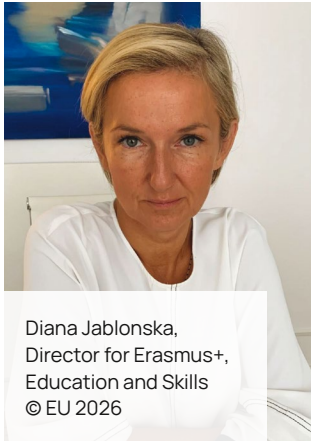




INTRODUCTION

Empowering the next generation: building a culture of preparedness together



Diana Jablonska,
Director for Erasmus+,
Education and Skills
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Dear reader,

As we reflect on the achievements of the past few months, I am inspired by the growing recognition of a simple yet profound truth: **preparedness begins with education, and education must begin early.** That is why I was honoured to be asked to introduce this special edition of the Knowledge Network newsletter which provides

a welcome opportunity to shine the spotlight on the important work being done to boost preparedness among children and young people. During the recent European Citizens' Panel on preparedness, education was at the heart of many discussions, underscoring the need to educate well-informed citizens and build resilient societies, starting with our youngest members. This reflects a key insight: fostering a culture of preparedness from an early age is not just beneficial. It is essential. Children who understand risks and know how to respond grow into resilient adults, capable of protecting themselves and their communities.

I am proud to say that our work on education for [sustainability, citizenship](#) and countering [disinformation](#) provides a strong foundation for teaching children to understand and respond to crises. We are now taking this further, in the framework of Action 29 of the Preparedness Union Strategy, in partnership with the Directorate-General for European Civil Protection and Humanitarian Aid Operations and with invaluable inputs from the civil protection community, as we will soon release *Guidelines to embed preparedness education in early childhood and primary education curricula*. We are also supporting educators and teachers through the [European School](#)

[Education Platform](#) which offers educational materials and guidance to educate children on preparedness-related topics in an age-appropriate way.

Equally important is the work underway through Action 30 of the Preparedness Union Strategy, where the [Erasmus+](#) and [European Solidarity Corps](#) programmes are supporting projects that understand and react to crises. These, along with those included in this special edition newsletter, demonstrate that preparedness is not merely a technical skill but a shared social responsibility.

As we move forward, let us continue to bridge the gap between policy and practice, between experts and educators, and between institutions and individuals. Let us keep sharing knowledge and ensure no one is left unprepared. I look forward to seeing how our collective efforts will strengthen Europe's resilience, one classroom, one community, and one young mind at a time.

With gratitude for your dedication,



Diana Jablonska

Director for Erasmus+, Education and Skills
Directorate-General for Education, Youth, Sport and Culture
(EAC) – European Commission

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YOUTH EDUCATION DOSSIER

The DrawData project: how Croatia is making disaster risk reduction cool

By Jo-Anna Van Vlaenderen, Unit B3, DG ECHO



A comic book series introducing children to earthquakes, floods, fires and pandemics © stock.adobe.com by prostock-studio

The DrawData project, short for Drafting Disaster Risk Reduction Awareness Raising Guidelines and Disaster Loss Data & Assessment System, is funded under Track 1 with an ambitious goal. It aims to build a more risk-aware and resilient society by strengthening how disaster losses are recorded and analysed by translating that information into clear, engaging awareness-raising tools. At its core lies a simple but powerful idea: people respond better when information feels relevant to their own lives.

Why local data makes all the difference

For Nataša Holcinger, head of the Croatian Platform Coordination Department within the Ministry of the Interior's Civil Protection Directorate, the project meant rethinking how awareness campaigns are designed. 'Before the project, awareness-raising activities in Croatia were organised under a one-size-fits-all principle,' she explains, 'but people were often presented with risks that are not common in their area.' The DrawData project addresses exactly this. Instead of generic messaging, citizens are presented with concrete examples of floods, earthquakes or fires that have caused real damage in their own regions.

At the same time, surveys conducted at the start of the project revealed a deeper issue: a gap in public understanding. 'The public is somewhat aware of hazards,

but not of risks', Holcinger explains. 'Many people think: civil protection will come and save us.' That perception is exactly what the project aims to change. 'Disaster risk reduction is not just about response', she says. 'It's about what you, as a citizen, do before.'

A playful comic book with a serious message

One of the project's most distinctive outputs is a colourful and engaging comic book designed primarily for children aged 9 to 12. The comic focuses on four key hazards: earthquakes, floods, fires and pandemics, identified as the most relevant risks in Croatia based on national risk assessments. As a playful twist, in Croatian all four begin with the letter 'p' (potres, poplava, požar, pošast), making the concept even more memorable and playful for young readers.

But behind the humour lies a serious message: resilience starts with individual action. 'We didn't want to create fear', Holcinger explains. 'Many artists tend to portray disasters in a very dark way. We wanted something fun, but still educational.' The team partnered with Darko Macan, a prominent Croatian comic book artist known for his storytelling and humour. 'We gave him all the information about disaster risk reduction, but we let him decide how to present it', Holcinger says. 'That outside perspective really paid off.'

Reaching children and youth

The comic is distributed through schools and due to its popularity is now also available in public libraries, with an online version ensuring broader access. 'It's not easy competing with emergency response and their equipment, like trucks, when it comes to children's attention', Holcinger admits. 'But we want them to understand that prevention matters just as much.'



Empower-Kids: nurturing resilience in the younger generations of Castelraimondo

By **Raniero Maggini (Cittadinanzattiva)**

In a historical period marked by increasingly frequent and severe disasters, and driven by ongoing climate change, [Empower-Citizens](#) aims to contribute to rethinking how we manage these events and fostering collaboration among all community actors.

Now more than ever, citizen engagement is vital. Including the younger generations in this process feels like a natural choice. In Castelraimondo, the Italian case study for Empower-Citizens, the Centro Primavera Centre is currently active. Supported by the local municipal administration and managed by the Il Faro Cooperative, the centre brings together 25 children of different ages, ranging from 6 to 11 years old.

Thanks to the enthusiasm of Anna Benigni, head of the municipality's social affairs service, and Isabella Cucculelli, head of Centro Primavera, the 25 very young residents of Castelraimondo have become the protagonists of Empower-Citizens, through a dedicated initiative called Empower-Kids.

But what kind of journey are these children undertaking, given that during the 2016 earthquake they were not yet born or were just over a year old?

They listened to the stories of those who lived through the earthquake, observed the cracks in the buildings caused by the tremors, and looked at the houses and buildings currently being rebuilt. They met with three types of experts: a geologist explaining how earthquakes behave and how soil and rocks react, an architect explaining how houses can be built to be more earthquake-resistant, and civil protection operators explaining how to behave during an emergency. Furthermore, the children interviewed their parents and relatives about their personal experiences. These shared memories spanned well beyond Castelraimondo, touching upon the countries of origin of families coming from Africa, China and eastern Europe.

This path represents a process of personal growth and risk awareness. Learning the steps needed in the immediate aftermath of an event and creating a magical 'emergency backpack' that can help them get through the first few hours without shelter enhances their preparedness.



Children taking part in a guided walk through areas affected by the 2016 central Italy earthquake © Il Faro Cooperativa Sociale

'We are truly delighted with the progress made by the children of Castelraimondo, who have shown such interest and attentiveness to the many opportunities presented to them. It is important that even the youngest members of the community are involved in these processes – something that rarely happens. It is also wonderful to see how their commitment is helping to make this community increasingly united and cohesive'.

– Anna Benigni, head of the municipality's social affairs service

Engaging the next generation in disaster risk management

By André Moreira Agrela Gonçalves, Unit E.1, JRC

From secondary school placements to university curricula, the Joint Research Centre (JRC) is helping build the next generation of disaster risk management (DRM) professionals.

A taste of disaster risk science

The JRC Ispra site has been partnering with the European School in Varese to offer secondary school students a two-week traineeship as part of their compulsory work experience. Last year, the JRC welcomed 46 students, four of whom were in the Disaster Risk Management Unit in 2024.

