

**Dear Readers,**

We are halfway through our Presidency, and we have already achieved many milestones together. However, many more still lie ahead of us as we continue our common work to strengthen the protection of our population. In the current trio Presidency of France, the Czech Republic and Sweden, we are dealing with topical threats that EU Member States are being exposed to.

Namely, actively managing the COVID-19 pandemic, which has affected the whole world over the last few years; the Russian invasion of Ukraine, which has created the biggest European crisis since the end of the Second World War; and the increasing number of forest fires in Europe, which are having a devastating impact on the environment. This has triggered us to set 'Preparedness and response to long-term emergencies' as the priority of our Presidency.

When we chose this topic as our priority, we had no idea how the actual events would surpass even our wildest expectations. The urgency of this theme was confirmed during discussions at the Presidential workshop in Pilsen in July, where the participants came to some very interesting conclusions. You will find more about the workshop in an article within this issue of the Union Civil Protection Knowledge Network newsletter.

When responding to current and future crises, we should also consider adapting measures to long-term crises (in terms of continuous risk and crisis communication, population preparedness, sheltering capacities, emergency energy supplies and sufficient water supply, for example). We are at the starting point of more detailed discussions and analyses on this, as it poses a challenge both for future steps of the Union Civil Protection Mechanism (UCPM), and for the civil protection community as a whole.

I think that, in these difficult times, it is important to rethink what makes us strong. The UCPM and our European cooperation were built on mutual trust, friendship and responsibility. The Mechanism acts an important example, and we must do whatever we can to deepen and strengthen it.

There is a lot of very challenging work ahead of us, but I believe that at the end of it, Europe will be better prepared for long-term emergencies.

**Lt Gen Vladimír Vlček, Ph.D., MBA**  
Director General  
Fire Rescue Service of the Czech Republic

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## Wildfires in the EU: The pre-positioning scheme addresses this burning issue

Climate change is rapidly altering wildfire risk in Europe. From 1 January to 12 September 2022, 2 512 fires larger than 30 hectares burned 759 020 hectares of land in the EU. Compared to the same period in 2021, these figures have more than doubled: 60% more fires, coupled with a 65% increase in the burned area. Devastating forest fires hit Southern and Central Europe during an exceptionally hot and dry summer, resulting in 11 UCPM activations. On 5 September, EU ministers called for [increased coordination at the EU level](#) within the framework of the UCPM, in order to better protect the EU and its citizens from fires in 2023 and beyond.

In this context, Greece requested EU assistance to pre-position forest fighting assets during the summer of 2022. Thanks to a pilot project organised through the [Exchange of Experts programme](#), the country hosted more than 200 firefighters from six European countries. Lieutenant Fire Colonel **Spyros Georgiou**, Head of the International Relations Directorate of the Greek Ministry for Climate Crisis and Civil Protection, shared his views and experiences of what could become a major new UCPM resource in future years.



Finnish and Greek firefighters battling against a forest fire in the Peloponnese area, Greece.  
Credits: Finnish Rescue Team

*This summer, during July and August, we have seen a potential new feature of the UCPM; a pilot project for pre-positioning ground forest fire teams in Greece to support local responders, but also to exchange experience and learn about the special wildfire risk situation prevalent in Greece. Which countries participated and, in your view, how did it work? Is there anything that could be improved and done differently in the future?*

“Indeed, this summer, Greece had the honour of hosting the first ever pre-positioning pilot project. More than 200 firefighters from Bulgaria, Finland, France, Germany, Norway and Romania arrived in Greece in July and August. They were stationed in three strategic locations (Attica, Peloponnese and Central Greece) in order to provide immediate assistance when needed. Their daily schedule included training in the firefighting techniques used in Greece, local flora and forest types, and how they should react in different environments. There was a valuable exchange of expertise between the Greek teams and the foreign firefighters, so both sides gained considerable knowledge. More than that, it was an excellent opportunity for networking and developing a common language for cooperation. This will benefit all participants in the future.

We are planning to hold discussions and meetings to examine the lessons learned from this project, and identify possible improvements for similar projects in the future. I strongly believe that the participation of more and more countries as hosts will be of great added value. In this regard, additional EU funding should also be pursued. In my view, the importance of investing in initiatives promoting tangible European solidarity cannot be overemphasised.”

*The teams themselves came from different backgrounds, different countries and had a diverse level of experience in combatting wildfires. What were the strengths and weaknesses of this, and were there any special difficulties encountered in this regard?*

“These different backgrounds are exactly what made this project a success. Firefighters – or colleagues from other sectors participating in future projects – with different training, mindsets and operational cultures are coming together and learning not only how to react in different kinds of fires, but in a completely different environment. They get the opportunity to develop soft skills – adaptability, teamwork, communication and more – in real-time situations. The expertise they gain will undoubtedly make them more effective in their own countries, as well as in the framework of international missions. Greece assigned one Liaison Officer to accompany each team. We believe that this greatly contributed to the success of the project. Each team, from day one, had a certified Greek officer to provide guidance, advice and assistance with every little thing that would come up. This was a key factor that contributed to building trust and good cooperation, and creating a safe environment.”



Romanian Firefighters patrolling the mountains of Parnitha and Hymettus with their Greek colleagues  
Credits: Ministry for Climate Crisis and Civil Protection, Hellenic Fire Service.

**Not all teams were able to bring their equipment along. This means they really had to learn about and adapt to the local practices. How did this experience work?**



"Greece provided all teams that did not have their own equipment with the necessary tools. Of course, that could only work with relevant training, and this is how we proceeded. As a result, the teams adapted quickly to the new environment, and they were able to assist in numerous cases. I can't stress enough the invaluable role played in this respect by the Liaison Officers accompanying the teams. Their guidance and assistance in this process of familiarisation, not only with the equipment, but also with the operational procedures and specificities on the ground, was just invaluable. Based on this experience, some teams improved their own equipment, adapting it to higher standards to be able to effectively deal with forest fires."

**In your professional view, is this a scheme that should be replicated in the future? Do you think it could be interesting for other countries to invite teams, maybe even for risks other than wildfires?**

"I firmly believe that the project should be replicated in the future. Now that we have the experience, we are able to help in many ways countries that would like to host similar pre-positioning projects. Wildfires are only one of the many disasters Civil Protection Officers face on a daily basis. Similar projects focused on floods, search and rescue, and other kinds of threats would be of great benefit. Such joint endeavours make us all stronger and more resilient. The first pre-positioning project has been a valuable pilot. Taking it even further can certainly make a real difference."

*"The pre-deployment programme was a great learning opportunity for the Finnish Fire Fighters team. We left Greece with a bucket full of ideas and practices for the coming years. This experience showed everyone the importance of cooperating at the EU level and the value of the UCPM."*

Petri Lyttinen, Executive Fire Officer, Finland

*"Pre-positioning of European firefighters minimises the distance from the affected areas, as well as the response time. Additionally, the participants in the programme start as simple partners and end up as friends, thus expanding the firefighting family."*

Vasileios Bikas, Fire Major, Greece

*"When it comes to forest fires, the faster the response, the easier they can be controlled. This programme allows a sped-up response, as it is already in standby in the fire-prone environment."*

*Also, the specialised modules exchange experience with local authorities and firefighters, improving knowledge on fire behaviour, tactics and techniques, and informational flow. This programme strengthens the UCPM, ensuring a timely and effective response in a fire-prone country."*

Major Catalin Samsodan, Romania

*"Through the UCPM, the EU has reinforced the fundamental principles of solidarity, collaboration, and mutual assistance in daily life. This will be needed more than ever in the future. It was an honour to highlight the similarities and strong ties that have united France and Greece in civil protection for centuries."*

*I am sure this exchange will pave the way for many other collaborations between our two countries."*

Capitaine Sylvain Cheval, France

- Learn more about the Ministerial Meeting on Forest Fires of 5 September 2022 and its conclusions [here](#).
- Consult the latest map on drought and UCPM activations for wildfires [here](#).

