



EU Civil Protection Mechanism (UCPM) Overview and EU response

17 October 2024
Mutual Joint Visit Workshop for Seveso Inspections

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Overview

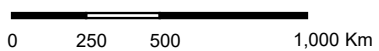
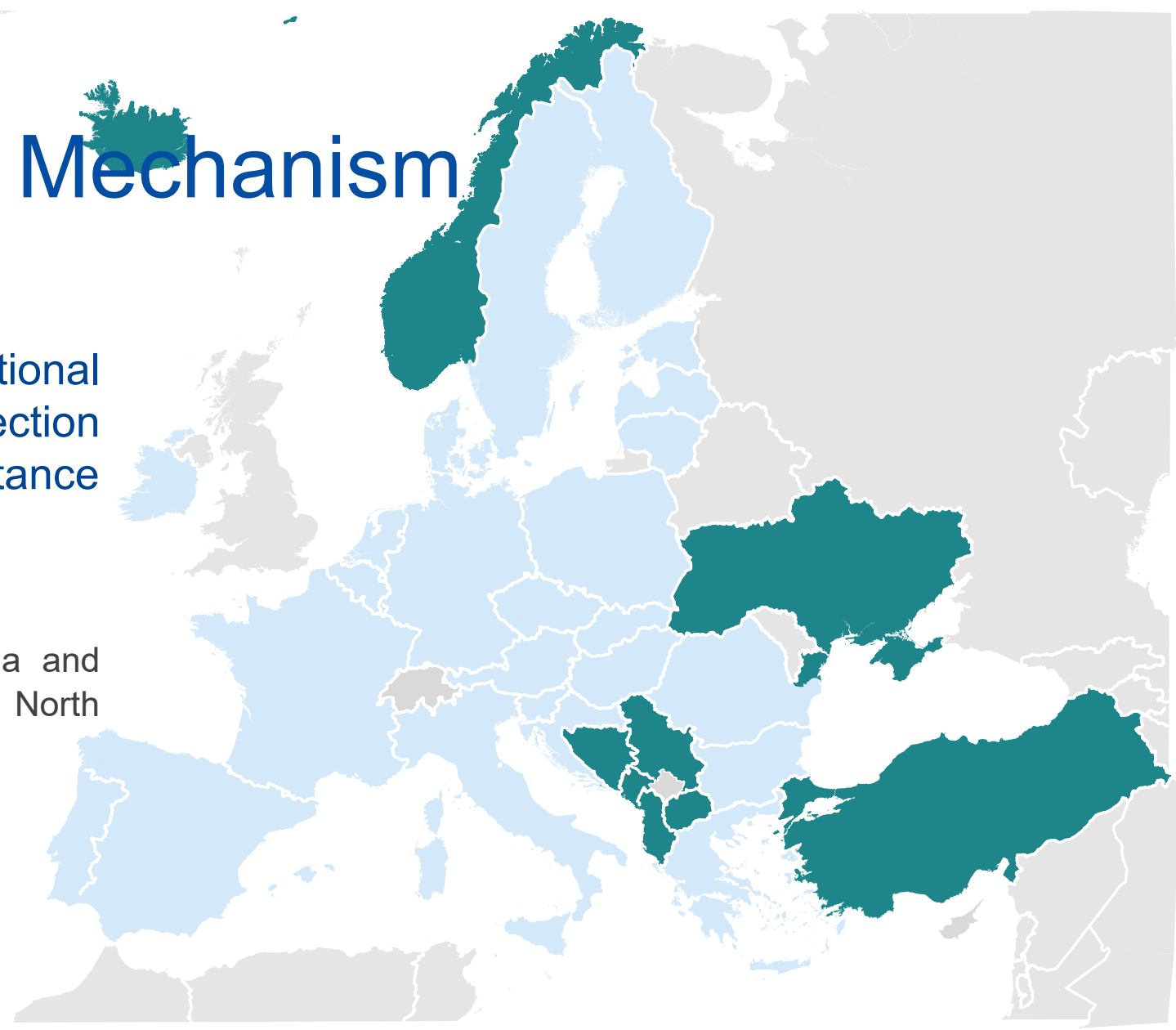
- Introduction to the EU Civil Protection Mechanism
- EU response
- Preparedness: European capacities
- Preparedness: UCPM Exercises
- Take aways: UCPM support
- Useful links

