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Knowledge Network





Dear Reader,

As the Spanish Presidency begins and we take the baton from our Swedish colleagues, I would like to share with you our goals for the second half of this year. It will be an honour to add our contribution to the continuous efforts by all recent Presidencies to strengthen resilience in Europe based on solidarity and reinforced coordination.

In line with international efforts such as the Sendai Framework, our national systems should be moving from managing disasters to managing disaster risk. There is no doubt that we face new and growing challenges resulting from natural and manmade risks. The last three Presidencies (France, Czechia and Sweden) have allowed us to reflect on some of these new challenges, like the impact of climate change and long-term emergencies on national civil protection systems. As a next step, one of the main objectives of the Spanish Presidency will be to explore ways to strengthen governance of disaster risk management (DRM) in Europe.

On 5–6 July, a workshop is taking place in Aranjuez on the topic of 'Governance for Disaster Risk Management'. During this event, we will pay special attention to systems and planning, but also to measuring and monitoring progress on disaster risk reduction. We will learn about research currently being undertaken in this field by key international institutions, and discuss one of the recent milestones in the UCPM's development: the Union Disaster Resilience Goals. We will focus on the first of the goals, which aims to improve risk assessment, anticipation, and DRM planning.

Building upon the results of the workshop, over the coming months we propose highlighting the need to address risks in a holistic manner in all phases of the DRM cycle, guaranteeing the life and safety of all persons in an inclusive way, as well as their property, the environment, and historical and cultural heritage, avoiding disasters (or at least reducing their impact). Mobilising the funding needed for this approach requires knowing the cost of disasters, facilitating evidence-based decision-making along the DRM cycle, and improving knowledge about and access to funding mechanisms available at national, European and international level.

We are very much looking forward to engaging with experts and other members of the UCPM family at the different events that will take place, both in Spain and at the EU institutions, during these six months, sharing good practices and learning from one another on our way to becoming a more disaster resilient Europe.



Francisco José Ruiz Boada

Director General for Civil Protection and Emergencies of Spain

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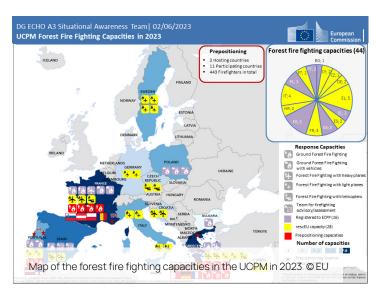
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'Success is based on preparation' - ERCC ready for the 2023 wildfire season

Wildfires remain one of the most prominent disaster risks in Europe, and are increasing in intensity and geographic scope. In terms of burnt areas, 2022 was the second worst year in Europe since 2006, with 2017 being the most catastrophic. The potential numerous requests for assistance to the Union Civil Protection Mechanism (UCPM), the threat posed by wildfires to human lives, and the risk of economic damages are just some of the reasons behind the attention paid to wildfires across the disaster risk management cycle under the UCPM.

"This year has already started much drier than average, and it may be a very busy summer, so we need to be ready," said Commissioner for Crisis Management Janez Lenarčič.



After a dry season in Europe in 2022, persistent drought conditions have continued in the beginning of 2023 as shown by an ECHO Daily Map on desertification and drought. Based on data from the last 40 years, areas in north-eastern and south-eastern Europe are likely to experience a much higher than average Fire Weather Index (FWI) in the upcoming summer. A high value of FWI indicates a high probability of having larger wildfires and burnt areas.

The UCPM will enter the 2023 wildfire season with more capacities than ever before. The Mechanism counts on the European Civil Protection Pool (ECPP): two modules with planes (consisting of two Canadair each), five ground firefighting modules, seven modules with vehicles, and two forest fire advisory/assessment teams are pre-committed by UCPM member states to be deployed if they are needed.

Should the availability of ECPP response capacities be exhausted, the EU has the rescEU fleet as a safety net. This has been doubled, and now includes 24 airplanes and 4 helicopters from 10 UCPM member states. Furthermore, 11 member states will send almost 450 firefighters to be pre-positioned in France, Greece and Portugal – all areas at high risk – for different periods in the wildfire season.

An Emergency Response Coordination Centre (ERCC) Wildfires Support Team will be operational from mid-June until mid-September. The team will consist of ERCC Duty Officers, national experts, and one <u>ARISTOTLE</u> wildfire expert as part of the Scientific Technical Assistance Facility (STAF). The team will assist the ERCC through situational analysis and operational support, ensure common situational awareness, and enable efficient information exchange between the wildfire-prone countries.

Lastly, the ERCC Situational Awareness Sector, in close cooperation with ARISTOTLE, has set up a monitoring service and a 24/7 wildfire emergency reporting service at European and global level. This will capitalise on scientific expertise and early warning systems, such as the European Forest Fire Information System (EFFIS) and the EFFIS Decision Support System developed and managed by the JRC.

Upon request from the ERCC or a UCPM member or participating state, an emergency report indicating fire danger forecast and wildfire-related information derived from earth observation data will be available within three hours. The EU's Copernicus emergency management service and its satellite mapping component complements operations with detailed assessments from space.

While this summer is expected to be hot and dry, the ERCC and the UCPM are preparing.



10 years of the Emergency Response Coordination Centre

Commissioner for Crisis Management Janez Lenarčič welcomed a delegation of European ministers, high-level representatives, firefighters, and journalists to the European Response Coordination Centre (ERCC) on 30 May to mark the 10th anniversary of the ERCC. This occasion also offered an opportunity to present the EU's preparedness actions for this summer's wildfire season.

The inauguration of the ERCC in May 2013 changed the way the EU responds to disasters. Over the past 10 years, the ERCC has worked 24/7, 365 days a year, to respond to over 650 requests for assistance in support of countries affected by disasters. In the last three years alone, it has implemented actions as part of the worldwide response to the COVID-19 pandemic in 2020 and 2021; assistance to Ukraine (the most complex operation to date); and assistance (in record time) to respond to the earthquake that hit Türkiye and Syria.

Working closely with the UCPM member and participating states, counting on their solidarity and expertise, the ERCC has contributed to landmark achievements in European Union response to crises. Today, the ERCC is at the heart of Europe's preparedness and response to emergencies, and is a global source of analytical and anticipatory information.

rescEU, a reserve of national capacities set up in 2019 and fully funded by the EU, added a new layer of protection from disasters. During his visit to the ERCC, Commissioner Lenarčič announced the doubling of the rescEU aerial firefighting fleet for the 2023 wildfire season. The 10 EU member states, which will host a total of 24 airplanes and 4 helicopters, were presented with certificates of appreciation.

The operational level was represented by a group of firefighters, including leaders of the teams that will be pre-positioned in France, Italy and Greece during the wildfire season, and pilots who will fly rescEU aircraft. During the anniversary ceremony, they spoke about their preparations for the wildfires season. Commissioner Lenarčič thanked them, stressing: "Wildfires have become a pan-European concern. They gravely affect lives, livelihoods and the environment. In total, 20 EU Member States recorded more burnt areas than average in 2022. The wildfire risk expanded to areas that have not previously been exposed, moving well beyond the Mediterranean region. This increase in wildfires requires decisive and prompt action, also at EU level".

A temporary exhibition at the ERCC highlighted its analytical capacity and work behind the scenes. Visitors were able to experience how wildfires are extinguished in Spain in a Canadair aircraft through virtual reality (VR) goggles. Maps and other visuals illustrated some of the ERCC's main activations in recent years, showcasing the scientific systems and services that enable the centre's monitoring and anticipatory capacities.

Go to the <u>Knowledge Network platform</u> for more information and videos.