## Forest fires: €170 million to reinforce rescEU fleet

The European Commission proposed on 5 October €170 million from the EU budget to reinforce its rescEU ground and aerial assets starting from the summer of 2023. The rescEU transitional fleet would therefore have a total of 22 planes, 4 helicopters as well as more pre-positioned ground teams. As from 2025, the fleet would be further reinforced through an accelerated procurement of airplanes and helicopters.



EU solidarity to combat wildfires across the continent  
© European Union, 2022

Commissioner for Crisis Management **Janez Lenarčič** said: "Due to climate change the number of regions affected by wildfires is increasing, going beyond the traditionally affected Mediterranean countries. The last summers have clearly shown that more firefighting assets are needed at EU-level. By building up our fleet of aerial means and ground forces, the EU will be able to ensure a prompt, flexible response, including in situations where fires are burning in multiple Member States at the same time."

Wildfires in the EU are increasing in scope, frequency, and intensity. This season, following 11 requests for assistance for forest fires, 33 planes and 8 helicopters were deployed across Europe via the EU Civil Protection Mechanism, which were joined by over 350 firefighters on the ground. In addition, the EU's emergency Copernicus satellite provided damage assessment maps of the affected areas.

- Read the full press release [here](#)

## Bosnia and Herzegovina joins the UCPM

On 6 September, Commissioner for Crisis Management Janez Lenarčič [signed an agreement](#) on behalf of the European Union granting Bosnia and Herzegovina (BiH) official membership of the UCPM, meaning the country is now a full member.



From now on, BiH, which has previously received assistance from the Mechanism, will be able to actively dispatch assistance via the UCPM to wherever it is needed. This will contribute to enhancing Europe's emergency preparedness and response capabilities.

**Janez Lenarčič**, Commissioner for Crisis Management said: "Today we are taking an important step towards stronger European crisis response – Bosnia and Herzegovina is joining the EU Civil Protection Mechanism as a fully participating member. This comes at the time when natural hazards are on the rise in Europe, and elsewhere in the world. This year we endured one of the toughest summers with forest fires blazing across Europe. We saw once again that EU disaster response is the strongest when we act together."

Fully fledged participation in the EU Civil Protection Mechanism is a recognition of the significant progress Bosnia and Herzegovina has made over the years in building a resilient civil protection system. I am confident that soon other countries in need will reap the benefits of this accession."



Commissioner Janez Lenarčič and Selmo Cikotić, Minister of Security of Bosnia and Herzegovina  
© European Union, 2022

- Read the full press release [here](#)
- Read the opinion editorial by Commissioner Janez Lenarčič [here](#)

## Looking back at the 7th edition of the European Civil Protection Forum

### Towards faster, greener and smarter emergency management

*“The European Union continues to invest in European Civil Protection. Our goal is to protect all of Europe’s citizens and to show our solidarity worldwide.”*

Janez Lenarčič, Commissioner for Crisis Management, European Commission

June 2022 saw the civil protection (CP) community from Europe and beyond come together once again for the 7th edition of the Civil Protection Forum.

Overlapping and rapidly unfolding crises have become the new norm in recent years, forcing us to face the limitations of the current UCPM framework by revealing the acute need for better European prevention, preparedness and response.

The Forum has become a major gathering of practitioners and decision-makers in the field of CP over the last 15 years, and this year’s event was no exception. Under the theme ‘Towards faster, greener and smarter emergency management’, this year’s event hosted more than 800 people in person, including high-level speakers, representatives of governments, local, national and regional CP authorities, first responders, EU institutions, the scientific community, the private sector, and other relevant stakeholders. The experiences of inspirational speakers – including a CP youth representative, an actress refugee from Ukraine, and a football coach – brought unique perspectives and new meanings to the word ‘resilience’.

The Forum sessions touched upon all angles of the Mechanism – prevention, preparedness and response – looking at innovative transdisciplinary solutions in disaster risk management. With recent legislative and budgetary changes, there is a concrete opportunity for the Mechanism to be improved even further, in close collaboration with its Member and Participating States. And this is exactly what our participants looked into over the course of 4 plenary sessions, 12 workshops, 2 thinking labs, and more than 30 exhibition stands.



Another highlight of the Forum which was thoroughly enjoyed by participants was awarding of the first ever Union Civil Protection medals for long-standing commitment and extraordinary contributions to the Mechanism. Three CP national teams received the UCPM medal for extraordinary contribution in an incredibly challenging context during their deployment in Haiti, while a medal for long-standing commitment was awarded to the Secretary of State for Portugal, Patricia Gaspar.

As the ‘Goliath’ of international disasters, the COVID-19 pandemic was widely discussed during the 7th edition of the CP Forum, as were many other pressing topics, such as climate change and resilience, the ever-changing risk landscape, the role of the UCPM in the world, innovation and digitalisation, and – last, but by no means least – Russia’s war on Ukraine. In addition to this, the two consecutive revisions of the European CP legislation in 2019 and in 2021 further strengthened the UCPM and connected, among others, rescEU (a European reserve of assets) and the Union Civil Protection Knowledge Network. The Forum was the perfect opportunity for participants to further explore these two subjects – vital for an upgraded and up-scaled UCPM and knowledge-sharing at large.



The plenary sessions and roundtables clearly showed that climate change is the biggest current challenge in disaster risk management, and we only have a short window of opportunity left to secure a liveable future, reduce emissions and build resilience. The disaster risk management (DRM) community must be decisive and look at everything we do through the lens of climate change adaptation. CP voices must act as a credible source of guidance on long-term resilience building and adaptation, as well as smart investments that maximise social and economic benefits, while making sure vulnerable communities are not left behind.



The event gave the community the chance to meet again, make connections and share knowledge © European Union

Similarly, participants stressed that we need to improve our own skills in 'thinking the unthinkable', and make citizens aware of the role of CP in their lives. Preparedness efforts need to be cross-sectoral and envision long-term goals implemented at large scale by strengthening European CP at EU and national levels. Society must learn from recent crises and share information across sectors and actors, particularly in view of protecting critical infrastructures. On disaster management, actions must address vulnerabilities across societies and take into consideration critical elements such as innovation, cooperation and foresight exercises. The CP community should not be afraid to innovate in policy making and programme development, for example, by integrating climate change issues with risk management.

European Commission Policy Officer, Raluca Murg, said: "The openness and familiarity of the civil protection community from Europe and beyond seeing each other in person for the first time since the start of the COVID-19 pandemic highlighted the dedication of those working in our field, and their passion to help people in need and bring a positive change into the world." She added: "Personally, I witnessed friendship and drive, patience and perseverance, and I am convinced the future of the UCPM, and of civil protection colleagues, will bring noble undertakings for many more years and Forums to come."

- For more on the Forum, including reports, recordings and photos of the event, visit the [event page](#).

## First UCPM medals awarded

One of the highlights of the 7th European Civil Protection Forum was awarding of the first ever UCPM medals. Given for extraordinary and long-standing contribution to the UCPM, the medals were a unique opportunity for the community to reflect on its collective achievements, and to recognise the efforts of people working tirelessly and professionally to relieve suffering when a crisis takes place.

The UCPM medal for 'Extraordinary contribution to the UCPM' was jointly awarded to three teams deployed in Haiti after the earthquake in 2021: the water purification module from France, the emergency medical team (Type 1) from Norway, and the telecoms emergency communication team from Luxembourg.

Announcing the medal recipients, European Commissioner for Crisis Management, Janez Lenarčič, said: "National teams and modules are the backbone of the UCPM's response capacity. The bravery that these teams demonstrated during their deployment in Haiti is an act that deserves this award."



Commissioner Lenarčič awarding the medal for extraordinary contribution to the UCPM. © European Union

Asle Hirth, from the Norwegian emergency medical team, said: "When we were on our way to Haiti, I think we all had our own ideas about what would meet us, and it turned out to be very much different. There was a lot of improvisation, a lot of humanity, and a lot of diplomacy to be able to achieve good medical care. I'm really honoured on behalf of the whole Norwegian emergency medical pool, and our co-workers in the health department and civil protection department, to receive this very first medal."