What they did depended on the team. Some worked alongside scientists on technical tasks while others contributed to communications work. Activities included reviewing website structures, creating dissemination materials, exploring trends in EU-funded research projects, and producing stories and presentations using JRC data for interactive touchscreens. For many of them it is a first contact with a professional environment, and a first glimpse of how scientific knowledge about floods, wildfires or droughts can help save lives and assets.



University students participating in a disaster risk management training course
© stock.adobe.com by Jacob-Lund

Five months at the JRC

For those further along in their studies, the [JRC Scientific Traineeship Programme](#) offers something more substantial. Each call recruits around 50 trainees across JRC sites in Belgium, Germany, Spain, Italy and the Netherlands, covering fields from environment and climate to data science, AI, and crisis management.

The traineeships run for five months and come with a monthly allowance, serving as an entry point into EU science and policy work. Like other Commission departments, the JRC also hosts [Blue Book traineeships](#).

Building the next cohort of professionals

At university level, the [Disaster Risk Management Knowledge Centre \(DRMKC\)](#) partners with the Cooperation Network of Risk, Safety & Security Studies (CONRIS) to support DRM training across European universities. Member institutions integrate DRM content into their own curricula, with students working in groups, engaging with real case studies, and applying tools to specific crisis types including extreme weather events.

One recent example is the Saxion University of Applied Sciences in the Netherlands, where a training module ran in [February 2026](#) as part of the third-year crisis and disaster management semester. Some months before another online training programme, lasting two and a half months, took place for undergraduate students in partnership with Coventry University. Students covered the full spectrum of the discipline: risk assessment, communication, response and emerging challenges.

Investing in those who will manage tomorrow's risks

A two-week placement for a secondary school student in Varese, a five-month traineeship for a recent graduate, and a semester module at a university – while the formats and audiences vary, each initiative contributes to building the skills and knowledge needed to manage future disaster risks.



Preparedness through play: how serious games can help children understand disaster risks

By Stephanie Khalaf, Unit B3, DG ECHO



Participants engaging with a hazard-themed board game during a workshop © FIRE RES

Can a board game help children understand wildfire risk? Can an escape room teach them how to respond to a chemical incident? Across Europe and beyond, educators and civil protection practitioners are increasingly turning to serious games to help young people learn about hazards, preparedness and resilience.

A review carried out as part of the Wildfire Risk Awareness and Communication initiative of the Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO) examined 12 serious games focused on wildfires and other disasters. While the games vary in format and audience, they share a common goal: helping children and young people develop the knowledge and skills to understand risk and make informed decisions before and during an emergency.

Many of the games place players in realistic scenarios where they must solve problems, work together and face the consequences of their choices. Rather than relying on classroom teaching alone, they encourage learning through experience. Players might explore how forest management reduces wildfire risk, decide how a community should prepare for an approaching disaster or work to improve recovery after a major event.

Several games are specifically designed for younger audiences. The United Nations Office for Disaster Risk Reduction's 'Stop Disasters!' introduces preparedness through interactive challenges, while the 'HEART Force

Wildfire' game encourages students to respond to and recover from wildfire events as a team. In Spain, the [Escut kimik](#) escape room uses problem-solving to raise awareness of chemical risks among secondary school students. The 'First Aid Game' uses interactive scenarios to help children learn how to respond safely to everyday emergencies, teaching basic first aid skills. Other examples include Poland's [The Elements of the Forest](#), which teaches young players about climate adaptation and forest fire prevention. The multilingual [NHD Play](#) platform uses videos, quizzes and interactive challenges to help children understand how to respond to wildfires, floods, and earthquakes.

Format matters too. Physical board games bring children together around a table and encourage discussion. Digital platforms offer reach and scalability and can provide immediate feedback on decisions. The best approaches tend to draw on both, adapting to the tools and contexts available in different schools and communities across the EU.

While some games are available in multiple languages, accessibility remains a practical challenge. Games designed for one national context are not always easy to adapt elsewhere, and tools that require a trained facilitator can be difficult to scale. Any new serious game developed for EU-wide use would need to address these gaps directly.

The review identifies a clear opening. A well-designed wildfire awareness game for primary school children should be built around prevention as much as response, accessible across languages and formats, and grounded in the varied landscapes and risks of different European regions. The groundwork has been laid. The next step is to build something that puts real preparedness knowledge in the hands of the children who will need it most.



Bogataj Rescue and Protection Days 2026 focused on societal preparedness and solidarity

By the Administration for Civil Protection and Disaster Relief of Slovenia (ACPDR)

From 21 to 23 May 2026, the city of Nova Gorica became Slovenia's hub for promoting population preparedness, civil protection and presenting rescue innovation as it hosted the Bogataj Rescue and Protection Days 2026.

Organised by the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (URSZR) in cooperation with the Municipality of Nova Gorica, the event brought together thousands of visitors, rescuers, firefighters, civil protection units, police, members of the armed forces, volunteers, researchers, and technology providers from across the country and abroad.

Recognised as Slovenia's largest biennial event dedicated to civil protection and disaster relief, the event's three-day programme combined professional discussions, public demonstrations, competitions, and educational activities for visitors of all ages.

A platform for knowledge sharing and regional cooperation

Exhibition areas featured more than 60 domestic and international exhibitors presenting innovative disaster management solutions and equipment. Visitors had the opportunity to witness live rescue operations or participate in a series of expert conferences, workshops, and professional consultations.

Foreign guests from the Western Balkans and Slovenia's neighbouring countries were invited to the 'Implementation of Lessons Learnt from Recent Forest Fires' round table which highlighted the importance of systematically implementing lessons learnt across the overall disaster

management cycle, normative frameworks, and financial programmes. A representative from the Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO) contributed to the discussion with an overview of EU and UCPM complementarities to regional and bilateral wildfire preparedness activities. A dedicated programme for foreign diplomatic missions in Slovenia also focused on recent consular developments.

Building resilience from an early age

A strong educational focus was at the heart of Bogataj Rescue and Protection Days. Visits for kindergartens and schools introduced children and young people to emergency preparedness through engaging activities, guided tours, and puppet performances. The youth corner featured educational games, safety-awareness activities, and presentations teaching how to respond in emergencies. Through interactive storytelling and demonstrations, the programme aimed to build a culture of safety and responsibility from an early age.

Preparedness through competitions

The event programme also included several competitions designed to promote teamwork, resilience, and physical readiness among rescue personnel. Highlights included the endurance race Run112, an international firefighting competition, and first-aid preparedness competitions.

More than just a professional exhibition, the Bogataj Rescue and Protection Days 2026 celebrated solidarity and dedication. It highlighted the importance of population preparedness, cross-sectoral and international cooperation, and community resilience.



Civil protection experts exchanging lessons from recent wildfires during a round table at Bogataj Rescue and Protection Days 2026 © EU2026

Children learning about civil protection and emergency preparedness through interactive demonstrations during Bogataj Rescue and Protection Days 2026 © Administration for Civil Protection and Disaster Relief (ACPDR)



Bridging science and practice in disaster management

By Prof. Dr Cees van Westen, University of Twente

EUMA (Creating a **EU**ropean Higher Education Network for **MA**ster's Programmes in Disaster Risk Management) has opened registration for its first students, with the inaugural cohort starting in October 2026. Developed with EU funding, the programme brings together several European partner universities to provide continuing education in disaster management and civil protection.

The continuing education programme **International Disaster Management and Civil Protection** (EUMA) provides scientific foundations and practical skills for working with risks and disasters in international contexts. Students engage with the full disaster management cycle, apply theory in practical exercises and analyse current case studies from Europe and around the world.

All courses are taught in English and combine attendance blocks at partner universities in several EU countries with online units. This structure supports specialist depth, interdisciplinary perspectives and strong international networking.

EUMA is offered in two variants. The **Master's Programme** (120 ECTS) includes a master's thesis, leads to an academic 'Master of Science' degree and therefore strengthens students' academic profile. The **Academic Expert Programme** (60 ECTS) focuses on practical professional competences in international disaster and risk management. Both programmes professionals aiming to expand their responsibilities in disaster risk management and civil protection at European and global levels.