Ukraine - new member of the European civil protection family



Ukraine joined the UCPM on 20 April 2023, becoming its ninth participating state. Head of the State Emergency Service of Ukraine (SESU), Mr Serhiy Kruk, shared his insights with ECHO on Ukraine's accession to the Mechanism, and lessons learned during Russia's war of aggression.

Head of SESU, Mr Serhiy Kruk: Let me start by commending Commissioner Lenarčič, Director-General Popowski, and colleagues at ECHO for their unconditional support in facilitating the process of Ukraine's accession into the UCPM.

I want to thank all European colleagues and the ERCC who have supported Ukraine, and we hope for further joint cooperation. After all, we are invincible when we are united. We very much look forward to working together with member and participating states of the Mechanism.

What does membership in the UCPM mean for Ukraine?

With the UCPM membership, we will have an invaluable opportunity to benefit from existing tools and programmes for the development of our civil protection system and for attracting assistance. We will also be better positioned to dispatch assistance via the UCPM wherever it is needed.

I am confident that Ukraine will further strengthen its capacity in the field of prevention, preparedness, and response to emergencies at national and international levels.

Finally, Ukraine will also have a chance to strengthen cooperation and interaction between the ERCC and SESU.

In your opinion, how can Ukraine contribute to the UCPM, now or in the future, in terms of capacities, knowledge, and expertise?

We have accumulated experience while dealing with the consequences of Russia's ongoing aggression. We are ready to offer our expertise in conducting medical evacuations, provision of medical assistance, and transportation of victims to healthcare facilities. Also, Ukraine can offer trained teams for emergency and rescue operations, and training on demining actions. In general, Ukraine has experience in responding to emergency situations and organising civil protection measures under martial law conditions.

What is the main lesson learned for Ukraine since the onset of Russia's war of aggression against Ukraine, and how can membership of the Mechanism help?

Since the beginning of Russia's war of aggression, the State Emergency Service has been performing a wide range of tasks to protect the civilian population – inter alia, eliminating the consequences of missile and air strikes, extinguishing fires, and conducting rescue operations and humanitarian demining.

The main lesson learned is the vital importance of coordination and collaboration with international, national, and local authorities to ensure smooth streamlining of equipment and assistance provided to the affected population.

UCPM membership offers an invaluable opportunity to engage with the European civil protection family through the exchange of experts programme, and participation in prevention and preparedness projects. We are also very pleased to be invited to expert group meetings, Presidency workshops, and civil protection committees – this allows us to exchange expertise and strengthen relations with member and participating states of the UCPM.



Swedish Presidency workshop 'Strengthening whole-of-society resilience in Europe'



The 'Strengthening whole-of-society resilience in Europe' workshop of the Swedish Presidency took place in Stockholm, gathering almost 100 participants from UCPM member and participating states, representatives from ECHO, the EU Agency for Cybersecurity, the General Secretariat of the Council of the EU, the Government Offices of Sweden, NATO and the OECD.

Under the framework of the Union Disaster Resilience Goals, participants focused their discussions on 'strengthening whole-of-society resilience in Europe', a priority of the Swedish Presidency of the Council of the EU in civil protection. This included strengthening individuals' preparedness

(for which the Presidency proposed launching a European Crisis Preparedness Initiative directed towards the population of Europe), as well as further developing cooperation with the private sector in prevention, preparedness and response. 'How to monitor and measure public awareness and preparedness' was another topic covered in the two-day workshop.

The workshop was opened by Charlotte Petri Gornitzka, Director-General of the Swedish Civil Contingencies Agency (MSB): "Our discussion on the individual's preparedness and private sector engagement is highly topical. The aim of our Presidency is to provide a joint European framework for our efforts to enhance preparedness and resilience, drawing on the many lessons to be learned from the ongoing war in Ukraine, the pandemic, and the climate crisis. A European Crisis Preparedness Initiative could help us develop and learn together, exchange experiences, and involve all kinds of stakeholders in efforts to develop a more resilient Europe".

50th meeting of the Directors-General for Civil Protection, Arlanda, Sweden 15–16 May 2023

The Directors-General for Civil Protection from member and participating states met for the 50th time to discuss ways to increase Europe's resilience and the capability of the UCPM in the face of complex emergencies. The meeting was chaired by ECHO Director-General Mr Maciej Popowski. Ukraine and Albania were welcomed as new UCPM participating states. While the focus was Russia's continued war of aggression against Ukraine (including scenarios involving chemical, biological, radiological and nuclear materials), prevention and preparedness for wildfires and climate change-related disasters were also discussed.

The Directors-General endorsed swift implementation of the Disaster Resilience Goals, a compass for strengthening Europe's resilience to potential future disasters. Romania shared its experience with the UCPM peer review on disaster risk management, which aimed to identify good practices and gather recommendations from independent experts to improve the national system. The 10th anniversary of the ERCC was also marked during the meeting.

Mr Serhiy Kruk, Head of the Ukrainian State Emergency Service, participated in the meeting for the first time, following Ukraine joining the UCPM on 20 April. He was warmly welcomed by the Directors-General, and expressed enormous gratitude on behalf of his country for the assistance offered by each UCPM member and participating state, as well as the Union's robust contribution and coordination through the Mechanism.



ERCC Liaison Officers in Emilia Romagna: Strengthening European solidarity

ERCC LOs Martina Benassi and Gian Marco Desogus share the story of their deployment



"The devastating floods and landslides that hit the Emilia Romagna region of Italy in May 2023 caused casualties and extensive damage, leading the country to activate the UCPM for assistance. The ERCC selected us as Liaison Officers (LOs) to support the four UCPM High Capacity Pumping modules from Belgium, France, Slovakia and Slovenia, and to coordinate with the Italian National Department of Civil Protection. We were deployed to Italy from 22 May to 5 June.

As ERCC LOs, our role was primarily to enhance communication between the UCPM teams and local actors. We also maintained regular communication with the ERCC, providing situational reports and seeking advice when needed. Over the course of the deployment, our schedule was filled with a whirlwind of activities. We moved continuously between the Base of Operations (BoO), local crisis management centres, and various work sites. With each step, we drew closer to the heart of the emergency, witnessing first-hand the resilience of the local communities. Interactions with the UCPM teams were characterised by camaraderie and a shared sense of purpose. We worked side by side, facing challenges together. Our role extended beyond that of a Liaison Officer, as we also supported with coordinating logistics and addressing the practical needs of the teams.

As Italians, it was an emotional experience to be involved in a disaster occurring in our own country. The meetings with local authorities were particularly impactful for us. During meetings at the Prefecture of Ravenna and the City Hall of Ravenna, we witnessed the tireless efforts of the local authorities to restore normality. It was in these meetings that we truly recognised the profound impact of the UCPM teams' contributions, whose expertise and resources played a pivotal role in safeguarding the city of Ravenna and preserving its rich cultural heritage. The visit of the President of the European Commission, Ursula von der Leyen, to Cesena, where she met with ERCC LOs and UCPM team leaders, was symbolic of the EU solidarity shown to Italy.

The most fulfilling aspect of our deployment was the connections we established with the Italian people. From the warm smiles of the volunteers, to the shared meals at the BoO, we felt embraced by a community driven by unity and determination. Through these personal interactions, we truly grasped the power of human connection in times of crisis. As we concluded our assignment, we left Emilia Romagna knowing that the UCPM had made a difference, and the spirit of European solidarity would continue to guide its recovery. In retrospect, we realised that our deployment went beyond the mere achievement of objectives. It was an incredible journey of empathy, resilience, and personal growth. The people we met, the stories we heard, and the challenges we faced together left an indelible mark on us. The lessons learned and experience gained highlighted the importance of international collaboration and the added value of the UCPM in supporting local response efforts."