The medal for 'long-standing contribution to the UCPM' was awarded to Patricia Gaspar, Secretary of State for Portugal. Patricia said: "Thank you so much for this award. However, this medal is not mine. It is my duty to share this medal with all my European colleagues who have joined us for these past 22 years in all the efforts we have made to transform the Mechanism from a tiny little thing, that most people didn't know about, to what it is today – well known in the four corners of the world."



Patricia Gaspar receiving the medal for long-time contribution to the UCPM © European Union

She added: “So, I will be the guardian of this medal, and I would like to ask you all to applaud all the blue vests, all the blue shirts, that are here with us today – but have been working with a tremendous effort for the past year, especially.”

The award ceremony had one final surprise in store for Peter Billing, from ECHO. Now retired from the Commission, Peter was invited onstage to receive special thanks from Commissioner Lenarčič for his contribution in building the Mechanism to what it is now. You can read about Peter’s reflections on a long and rich career with ECHO and the UCPM in [Issue 5](#) of the Knowledge Network newsletter.

## **Prevention, Preparedness and Response to long-term emergencies: The Czech Presidency workshop**

The Czech Presidency of the EU Council, with the support of ECHO, organised a workshop on ‘Prevention, Preparedness and Response to long-term emergencies’ on 20–21 July 2022. More than 60 CP experts met in Pilsen to discuss the definition of ‘long-term’ emergency”, explore what types of emergency can be classified as long-term and define the role and added value of UCPM in addressing them.



Mr. M. Lukeš from the Czech Presidency Team presenting at the workshop © Tomáš Pořízek

Recent long-term emergencies – and the resulting strong engagement of CP authorities – have shown that population preparedness policy is invaluable in response management and limiting the magnitude of impacts. Increased self-sufficiency of the population enables emergency authorities to provide rapid and effective assistance where it is most needed. Someone who is well-informed and prepared can take action, and also help others.

Director General of the Fire Rescue Service of the Czech Republic, Lieutenant-General Vladimír Vlček, was pleased that participants appreciated the Czech Project, ‘[World of rescue](#)’. He said: “I think that this effective and modern approach to population

preparedness will increase the resilience of our societies, and should be further explored in other countries and at the EU level. I also agree that we should address the growing importance of continuous risk, emergency, and crisis communication with the public.”

Forest fires are a typical example of a long-term emergency related to climate change. This year’s forest fire season in Europe was much worse than in any previous year. For the first time, we have witnessed increased fire risk in Central Europe. The forest fires in the Bohemian Switzerland National Park (northern Czechia) and the Saxony Switzerland National Park (central-eastern Germany) are an upsetting example. The workshop discussion focused on three types of response capacities that are typically needed for long-term climate change-related emergencies: emergency shelter, emergency energy supply, and water availability (drinkable, technical and fire water).



Workshop participants listening to the welcome speech by Lieutenant-General Vladimír Vlček, Director General of the Fire Rescue Service of the Czech Republic. © Tomáš Pořízek

An important conclusion of the workshop was the need to establish an Operational Management Board of senior representatives from national CP authorities during long-term emergencies. The Board would combine operational understanding of the UCPM with decision-making powers, and adapt its functioning to the needs of long-term emergencies with complex cascading effects. The mandate and responsibility of the Board would need to be carefully defined for it to have clear benefit, and avoid overlaps with existing coordination structures. It would be integrated into existing structures – i.e. closely linked to the integrated political crisis response (IPCR) arrangements and regular meetings of operational 24/7 contact points during emergencies. Differing from IPCC high-level round tables, the Board would make operational decisions on the UCPM's most effective functioning during the long-term emergency (potentially based on specific arrangements for long-term emergencies, which are to be established).

*“The workshop provided a great opportunity for exchange on the characteristics of long-term crises, their common challenges, and the role of the UCPM. The discussions on population preparedness and resilience were also particularly interesting. Participants agreed that the cooperation between Member and Participating States could be strengthened further.”*

Jessika Bohr, Division for Crisis Preparedness,  
Ministry of Justice, Sweden

Member States called for simplification and increased flexibility in the response to long-term emergencies with high impact. They expressed the need to reduce administrative burdens and the timelines for decision-making to allow channelling the required high amounts and different types of assistance as effectively as possible, to where it is needed most. Long-term emergencies

are more likely to require quick coordination on national procurement actions, an easier use of joint procurement modalities at European level, and potentially also the option of direct procurement through the European Commission.

It was agreed that the discussion during the workshop was only a starting point for other, more detailed discussions in the future. These topics are often beyond the strict boundaries of CP authorities.

- You can consult the materials from the workshop [here](#).

## Spotlight on the Health Emergency Preparedness and Response department



The Health Emergency Preparedness and Response (HERA) department's mission is to prevent, detect, and rapidly respond to health emergencies. HERA, created in the aftermath of the COVID-19 pandemic, will anticipate threats and potential health crises through intelligence gathering, in order to build the necessary response capacities. HERA was established in October 2021, became operational in January 2022, and is still growing to be able to fulfil these and more of its tasks in accordance with its mandate. HERA expects to expand to close to 90 staff by the end of this year.

**Anne Simon** is the Head of Unit of the Emergency Office. Before taking up her position at HERA in January 2022, Anne worked in ECHO for 16 years on humanitarian and CP activities.

*HERA is a fairly recent player in the field of crisis management. Can you tell us about its origins?*

“The COVID-19 pandemic showed the importance of coordination among European countries, and the added value of a coordinated response in the face of cross-border health threats. Just look at what was achieved with European unity – sufficient vaccines for everyone, with so many lives saved.

But lessons were learned too, and it is clear that the Commission needed to build a stronger European Health Union; one that is prepared and able to respond to emerging health threats. HERA was formed as a key pillar of this Health Union, to be able to respond to health emergencies by ensuring sufficient supply and effective distribution of medical countermeasures, like vaccines, therapeutics, and personal protective equipment.”

***Setting up new institutions is always a challenge, and HERA is growing step by step. Where do you stand today?***

“HERA is indeed growing. With the pandemic still not over, and the ongoing monkeypox outbreak, we are kept very busy! HERA was established in October 2021, became operational in January 2022, and is still growing to be able to fulfil tasks in accordance with its mandate. We expect to expand to close to 90 staff by the end of this year, and currently employ about two thirds of this figure, with recruitment ongoing.”

***There are fears that ECHO and HERA roles in emergency management might overlap. How do you perceive that risk?***

“HERA is working on assessing health threats, gathering intelligence, and working with industry and research, all to ensure that we are ready to respond to health emergencies. HERA’s Emergency Office has a number of former ECHO colleagues who understand very well how to ensure complementarity and, to be honest, the relationship is working very well. HERA and ECHO have been working very closely together on Ukraine and on monkeypox, which clearly demonstrates the effectiveness of our collaboration.”

***HERA recently had a challenging first task in relation to the monkeypox virus. How did you deal with the situation?***

“From the moment the first monkeypox cases were reported in the EU in May, HERA has been actively supporting Member States to tackle the outbreak.

In a short space of time, HERA led and coordinated three purchases, totalling over 334 000 vaccine doses. For the first time, these were financed by the EU budget as a direct procurement, precisely to ensure that they would reach Member States and citizens as quickly as possible. Within weeks, deliveries had already started for the Member States most in need.

But the work doesn’t stop there – to meet Member States’ medium-term needs, HERA launched a joint procurement procedure for additional vaccines and therapeutics. In close collaboration with HERA, under rescEU, ECHO launched emergency procurement of a therapeutic that was much needed by Member States.

Already, we are seeing a reduction in cases in the EU, but the threat is still present, and preparedness is key to avoid another difficult situation.”

***There are ambitious plans to establish Emergency Medical Teams as part of rescEU. Will HERA be involved in that, too?***

“Emergency Medical Teams (EMTs) fall under the remit of ECHO, and while there are no plans at the moment, HERA would not rule out EMTs in the field of medical countermeasures as a possible area of collaboration in the future.”