EU Civil Protection Mechanism

When an emergency **overwhelms** national response capacities, the EU Civil Protection Mechanism enables a coordinated assistance

by all **27 EU Member States**

+ **10 Participating States:** Albania, Bosnia and Herzegovina, Iceland, Moldova, Montenegro, North Macedonia, Norway, Serbia, Türkiye and Ukraine



EU Civil Protection Mechanism

Fundamentals

Responsibility: States are responsible for the security and the safety of their citizens.

Solidarity: Member States have the responsibility to support other disaster-affected Member States when requested. (Reinforced by the Solidarity Clause, Lisbon Treaty)

Call for assistance: Member States and third countries can call for assistance when overwhelmed by a disaster. After needs identification, they are responsible for the reception and use of foreign assistance.

Voluntary: The level of support is determined by the Member State providing assistance.

Commission as facilitator: EU supports preparation, facilitates cooperation, coordination and complements Member States (Art. 196, Lisbon Treaty).

Three dimensions

Prevention: Support Member and Participating States in preventing risks or reducing harm to people, the environment or property resulting from emergencies.

Preparedness: Training, exercises, exchanges of experts, capacities.

Response: Facilitate cooperation and coordination in responding to disasters inside and outside the EU.



The Emergency Response Coordination Centre (ERCC)