Slovenian Civil Protection High Capacity Pumping module deployed to flooded area of Italy

In May 2023, Italy was severely affected by devastating flooding and landslides due to heavy rainfall, with the region of Emilia Romagna experiencing the brunt of the damage. The severity of the situation prompted the Republic of Italy to seek assistance through the Mechanism.

In response to this appeal, Slovenia offered rescue support in the form of a High Capacity Pumping module (HCP module), comprising 32 members and 16 vehicles. On 22 May, the module was deployed to the affected region and began operations at the designated location assigned by the Italian Civil Protection.

Understanding the urgent need to alleviate the flood zones, the Slovenian HCP module focused its efforts near a small power plant in the town of Ravenna. Utilising two pumps with a capacity of 900 m³/h, their primary objective was to divert as much water as possible past the power plant, thereby providing relief to the flood-affected areas.

The HCP module demonstrated unwavering commitment by ensuring uninterrupted and continuous water pumping. To maintain efficiency, team members followed a predetermined schedule, rotating every six hours. In addition to water pumping operations, the Italian Civil Protection requested assistance with clearing debris that obstructed the functioning of national and international units. Slovenia promptly provided a vehicle equipped with a telescopic lift, facilitating the removal of obstacles and enabling smoother operations.

After five days of relentless work, the initial HCP module staff were replaced by a new team of 30 members who continued to perform crucial tasks until 2 June. In total, the Slovenian HCP module successfully pumped an impressive 378 000 ^{m3} of water at two different locations, Ravenna and Conselice, significantly mitigating the flooding. Throughout the second week of the intervention, the situation progressively improved on a daily basis. Consequently, a portion of the second rotation team returned home on 31 May, and the HCP module, with half of its members, effectively concluded the intervention.



The impeccable organisation and response of the Italian Civil Protection were commendable. The collaborative efforts with units from Belgium, France, and Slovakia, within the UCPM and its Emergency Response Coordination Centre, exemplified the power of well-coordinated cooperation during times of natural disaster.

Borut Horvat, the First Slovenian HCP Module Team Leader, expressed his admiration for the Italian Civil Protection's excellent host nation support and coordinated approach, emphasising the successful partnership formed through the UCPM.

Read the press release.



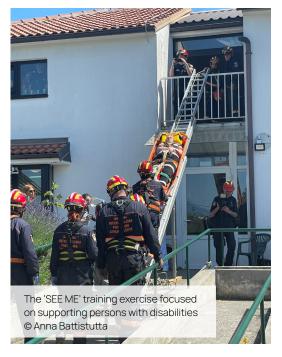
Disability inclusion in civil protection: 'Nothing about us without us'

No policy should be decided by any representative without the full and direct participation of members of the group affected by that policy.

May marked the European Month of Diversity, a month dedicated to raising awareness about the importance of diversity and inclusion across societies. This year, the focus was on 'Assessing diversity and inclusion', as emphasised by the EU Commissioner for Equality, Helena Dalli, who stated: "To start any journey or to assess your progress, you need to know where you stand". But where does the UCPM stand in terms of inclusivity and preparedness?

Did you know that approximately 15 % of the world's population lives with some form of disability?

This percentage is likely to increase in emergency situations. Persons with disabilities are among those most vulnerable and exposed in emergencies, yet they are often excluded from decision-making processes. A tragic example of this exclusion occurred during the 2021 devastating floods in Germany, where 12 persons with disabilities drowned in a care facility, highlighting the significant gaps that still exists when it comes to rescuing certain groups of citizens.



To address these gaps, inclusivity must be considered as a fundamental principle that encompasses all aspects of the UCPM, from prevention, to preparedness, to response.

Simultaneously, the EU Disaster Resilience Goals (DRGs) are being developed in the field of civil protection with a particular focus on the causes of vulnerability, including disability. These goals aim to prevent history from repeating itself by ensuring that no one is left behind in the face of disasters. To achieve this, the EU can take steps such as improving the identification and analysis of vulnerable groups for better risk assessment, ensuring public access to risk information so that vulnerable groups and persons with disabilities are aware of risk prevention measures and the actions they can take during common disasters, and ensuring that public warnings are inclusive and tailored to the needs of all citizens, including persons with disabilities.

Exercise and preparedness are equally important. To be ready for the next emergency, it is crucial not to overlook the participation of different groups of citizens, including persons with disabilities. First responders should be trained to accommodate all disability levels, including physical, developmental, behavioural, and sensory impaired disorders.

Raising awareness and preparing to address an issue that may seem distant, but could become our reality, is of the utmost importance. In this regard, from 2014 to 2022, the UCPM co-funded 16 cross-border projects which included a focus on a 'vulnerable groups component'.

However, our efforts cannot end here. As Commissioner Lenarčič emphasised in his recent speech at the fifth edition of the European Parliament of Persons with Disabilities, there is an urgent need to invest in inclusive preparedness **together** with persons with disabilities, as they are best placed to assess their needs – 'nothing about us without us' should be more than just a slogan, it should be a guidance practice.



EU reaffirms support for Sendai Framework for Disaster Risk Reduction



Commissioner for Crisis Management Janez Lenarčič attended the United Nations General Assembly meeting on 18 May, where he highlighted the EU's work in support of the Sendai Framework and reaffirmed the EU's commitment to achieve its objectives by 2030. The Assembly, which took place in New York, was on the midterm review of the implementation of the Sendai Framework for Disaster Risk Reduction.

Commissioner Lenarčič <u>said</u>: "As we look towards 2030, we must use this moment to renew our commitment to the objectives of the Sendai Framework, and spare no effort in the next seven years to accelerate its implementation. The EU will continue to work to make this happen, providing instruments to support disaster risk reduction and preparedness measures both inside and outside the EU. We are placing resilience at the heart of our policy making and research agendas. Together, we can build a better, safer and more resilient future".

The European Commission released a <u>report</u> on the occasion of the midterm review, which highlighted key initiatives implemented at EU level to support the objectives of the Sendai Framework.

Mami Mizutori, Special Representative of the Secretary-General for Disaster Risk Reduction and Resilience and Head of the United Nations Office for Disaster Risk Reduction (UNDRR), emphasised that the midterm review showed the need to better understand risks and their cascading impacts, as well as the important role of civil society. She <u>urged</u> for focus on the local level, an increase in multilateral cooperation, and enhanced preparedness and effectiveness of responses.

The General Assembly adopted a <u>Political Declaration</u> with a brief analysis of the main achievements and shortfalls since 2015. It states that progress needs to be accelerated on integrating disaster risk reduction (DRR) into policies, programmes and investments at all levels in order to reach the Sendai priorities and targets by 2030. While the General Assembly recognised that the implementation of the Sendai Framework is delivering positive results, it expressed deep concern that the pace of implementation is not sufficient nor equal across countries. Insufficient access to disaster data, risk knowledge, technology, and financing, as well as insufficient prioritisation and action on DRR (including through climate action), continue to hinder progress on implementing the Sendai Framework. The UNDRR also published a report on the main findings and recommendations of the midterm review and a detailed report on the implementation of the Sendai Framework.

Since the adoption of the Sendai Framework, the European Commission has focused on resilience, placing it at the core of its policy agenda and promoting a risk-informed approach to EU policies and programmes. Many EU instruments in areas such as research and innovation, cohesion policy, agriculture, health, development and cooperation provide support to DRR and preparedness measures, both inside and outside the EU. The EU will continue to work with EU member states, third countries, partners such as the UNDRR and others to contribute to achieving the Sendai Framework goals and targets by 2030.



NEW: OECD Decision-Recommendation concerning Chemical Accident Prevention, Preparedness and Response

Adopted by the 2023 Meeting of the OECD Council at the Ministerial Level, the <u>Decision-Recommendation</u> comes with the supporting <u>OECD Guiding Principles on Chemical Accident Prevention</u>, <u>Preparedness and Response – Third edition</u>.