***Do you think that the Knowledge Network can also help to ‘connect, share, and grow’ in the medical emergency field?***

“Yes, HERA sees the Knowledge Network as a unique platform that offers huge potential for all those involved in emergency preparedness and response. HERA has already established a number of formal groups, made up of expertise from all across Europe. We very much look forward to collaborating with colleagues in DG ECHO to discuss and explore how we can contribute to future development of the Knowledge Network to support health emergency responders to ‘connect, share, and grow’.”

## A farewell message for the Knowledge Network



Dear Colleagues,

At the time you are reading this, I will no longer be leading the Disaster Risk Management Unit, which is at the core of the Science Pillar of the Union Civil Protection Knowledge Network through the [Disaster Risk Management Knowledge Centre \(DRMKC\)](#). I'll probably be running between meetings as the new Director of Sustainable Resources at the Joint Research Centre (JRC).

As you know too well, we will face – besides the current ones – multiple challenges and disasters in the future, and a part of me has sometimes felt scared about what is to come. Perhaps you, too, have felt the same way sometimes?

But then, I remember the foundations of the Knowledge Network's Science Pillar; DRMKC's amazing projects – such as [INFORM](#), the [Risk Data Hub](#), or the Global Risk Conflict Index – and upcoming activities, such as the Disaster Resilience Goals. And I think that, although we'll hardly ever feel 100% safe, initiatives such as these, built with extraordinary people such as yourselves, lead us closer to this feeling of safety every single day, as you bridge the gap between science and policy.

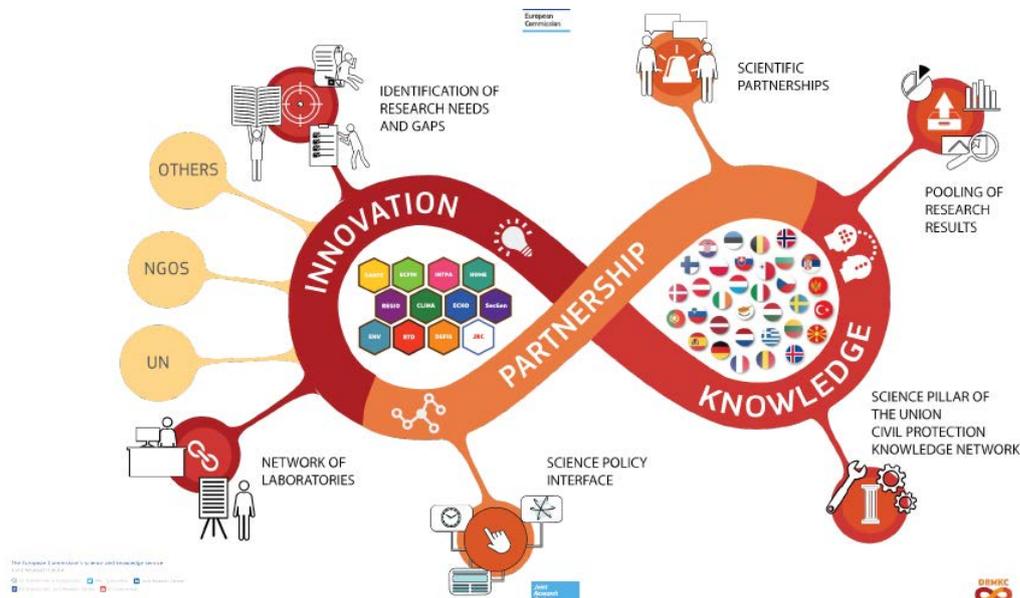
I hope you keep proactively sharing your existing knowledge, and aiming for new knowledge, wherever you are and whatever it is you are working on. Whether you are a policy-maker, a scientist, or a practitioner, this Network is made by all and for all. The more you give to it, the more you will get back. That is the culture we've been creating, and I don't think that will change.

But other things will – I trust you will keep continuously mapping the Network's needs (which are not permanent, but keep changing over time). This will certainly mean reinventing it; creating new synergies to ensure that the Network is larger than the sum of its parts, and that the Science Pillar continues to meet today's and tomorrow's needs, translating science and knowledge into practice.

It has been my pleasure and honour to be a part of the journey of the Knowledge Network. I'm curious to see what lies ahead, and am confident you'll choose the right path forward with Tom De Groeve as acting Head of Unit (who will now co-lead the way of the Science Pillar, hand-in-hand with the Knowledge Network Secretariat and the Knowledge Network Board members and working groups).

**Alessandra Zampieri**

Director of Sustainable Resources, JRC





## LEARNING

### PROFOUND exercise tests Danube flood response

Recent years have seen an increase in devastating floods across Europe. With the frequency and intensity of floods building, volunteers and national authorities must act rapidly to save lives and property. Flooding happens quickly and respects no borders, so flood responses need to work fast locally, nationally, and regionally.

A full-scale CP exercise took place in the Danube region in early September. It tested the preparedness of water rescue teams and volunteer fire brigades to work together in case of a major flooding event.

The **PROFOUND** exercise took place in Hungary, Slovakia and Romania, and tested the ability of flood responders to act when both the Tisza and Danube rivers flooded at the same time, in different places.

*“There has never been an exercise of this scale in Hungary, where the majority of participants were voluntary organisations. Extreme weather conditions – flash floods, vegetation fires, windstorms – are a challenge for the Danube region that can’t be met by professional forces alone, so well-trained disaster response NGOs are crucial in our region.”*

Zsolt Kelemen, PROFOUND Project Director

*“Our exercise control provides opportunities for the different response capacities to react, make decisions, and coordinate and cooperate with each other. Our mission is to support flood response NGOs in the Danube Region to engage in joint preparedness and response activities. I’m very proud of my team and the efforts of all the participants.”*

Kinga Perge, Chief Exercise Controller



During exercises, response teams operate as they would in real emergencies  
© Andras Preda

With participation from Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Romania and Slovakia, the three-day exercise simulated major flooding hitting first in the Budapest area of Hungary, and then spreading to both Romania and Slovakia. As the exercise went on, teams had to deal with simulated threats to human life, landslides, and the pollution of river water.

An activity of the UCPM, PROFOUND is helping volunteer organisations to adapt their procedures in line with the requirements of the Mechanism in order to better face floods in their own areas, as well as help neighbouring countries with flood response in the future.

### MODEX exercise in Austria for search and rescue

An EU modules field exercise in Austria in September tested urban search and rescue (USAR) and cave search and rescue modules, along with other response capacities, in an earthquake scenario that simulated damage to a school and trapped cavers. These teams were supported operationally by the assessment drone team.

Teams from Austria, Poland, Slovenia, Spain and France joined the exercise, which tested what could happen if a public building was badly damaged in an earthquake, trapping children and adults inside, or if cavers become trapped inside a cave system.

For the USAR modules from Austria and Poland, and the cave search and rescue teams from Slovenia and Spain, their responses were centred around a museum, office buildings, car parks, and a school. In the scenario, buildings had been damaged by the earthquake and the teams had to locate and rescue victims.



The cave search and rescue team arriving to respond to reports of trapped cavers.  
© European Union

In the cave rescue part of the exercise, teams from Slovenia and Spain were up in the mountains to enter a cave, search for the missing cavers, and evacuate the victims to safety outside of the cave.

All the teams involved tested their capabilities, operating procedures, and equipment, but also – even more importantly – their ability to work together, in the same place, combining their efforts to rescue victims.

EU modules field exercises test teams and their equipment in terms of their readiness for disaster, and their ability to work together in an international format (which would happen if a country requested support with disaster response through the UCPM).

*“The earthquake scenario was challenging for the exercise participants. The cave search and rescue capacities worked in an extremely difficult cave system, and the USAR modules – supported by a drone team – located and rescued victims in buildings that had been destroyed.*

*Then, all five teams came together to search for and rescue children trapped in a severely damaged school. Having the certification of a module as part of this exercise meant that, as well as the CP Pool gaining a valuable new asset, the team could train in a realistic scenario.”*

Marcin Kędra, EU MODEX Desk Officer

An emergency remote piloted aerial system from France was also put through its paces during the exercise in Austria, to examine its usefulness in an earthquake scenario and its readiness to become part of the joint pool of resources used by countries requesting support through the Mechanism.

- For more information check [here](#).