**Monitors disasters
around the globe**



**Maps disaster
risks**

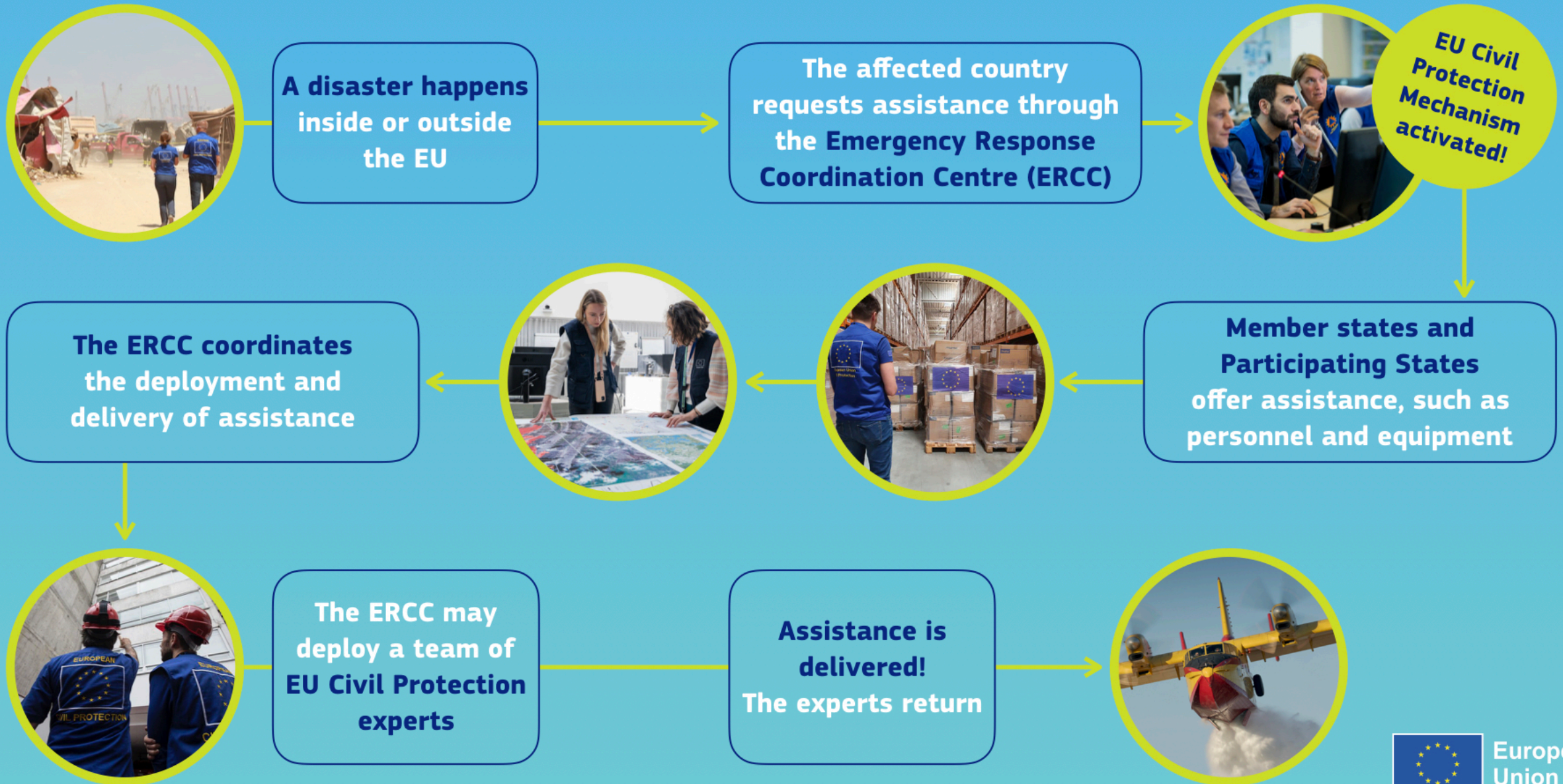


**Provides real-time
information**



**Coordinates joint
European
response operations**

Do you know how the EU Civil Protection Mechanism works?



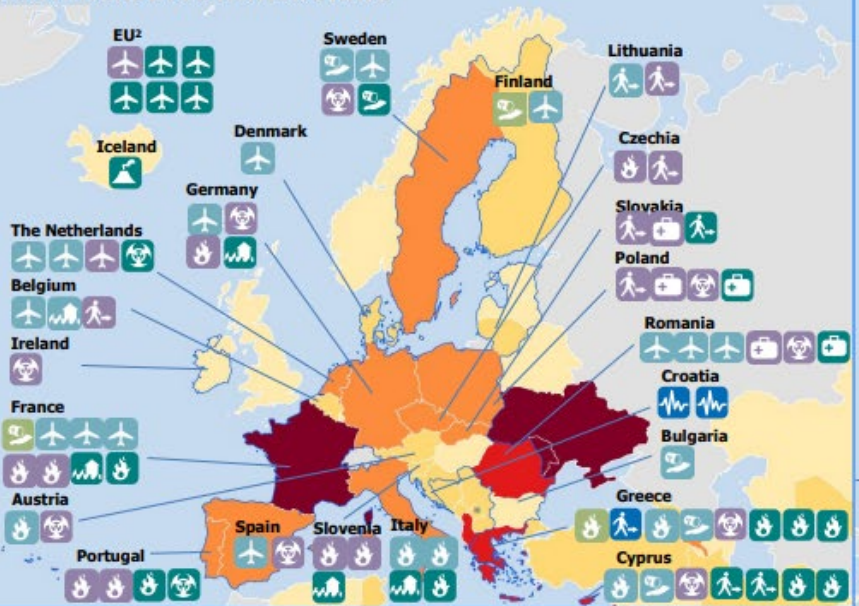
Since its creation in 2001,
the **EU Civil Protection Mechanism**
has been activated for more than **720 emergencies**



UCPM activations: 2019 - 2023



ACTIVATIONS BY EU MEMBER STATES



Total UCPM¹ activations 2019-2023:
486² + 176³



AFFECTED COUNTRY	YEAR OF ACTIVATION	NATURE OF UCPM ¹ ACTIVATION
Total activations		
1 - 2	2019	Disaster preparedness mission
3 - 4	2020	Conflict
5 - 6	2021	Wildfire
7 - 9	2022	Accident / Environmental accident
10 - 12	2023	Epidemic
		Population displacement
		Consular support
		Earthquake
		Flood
		Tropical cyclone
		Volcanic activity
		Medical