European Union

SCIENCE

How did the JRC's science support the emergency response to floods in Emilia Romagna?

After experiencing deadly floods in early May 2023, the Emilia Romagna region was once again struck by severe weather. Persistent rainfall triggered a series of landslides in the middle Apennines mountain range, leading to the evacuation of several hundred residents.

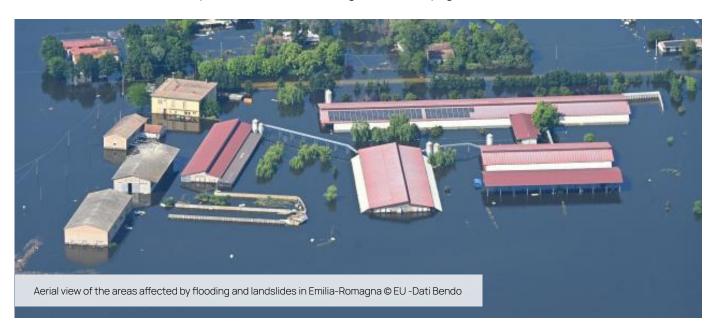
On 14 May 2023, flood forecasts by the <u>European Flood Awareness System (EFAS)</u> of the <u>Copernicus Emergency</u> Management Service began indicating an increased probability of flooding, although with high uncertainty, for the Secchia and Panaro rivers (tributaries to the Po river), the Reno river basin, and the Lamone, Montone, Ronco, and Savio rivers in the Emilia Romagna region, Italy. Subsequent forecasts confirmed the heightened likelihood of flooding of these rivers, but the uncertainty remained high, particularly regarding the magnitude of the event and the exact locations due to the small catchment size of some of the rivers.

On 16 May 2023, the rainfall caused a significant surge in the water levels of the Idice, Samoggia, Savio, Marzeno, Voltre, Marecchia, Pisciatello, Ausa, and Montone rivers. On the same day, the Italian Civil Protection activated the Copernicus Emergency Management System Rapid Mapping component to assess the extent and impact of the flooding and landslides. Upon the request of the Italian Civil Protection, the Copernicus Emergency Management Service (CEMS) Risk and Recovery Mapping (RRM) component was also activated to support with assessment of the extent of the flooding and the detection of landslides triggered by the heavy rainfall.

As a result, 12 maps were produced, showing that in the 12 300 km² analysed (of which 220 km² was flooded, including 12 750 buildings), approximately 39 000 people were affected. The maps highlighted affected areas, ranging from industrial buildings to offices and transportation pathways. More maps created using drone imagery – which analyses landslide damage with 5 cm spatial resolution - will soon be produced.

The European Commission (JRC and the ERCC) worked in close collaboration with the Italian Civil Protection to prepare response actions. As a result, three situational maps were created. These provided a comprehensive overview of the event by combining data from CEMS maps with other information related to the UCPM response, and from the Italian satellite mapping capacity and civil protection response. ECHO and Italy used these maps to plan rescue and recovery operations.

Read more about the UCPM response to the Emilia Romagna floods on pages 6 and 7.





Here's how anticipatory science is supporting the EU's response to the Nova Kakhovka dam breach emergency

A huge emergency that did not come as a complete surprise

On 6 June, the Nova Kakhovka dam was destroyed, leading to devastating human and ecological consequences. The dam break scenarios previously developed in anticipation of this event by the Joint Research Centre (JRC) at the ERCC's request have served as a basis for a rapid disaster impact analysis. These scenarios, along with the ensuing analysis of potential needs, allowed the ERCC to make reasonable estimates of the potential impact already at hand when the dam broke, putting them ahead of the curve.

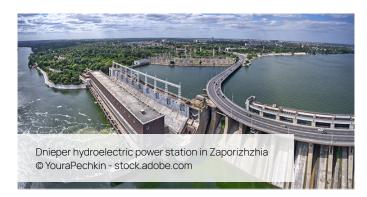
These analyses were also used for analytical products like ECHO's Daily Maps, which help identify exposed settlements and critical infrastructures. In fact, the water level at the time of the breach was 17.3 metres, making the most recent analyses with record-breaking water levels particularly relevant. The analysis is currently being updated and will be validated using field data on the real impacts.

This anticipatory work example clearly highlights the importance of multidisciplinary and anticipatory science to provide emergency response support. Furthermore, the collaboration between scientists and emergency managers is also of utmost importance before, during, and after an emergency.

The start of anticipatory work in late 2022

Since February 2022, science has played a key role in raising awareness about the ongoing situation. The Kakhovka reservoir was first brought to the attention of the European Commission by Ukrainian President Volodymyr Zelensky's press declarations on 20 October 2022, indicating that the Nova Kakhovka dam had been mined by the Russian army.

JRC and ERCC analysts collaborated to elaborate reports exploring the situation in case of a dam breach. Downstream to the dam, the focus was on the potential consequences of floods on populated areas. Upstream to the dam, the focus was on the effects of a significant reduction in water levels for the cooling system of the Zaporizhzhia Nuclear Power Plant (ZNPP).



A follow-up set of reports was produced after the first bombing of the Nova Kakhovka dam in November 2022. Following these reports, regular monitoring of the water levels in the Kakhovka reservoir on the basis of satellite altimetry was put in place. During this monitoring period, alerts were raised twice. First in January 2023, when the water levels in the reservoir were critically low, with local Ukrainian press reporting mass fish die-outs. The second time was in May 2023 when, in complete contrast, the water level in the reservoir had bounced back and reached historically record-high levels of 17.5 metres.

These water levels were highly concerning, given the damaged status of the dam since November 2022 and stability uncertainties. At the time, JRC simulated new downstream flood scenarios, which triggered a third set of analyses.

When the time came, JRC scientists were already prepared to support with this emergency, working hand-in-hand with ECHO and others to provide the best data and prepare the best possible response to the disaster.



How can social media and user-generated data support emergency response?

Social media platforms are seen as a form of collective intelligence, enabling people to make sense of unfolding events together. They can be a valuable real-time data source during crises, aiding early response efforts. However, social media platforms often need more functionality to summarise the information that is most useful to crisis responders.

A task force making the most of social media



The Social Media for Disaster Risk Management (SMDRM) Task Force addresses this challenge by researching and developing artificial intelligence (AI) techniques to streamline the processing of thousands of texts and images from social networks in near real-time during disasters.

The task force promotes collaboration between researchers and practitioners to co-design solutions for incorporating citizen-generated data from social media into traditional emergency management systems. It is supported by researchers from the Copernicus Emergency Services at the JRC.

So far, three workshops have been organised to identify challenges and find solutions. In the first workshop in 2020, practitioners highlighted challenges related to adopting social media for timely information, including validation, integration, and countering misinformation. In the second workshop, practitioners used different approaches to analyse user-generated data during crises, and emphasised the importance of validating and integrating non-authoritative data into crisis datasets.

The third workshop took place on 7–8 June 2023. The aim was to keep an open channel of exchange and address questions on the use of new technologies such as Large Language Models (chatGPT) or Generative Al. It allowed practitioners and researchers to collaborate, test new developments, and conduct experiments.

Outcomes and next steps of a project ahead of its time

During the workshop, researchers and practitioners could access and make use of the European Crisis Management Lab. They participated in an exercise simulating the extraction of information from social media during the aftermath of the Türkiye earthquake in February 2023, and used real data displayed on the screens in the crisis room. The exercise showed how beneficial this type of information can be for impact assessment and geo-intelligence on impacted infrastructure.

The opportunities offered by integrating diverse analysis showed great potential, as preliminary results confirmed that social media data could be trustfully used for situational reports. The challenges of harmonising different data also provided input about the future direction of Al-applied research.