The programme has an international structure and includes courses at several European partner universities in Germany, Ireland, Italy, the Netherlands and Austria. Students participate in attendance blocks at the **University of Vienna, University of Twente** (Enschede), **Scuola Superiore Sant'Anna, University of Bonn and Dublin City University**. The development of the curriculum was made possible through [EU funding](#).

Each university focuses on a different area of the risk management cycle. This gives students insights into different institutional models, national structures and examples of good practice in disaster and risk management. Beyond the programme itself, EUMA is building a broader learning offer. **EUMApplus** bundles complementary formats designed to make knowledge in disaster management and civil protection more accessible. The book series *Civil Protection, Disaster Management and Resilience* published by Springer translates leading research into resources for academics and practitioners. The **EUMA Podcast** brings expert conversations from science, operations and policy beyond the classroom. Plus, the **EUMA MOOC** offers free, open online learning for anyone wanting to engage with core concepts in the field. Joint teaching formats, excursions and simulation-based exercises strengthen students' international network and support exchange with experts from different countries and disciplines.

'EUMA provides disaster management and civil protection professionals with a strong scientific base and practical exercises that can be directly applied in daily work – bridging the gap between science and practice.'
– Univ.-Prof. Dr Thomas Glade, Academic Director.

[Registration for the first cohort is open.](#)

[Further information on the programme is also available.](#)





Citizens' Panel on Preparedness: a golden opportunity to hear directly from citizens

By Stacey Vickers, Unit B3, DG ECHO



Participants in the European Citizens' Panel on Preparedness gathering in Brussels to discuss recommendations on strengthening preparedness and societal resilience © EU2026

Brussels policymakers are sometimes accused of being in a 'bubble' and not hearing what citizens really think about an issue. The recent European Citizens' Panel presented a golden opportunity for Commission staff and civil protection experts to hear directly from 150 randomly selected citizens, representing the EU's diversity, who came together to share their views and help shape preparedness policy.

Over three weekends, the group of citizens received information from experts on preparedness, before dividing into groups to come up with their own recommendations. These were presented to Director-General Maciej Popowski of the Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO), and covered the areas of communication, information integrity (misinformation and disinformation), inclusion, self-sufficiency, engagement, and education. The Commission will provide an official response to the recommendations in a report to citizens.

The 150 citizens were selected through door-to-door research, ensuring a representative group based on gender, location and age (one third of the panel was under 30). Many of the citizens told the organisers afterwards that they initially thought it was a scam. Only after receiving the official documentation did they actually believe it was a genuine Commission event!

A Knowledge Committee made up of approximately 10 experts in the area of preparedness was selected by the Commission services taking part: DG ECHO, the Directorate-General for Health and Food Safety, the Health

Emergency Preparedness and Response Authority, the Directorate-General for Climate Action, the Joint Research Centre, and the Directorate-General for Communication. Their role was to help citizens understand the topic and answer any questions they might have. Many experts shared how much the event meant to them. Three reflected on their experience.

Jeanette Serritzlev, Military Analyst, Royal Danish Defence College, Information Warfare and Disinformation

'It's been nothing less than amazing. I feel very privileged. It is inspiring to listen to the discussions and engage with citizens, as well as experts on the Knowledge Committee. It has also given me a lot of insights that I can use in my job. It is interesting that people come from all over the EU yet have a common understanding of the need for preparedness and societal resilience.'

Sébastien Français, MD – Head of Unit – Emergency Preparedness and Response Unit

'It has been a discovery for me, to hear that this sort of panel exists and can be organised under my area of health. It has given me another dimension of reflection. The citizens have been very direct, very frank.'

The insights I've picked up here will help me to redraft and write my own preparedness plans. We have a newsletter on preparedness for medical doctors in Luxembourg. One of the topics I'll address is communication and how to reach communities, particularly the most vulnerable, and I will connect this to the discussion we have had on the panel.'

Jose Segarra Murria, Adaptation to Climate Change Mission Board, EU Climate Pact

'This panel has been a great demonstration of deliberative process, dialogue and collective consultation to face the challenges of the future, showing that citizen participation can and must play a central role in public policies. We need more spaces like this, where people can actively take part in designing the solutions.'

Estonia's crisis reserve: strengthening civil protection in an uncertain world

Rein Olesk, National Expert in Professional Training at DG ECHO, seconded from Estonia

As security threats evolve, Estonia, a nation of just 1.3 million people, is taking a proactive approach to civil protection. While the country already has a military reserve system, it is now establishing a civilian crisis reserve to ensure it can respond effectively to prolonged emergencies.

Estonia's 6 000 first responders in civil protection, including rescuers, police and emergency responders, keep essential services running even in crises. However, **Hedi Arukase**, head of the Civil Protection Department at the Ministry of the Interior, points out that current resources may not be enough. 'If a long-term crisis hits, expectations skyrocket and the need for first responders increases. With our existing workforce we won't be able to cope', she says.

In addition to contracted first responders, volunteers play a big role in civil protection in Estonia. There are more than 3 000 volunteering rescuers, 1 300 assistant police officers, 850 sea rescuers, 150 state helpline responders, and 100 deminers, but many juggle multiple roles. For example, some serve both in the rescue services and voluntary defence league. Arukase says it is amazing how motivated those people are, but at the same time it is creating coordination challenges. 'Our goal is simple – in times of large-scale crisis: one person, one role', she explains.

To address this, Estonia is building a legally backed crisis reserve, ensuring volunteers have clear responsibilities, professional training and social guarantees. 'We are working to create a system where we can reliably call on these reserves when disaster strikes', Arukase adds.

Balancing defence and civil protection

With a small population, effective resource allocation depends on close cooperation. A key challenge is preventing overlaps between military and civil protection personnel.

'Disasters come in many forms – natural, man-made, complex, hybrid threats or armed conflicts. Understanding this is key in building systems and working towards resilience that can truly withstand and adapt to any kind of



crisis', Arukase notes. 'We need to protect our people on the "backline" as well and ensure the whole of society concept.'

High-level cooperation between defence and civil protection agencies helps ensure that both sectors can access the personnel and capabilities they need, whether for defence operations or in civil protection tasks.

Questions for policymakers

Estonia's approach raises important questions for all nations with volunteer-based systems:

1. How much additional personnel do agencies need to ensure the continuity of critical services during a long-term crisis?
2. Where can these people be found?
3. What legal, financial or social mechanisms will ensure people step up when called on?

By combining legal clarity, specialised training and meaningful social guarantees, Estonia is building more than a volunteer reserve. It is creating a resilient framework for national preparedness. As crises become increasingly complex and prolonged, Estonia's model highlights the importance of integrating civilian readiness into broader security planning: resilience cannot rely solely on military strength. It also depends on organised, trained and trusted civilian support systems capable of responding when society faces its greatest challenges.



SCIENCE

Exposed and vulnerable: multi-hazard risk data from the Risk Data Hub

By Andrea Sibilia, Christos Bountzouklis, Unit E.1, JRC

Which areas in Europe are highly exposed and vulnerable to natural hazards? Two recently published interactive StoryMaps from the [Risk Data Hub \(RDH\)](#) of the [Disaster Risk Management Knowledge Centre \(DRMKC\)](#) provide a consistent and comparable, pan-European assessment of both the exposure of critical infrastructure to natural hazards and the regional dynamics of vulnerability.

Uncovering structural drivers of vulnerability in Europe

How have socio-economic, political and environmental conditions interacted to shape vulnerability across Europe over the last five years? Analysing the indicators that underpin the RDH multi-dimensional Vulnerability Index reveals three main combinations shaping overall vulnerability: economic and governance capacity, environmental susceptibility, and social inequalities and poverty.

When grouping EU regions according to similar profiles, six clusters emerge with common patterns over the period 2020–2024. Some regions in western, southern and eastern Europe tend to have weaker socio-economic and governance conditions, while central Europe combines strong economies with social and environmental risks linked to urbanisation. Northern Europe is generally resilient but faces potential vulnerability from remoteness and limited connectivity despite favourable conditions.

Explore the [Vulnerability StoryMap](#) and check how your region scores.