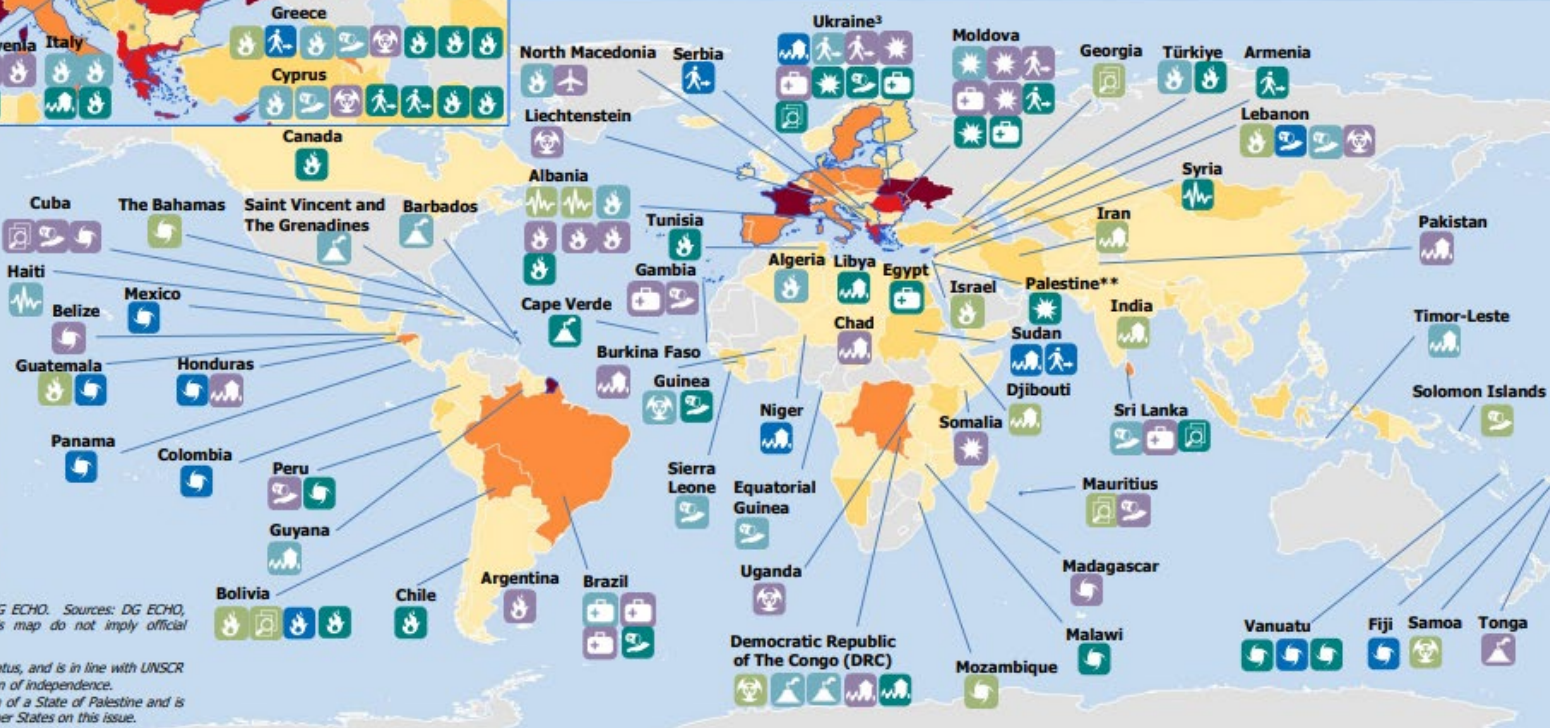
¹UCPM: EU Civil Protection Mechanism

²Between 2020-2023, the ERCC was activated 211 times for 113 countries, 3 ECHO partners and the EU, related to the COVID-19 pandemic (equipment, repatriations). These are included in the number of total activations in the map.