The event organisers said: "We take great pride in acknowledging the work done in these years. We went from sharing ideas among a few research fellows, to a growing community of researchers and practitioners delivering information during actual events, as in the case of JRC supporting humanitarian response to the earthquake in Türkiye".

The workshop also confirmed that research on disaster management and generative AI, now at an early stage, is exploring pathways and barriers to widening their adoption. The community could use it to facilitate decision-making, like summarising extensive information, or augmenting data for disaster-related AI models.

More information on the **DRMKC** website.





The EU 2022 wildfire season in Europe, the Middle East and Africa (EMEA) and the European Union – Latin America and Caribbean Foundation (EU-LAC) collaborations for wildfire management

Based on data from the EFFIS, the 'Advance Report on Forest Fires in Europe, Middle East and North Africa 2022' offers a preliminary assessment of last year's wildfires in the pan-European region. EFFIS monitored forest fire incidents in 45 countries. Overall (excluding Ukraine), the results pointed out a total of 10 632 fires burning an estimated area of 1.1 million hectares (ha).



How was the 2022 forest fire season in the EU?

Wildfires were mapped in 26 of the EU27 countries (all except Luxembourg). In 2022, they burned 837 212 ha in total – 86 % more than the 449 342 ha recorded in 2021.

When comparing EU countries, Slovenia, Germany, Hungary and Slovakia had, respectively, the highest burnt area increases compared to 2021. However, their numbers remain very distant from the top countries with the most burnt area. Contrarily, Finland, Greece and Sweden saw a decrease in their burnt area in 2022 compared to 2021.

Natura 2000 sites – which include the habitats of special interest and are home to endangered plant and animal species – were also hit hard. The total burnt surface reached 365 308 ha, the maximum amount recorded in the last 10 years. Spain, Romania and Portugal accounted for over 75 % of the total area burnt.

The international wildfire conference got Europe and LAC wildfire experts together for the first time in May 2023

The 4th Expert Group on Forest Fires (EGFF) for Latin America and the Caribbean, organised by the European Commission Joint Research Centre (JRC) in collaboration with the fire management services of countries in the LAC region and international organisations – namely UNFAO, UNEP and Amazon Cooperation Treaty Organization (ACTO) – was organised in Porto, together with the <u>Wildfire2023 8th International Wildland Fire Conference</u>.

The EGFF event aimed to give higher visibility to the activities of the EU in the LAC region, facilitate the exchange of good practices and knowledge between European and LAC wildfire managers, and discuss collaboration opportunities between these and other international organisations.

The participants appreciated the collaboration established through the EGFF LAC and the excellent perspectives for future collaboration. As the EU's science hub, the JRC will continue supporting wildfire early warning and monitoring in LAC through the Team Europe Initiative Amazon, under the AMAZONIA+ component, in the period 2023–2027.









FROM THE COMMUNITY

Swedish Presidency hosts second meeting of Directors of Civil Protection and Firefighting Schools

Representatives from 21 UCPM member states and 2 participating states attended the second meeting of Directors of Civil Protection and Firefighting Schools from 31 May-1 June in Lund, Sweden.

Organised within the Swedish Presidency by the Swedish Contingencies Agency (MSB) and ECHO, the meeting of Directors followed the first event organised under the French Presidency in Valabre, France, in 2022.

The event was structured around plenary sessions and workshops, opening up discussions to find synergies between civil protection and firefighting schools in order to acquire and pool capacities, sharable methods and techniques.

The schools and training centres, together with the wider community, engaged with a 'network mindset' and with ideas and suggestions on how to better share knowledge and other resources, fitting naturally within the Knowledge Network's philosophy and activities.





"The theme for the meeting was to Connect, Share, Grow, and I believe that we managed to do that. Thanks to all participants and colleagues who made this meeting to a great meeting. See you soon somewhere in Europe. Together we are stronger."

Fredrik Zäll, Senior Advisor at the Swedish Civil Contingencies Agency (MSB) This year's meeting also presented EU-funded projects and MSB initiatives:

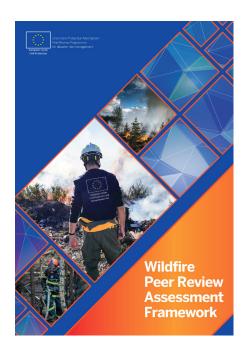
- The <u>NEMAUSUS</u> project, which worked to prepare the groundwork for a future centre of expertise, and to serve as a 'blueprint' for the establishment of similar centres in the future;
- <u>COLLARIS</u>, working to establish a multidisciplinary network on Unmanned Aerial Systems (UAS) for crisis management and first response;
- <u>Tracenet</u>, which aims to develop an innovative and collaborative 3D environment for training and simulation scenarios using VR;
- The Real world testbed initiative, based on the MSB's training environments and facilities, where civil protection actors, together with educators and students, can conduct tests under realistic and safe conditions to investigate future processes and technologies.

Connecting EU projects in prevention and preparedness and disaster risk management to a wider audience is important. It helps to ensure that the project outcomes are relevant to the needs of practitioners and schools, so that they are more likely to be adopted and implemented. It builds capacity among professionals and schools by providing them with access to new knowledge and resources. Finally, it promotes collaboration and networking between professionals and schools, leading to the development of new ideas and approaches.

A visit to MSB's training and exercises facilities in Revinge, talks on how to increase 'start-up readiness' and interaction between networks, and a final panel discussion completed the programme.



NEW! - Peer reviews on wildfire disaster risk management



The Commission has introduced a new tool to support capacity building and exchange of good practices in wildfire risk management among European countries. The Wildfire Peer Review Assessment Framework (Wildfire PRAF) will facilitate peer reviews of wildfire risk management systems within the framework of the UCPM.

This innovative tool aims to assist countries in assessing their capacity to prevent wildfires and their preparedness to cope with them. Member states and participating states are invited to volunteer for a wildfire management peer review, or utilise this tool for a self-review, at national and/or regional level.

Wildfires pose one of the most significant disaster risks in Europe, and their intensity and geographic scope are increasing due to climate change. In 2022, Europe experienced the second highest number of hectares burned since 2006, surpassed only by 2017. In 2022, the UCPM was activated 11 times by 6 countries (Albania, Czechia, France, Germany, Portugal and Slovenia) due to large wildfires that exceeded their national coping capacity. This highlights the considerable attention given to wildfires throughout the disaster risk management cycle under the UCPM.

In September 2022, the EU ministers responsible for civil protection urged the Commission to enhance its support to EU Member States for wildfire prevention. In response, the Commission put forward a <u>Wildfire Prevention Action Plan</u>, with the Wildfire PRAF being a key contribution to this action plan.

The Wildfire PRAF has been developed through an extensive consultation process, involving wildfire experts from different countries and sectors. The initial draft was discussed with these experts during a workshop organised by the Commission in March.

The Wildfire PRAF has been drafted with the assistance of the technical consultant on the UCPM Peer Review Programme, the Euro-Mediterranean Centre on Climate Change (CMCC). According to Veronica Casartelli, Senior Scientific Manager at the CMCC: "The framework will significantly contribute to the implementation of effective peer reviews and the strengthening of wildfire risk management capabilities across the EU. It is very much the result of team effort, and thanks to the Commission, an extensive consultation process involving wildfire experts from different countries and sectors was conducted. These experts collaboratively provided an essential contribution, giving high-level technical advice on wildfire risk prevention from different perspectives. It is an excellent example of cross-sectoral collaboration that 'breaks silos', and it has been a pleasure to participate in the process".