## Ad hoc training activities – Call for ideas

The revamped UCPM training programme will start in 2023, offering courses for deployable experts, modules, and other parties involved in Mechanism activities.

To support UCPM training exercises and activities which respond to emerging risks and training needs, the Commission also offers learning opportunities with a more flexible training set-up/on specific thematic areas. A Framework Contract can be used to request online modules, ad hoc training courses, training of trainers, and thematic seminars and workshops in order to swiftly respond to new learning needs.

The training activities requested shall fulfil the following objectives for participants:

- (1) Increase knowledge relevant for the UCPM, through online modules;
- (2) Increase knowledge and skills on a new and emerging UCPM topic (or a relevant UCPM topic that is not covered by the regular UCPM training programme) through online and onsite blended training courses;
- (3) Increase knowledge and skills on specific topics relevant for the UCPM, in order to replicate and multiply them in regional, national, institutional or other contexts through blended 'training of trainers' courses (online and onsite);
- (4) Strengthen and exchange knowledge and expertise, discuss good practices, and share lessons learned on a specific topic within the European CP, DRM, or related domains via thematic seminars (webinars) and virtual or face-to-face thematic workshops.

Training activities shall have a strong EU dimension, and could be related to any of the phases of the disaster management cycle.

*If you have ideas for training activities that could be organised using this Framework Contract, please contact your [National Training Coordinator](#) for them to bring to our attention.*

UCPM training and exercises team, ECHO



## National Training Coordinators hone their skills for the new UCPM training programme

After two years of online meetings, National Training Coordinators (NTCs) met face-to-face for their annual meeting in Prague, Czech Republic on 21–22 September.

NTCs are the point of contact in UCPM Member and Participating States for CP and disaster management personnel to identify their training needs and access the right training opportunities. As part of this, they identify the participants to be trained through the UCPM training programme.

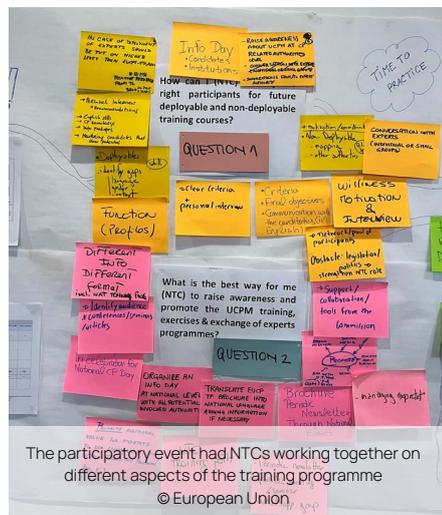
The meeting was organised by the Czech Presidency of the EU in collaboration with ECHO, and focused on preparing for the new UCPM training programme, which is being launched at the beginning of 2023.

The NTCs explored the different training pathways, courses and activities of the UCPM training programme, in order to ensure that they were best placed to explain them to training participants in their respective countries.

Colonel Petr Ošlejšek, Deputy Director General of the Fire and Rescue Service of the Czech Republic, said in his welcoming



NTCs at their first face-to-face annual meeting for over two years. © European Union



The participatory event had NTCs working together on different aspects of the training programme © European Union

speech: “Training of experts is, from my point of view, one of the key elements of the UCPM. I’m a graduate of Mechanism courses, so I know what I’m talking about! UCPM training and exercises create a network among national experts and capacities personnel. This network creates valuable contacts, relationships and friendships, in many cases facilitating and accelerating cooperation during emergencies.”

The NTCs were updated on UCPM activations coordinated by the Emergency Response Coordination Centre (ERCC) and the tools for operational information exchanges (requests for assistance). They also learned about the different new tools and online platforms that can support them in delivery of their tasks.

The face-to-face format was really appreciated after two years of working via video-conferencing.

Participants in the meeting also welcomed to the family of UCPM participating states. NTC of Bosnia and Herzegovina, Maja Pantić, said: “It’s

the first meeting for me at the UCPM level, and a wonderful opportunity to network and get to know the new names for the courses and their content in an interactive way.”

The next NTC annual meeting will take place in Spain in 2023.

*“What a pleasure to meet again face-to-face with NTC colleagues after having been deprived of it for two years. This is a key moment for the training programme after the inauguration of the Knowledge Network platform, and with the upcoming advent of the new training programme. We were hungry for information and best practices to tackle this turning point with confidence.”*

Frédéric Harrault, NTC of France



## New UCPM training programme kicks off

The new UCPM training programme for deployable experts, modules, response capacities, and CP and DRM stakeholders got off to a flying start at its contractor kick-off meeting in Brussels on 29 September 2022.

The new training programme divides courses into deployable and non-deployable learning pathways, in order to better respond to the needs of the UCPM. The aim is to create a European CP Pool of trained, deployable experts to reinforce UCPM responses to disasters, and other operations.

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## CBRN Consequence Management course, 21–25 November 2022

This course is organised by the Joint Chemical, Biological, Radiological and Nuclear (JCBRN) Defence Centre of Excellence in Vyškov, Czech Republic. It aims to introduce and describe CBRN crisis and consequence management for both civilian and military experts.

The course is developed for key actors in the crisis management sector (e.g. police officers, firefighters, health workers, military, civil defence, and emergency management authorities).

For more information and to register, please go to the [JCBRN Defence Centre of Excellence website](#). The deadline for registrations is 7 November 2022.

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## New e-learning course: Economics for Disaster Risk Management

Exacerbated by human-induced climate change, hazards such as floods and wildfires have been ravaging parts of Europe. The human, environmental and economic losses from disasters are making recovery from the COVID-19 crisis even harder.



Under the UCPM, the European Commission and the World Bank carried out a study on 'Economics for Disaster Prevention and Preparedness', which modelled the potential impact of floods and earthquakes on Europe's society and economy, and quantified the costs and benefits of investments in disaster resilience. The European Commission has now developed a new e-learning course based on this study's findings.

Designed for CP practitioners, national administrations and authorities, and European Commission staff, 'Economics for Disaster Prevention and Preparedness' demonstrates why investing in prevention and preparedness makes economic sense.

It explains the impact of disasters caused by natural hazards, why they occur, and the potential interaction with man-made hazards and pandemics.

In this one-hour online course, participants will gain an understanding of how disaster risk is estimated in order to assess options for preventing risks, and how disaster risk financing can be used to respond more effectively to disasters.

The course will be available very soon on the EU Academy: <https://academy.europa.eu/>

- **Study:** [Economics for Disaster Prevention and Preparedness](#)
- **Contact:** [ECHO-CP-P&P@ec.europa.eu](mailto:ECHO-CP-P&P@ec.europa.eu)



## FROM THE COMMUNITY

### Building up search and rescue training in Kosovo\*

The [Kosovo Search and Rescue International Training Centre](#) (SARITC) has a short but meteoric history. Following research visits to other training establishments in Europe to gather ideas on constructing objects for internal search and rescue training, construction work on the training site began in August 2015, and SARITC officially opened in 2016. The Swedish Rescue Training Centre supplied the designs of their 'collapsed' and 'semi-collapsed' training buildings, and an expert consultant advised on how to further improve them.

As well as internal training work in urban, mountain and diving/water rescue, work continued to build train carriages, large hazardous materials containers and vehicles for added realism. The size of the site increased to allow further growth, and an 18-metre-high rappelling tower was built (including scenario rooms and a 23-metre-long mock-up helicopter). It quickly became clear that the site could now respond to more training needs than initially foreseen, and accommodate other emergency responders in Kosovo and regionally.



*"Five of our team members have recently taken part in a 'Heavy Deployment' USAR exercise in Kosovo, as part of the UK-ISAR Team. A fantastic training venue, providing challenging and realistic training!"*

Scottish Fire and Rescue Service  
International Search and Rescue,  
13 June 2022

In fact, the site was nearing the size and capacity of other training centres in Europe. In March 2018, the SARITC Director decided that Kosovo would strive to have a SAR training centre which had the most numerous and diverse training objects in one location in the world. The ambition is for Kosovo to become the 'one stop shop' for SAR training.