³Ukraine has submitted 176 requests for assistance to the ERCC, since it activated the UCPM shortly before the start of the Russian invasion in 2022

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*This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.
**This designation shall not be construed as recognition of a State of Palestine and is without prejudice to the individual positions of the Member States on this issue.



Lebanon

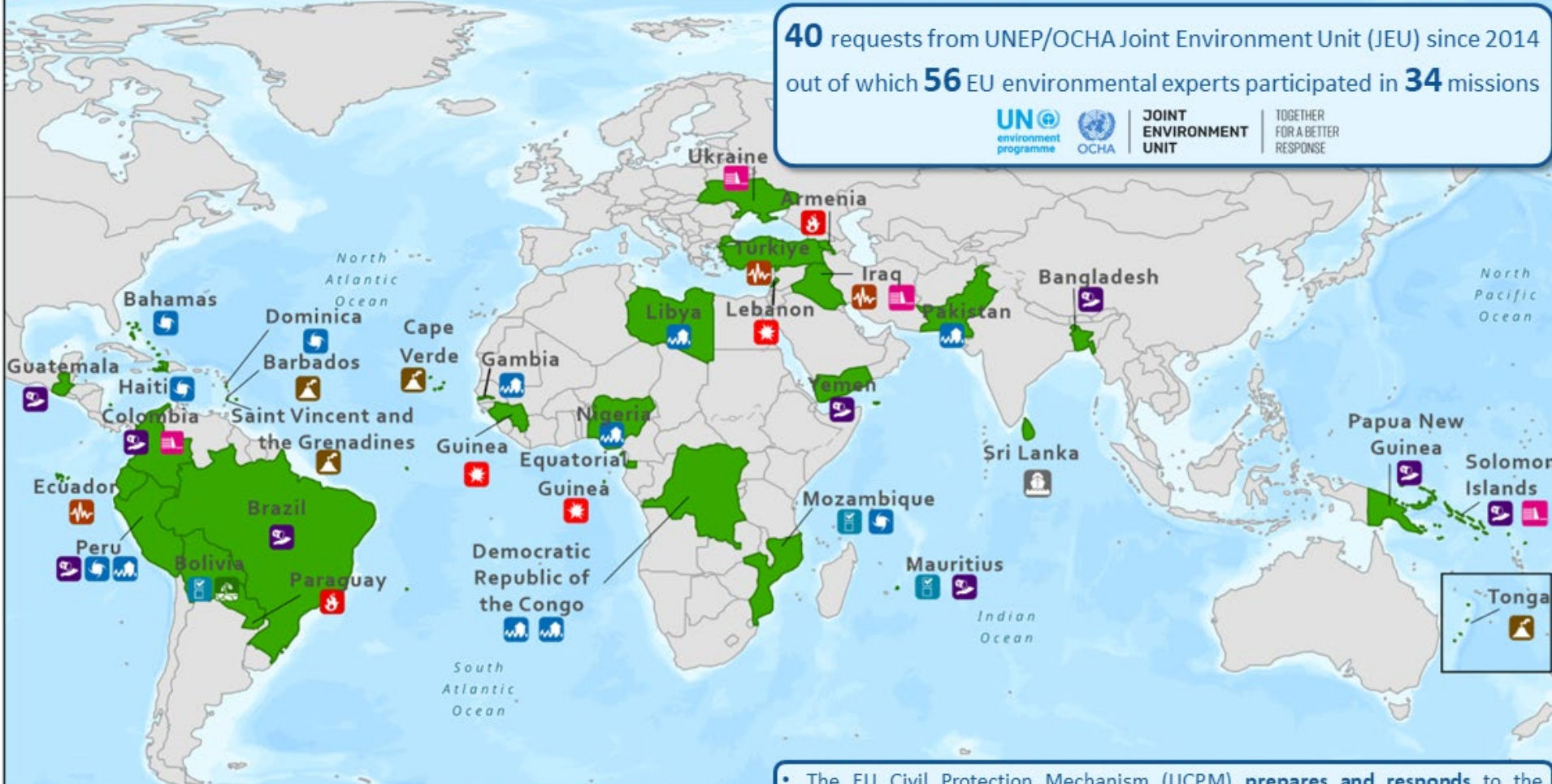
Mauritius

Cuba



Environmental Emergencies: UCPM support to UNEP/OCHA JEU

40 requests from UNEP/OCHA Joint Environment Unit (JEU) since 2014
 out of which **56** EU environmental experts participated in **34** missions