More information: UCPM Peer Review Programme

Countries or regions interested in requesting a wildfire peer review can express their interest by e-mail to: ECHO-CP-PEER-REVIEW@ec.europa.eu



Towards an integrated wildfire risk management system: France's lessons learned in 2022

In 2022, France faced a twofold challenge in terms of forest fires: their territorial impact and simultaneous nature. This led authorities to take immediate measures to strengthen wildfire anticipation, prevention, preparedness, and response using a horizontal and vertical approach to improve national resilience.

Wildfire scenarios were anticipated at national and EU levels, including in work on adaptation to climate change, added value work on the Union DRGs, the Wildfire Prevention Plan, involvement in the Wildfire PRAF, past lessons learned from deployments under the UCPM, and coordination of the NEMAUSUS project, which lays the foundations for an EU centre of expertise on forest fires.

Structural measures with immediate effect

The French strategy is based on three principles: a **global approach**, enabling interdepartmental coordination; **prevention**, limiting the risk of fire; and **anticipation**, with early effective firefighting action.

On 4 May 2022, an inter-ministerial circular, preceded by parliamentary work and reports involving all stakeholders, was sent to all the Prefects. This document gathers the three main ministries involved in the prevention of and fight against forest fires (i.e. Interior and Overseas Territories, Agriculture and Food Sovereignty, and Ecological Transition and Territorial Cohesion).

The following concrete measures emerged:

Raising public awareness

- A national and annual communication campaign on preventing the risk of forest fires will be launched mid-May.
- Starting from 1 June, a daily 'forest weather forecast' will be available on the Météo-France website in order to support local assessment of the risk of forest fires.

Prevention

- · Urban planning documentation.
- To support municipalities in their planning and urban development policies, a map of areas sensitive to fires and a technical kit based on:
 - Forest fire risk prevention plans (PPRif);
 - · Technical safety guides for campsites;
 - · Green fund financing of fire prevention measures.
- Legal obligations to clear undergrowth (OLD) represent a protection issue, as well as a safety issue during firefighting operations, by preserving homes in the event of a fire and limiting the spread of a 'domestic' fire. They also help to protect the environment and biodiversity.

 Departmental forest fire protection plans act as reference documents for ensuring that prevention and monitoring resources are consistent with firefighting resources.

Crisis anticipation and management resources

- Forest fire risk is included in the departmental risk analysis and coverage plans (SDACR), banning access to forest areas and use of fire and reinforcing operational resources:
 - 25 water-bombing aircraft;
 - 3 reconnaissance aircraft;
 - Up to 10 water-bombing helicopters;
 - · 1 reinforcement battalion mobilised nationwide;
 - An advanced coordination centre in Nîmes at the national aerial firefighting base, in permanent liaison with Zonal Headquarters, dedicated only to forest fires;
 - Knowledge of the meteorological fire hazard to inform the sizing of preventive measures and prepositioning.

These measures are fully in line with France's contributions to the UCPM, which give priority to better DRR and disaster risk management (DRM) for an efficient and rationalised action.



Action programme 'Hotspot Forest'

The Austrian Federal Ministry of Agriculture, Forestry, Regions, and Water Management launched a joint commitment of actors concerned with forest fires in the country to prepare for the challenges of rising wildfire risk in the coming years.

The action programme 'Hotspot Forest' aims to develop integrated wildfire management in Austria that is ready to adapt to climatic and behavioural changes impacting the risk landscape. Factors such as the increase in dry periods and heat waves, as well as changes in recreational activities, will most likely increase the number and intensity of forest fires in the near future.

The action programme is focused around three target corridors:

- 1. Researching and understanding forest fires;
- 2. Preventing and fighting forest fires together;
- 3. Disseminating and implementing knowledge about forest fires.

Each corridor contains fields of action which combine short-, medium- and long-term measures to mitigate the effects of climate change on the ecosystem. The involvement of 17 institutions in the elaboration process underlines the high political and social significance of the topic.

In the development process, emphasis was placed on focusing on all the 'necessary' measures for integrated forest fire management. To implement these 39 necessary actions, increased efforts are needed to develop new scientific research and transfer of knowledge, alongside active forest fire risk communication and awareness raising.



'Researching and understanding forest fires' aims to harmonise definitions, data, and information sources across Austria to enable closer cooperation in research and in response to wildfires. Furthermore, research into factors leading to forest fires shall be strengthened to improve risk assessment and early warning.

As one of the first initiatives in the action programme in 2021, the Austrian Federal Ministry of Agriculture, Forestry, Regions, and Water Management published a forest fire hazard map at district level. Last year, five complementary maps at municipality level followed, focusing on **exposure**, **vegetation**, **socio-economic factors**, **moisture**, and **lightning**.

Preventing and fighting forest fires together' builds on the cooperation of actors at all levels. Exchanges of experience, acting on existing and developing new synergies, as well as adaptation of land use in risk areas, shall lead to new findings in forest fire prevention and preparedness.

Lastly, 'Disseminating and implementing knowledge about forest fires' concentrates on the wider population, aiming to develop public risk awareness and integrate good behavioural practices in all age groups. The character of Florentina Fuchs was created as a heroine who boldly goes ahead to bring the issue to the forefront of media attention. With digital and analogue appearances in various forms of media, the character targets children, youths, and young adults to educate them, incite interest in forest fires, and change risk behaviour.

Christian Rachoy, from ÖBB Infrastruktur, said: "Preventing and fighting forest fires is only possible together with all relevant stakeholders, the response agencies, municipalities, operators of critical infrastructure, and the authorities. [...] For me and my organisation, the action programme means coordinated and proactive access to protection from forest fires".

More information on Hotspot Forest can be found on the programme website (in German).



Kahramanmaraş comes back to life



Rehabilitation work continues after a devastating earthquake of magnitude 7.7 in Kahramanmaraş, Pazarcık, and magnitude 7.6 in Kahramanmaraş, Elbistan on 6 February 2023. The earthquakes hit 11 provinces and affected an area of 108 812 km2 in the Eastern and Southeastern Anatolia, and a total of 36 304 aftershocks occurred between 6 February and 23 May 2023. More than 50 000 people lost their lives in Kahramanmaraş, Gaziantep, Şanlıurfa, Diyarbakır, Adana, Adıyaman, Osmaniye, Hatay, Kilis, Malatya and Elazığ.

The relief and rehabilitation effort in facts and figures:

968 976 tents have been set up in the quake-hit regions so far

222 tent cities have been put into service

352 container cities are planned, with 191 container cities completed as of 29 May

9 319 mobile showers and **19 176 WC containers** have been put into use in the shelter areas

2.9 million people have been provided with accommodation services

103 808 affected citizens have been provided with accommodation in dormitories, hotels, guesthouses, and other facilities that are located in provinces outside of the earthquake region

4 439 search and rescue personnel were assigned to the earthquake region from the first moment after the earthquake, continuing their efforts despite the risk of aftershocks

35 250 search and rescue personnel, including **11 418 international search and rescue personnel**, have worked in the earthquake area since 6 February

274 000 personnel have been deployed in the region, with **166 056 personnel** still continuing rehabilitation activities

20 000 vehicles, including construction equipment, 141 helicopters, 182 aircraft, and 23 ships, were deployed to the affected areas, carrying out medical evacuation, personnel transfer, material transportation and firefighting activities

312 mobile kitchens have been sent by the Turkish Red Crescent, the Earthquake Humanitarian Aid Campaign (AFAD), the Ministry of Defense, the Gendarmerie, and non-governmental organisations to meet the nutritional needs of citizens affected by the disaster

356 million hot meals and 401 million pieces of bread have been served

81 million bottles of water have been distributed

32 million packaged food items have been distributed in the region

101.4 million items of material aid have been distributed, and 213 social markets established as part of in-kind and warehouse management services

2.7 million people have been provided with psychosocial support services coordinated by AFAD with the support of the Ministry of Family and Social Services, the Ministry of National Education, and NGOs, aiming to reduce the psychological impacts of the disaster on individuals and support them to move on with their lives



Croatian aid to Türkiye after the devastating earthquake



Croatia was one of the first countries to offer assistance to Türkiye through the Union Mechanism for Civil Protection after the first devastating earthquake that hit the country on 6 February 2023. On the same day, the Government of the Republic of Croatia sent a medium category module for urban search and rescue.