A dynamic and ambitious plan was thus prepared to lift SARITC beyond current international standards. A HQ building was constructed containing classrooms, sleeping rooms (all with televisions, Wi-Fi, desks, private bathrooms, etc.), a 250-seat auditorium for conferences and seminars, and communal relaxation areas.

Extra training objects constructed included a 30-metre iron bridge, a 200-metre-long 'rubble pile', 3 additional underground tunnels, 2 above-ground tunnels, a 6-metre-deep water well, and a 4-container-long 3-2-1 configuration (including a dry trench collapse area, and chainsaw and hot-cutting practice areas).

Almost 50 vehicles are dotted around the training area. A 30-metre-long outdoor pool is currently under construction, with an underwater obstacle course and a submerged house in the middle. The site is projected to grow incrementally, with more training objects added over time, and the centre also includes many off-site locations.

*"During an USAR exercise in May 2022, I was mentoring the UK-ISAR team. The Kosovo exercise ground has the potential to become one of the leading exercise grounds for USAR teams. The facilities to host teams are already there, and with the new buildings and plans to add even more realistic collapsed structures, we are looking for opportunities to train there in the future."*

Marco Boulogne, Staff Officer Education,  
Training and Exercise, USAR.NL

SARITC facilities are available to all emergency response organisations. They can be used independently and with organisations' own instructors, role players and equipment.

Recent visitors have included regional neighbouring countries, plus Israel, Jordan, the Netherlands, Ukraine, and the UK International Search and Rescue (UK-ISAR) Team.

If you want a unique, challenging and thoroughly enjoyable training experience, contact:

- **e-mail:** [qntksh@fsk-rks.org](mailto:qntksh@fsk-rks.org)
- **Phone:** +383 49 901 211

\* This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the International Court of Justice (ICJ) Opinion on the Kosovo Declaration of Independence.



## FROM THE COMMUNITY

### Education and civil protection in Italy

This year, 2022, marks the [European Year of Youth](#). Significant public awareness and risk communication initiatives targeting young people are in place at national level. These take the form of educational programmes, awareness campaigns, pilot projects, and tools to inform people on various risks.

In Italy, risk education dates back to the most extensive programme in the country, the [EDURISK](#) project, which is promoted by the National Institute of Geophysics and Volcanology and Civil Protection Department. Since 2002, through teacher training, this project has offered schools and teachers of all Italian regions a series of educational tools to improve their knowledge of seismic and volcanic phenomena.

Since 2011, Italian CP partners have promoted a national communication campaign on best practices called '[I don't take risks](#)', with one variation, 'I don't take risks - School', designed for primary school students. 'I don't take risks - School' has a very interactive approach and is presented in school classrooms by CP volunteers specifically trained on pedagogical aspects, with active collaboration from school teachers.



*"Students are led to acquire greater awareness of the risks in their area through games, activities and small experiments to be carried out together. The activities are designed to stimulate their curiosity, and encourage participation and cooperation, through a playful approach."*

Daniela Di Bucci, Italian Civil Protection Department

In parallel, advances in national legislation on CP include, for the first time, a provision on the 'dissemination of knowledge and culture of civil protection, also with the involvement of educational institutions, in order to promote resilience of communities and the adoption of aware behaviours and measures of self-protection by citizens' (L. Decree 1/2018).

In 2018, the Civil Protection Department and the Ministry of Education, University and Research signed a Memorandum of Understanding which engaged institutions to promote strategic actions on increasing the 'resilience of communities' through the dissemination of the culture of CP. This collaboration between the institutional and academic world includes work to define qualified training courses on CP through the Conference of Italian University Rectors.

Finally, the recent Law 92/2019 re-introduces 'Civic Education' among the mandatory school subjects. Basic CP training is included among the skills to be developed and the learning objectives. While it is only a few hours, this is an important and highly symbolic signal. Following the approval of the Law, a book entitled '[Civil protection in Italy - basic training in civil protection](#)' was published (see the 'New resources' section).

For more information, please contact:

**Daniela di Bucci**, Italian Civil Protection Department

- e-mail: [Daniela.DiBucci@protezionecivile.it](mailto:Daniela.DiBucci@protezionecivile.it)



## FROM THE COMMUNITY

### Comparative mapping of EU flood risk responses

During the floods of 2021, Belgium, Germany and the Netherlands activated their emergency response capacities. While they share some common aspects, their national response systems involve different terminology, procedures and institutions. These differences reflect cultural, historical, social and political norms, but can make it difficult to understand each other's systems when it really counts.

**Comparative Stakeholder Mapping**  
United Nations University - Climate Resilience Initiative

In 2021 to cope with the 2021 floods, Belgium, Germany and the Netherlands activated their emergency response capacities. Although these mechanisms are common in some aspects, there are differences in terms of terminology and roles management procedures. This stakeholder map shows the emergency response mechanisms from a governance point of view in each country. It represents the state of flood risk in the North Province (Belgium), the North-Rhine Westphalia state (Germany) and the Limburg province (the Netherlands). In Germany emergency response is managed by the federal government, in Belgium by the federal government and in the Netherlands by the provincial government. The purpose of this comparative stakeholder mapping is to provide a common understanding to facilitate further cooperation and exchange between the three different countries.

**Exciting country-specific features**

- In Belgium emergency response is managed by the federal government, in Germany by the state government and in the Netherlands by the provincial government.
- Emergency response is managed by the federal government in Belgium, by the state government in Germany and by the provincial government in the Netherlands.
- The emergency response is managed by the federal government in Belgium, by the state government in Germany and by the provincial government in the Netherlands.

**Legend**

- Administrative level
- Actor
- Function
- Emergency response
- Decision
- Information
- Support
- Coordinate
- Operate
- Decide
- Inform
- Coordinate
- Operate
- Decide
- Inform

**Authors**  
UNU-CRRI, Institute for Environment and Society, University of Groningen, University of Bonn, University of Maastricht, University of Cologne, University of Duisburg-Essen, University of Applied Sciences, University of Applied Sciences, University of Applied Sciences

The floods which occurred in July 2021 shone a spotlight on the need for synergies between neighbouring countries. Students and researchers from the three United Nations University Institutes in Bonn, Bruges and Maastricht compared the disaster response mechanisms in Namur Province (Belgium), North Rhine Westphalia state (Germany) and Limburg Province (the Netherlands) from a legal/constitutional viewpoint.

This helped to identify a common understanding of institutional functions and operations at different governance levels. It also highlighted opportunities and barriers for future cross-border cooperation and joint DRM response and recovery among the three countries.

As a first step, the stakeholder mapping visually captured the DRM institutions and actors in each of the three countries. This allowed for comparison of how the emergency response that was actually carried out during the flood response differed from pre-existing formal procedures. This comparative approach also helps identify challenges related to the multilevel governance systems, from supranational down to the local level.

**Germany**

In Germany, emergency response is managed by the state government, in Belgium by the federal government and in the Netherlands by the provincial government. The emergency response is managed by the state government in Germany, by the federal government in Belgium and by the provincial government in the Netherlands.

**The Netherlands**

In the Netherlands, emergency response is managed by the provincial government, in Belgium by the federal government and in Germany by the state government. The emergency response is managed by the provincial government in the Netherlands, by the federal government in Belgium and by the state government in Germany.

**SCAN ME**

**NOWATER**

### About the map

The DRM system of each country is presented in a stakeholder map, along with a descriptive text and a presentation of some of its limitations.

Each map shows the main administrative levels, actors, and actions of the emergency response, highlighting features that are specific to each country.

The map design maximises user-friendliness and accessibility by selecting key features for each country and grouping equivalent roles together, identifying the main actions and functions that actors have during the response (decide, inform, operate, coordinate and support).



For more information, please contact:

**Sophie van der Heijden**

- e-mail: [heijden@ehs.unu.edu](mailto:heijden@ehs.unu.edu)

You can find more information on the mapping and sources at: <https://heijden4.wixsite.com/stakeholdermapunucri> (please note, you may have to switch browser or device to access this site)



## SCIENCE

### Enhanced capacity for the Copernicus Emergency Management Service: Manned and unmanned aerial services to complement satellite sources for humanitarian aid and civil protection

The Commission's Joint Research Centre (JRC) has awarded Fairfleet and CGR/Eurosense a four-year framework contract to provide manned and unmanned aerial services for the [Copernicus Emergency Management Service](#).