People walking through floodwaters in Venice's Saint Mark's Square during a high-water event
© stock.adobe.com
by Ihor

Europe's exposed infrastructure

Where is Europe's critical infrastructure exposed to natural hazards? The second interactive StoryMap shows how critical infrastructure across five sectors – energy, transport, health, digital and public administration – is exposed to river and coastal floods, windstorms, earthquakes and wildfires. Users can navigate through individual hazard layers or explore the combined multi-hazard index to understand complex, overlapping hazard environments.

Exploring the combined multi-hazard exposure scores at the regional level (NUTS 2) reveals distinct spatial patterns across EU-27 and European Free Trade Association (EFTA) countries. While no region is entirely free from exposure to natural hazards, the highest scores are concentrated along western and northern coastlines (driven by windstorms), throughout central Europe (primarily river floods), and in specific Mediterranean regions where localised hazards such as wildfires most frequently intersect with critical infrastructure.

Closely aligned with the [Critical Entities Resilience \(CER\) Directive \(EU\) 2022/2557](#), this interactive StoryMap indicates regional hotspots where simultaneous or cascading hazards could severely disrupt infrastructure across the five sectors. These are among the vital societal functions that the CER Directive recognises as essential to economic activity, public health, safety and the environment. Ultimately, it provides an evidence-based foundation to support targeted disaster preparedness, resource allocation and cross-border cooperation.

Explore the [Exposure StoryMap](#) and check how your region scores.

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AI and drought: what 20 years of research mean for disaster risk management and climate adaptation

By Andrea Ficchi, Politecnico di Milano, Milan, Italy; Guido Ascenso, CMCC Foundation – Euro-Mediterranean Center on Climate Change, Milan, Italy; Andrea Toreti, European Commission Joint Research Centre, Ispra, Italy



A recent review of 20 years of research on AI and drought science has shed light on the potential of AI to advance disaster risk management and climate adaptation. [The study, published in Water Resources Research](#), analysed 544 scientific papers from around the world, published since 2003. It highlights the rapid growth of AI research in drought science, driven by advances in computing power machine-learning algorithms, satellite observations and climate data availability. The rise of AI in drought science demonstrates potential for improving drought forecasting and monitoring, with machine-learning methods increasingly able to detect complex climate patterns and improve early-warning capabilities.

Despite this potential, the study reveals that most AI applications are currently concentrated in a few regions, leaving drought-prone areas in Africa and South America under-represented (Figure 1A). This imbalance is significant, as many of these regions face the highest vulnerability to food insecurity, water scarcity and humanitarian crises linked to drought.

The study also found that countries in Africa and the Middle East devote a higher-than-average share of their scientific

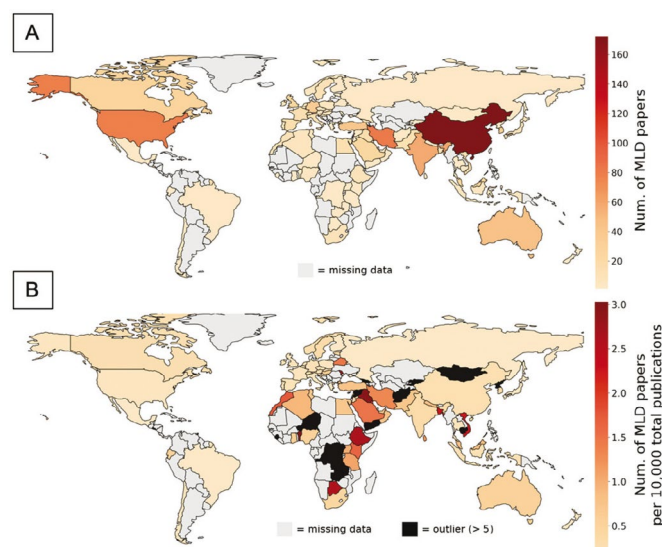


Figure 1
(A) Number of machine learning for droughts (MLD) papers by country of authors' affiliations, in the period 2003–2022; (B) number of MLD papers normalised by the number of total scientific publications from that country, where global data on total publications are available (The World Bank, 2025). Adapted from Ascenso et al. (2026).

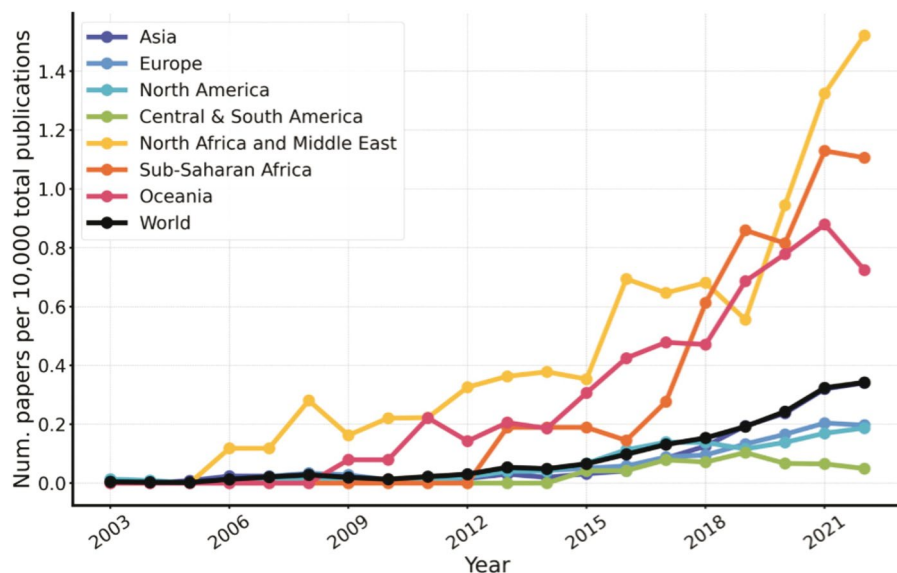


Figure 2

Yearly number of publications on machine learning for droughts per 10 000 total publications across major regions (2003–2022), with North America separated from Central and South America, and the Middle East and North Africa grouped together (Ascenso et al., 2026)

output to AI-based drought research (Figure 1B), and also record the strongest growth rates in this field (Figure 2).

The study also shows that the field of drought science still relies heavily on conventional machine-learning approaches, while more advanced deep-learning and explainable AI methods remain underutilised.

For European policymakers, the study highlights several key priorities. First, strengthening drought preparedness requires investment not only in forecasting accuracy but also in impact-based drought intelligence, currently understudied. This means that the focus should be on understanding the effects of drought on agriculture, ecosystems, migration, energy, and livelihoods, in addition to improving forecasting capabilities. Second, explainability and transparency are essential for AI tools to support operational decision-making in civil protection and humanitarian contexts.

Europe has already shown strong scientific momentum in drought monitoring, climate services and Earth observation, thanks to initiatives such as the Copernicus Emergency Management Service (CEMS), European Drought Observatory (EDO) and Global Drought Observatory (GDO). The review points to a clear direction for Europe: invest in more open, reproducible and operational AI systems, and support collaboration with the regions.

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2025 wildfire season: the worst on record in the EU

By André Moreira Agrela Gonçalves, Unit E.1, JRC

The 2025 fire season was the most destructive ever recorded in the European Union. [A new report using satellite-based analysis](#) from the [European Forest Fire Information System \(EFFIS\)](#) shows that 1 079 538 hectares burnt across 25 of the 27 EU Member States, an area roughly equivalent to Cyprus, and nearly double the 2006–2024 average.

When including the wider territories monitored by EFFIS across Europe, the Middle East and North Africa, the total burnt area reached 2 242 195 hectares.

The season began unusually early, with over 100 000 hectares affected within the EU by the end of March. Intensity escalated through June and peaked in August, when a prolonged heatwave triggered 22 very large fires in Portugal and Spain almost simultaneously. The first three weeks of August alone accounted for 43 % of the EU's total burnt area for the year.

Germany, Spain, Cyprus and Slovakia each recorded all-time highs. Ukraine was the most affected country outside the EU, representing nearly 30 % of the total mapped burnt area across all EFFIS-monitored territories.

