Rösner of THW. Tiina is coordinator of project CURSOR and was able to ensure clear visibility of the IFAFRI strategy and its synergies with these aspects of Europe's Horizon 2020 project environment.

IFAFRI continues to enjoy a prominent presence within the Crisis Management Innovation Network Europe (CMINE) who were the organisers and channel providers for this CERIS event on behalf of DG HOME.

SPAIN

The complexity of the EU's security policies, the high number of research projects, the disconnection between research and implementation, the challenges involved in introducing innovative tools and solutions into the market and transferring innovative solutions, make it difficult communicating and sharing knowledge effectively and efficiently.

To improve this situation, the European Commission launched in 2014 a "User Community" named CERIS, to reduce the current fragmentation in security research and facilitate the exchange of information among policy makers, research, industry, professionals and the public in general.

Shifting this practice to a national level, in October 2017, the Spanish Ministry of Interior, in close collaboration with CDTI, the Centre for Industrial Technological Development of the Ministry of Science and Technology, took the decision to create the CoU Spain.

The main purpose for the active management of this Community of Users are multiple:

- carry out a better strategic planning of infrastructures and technological needs,
- promote participation in national and international forums on R + D + i in security,
- develop mechanisms to address the management of the expense of R & D & i items in a different way and,
- act as an observatory of technological technologies for security, which supports the strategic planning of the CoU.

This initiative stablishes synergies with the European CoU-CERIS, to identify technological issues of common interest, share information on proposals for ongoing R & D & I projects and raise possible technological needs that can be addressed at national or European level.

During these years, the utility and high expectations of the need to pursue and strengthen our community construction have been demonstrated, with more than 200 members from 25 public bodies and LEAs integrating the community.

COU ESPAÑA SEGURIDAD

GERMANY

IFAFRI Annual Meeting at INTERSCHUTZ

The next IFAFRI annual meeting will take place during the INTERSCHUTZ fair (https://www.interschutz.de/en/) in Hannover Germany in the premises of Deutsche Messe (the same location as the INTERSCHUTZ fair).

The IFAFRI-meeting time schedule:

22 of June 2022
2pm until 6pm:
IFAFRI strategy presentation and discussion

From 6pm: THW-booth party

23 of June 2022
9am until 5 pm:
IFAFRI strategy discussion and committee meetings

More information will be shared shortly with IFAFRI PoCs.

Upcoming Events

May 31 - June 2, 2022 | Messe Frankfurt in Main, Germany

GPEC 2022

Find out more...

June 20 - 25, 2022 | Hannover, Germany

INTERSCHUTZ

Find out more...

June 28 - 30, 2022 | SAFEX, Algiers, Algeria

SECURA NORTH AFRICA EXPO & CONFERENCE

Find out more...

23-26 August, 2022 | Adelaide Convention Center, Adelaide, Australia

AFAC 22 CONFERENCE & EXHIBITION WEBSITE

Find out more...

August 24, 2022 | Henry B. Gonzalez Convention Center, San Antonio, TX, USA

FRI - FIRE RESCUE INTERNATIONAL CONFERENCE (FRI SAN ANTONIO)

Find out more...

October 7, 2022 | Centro Fiera di Montichiari, Montichiari, BS, Italy

REAS 2022 (POWERED BY INTERSCHUTZ)

Find out more...

IFAFRI International Forum to Advance First Responder Innovation focuses on enhancing and expanding the development of affordable technology and innovative solutions to improve first responder safety, efficiency and effectiveness

Contact us today to find out how we can work together to help first responders.

European Commission | With the support of the European Commission

internationalresponderforum.org