These services will be offered either as an alternative source of post-event satellite imagery in emergency situations, or as real-time follow up to events (e.g. earthquakes, urban flooding, landslides, etc.) where satellite images are not available, or where the satellite's resolution is not sufficient. The aerial data gathered will then help the emergency management services complement satellite sources for humanitarian aid and CP.

*“Centre aerial platforms yield significant benefits due to their higher deployment flexibility, potential better timeliness, and more advanced technical capabilities – especially in situations that require detailed mapping of impact on high value assets. In this sector, airborne systems often offer the best possible performance in terms of spatial and spectral resolution.”*

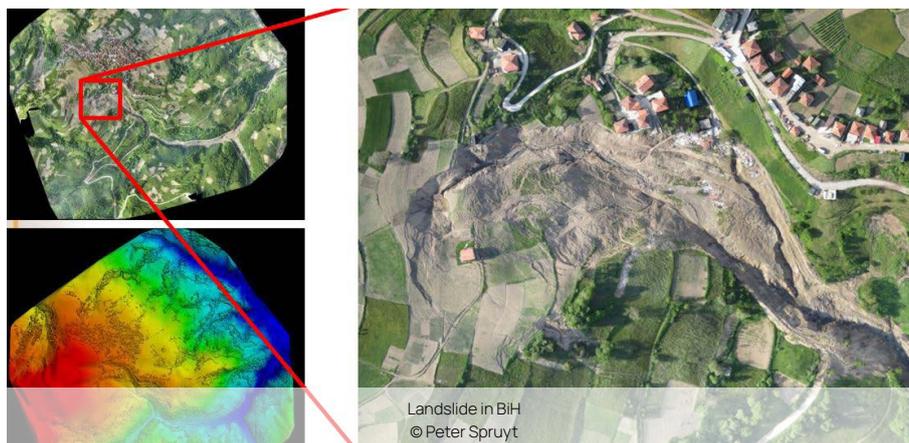
Peter Spruyt, Project Officer, JRC

Co-founder and Managing Director of FairFleet, Alexander Engelfried, said: “The key requirements for the unmanned aerial platform contract are the creation and maintenance of a European drone operator network and rapid processing capabilities, as well as fast data transfer. FairFleet was able to prove that we meet the requirements of the Copernicus Programme exactly. We are proud to be part of the Copernicus Family now, and to provide helpful data to European citizens.”

CGR/Eurosense will provide manned aerial campaigns and deliver ortho-rectified imagery and Lidar information.

#### Background

[Copernicus](#) is an EU programme aimed at developing European information services based on satellite Earth Observation and in situ data. The Copernicus Emergency Management Service provides information for emergency responses in relation to different types of disasters (including meteorological hazards, geophysical hazards, deliberate and accidental man-made disasters, and other humanitarian disasters), as well as prevention, preparedness, response and recovery activities.



## Social media analysis in situational awareness



Suppose you are an emergency responder, and you see a social media post showing an unusable road in a place which is not covered by traditional news. You see a similar message from several accounts. Wouldn't you wonder whether they were referring to the same event, or whether the area was worth a more detailed analysis using satellite imagery?

With this in mind, during the [2021 Haiti Earthquake](#), scientists at the JRC used social media data analysis to complement assessment of impacts in the immediate aftermath of the earthquake. This was the first case of a software platform scanning millions of social media texts and images per day for situational awareness and impact assessment. Machine learning models allowed the platform to collect, filter and geocode the information automatically and in real-time.

The first goal of this platform was to provide an additional geospatial layer to the [European Flood Awareness System](#) (EFAS) and the [Global Flood Awareness System](#) (GloFAS). These two online systems offer flood forecasts based on model simulations, which are crucial to the [Copernicus Emergency Management Services](#) managed by the JRC.

The monitoring ability of these early warning systems is mostly anchored in satellite images and numerical models. Integration of this social media analysis layer allows them to assess the likelihood and impacts of a flood event with even greater accuracy.

The platform software was released as [open-source](#), meaning it is free and open to all (practitioners and researchers linked to crisis response, in particular). The Social Media Disaster Risk Monitoring (SMDRM) platform can be adapted for different disasters, resulting in valuable information for reports, or descriptions of the situation on the ground or in the vicinity. This information can help crisis managers to prioritise their actions, or point satellites and efforts to specific locations.

### An international Task Force to connect researchers and practitioners

The JRC is co-leading an international Task Force to promote the use of social media in crisis rooms, championing 'good practices' and 'real cases'. Its mission is to identify, understand and address challenges for improving the adoption of non-authoritative data (social media included) for disaster management.

Valerio Lorini from the JRC (leader of the SMDRM project and co-founder of the Task Force) stated: "Social media constitutes a growing data source to help improve responses in the early hours and days of a disaster, when gaining situational awareness is critical and time-sensitive. Today, automated data collection systems are available and mature, and AI-supported systems for filtering information are well-tested." He added that "Practitioners need to be involved early on and throughout the research process of such systems to ensure they can use social media sensors in crisis rooms as any other physical sensors. Emergency managers should have a proper introduction to social media analysis tools to acquire the proper skills to master them".

In June, the Task Force organised a second workshop, 'Social media for Disaster Risk Management: Researchers meet practitioners', to connect practitioners' needs to researchers' agendas. During the workshop, practitioners presented operational tools deployed during emergency coordination activities, and barriers to the effectiveness of social media during critical times. They shared their own insights, experiences, and views on social media use in recent incidents.

The researchers at the JRC are looking forward to strengthening the relationship between research and practice in the coming years. Currently, the Task Force is analysing a survey which targeted practitioners to understand their needs and use of social media, in order to identify the usefulness – but also biases – of such data.

To access workshop presentations or collaborate, head to [this page](#).





## Global Concurrent Extremes in 2022: A warning bell?

In 2022, the world has already been hit by several climate extremes, and the year is not over yet. Droughts, heatwaves and floods have affected almost all continents. In the last months, more than [60% of the EU](#) experienced drought conditions associated with severe precipitation deficit and a sequence of heatwaves. In some areas of Europe, the onset of the drought dates back to [winter 2021–2022](#), which was also a period characterised by very poor snowfall accumulation over the Alps.

Key socioeconomic sectors and ecosystems have all been affected by these persistent extreme conditions. Many European rivers have reached critical conditions, with anomalous low flow affecting river transport, energy production and dike stability, among other things. Furthermore, sea-water intrusion posed a threat to ecosystems and agriculture. In the [Po's delta](#), it reached almost 40km inland. Severe impacts have been reported for [European agriculture](#), with yield reductions at the EU level estimated to be -21%, -19%, -17%, and -13% (when compared to the last 5 years) for rice, maize, soybean, and sunflower.

In [East Africa](#), persistent drought conditions have affected many areas, including in Somalia, Tanzania, Kenya, and Ethiopia, with 18 million people now food-insecure. According to UN-OCHA, humanitarian help is needed by 7 million people in Ethiopia, 4 million people in Kenya, and 5 million people in South Sudan. In Somalia, 6.1 million people have been affected by the drought emergency, and more than 700,000 (mostly women and children) have been forced to leave their homes to look for food and water.