The season reinforced a concerning structural trend: an earlier annual onset, more frequent and intense heatwaves, and fires reaching higher latitudes than historically observed.

Civil protection response and preparedness tools

The scale of the 2025 season underlines the continued importance of coordinated civil protection capacity. The EU Civil Protection Mechanism (UCPM) pooled firefighting personnel and equipment from 27 EU Member States and 10 UCPM participating states throughout the season. Under rescEU, firefighters were strategically prepositioned in high-risk locations and a joint firefighting fleet maintained on stand-by.

The reinforcement of rescEU's permanent aerial fleet is underway. The Commission has allocated resources for 12 new firefighting planes to be based in Greece, Spain, France, Croatia, Italy and Portugal. Czechia, Romania and Slovakia will get five helicopters. The first helicopter was delivered earlier this year, and the first planes are expected in 2028.

On 25 March 2026, the Commission adopted a [new integrated approach to wildfire risk management](#) covering prevention, preparedness, response and recovery. As part of this approach, the Copernicus Emergency Management Service and EFFIS tools – which provide early warning, fire mapping, and near-real-time satellite data – will continue to be enhanced to support national preparedness and response activities.

Burnt landscapes stretching across large areas following a wildfire
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FROM THE COMMUNITY

Strengthening EU emergency response: feedback from the annual UCPM Lessons Learnt Programme meeting

By Przemyslaw Jankowski, Unit A2, DG ECHO

The Union Civil Protection Mechanism (UCPM) continues to evolve, shaped by recent crises and operational challenges. At the annual UCPM Lessons Learnt Programme meeting (20–21 April 2026, Brussels), experts from 24 national civil protection authorities reviewed responses to major emergencies since 2025, identifying best practices and areas for improvement in future operations.

Key lessons from 2025

The need for greater logistical resilience was highlighted, particularly in prolonged crises, such as Ukraine, where energy sector support revealed vulnerabilities in transport networks. Over-reliance on single corridors, especially roads, led to delays caused by attacks or bureaucratic hurdles. Diversifying transport methods (rail, water, air) or decentralising supply chains to strengthen local capacity were identified as possible solutions. Infrastructure incompatibilities, such as differing rail gauges, further emphasised the need to pre-map bottlenecks and harmonise cross-border procedures.

Civil-military cooperation was also examined at the meeting. Military support remains a last resort for civil protection, although recent operations, including medical evacuations from Ukraine and Gaza, demonstrated its value in accelerating response, by leveraging established military-to-military networks. Coordination challenges could be addressed through joint training programmes.

The meeting examined the complementary use of diverse EU tools in crisis response, exemplified by ReliefEU for humanitarian emergencies. Lessons from Myanmar's earthquake and Hurricane Melissa in the Caribbean prompted the Directorate-General for Civil Protection and Humanitarian Aid Operations (DG ECHO) to prioritise the pre-crisis planning, ensuring the most suitable instruments are selected for specific scenarios.

The final session focused on the growing demand for technical experts, who effectively complement national expertise. Deployments, such as the response to Romania's flooded salt mine and an advisory mission in Albania, have proven particularly valuable. At the same time, these



Representatives of EU Member States and UCPM participating states meeting at the Emergency Response Coordination Centre (ERCC) in Brussels © EU 2026

deployments showed that courses on Host Nation Support for local personnel improve collaboration with international experts. Meanwhile, clearly defined roles and daily debriefs help prevent confusion and ensure missions run smoothly. The session also confirmed that extending contracts for remote support and adding specialised training would help experts stay engaged and improve future deployments.

Looking ahead

As climate change and geopolitical tensions intensify, the UCPM's adaptability remains crucial. The lessons from 2025 point to a future where anticipatory measures, streamlined cooperation, and flexible tools will define the EU's emergency response, ensuring faster and more effective support when it matters most.

'Although looking at past response operations, the Lessons Learnt meeting is essentially a future-focused meeting, identifying ways to drive change and improve efficiency in operations.'

– Spyros Afentoulidis, Team leader of the ERCC Analytical Team, DG ECHO

Explore the new UCPM-funded projects

By Monica Ivanova Marinova, Unit B3, DG ECHO



Participants observing cultural heritage protection and restoration practices during a study visit © CPforHeritage project

A new wave of projects has been launched, financed through the 2025 Technical Assistance for Disaster Risk Management (Track 1) and the Knowledge for Action in Prevention and Preparedness (KAPP) calls for proposals. The projects are co-financed through the Union Civil Protection Mechanism (UCPM).

Latest civil protection and disaster risk management initiatives

The Technical Assistance for Disaster Risk Management (Track 1) call for proposals funds national civil protection and disaster risk management authorities. It enables them to develop strategic activities – including feasibility studies, proposals, policies and plans – that can strengthen capacities and leverage investments for greater disaster risk management impact.

In 2025, the Track 1 call received 41 proposals, almost double the number submitted in 2024, reflecting a growing interest among EU Member States and UCPM participating countries. Of these, 13 projects were selected for funding, receiving a total budget of EUR 6.3 million. The total requested funding amounted to approximately EUR 21 million, highlighting the strong competition for available resources.

The funded projects cover a wide range of priorities, including population preparedness, early warning systems, risk assessment, host nation support, business continuity, public authority training, wildfire risk management, crisis governance and post-disaster assessment and recovery.

Discover the awarded Track 1 projects

- Disaster Risk Management Initiative for Campsite Safety – [CAMPER SAFE](#) (Türkiye)
- Enhancing Institutional Capacity to Address disaster-related Displacement – [EICAD](#) (Romania)
- Strengthening Public Warning and Civil Protection – [SIREN](#) (Finland)
- Strengthening Disaster Risk Management Capability at Local Level 2 – [LOCAL-DRM 2](#) (Albania)
- Development of Regional Fire and rescue Capabilities and cooperation – [DRFC](#) (Norway)
- Host Nation Support Emergency Strengthening via Training and Instructions for Assistance – [HESTIA](#) (Belgium)
- Bridging Legal Frameworks and Practical Readiness in Host Nation Support – [HNS BRIDGER](#) (Germany)
- Operationalizing Host Nation Support in Iceland – [OHNSIC](#) (Iceland)
- COntinuity for REsilience – [CORE](#) (Italy)
- Akkuyu Nuclear Power Plant, Ports and SEVESO Facilities-Oriented Disaster Risk Management in Mersin: Resilient Society, Resilient City – [AKRA-MERANDA](#) (Türkiye)
- Modern Wildfire Training System for Czech Firefighters – [FIRESKILL](#) (Czechia)
- Building Resilience to Increase Disaster Management Governance and Emergency preparedness – [BRIDGE-IT](#) (Italy)
- Towards a national guideline on recovery, a whole-of-society approach to strengthen resilience in the Netherlands – [RECOVERY-GUIDE-NL](#) (The Netherlands)

New multi-country collaborations for advancing disaster prevention and preparedness

Another key funding instrument under the UCPM is the KAPP call for proposals. The programme supports multi-country prevention and preparedness projects designed to strengthen cooperation between EU Member States,



Emergency responders taking part in a practical drone training session © EU 2026

UCPM participating states, Instrument for Pre-Accession (IPA) beneficiary countries not participating in the UCPM and eligible European Neighbourhood Policy countries not participating in the UCPM.

The KAPP 'Prevention and Preparedness' call addresses specific priorities such as risk assessment, early warning systems and institutional preparedness capacities.

The 2025 KAPP Prevention and Preparedness call attracted strong interest. A total of 92 applications were submitted, requesting more than EUR 76 million in funding. Out of these, 14 projects were selected for funding, with a total budget of EUR 11.8 million.

The 2025 KAPP projects cover topics including civil defence, lessons identified from Ukraine, cooperation in the Western Balkans, decision-support systems and marine pollution preparedness.