The Croatian team (41 members of the National Intervention Unit of Civil Protection with 7 search dogs) was assigned to the Hatay area. In the ten days following the earthquake, together with rescuers from Türkiye and numerous other countries, they searched for survivors and participated in pulling victims out of the ruins. The Croatian module was equipped with specialised equipment including thermal cameras, drilling and cutting devices, vibration detectors, pneumatic and other penetration tools.

Although they were working in extremely demanding conditions, the team was ready for all challenges and difficulties it might face, as it consisted of experts who had gained experience and knowledge through the UCPM Training Programme and civil protection exercises.

The team was self-sufficient, meaning they provided their own accommodation, food, and equipment, as well as extensive logistical support, so they could work 24/7 without being a burden to the local authorities. During the mission in Türkiye, the search was carried out in zones designated as critical, and each searched object was mapped and sent to the urban search and rescue (USAR) coordination centre. This ensured a better overview of the situation and reduced the likelihood of duplication of activities. After locating a buried person, module members stabilised the ruins to prevent further collapse and ensure the safety of the rescuers and the person being rescued.

The Croatian module worked in cooperation with other modules sent by the EU within the Mechanism, meaning that through joint effort, many lives were saved, the local population was helped, and local authorities were supported. This was recognised by the Government of the Republic of Türkiye, who presented the modules that supported the response with awards as a sign of gratitude for their participation in the search and rescue operations.

In addition to the search and rescue module, the Government of the Republic of Croatia also sent equipment for the care of the population, food and medical equipment, housing containers, beds and mattresses through the Mechanism.

Project focus: Ireland's FUTUREPROOF-IE

The FUTUREPROOF-IE project, funded by ECHO, aims to enhance National Risk Assessment processes through emergent risk forecasting and horizon-scanning. Launched in March 2023, it is coordinated by Ireland's Office of Emergency Planning, with support from Dublin City University as research partner.

The project will review academic literature on emergent risk and horizon-scanning, and publish its findings. It will analyse horizon-scanning processes in Irish government departments.

Based on the review and mapping, FUTUREPROOF-IE will develop a methodology to incorporate horizon-scanning into the National Risk Assessment process. This will include an implementation strategy.

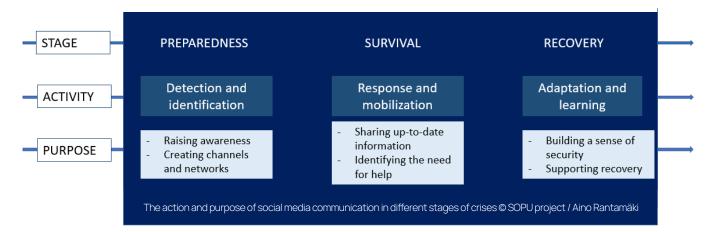
The project methodology will align with departmental and ministry policies, optimise efficiency, avoid duplication, track deliverables, reflect international best practices, and provide guidance to other UCPM member and participating states.

The final publication and outcomes will be shared with the Union Civil Protection Knowledge Network community.

Contact OEP@Defence.ie for more information.



Social media in disaster preparedness and response: Observations from Finland



During a crisis, social media offers real-time information dissemination, crowd-sourced data collection, and direct communication with affected populations. However, the agile creation and flow of information can also spur the rapid spread of misinformation and other forms of false information.

Social media has changed the operating environment of authorities and civil servants. The laws and rules that govern the work of authorities do not always gel with the rapidity of the new information environment. That gap widens in crisis situations, when uncertainty and lack of information increase and information voids are created. Those voids are easily filled with false information if authorities do not engage in the discussion.

The SOPU research project, funded by the Prime Minister's Office of Finland, approaches social media in three ways. First, the project examines the identified benefits and risks of social media used as part of crisis management. Second, the project studies the use of social media in the context of Finnish crisis management. Third, it aims to identify the competences, capabilities, and tools authorities require to make the best use of social media.

Crises can be viewed from a temporal dimension, meaning the times before, during, and after a crisis. These different stages also affect communication and interaction on social media.

Pre-crisis communication focuses on creating networks and channels, building relationships and trust, and strengthening preparedness and citizens' risk awareness. The target groups for communications are identified, and a relationship with the audience is built in advance. Planning is also an essential part of communications, and the use of social media should be proactively integrated into communication strategies.

During a crisis, communication focuses on the rapid transmission of reliable and up-to-date information. Consistency of communication is essential. It is important to create a core message that will be shared through different channels. Following the crisis, communications must support recovery and learning, strengthen trust and the sense of unity in society, and build citizens' sense of security. Social media can advance learning if authorities analyse discussions on different channels and people's reactions to government actions and communications.

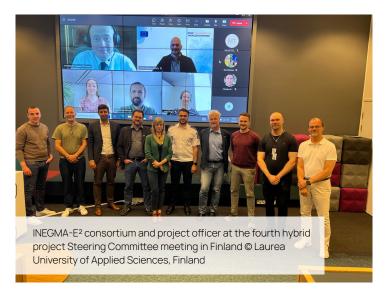
Official communications can benefit from innovation. For example, public authorities in Finland successfully utilised social media influencers to support their COVID-19 crisis communications. However, the cooperation was not without its problems. The initiative revealed, among other things, the necessity of coordinating communication objectives. Another method as yet underutilised is the use of AI: AI has great potential to identify emerging issues and moderate social media discussions, for example.

The most important thing is to implement a strategic approach to social media communication. Instead of seeing social media as a separate environment, it should be integrated into the everyday practice of public authorities.

For further information, please contact: Harri Jalonen, University of Vaasa, harri.jalonen@uwasa.fi



INEGMA-E² – Standardising EU civil protection exercise evaluation



INEGMA-E² was featured in Issue 7 of the Knowledge Network <u>newsletter</u>. With the project ending on 30 June 2023, now is the moment to give the Knowledge Network community an update on the project outcomes.

International Network of Evaluators and Guideline for a Methodological Approach in Exercise Evaluation (INEGMA-E²) aims to achieve a new level of exercise evaluation that meets high standards in documentation, replicability and targeting.

In parallel to its other activities in its <u>first year</u>, market research was done to assess the availability of IT solutions that could be used for exercise evaluations. With these results, a web-based tool was designed and later tested during the <u>Host Nation Support Tabletop Exercise in Moldova</u>.

Furthermore, a training concept for exercise evaluators was developed. This training concept was tested during the <u>FORMATEX23 project</u> and will be applied during the UCPM full-scale exercise in Austria in September 2023. The project activities of the last few months have been focused on building a web-based pool of evaluation experts that can be used by the EU civil protection community when organising and conducting exercises.

The project results have been presented in articles (i.e. in the Crisis Response Journal), at inter- and trans-disciplinary conferences (e.g. Research for Civil Protection Congress in Germany, January 2023) and at events including the Humanitarian Networks and Partnerships Week in Geneva (2022 and 2023), the Disaster Research Days in Austria, and the Nicosia Risk Forum in Cyprus.

"Exercises are a key learning opportunity for experts and response capacities. A structured and comparable exercise evaluation guarantees not only the further improvement of the exercise quality, but it also makes the evaluation of participants comparable and more credible. The INEGMA-E² project established a very valuable basis to enhance the quality principles, not only for exercises, but for all training activities."