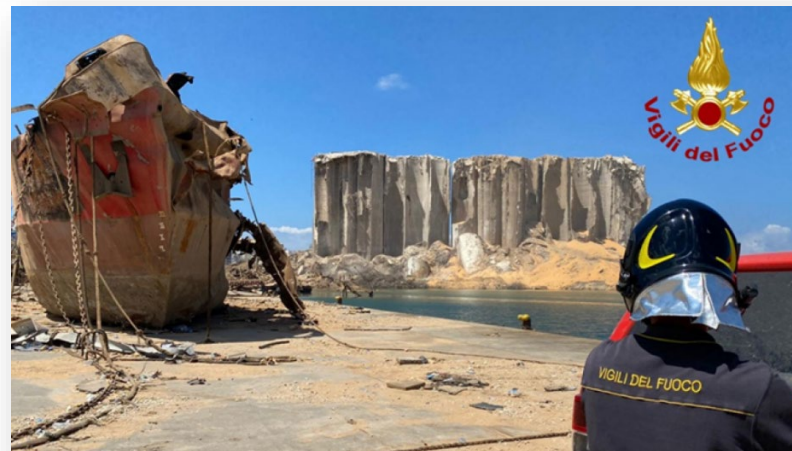
Type of disaster	

- The EU Civil Protection Mechanism (UCPM) **prepares and responds** to the environmental dimensions of emergencies, including incidents that arise as secondary effects of disasters.
- DG ECHO, operating through the UCPM, is among the **JEU's most important partners**.
- DG ECHO's collaboration with the JEU has been constantly increasing during the past years, raising at a level of **80% of all the JEU's missions** between 2018-2024.
- DG ECHO supported the organisation and roll-out of **6 Environment and Emergencies Trainings (EET)**.

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Case studies

Beirut explosions – August 2020




20 MS/PS offered teams and in-kind assistance
300 personnel from the EU joined the response

EU RESPONSE

EUR 33 M initial assistance (of which EUR 2 M made directly available) + **EUR 30 M** additional humanitarian funding pledged.

Humanitarian Air Bridge bringing in supplies for UNICEF and Médecins du monde

Union Civil Protection Mechanism (UCPM)
Modules²: 5 MUSAR (CZ, DE, EL, FR, PL), 1 HUSAR (NL), 1 CBRN (IT) and 1 Medical Team (FR)
In-kind assistance: (chemical protective) clothing, medical supplies and equipment, surgical kits, emergency health kits, hygiene kits, shelter equipment, food items, mortuary deposits, generators and vehicles (ambulance and fire truck).