Discover the 2025 KAPP Prevention and Preparedness projects

- Strengthening Preparedness for Plastic Pellet Spill Emergencies in the Marine Environment – [POLARIS](#)
- Bridging prEvention And preparedness in ciVil protEction with adaptation through inclusive proximity Resilience actions – [BEAVER](#)
- First impact Assessment Systems and Tools for Earthquake rapid Response – [FASTER](#)
- Protecting Cultural Heritage from the Consequences of Disasters for All – [PROCULTHER-4ALL](#)
- Strengthening International Civil Protection Preparedness for Defence Situations – [STRIDE](#)

- Ukrainian National Initiative for EMTs: Integrating Health Security and Civil Protection for a Stronger Emergency Response – [UNIT-E](#)
- Prepare to Shelter - Strengthening Preparedness and Community Awareness for Natural Disaster Sheltering – [Prep2Shelter](#)
- Holistic AI-driven Early Warning System for Climate-Induced Hazards in Critical Infrastructure and Civil Protection – [AI-WARN](#)
- Creating Open Access Digital Educational Material in Disaster Risk Management and Civil Protection – [EUMApIus](#)
- Open Decision-Making System for Enhancing Europe's Preparedness and Response Capacities to ExTreme Wildfires – [ODET](#)
- South-East Europe Host Nation Support – [SEE HNS](#)
- Preparedness and Prevention for Cross-border Wildfire Resilience in Kosovo*, Montenegro, and Albania – [KOMOAL-PREP](#)
- Building Resilience through Disability-inclusive Civil Protection and Disaster Risk Management in the Baltic Region – [READY BALTICS](#)

Further information on future funding opportunities is available through the [EU Funding & Tenders Portal](#) and the [Union Civil Protection Knowledge Network Platform](#).



EUCCS Preparation advances through large-scale operational trials

By EUCCS Preparation Project

The [EUCCS Preparation](#) project, funded by the European Commission's Internal Security Fund, has reached important milestones in developing the future European Critical Communication System (EUCCS). This EU initiative aims to create a secure, interoperable broadband communication system that enables police, firefighters, civil protection authorities and other emergency responders to communicate seamlessly across borders.

A major achievement was the successful completion of two large-scale pilot trials designed to evaluate mission-critical communication technologies and operational cooperation in realistic emergency scenarios.

First pilot: Civitavecchia, Italy

In November 2025, more than 100 participants gathered at the Port of Civitavecchia, Italy, for the first large-scale pilot. The exercise brought together emergency services, law enforcement authorities and European stakeholders to test secure mobile communications, data sharing and real-time coordination using Mission Critical Services (MCX).

The main scenario involved the interception of a vessel suspected of migrant smuggling, alongside additional incidents including a road traffic accident, hazardous material contamination, a medical emergency and a cross-border surveillance mission. Three control rooms located in different locations were used to assess international coordination and information exchange under realistic operational conditions.

The trial also evaluated how operational procedures can adapt to new communication technologies, ensuring that innovative tools support responders' work effectively. Technologies provided by Leonardo and Frequentis were deployed and assessed throughout the exercise.

Second pilot: Aschaffenburg, Germany

A second pilot trial took place in March 2026 in Aschaffenburg, Germany. The exercise brought together firefighters, police officers and rescue service personnel from 14 European countries to test broadband communication solutions during a simulated large-scale



wildfire response. The exercise assessed how these technologies can improve coordination, information sharing and situational awareness among emergency services operating across different disciplines and national borders.

Key findings and next steps

Together, the Civitavecchia and Aschaffenburg pilots enabled the operational evaluation of technologies provided by the four industrial contractors participating in the programme: Airbus, Frequentis, Leonardo and Teltronic. The trials provided valuable data on interoperability, reliability and operational performance in cross-border emergency situations.

The results are now being analysed by the EUCCS consortium and the Technical Validation Committee. According to EUCCS Preparation Coordinator David Lund, testing technologies in realistic operational conditions allows the consortium to assess not only technical performance, but also how the systems support collaboration between services and countries.

These insights will help shape the next stages of development as Europe moves closer to establishing EUCCS by 2030.

Dedicated video reports documenting the pilot trials in Civitavecchia and Aschaffenburg are available on the EUCCS Preparation website.

[Pilot trial in Aschaffenburg](#)

[Aschaffenburg press release](#)

[Pilot trial in Civitavecchia](#)

[Civitavecchia press release](#)

[Contact details](#)

What Kherson learnt that Europe should not re-learn under fire

By Josh Rudolph, German Marshall Fund of the United States

In the last month alone, Russia [enacted](#) a law authorising the use of military force to 'protect Russian citizens' abroad, [warned](#) that 'the coordinates of decision-making centres on Latvian territory are well known', [drove](#) Lithuania's leaders to take shelter during a drone air alert, and [struck](#) a Romanian apartment block.

Until 24 February 2022, many assumed similar escalations against Ukraine were bluffs. The logical endpoint of escalating Russian aggression now looks like the deliberate targeting of civilians going about their daily lives: driving to work, standing at a bus stop, or walking to a store. A novel defence against this kind of persistent threat comes from the Kherson region of Ukraine, where nets cover streets to intercept drones.

Lessons from Kherson

That anti-drone innovation is just one symbol of resilient civilian governance systems that Kherson has built to survive modern warfare. Kherson's operational record and lessons learnt are documented across 32 sector-by-sector chapters – spanning electricity, gas, transport, housing, displacement, demining, training, schools, disinformation and more – of [Unbreakable Kherson](#), a new book co-authored by the German Marshall Fund and the Kherson Regional Military Administration.

Of the book's 162 policy recommendations, 21 are directly relevant to the Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO), covering areas such as dual-use shelter standards, hospital and water system vulnerability assessments, evacuation route hardening protocols, and other preparedness gaps across a dozen sectors. Rather than being copied directly, these recommendations should be adapted to each country's own geography, institutions and risk profile. Europe's civil protection architecture was not built for the persistent threat that forced Kherson to become unbreakable.

The Union Civil Protection Mechanism (UCPM) is optimised for disasters and other events that come and go, after which outside assistance returns to normality. Russia's siege against Kherson is sustained, deliberately re-targeting the same infrastructure as soon as it is repaired. Peacetime assumptions embedded in European civil protection planning are appropriate for what they were designed to address. But they are insufficient for civil protection amid military conflict.

A resident walking through a street covered with an anti-FPV-drone net, Kherson, 3 November 2025
© AP Photo/Efrem Lukatsky



'The most important shift Europe needs is to recognise that military threats are neither distant nor implausible. We have already seen that scenarios long considered unlikely can become reality, so today the task is not to dismiss these risks, but to prevent them and prepare in advance. Kherson did not have the luxury of learning gradually.'

– Valeriia Ivanova, Senior Fellow, German Marshall Fund of the United States, and co-author of *Unbreakable Kherson*

Building Europe's response

Europe has already made the political turn to fill this policy gap, with the Preparedness Union Strategy, a UCPM revision within the 2028–2034 budget cycle, and the formation of the European Coalition for Civil Preparedness and Resilience. But political frameworks must be filled with operational substance. And Kherson has completed the field-tested learning cycle Europe would otherwise take decades to complete. The revision now under way offers an opportunity to build that experience into the UCPM through shared standards, preparedness funding, and pilots in frontline Member States, so that Europe need not improvise under fire what Kherson has already learnt.

The European Commission at the EGU26

By André Moreira Agrela Gonçalves, Giuliana Urso (JRC), Chloe Hill (EGU), Bertrand Le Saux (DG CNECT); Juha-Pekka Japola (DG ECHO)



A discussion session bringing together researchers, policymakers and practitioners at the EGU 2026 © EU 2026

The European Commission was well represented at the European Geosciences Union General Assembly (EGU26) in Vienna in early May, contributing to discussions on disaster risk management, climate resilience, science for policy and digital innovation.

During the first week of May 2026, the EGU welcomed more than 22 000 registered attendees – over 20 000 of whom attended in person – to its annual General Assembly. While the event is widely known for its extensive programme of scientific sessions, it also hosted workshops, discussions, short courses and policy-oriented sessions designed to strengthen connections between science, policymaking and operational practice.

The EGU is an important meeting point for the scientific community and for EU-funded research and innovation projects addressing disaster risk management and resilience. Both Horizon Europe and Union Civil Protection Mechanism-funded (UCPM) projects presented their work during the event.