Michael Felfernig, National Training Coordinator, Federal Ministry of the Interior, Austria In February 2023, the project was presented at the Civil Protection Committee (CPC) in Brussels. The final results were shared with the National Training Coordinators and experts in the area of training and exercises in UCPM member and participating countries on 20 June, for ownership at national level and to take further the discussion on remaining needs in exercise evaluation.

INEGMA-E² outcomes have been gathered in a guidance booklet for exercise organisers and evaluators. Experts can also register to be part of a pool of evaluators in the European evaluators' network.

The INEGMA-E² booklet and other materials, like guidance on evaluation methods and concepts, can be found on the INEGMA-E² project page on the Knowledge Network platform. To register as part of the pool of evaluators, go to: https://www.inegma-e2.eu.





IN CASE YOU MISSED IT



MODEX on forest firefighting in Portugal

In the context of the global threat caused by the rising number of forest fires, especially in Southern Europe, and the fact the Portugal is one of the most prone countries, with a significant number of forest fires that have already happened this year, the <u>EU MODEX on forest firefighting</u> took place from 3–6 May 2023 in Abrantes, Portugal. This exercise tested the skills of six modules/other response capacities from four countries in site assessment, coordinated ground and aerial operations, and post-mission handover. Ground Forest Firefighting Teams using vehicles from France, Italy and Germany were joined by a Spanish Fire Assessment and Support Team, Ground Forest Firefighting Team, and an Aerial Forest Firefighting Team in a simulated UCPM activation. They practiced and assessed their own Standard Operating Procedures (SOPs), operational response, cooperation, self-sufficiency, and interoperability.

Arctic REIHN full-scale exercise

The UCPM full-scale exercise Arctic REIHN simulated a nuclear-powered vessel in distress on the Norwegian coastline. With the participation of teams from Denmark, Finland, Iceland, the Netherlands, Sweden, Portugal and Norway, the exercise was held on 10–11 May 2023 in Bodø, Norway. In a joint response training, Arctic REIHN tested mechanisms for alerting and requesting assistance from other countries, and focused on the potential large distances between the area of the incident and the nearest preparedness and response resources. The exercise took into account potential consequences on sea and land, as well as cross-border contamination.

MODEX on medical capacities in earthquakes in Italy

Teams from six different countries participated in a <u>UCPM MODEX</u> which tested the capacities of international emergency medical teams to respond to a major earthquake. The exercise took place from 6–10 June 2023 in Arcevia, Italy. Participants were challenged with tasks that required excellent cooperation and coordination among the different teams. Setting up a BoO while victims were already arriving on site, infection control, and communication between actors at different levels were key missions the teams faced. Medical teams from Andorra, Austria, Germany, and Romania, as well as a technical assistance and support team from the Netherlands and an EU civil protection team, participated in the exercise.



COMING UP

EURO MED REACT 2023:

Full scale exercise – CBRN accidents in infrastructure scenario, Chișinău and Răzeni (Moldova)

11-14 July

EU MODEX:

Flood scenario, Warsaw (Poland)

5-8 September

FORMATEX 2023:

Full scale exercise - Natural hazards triggering technological accidents, Linz (Austria)

14-16 September

EU MODEX:

Medical scenario, Canakkale (Türkiye)

18-22 September



Summer school - Evidence for Policy in Disaster Risk Management



The 'Evidence for Policy in Disaster Risk Management' summer school, organised by the Knowledge Network and hosted by Scuola Superiore Sant'Anna, took place in Pisa, Italy from 29–31 May 2023. It brought together around 70 scientific experts and policy makers from 30 UCPM member and participating states. Participants came from a wide range of organisations, including research institutions, national civil protection agencies, EU institutions, the private sector, and the UN.

This richness of profiles and the high level of speakers and facilitators resulted in a deep and meaningful exchange. Plenary and masterclass discussions focused on bridging the gap between science and policy making, facilitating knowledge sharing and the development of skills and allowing for an improved translation of scientific evidence into policy solutions.

The summer school began with a plenary session, with keynote speakers such as the President of Italy's National Research Council Maria Chiara Carrozza, and Fabrizio Curcio, Head of the Italian Department of Civil Protection.

The six masterclasses held on the second day examined the relationship between science and policymaking from different angles, showing how strong and effective collaboration between the two domains is essential. Using an interactive approach, they prompted participants to discover how they can facilitate a better integration of scientific evidence into policymaking in their respective roles. For scientists, this meant developing a better understanding of how to communicate and visualise their findings and align their research with policy needs. Policymakers gained insights into how they can discover research relevant to their field, and then interpret it and integrate it into their policies.

Each participant had the opportunity to attend two masterclasses. The classes focused on topics such as managing available information on climate and weather changes, foresight in disaster risk management, and the role of hybrid experts in bridging the science-policy gap. During other masterclasses, participants learned about designing a balanced and engaging risk communication approach, the role of international disaster law for scientists and policymakers, and the economics of disaster risk management.

The outcomes of the six masterclasses were summarised and shared during a closing session. This session was attended virtually by Patricia Gaspar, Portugal's Secretary of State for Home Affairs, as key note speaker. At the end of the event, participants identified a better understanding of each other's roles, foresight, and different communication techniques as some of the key points they will be integrating into their work in the future.

"Interacting with practitioners in the field was a rare opportunity that allowed me to gain valuable insights. I realised the vast amount of data available, and how interconnected various aspects are in the realm of disaster risk reduction. I believe this event played a pivotal role in connecting the dots between policy and empirical levels."

Yigyeong Oh, UN Office for Disaster Risk Reduction

"Working with anticipatory tools as a scientist, it was particularly useful to see how decision-makers use different foresight approaches. Also, the role-playing game broadened my perspective about specific but interconnected positions of decision-makers, scientists, and hybrid experts during disaster events."

Anna Bromová, Global Change Research Institute, Czech Republic



Back to school in September - The start of the new UCPM Training Programme

After years of revision and a very intense design phase, the new UCPM Training Programme will be launched in July, with the new courses starting in September.

"Thanks to the huge amount of work done and good cooperation with all interested stakeholders, a solid foundation for the new training programme has been created, with a strong focus on quality and consistency, and using a learner-centred approach. The new programme will introduce improved evaluation of participants' performance, and we have further reinforced the monitoring and evaluation method of the overall programme," says Hana Kolić, Coordinator of the UCPM Training Programme.

The core training programme prepares different categories of experts – European Union Civil Protection Team (EUCPT) experts, Technical Assistance and Support Team (TAST) members, technical experts, and modules and other response capacities key personnel – for deployment on UCPM missions. Specialised European Commission-United Nations (EC-UN) joint training courses are part of the deployable pathway, preparing participants for specific deployments, like environmental or medical emergency missions.



Other parts of the programme train participants in their UCPM role linked to their national emergency management system. These courses mainly target civil protection and disaster management stakeholders with a UCPM coordination role at national level who will be involved in some way with UCPM assistance.

The UCPM Training Programme also offers online modules on different disaster management topics, from standalone courses, such as cultural sensitivity and gender, to refresher and pre-learning for residential training courses. Some modules are offered in French, Spanish and Arabic in addition to English.

Finally, the UCPM provides flexible training to respond to emerging risk and needs in the form of ad-hoc training courses, training of trainers, and thematic workshops and seminars.

For more information and course descriptions, follow the updates on the training page of the Knowledge Network Platform.



Want to keep up to date about events in civil protection and disaster risk management?
Then check out the <u>events section</u> on the Knowledge Network online platform.

European Civil Protection and Humanitarian Aid Operations - Union Civil Protection Knowledge Network

E-mail: ECHO-CP-Knowledge-Network@ec.europa.eu - Website: https://civil-protection-knowledge-network.europa.eu