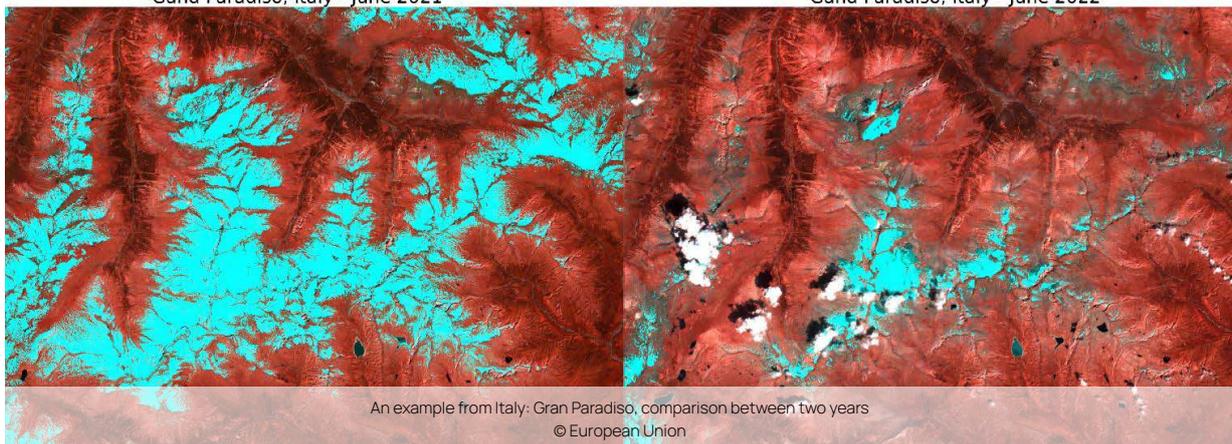
In China, a persistent heatwave combined with a moderate precipitation deficit severely affected the Yangtze river basin, impacting energy, agriculture, and water supply. In South America, the drought in the La Plata Basin has continued into 2022, affecting agriculture, inland water navigation, energy production, water supply, and ecosystems.

In [India and Pakistan](#), a record-breaking extreme heatwave occurred in March–April, with more than 70% of India being affected. Impacts on agriculture and human health were reported. It was estimated that, due to climate change, the probability of such events has increased thirty-fold. In [Pakistan](#), heavy monsoon rainfall during summer triggered extreme large-scale floods. More than 33 million people were affected, and heavy damages and losses were reported in sectors such as agriculture and infrastructure.

The list of 2022 climate extremes, unfortunately, does not stop here. However, all the above-mentioned events and their impacts should serve as a warning bell. Climate change will bring more frequent and severe concurrent global extremes. Enhanced early warning systems and climate services are going to be crucial in reducing the impacts of such events. The integration of Artificial Intelligence will also play an important role, as it can help with detecting and tracking extreme events, identifying areas of concern where sectoral impacts are expected, and extracting actionable information from multiple and diverse sources of data.

Gand Paradiso, Italy - June 2021

Gand Paradiso, Italy - June 2022

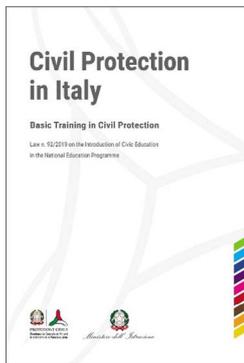


## NEW RESOURCES

### Drivers of future fluvial flood risk change for residential buildings in Europe

Flooding is a costly natural hazard in Europe, and climate and socioeconomic changes are projected to contribute to bigger costs in the future. Policy making and adaptation planning need reliable, large-scale risk assessments and an improved understanding of potential risk drivers.

In [this study](#), recent data for hazard and flood protection standards are combined with high resolution exposure projections and attributes of vulnerability from open data sources.



### Civil Protection in Italy – Basic training in civil protection

Designed to provide teachers with an organised and in-depth description of the work of the National Civil Protection Service, this [textbook](#) is a rich and useful source of information about disaster risk reduction, which will be of interest to a wide audience.

Adapted from 'Civil Protection in Italy - Institutional Textbook for School Teachers', published online in Italian in 2020.

Publisher: Dipartimento della Protezione Civile - Presidenza del Consiglio dei Ministri. ISBN: 9791281195011

### Pan-European wildfire risk assessment

Wildfires may result in long-lasting impacts on social, environmental, and economic systems. However, methods for wildfire risk assessment can vary widely among countries, leading to different regional or national approaches.

The European Commission is required to have a wide overview of wildfire risk in Europe, to support the actions of its Member States and ensure compliance in the implementation of EU regulations related to wildfires.

The [pan-European wildfire risk assessment](#) presents data on the causes of wildfires, fire behaviour and vulnerabilities of people and ecology, methodologies for assessing risk, and an overview of the milestones in the journey towards a European wildfire assessment.



Publisher: Publications Office of the European Union. ISBN: 978-92-76-55137-9 (online), 978-92-76-55138-6 (print)



### Knowledge Network Strategic Plan 2022–2026

The [Knowledge Network Strategic Plan 2022–2026](#) was endorsed by the Knowledge Network Board in June 2022.

The Strategic Plan outlines the position of the Knowledge Network within a broader CP and DRM system, and defines its vision, mission and strategic goals to be pursued in the next five years.

It was developed following consultations with UCPM Member and Participating States, with input from European Commission services.

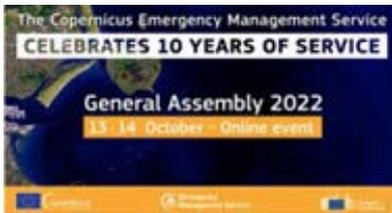
## COMING UP

### CEMS Annual Assembly 2022

13–14 October, online

This annual event brings together the disaster and risk management community to discuss the impact and evolution of the Copernicus Emergency Management Service (CEMS).

Find out more and register [here](#).



### Disaster Research Days 2022

13–14 October, University of Innsbruck

The [Disaster Research Days 2022](#) will support dialogue and networking between the individual scientific disciplines and departments in disaster management.

Discover more and register for the Research Days [here](#).



### Disaster Risk Reduction Conference 2022

25–27 October, hybrid

Under the theme of 'Complex Crises', the Disaster Risk Reduction Conference will address the dynamically increasing perception of the scale and compounding impacts of recent disasters and crises. Crises which increasingly threaten the lives and livelihoods of millions of people are exacerbated by the impact of Covid 19 and the armed conflict in Ukraine.

Find out more and register for the conference [here](#). Individual sessions available in English and German.



### "Know Your Hazard": A European Conference on Community Disaster Preparedness

27 October, Luxembourg

The European Investment Bank Institute, in collaboration with the Red Cross [Red Crescent Climate Centre](#), is organising the first European conference on community disaster preparedness.

Find out more and register for the conference [here](#).



## COMING UP



### Annual CEMS on Demand Mapping User Workshop 2022

27–28 October, online

An online event to learn how the Copernicus Emergency Management Service's 'On Demand Mapping' supports emergency response and DRM.

Get more information and register for the event [here](#)

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### NEEDS 2022 Conference on Global Disasters

1–3 November, Copenhagen, Denmark

The [NEEDS conference](#) aims to explore the status quo of disaster research and management. The overall theme for the conference will be 'Global Disasters', with a focus on Health and Climate Change and disaster risk reduction.



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### International Conference on Forest Fire Research

11–18 November, Coimbra

The themes of this conference will include 'Fire at the Wildland Urban Interface', 'Fire Risk Management', 'Decision Support Systems and Tools', 'Fire Management', 'Fuel Management' and 'Socioeconomic Issues'.

Find out more and register for the conference [here](#).



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### Nicosia Risk Forum

15–16 November, Nicosia

The Nicosia Risk Forum will bring together different stakeholders with a significant interest in Disaster Management in relation to the climate crisis.

Find out more and register to take part in the Forum [here](#).



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### 6th DRMKC Annual Seminar

22–23 November, Paris

This event aims to share the achievements of the UCPKN Science Pillar in addressing challenges such as compound, concurrent and cascade events that need to be included in risk analysis, and the communication challenges in risk management, among others.

Want to take part in the seminar? You can register and find out more [here](#).



## Let's take a look one more time: European Civil Protection Forum 2022



All pictures: Participants and activities of the European Civil Protection Forum 2022 © European Union

Would you like to receive future updates on the **Union Civil Protection Knowledge Network** directly to your mailbox? If yes, please let us know by filling in this [short form](#).

European Civil Protection and Humanitarian Aid Operations - Union Civil Protection Knowledge Network  
E-mail: [ECHO-CP-Knowledge-Network@ec.europa.eu](mailto:ECHO-CP-Knowledge-Network@ec.europa.eu) - Website: <https://civil-protection-knowledge-network.europa.eu>