Two UCPM-funded capacity-building projects were highlighted: the INLINE project presented its work on integrated pan-European rainfall and flood impact forecasts aimed at civil protection agencies, while the BORIS2 project showcased emergency condition assessment approaches. The session 'Implementing innovations and technologies for multi-hazard risk assessment to achieve impactful

disaster risk management' included several Horizon Europe projects, including DIRECTED, PARATUS and MYRIAD.

The next EGU General Assembly will take place in Vienna from 4 to 9 April 2027.

From Ispra to Vienna: research supporting disaster risk management

Several Joint Research Centre (JRC) staff members presented and convened sessions on floods, droughts, climate extremes, wildfire monitoring, artificial intelligence (AI), and multi-hazard risk management.

Some of the work presented was particularly relevant for civil protection practitioners. One contribution examined 10 years of European floods reconstructed from satellite data.

Other contributions focused on population exposure mapping and drought forecasting tools aimed at anticipating impacts months ahead.

Presentations also explored the use of AI and machine learning for [mining global news and tracking disaster events to increase situational awareness](#).

Discussions highlighted the importance of transparent data, impact-based approaches, remote sensing, and collaboration between researchers and practitioners.

Moreover, DRM/DRR research is now mostly focused on the use of AI, multi-hazard, compound, and cascading events by construction, acknowledging the complex and interconnected nature of disasters.

Science for policy at the EGU26

The EGU's science for policy programme enabled participants to explore the value of evidence-informed policymaking and how researchers can engage more effectively with decision-makers to create policy impact. These sessions were supported by policymakers, knowledge brokers and representatives from government institutions attending the assembly.

Several keynote sessions addressed themes relevant to the disaster risk management community, including 'Evidence-based policymaking in an era of increasing climate hazards and risks', 'Have we broken the Earth's water cycle?', and 'Climate change, morals, values and policies'.

Other science-for-policy activities took the form of workshops, roundtables and discussions, enabling participants to engage directly with topics such as science diplomacy, policy engagement tools and the challenges linked to the destabilisation of science.

Several sessions brought together scientists and policymakers to discuss cascading risks, climate hazards and preparedness. One session that generated particular discussion focused on measuring and valuing science-for-policy impact. Panellists explored how researchers could consider policy impact from the beginning of a project, the role of narratives in policymaking, and how impact can be understood beyond a single end point.

The EGU26 also included sessions dedicated to science communication, geo-ethics, education, and approaches to integrating equality, diversity and inclusion into scientific work and engagement activities.

Digital Twins, Destination Earth and open science

The Directorate-General for Communications Networks, Content and Technology (DG CNECT) co-convened and contributed to discussions on Digital Twins and Destination Earth (DestinE), focusing on the role of digital technologies in climate resilience and disaster risk management.

In the session 'Digital Twins in Earth Systems: Bridging Data and Predictive Modelling for Resilient Futures', speakers discussed how Digital Twin technologies are being used to improve climate modelling and support disaster risk management. Examples ranged from seismic and tsunami early warning systems to wildfire prediction and climate adaptation planning.

In the session 'Applications of Earth system digital twins', presentations showcased applications including urban heat-health forecasting, flood modelling and AI-supported hazard analysis.

Open science and data interoperability were also central topics during the 'Joining Forces in Shaping the European Open Science Cloud (EOSC) Town Hall Meeting'. Discussions focused on improving access to research infrastructures, reducing data silos and strengthening interoperability across Europe.

These efforts are expected to support better data sharing and collaboration across the European research and disaster risk management communities.

 LEARNING

Putting diversity and inclusion into practice: first ever diversity and inclusion manual introduced in UCPM training

By Stephanie Khalaf, Unit B3, DG ECHO

As the Union Civil Protection Mechanism (UCPM) strengthens its approach to diversity and inclusion (D&I) in training, the newly developed [Diversity and Inclusion Manual for UCPM Training and Course Staff](#) marks a shift from principles to practical application. To explore how this translates into day-to-day course delivery, we spoke with Sean Moore, lead author of the manual.

Sean Moore is a resilience and emergency management specialist with over 35 years of experience in civil protection, international deployments and training. He has been deployed to 16 international disasters and has extensive experience across the UCPM, the United Nations, and the International Search and Rescue Advisory Group (INSARAG) frameworks. He has contributed to more than 40 EU MODEX exercises and over 70 UCPM training courses, working as a trainer, evaluator and exercise lead.

How does the manual complement the existing D&I handbook?

The handbook and the manual were designed to work together. The handbook defines what D&I means in the UCPM context, why it matters operationally and how it is integrated across the deployable training pathway. The manual then translates that framework into daily practice for course trainers and staff. In simple terms, the handbook



Participants discussing practical diversity and inclusion challenges during a workshop linked to the development of the Diversity and Inclusion Manual © EU 2026

provides the 'why, what and where', while the manual provides the 'how, when and what to do'. It gives training staff practical guidance on modelling inclusive behaviours, managing group dynamics, intervening proportionately, recording issues factually and protecting psychological safety during course delivery.

What were the main challenges in developing practical D&I guidance for UCPM deployable training?

One of the main challenges was turning broad D&I principles into guidance that is genuinely useful to training staff. UCPM training is multinational, multilingual and operationally focused, so the guidance had to be realistic and usable across very different course types. We also wanted to avoid a purely theoretical or compliance-driven document. Instead we created something that training staff could reach for in difficult moments: managing dominance, supporting quieter participants, addressing inappropriate language and deciding when to intervene or escalate.

What does inclusive practice look like during a training course?

Inclusive practice is visible in the everyday choices training staff make before, during and after a session.

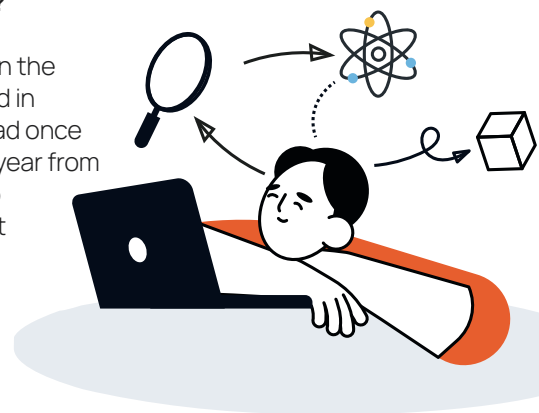
It means setting a respectful tone from the start, establishing clear ground rules, communicating in plain and inclusive language and creating multiple ways for people to contribute. It also means being alert to group dynamics: who is dominating, who is withdrawing, who may be constrained by language, confidence, hierarchy or culture. Inclusive practice involves being fair and consistent, and intervening proportionately when behaviour undermines inclusion – though thankfully this happens infrequently.

What are the most common challenges trainers face when applying D&I?

The most common challenges are recurring behaviours that can gradually undermine inclusion if left unaddressed: dominant participants taking too much airtime, quieter voices withdrawing, interruptions, dismissive language, inappropriate humour and hierarchy effects. Trainers also have to be able to manage more serious situations such as discriminatory remarks or conduct that crosses professional boundaries. What makes these issues challenging is that trainers must respond in a calm, fair and proportionate way that protects the wider learning environment.

What does success look like for this manual one year from now?

Success would mean the manual is being used in practice, not just read once and filed away. One year from now, I would hope to see more consistent D&I practice across courses, earlier and more confident interventions when inclusion is at risk, and stronger alignment between D&I expectations and what participants actually experience. The manual is described as a living resource, so another sign of success would be that it is being refined over time based on feedback from training delivery.



What is the most important message you would like training staff to take away?

The most important message is that D&I is not an optional extra or a separate topic. It is part of professional UCPM course delivery.

Training staff shape the learning environment every day through how they facilitate, communicate, observe and model behaviour. High performance does not happen by accident. It usually happens when participants feel psychologically safe, treated fairly and able to contribute fully.

Looking ahead, how do you see D&I evolving within UCPM training?

D&I will become increasingly embedded as a normal part of how UCPM training is designed, delivered, assessed and evaluated. We need to move away from seeing D&I as a standalone theme and towards treating it as a professional competence. The Three Vertices Consortium (TVC), contracted by the European Commission to design and deliver training and exercises under the UCPM, has invested significantly to integrate D&I into course design, observation practice and participant assessment. Over time, I hope this will be reflected in more consistent practice, stronger learning environments and better overall training outcomes.

Civil protection exercises as strategic tools for preparedness

By Stephanie Khalaf, Unit B3, DG ECHO

Jurgena Kamberaj is a senior researcher in the Risk and Resilience Team at the Center for Security Studies (CSS) at ETH Zurich. Her work focuses on disaster preparedness and the impacts of environmental crises on societies and ecosystems. As co-author of the risk and resilience report [The Strategic Value of Civil Protection Exercises](#), she draws on the MAGNITUDE Full-Scale Earthquake Response Exercise in October 2024 in southwest Germany, co-financed by the European Commission.



Members of an international civil protection team using digital tools to coordinate response activities during MAGNITUDE exercise
© Baden-Württemberg Ministerium des Inneren, für Digitalisierung und Kommunen

You studied the MAGNITUDE exercise as part of your research. What added value do exercises like this offer beyond operational training, and how can they help bridge the gap between research and real-world practice?

Full-scale international exercises such as [MAGNITUDE](#) matter because they become one of the few arenas where ideas, systems and people come together under realistic pressure.

As researchers, we can work with concepts such as resilience or crisis governance. But practitioners need to recognise when an emergency is turning into a crisis, how cooperation actually works, and what begins to break down when many actors are moving at the same time. MAGNITUDE offered a controlled but realistic enough setting to make these dynamics visible.

Beyond that, exercises do far more than train people to carry out tasks. They validate governance – showing whether responsibilities are clear, whether coordination structures actually work, and whether leadership holds

up when the system is under pressure. They serve a diplomatic function: MAGNITUDE showed that Switzerland's participation in a UCPM exercise signals political intent, not just operational readiness. Exercises also support policy innovation, acting as laboratories where draft frameworks can be tested before being exposed to the pressures of a real event.

These three dimensions – governance validation, diplomatic engagement and policy innovation – are what I call the strategic value of exercises. This strategic value is still underused and under-theorised in civil protection today.

What does MAGNITUDE reveal about improving cross-border cooperation under the UCPM in practice?

MAGNITUDE shows that cross-border cooperation works best when interoperability is treated as both practical and relational. With almost 1 000 participants, the exercise offered a useful setting to observe how coordination functions when many actors from different countries, institutions and professional backgrounds are involved at the same time. On the practical side, it underlined the importance of shared terminology, common procedures, and shared information platforms such as the Global Disaster Awareness and Coordination System (GDACS) and the Copernicus Emergency Management Service.

But it also showed that cooperation depends on something less formal: trust, familiarity and the willingness to work across different professional cultures.

The lesson is not simply that we need more cooperation. It is that we need more systematic opportunities to practise cooperation together.

Exercises such as MAGNITUDE matter because they help build the relationships, routines and mutual understanding that cross-border coordination depends on in a real event.

You highlighted that the strategic potential of exercises is still underused. Where are the main gaps today?

The main gap is that civil protection is still often understood primarily in operational terms. As long as that framing dominates, exercises will mostly be designed to test procedures and coordination rather than governance and decision-making. Political and strategic actors do not always see why their active participation matters, and lessons often remain within technical communities instead of reaching the institutions that could act on them.

This has very practical consequences. Evaluation frameworks tend to measure tactical performance. Political

leaders are frequently invited to observe but not to take part in a meaningful way. And when the exercise ends, findings often go into an after-action report without being clearly linked to policy review or institutional reform.

The gap is not mainly technical. It is about how civil protection is understood within the broader system of crisis governance – as part of a wider preparedness and resilience architecture that starts with citizens, volunteers and communities, and extends across institutions, academia and public authorities.

Your research describes exercises as 'laboratories of governance'. What does this mean in practice, and what is needed to ensure lessons actually lead to change?

When I describe exercises as laboratories of governance, I mean that they allow us to test how institutions move between anticipating and acting – and how they do so differently in an emergency versus a crisis. In an emergency, the focus is often immediate: acting quickly and working with existing plans. In a crisis, the task becomes broader – recognising escalation, anticipating cascading effects, maintaining trust and coordinating across levels. Exercises make visible how institutions shift across these different modes.

The biggest challenge is that lessons are often identified but not embedded. After-action reviews frequently remain within the agencies that produced them. Unlike real disasters, exercises rarely create enough urgency on their own to drive reform. That is why political involvement matters as early as the design stage. If those with the authority to shape mandates or adjust institutional arrangements are not meaningfully involved, even very good lessons may go nowhere. Think early about who needs to be in the room if the exercise is meant to lead to change – not just learning.



A helicopter supporting search and rescue operations during a simulated disaster scenario at MAGNITUDE
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Ministerium des Inneren,
für Digitalisierung und
Kommunen

**COMING SOON**

Preparing today, ready for tomorrow: registration opens for the European Civil Protection Forum 2026



Registration is now open for the 9th European Civil Protection Forum, taking place on **3 and 4 November 2026** at Tour & Taxis in Brussels, Belgium.

This year's Forum will explore the theme 'Preparing today, ready for tomorrow'. The flagship event of the European civil protection community, the Forum brings together policymakers, civil protection authorities, first responders, practitioners, researchers and other key stakeholders from across Europe and beyond. Every two years, it provides a space to exchange knowledge, strengthen cooperation and shape the future of European civil protection.

Further details on the programme and speakers will be announced in due course.

[Register now.](#)





IN CASE YOU MISSED IT

The first UCPM Exchange of Young Firefighters

The first Union Civil Protection Mechanism (UCPM) Exchange of Young Firefighters (29 June to 4 July 2026), hosted by the Fire University in Warsaw with the support of the Polish civil protection authorities and coordinated and funded by the Directorate-General for European Civil Protection and Humanitarian Aid Operations, is a six-day initiative designed to strengthen cross-border cooperation, knowledge sharing and operational skills among young firefighting professionals across Europe.

Building on a pilot initiative launched by France in 2025, the exchange is now expanding to a pan-European level. In line with the Preparedness Union Strategy, which highlights the role of youth in fostering a culture of preparedness in Europe, 18 young firefighters – both professionals and volunteers – from across Europe will have the opportunity to familiarise themselves with the UCPM and deepen their understanding of the different civil protection systems of their peers and of European cooperation in emergency preparedness and response.



Young firefighters and emergency responders collaborating during a practical exercise as part of the first UCPM Exchange of Young Firefighters © EU2026

The initiative reflects the continued commitment of EU Member States and UCPM participating states, and the European Commission, to meaningfully engage youth within the UCPM. It also aims to foster a network of young firefighting professionals and is intended to become an annual or biannual activity, hosted by different Member States or participating states.

DG ECHO and Armenia strengthen civil protection cooperation with new administrative arrangement

On 20 April 2026, Maciej Popowski, Director-General of the Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO), and Armen Ghazaryan, Deputy Minister of Internal Affairs of Armenia, signed an Administrative Arrangement. The arrangement opens a new phase of DG ECHO collaboration in civil protection with Armenia, strengthening emergency response, information exchange and capacity building.



Maciej Popowski and Armen Ghazaryan formalising their collaboration by signing the Administrative Arrangement © EU2026

Key areas of focus include:

- enhanced information exchange during emergencies, ensuring swift and coordinated responses to disasters;
- sharing of expertise and good practices, allowing both sides to learn from one another and improve disaster preparedness;
- joint participation in exercises, seminars and workshops;
- support across all phases of disaster risk management, from prevention and preparedness to response and recovery.

Speaking on the occasion, Maciej Popowski stated: 'This Administrative Arrangement reflects our strong partnership with Armenia. It lays the groundwork for closer cooperation and shared learning in civil protection. We remain committed to supporting Armenia in building a more resilient civil protection system, which benefits not only Armenia but the wider region.'



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