EUROPEAN COMMISSION
JOINT RESEARCH CENTRE

Directorate E - Space, Security and Migration (Ispra)
Disaster Risk Management

Beirut - Explosions on 4 Aug 2020

Internal Report

UPDATE

Beirut explosions map: 04 August 2020

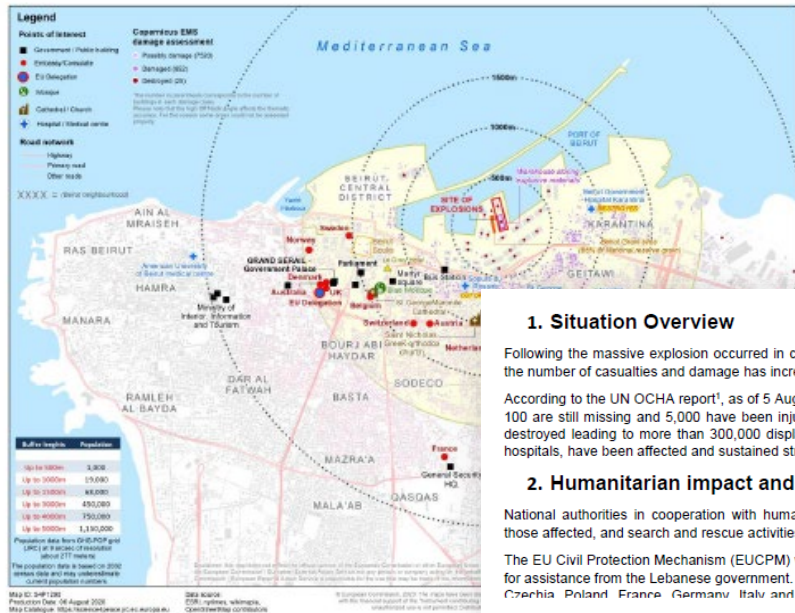


Fig. 1 – Situation map, as prepared for the External Action Service (as of 06/08 12:00)

1. Situation Overview

Following the massive explosion occurred in central Beirut at 15.08 UTC (18.08 local time), the number of casualties and damage has increased.

According to the UN OCHA report¹, as of 5 August, at least 135 people have died, more than 100 are still missing and 5,000 have been injured. Several houses have been damaged or destroyed leading to more than 300,000 displaced people. Many health facilities, including hospitals, have been affected and sustained structural damage.

2. Humanitarian impact and response

National authorities in cooperation with humanitarian organizations are providing help for those affected, and search and rescue activities are

The EU Civil Protection Mechanism (EUCPM) was for assistance from the Lebanese government. Other participating states include Poland, France, Germany, Italy and The

3. Chemical risk assessment on the ammonium nitrate explosion

After the Ammonium Nitrate blast, hazmat releases are typically very quick and the resulting toxic clouds are dispersed within a few hours. In the present case it consisted probably of gaseous materials such as NO₂, which many related to the explosion. In fact, the news report that the evacuation order due to the presence of toxic materials in the air has been retired already.

However, caution is recommended. The storage of other substances in the area is not known. There could be chemicals in liquid (pool) or solid (powder) form which could stay for days (or until the next rain). The media has not mentioned any of these, but this option cannot be excluded completely.

A database like eSPIRS in Lebanon would facilitate the track of the presence of storages of hazardous materials in the area.

4. Copernicus activation

Rapid Mapping activation



“Key environmental concerns in the aftermath of the explosion included: **i) air pollution** resulting from the smoke plume and toxic dust, with potential for resuspension in air with movements (clean-up, traffic, etc.) and runoff into the water supply system in the event of rains; **ii) any potential secondary and cascading impacts** resulting from damages to the port warehouses which were known to store chemical substances, some of which highly toxic; **and iii) the management of the large quantities of disaster waste** generated by the explosion, including the possible presence of asbestos and other hazardous waste. All of these have implications for soil and water contamination, both at the port and elsewhere.”

“Preliminary findings from the immediate response phase have informed the development of a comprehensive disaster waste management strategy, for which funding has been secured by the European Union.”

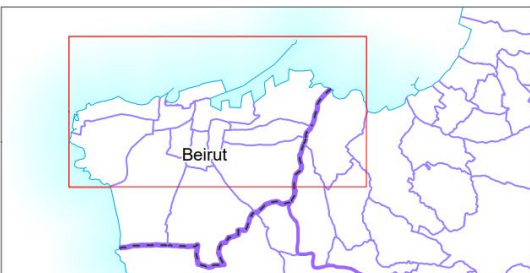
UNEP/UNOCHA Joint Environment Unit

JEU UNEP/OCHA
Swiss experts
2 EU experts
associated to UN
CBRN Italian team
Input from USAR
teams





- Hydrofluoric acid oxidizer
- Benzoyl Peroxide
- Calcium Hypochlorite
- Alcohols, Oils,
- Several unknown chemicals

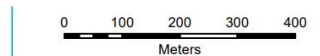


Map shows locations where a bio hazard was identified at the triage stage of the USAR worksite or where hazardous materials were found during preliminary environmental site surveys at the port.

The Lebanese CBRN Unit has reportedly also found and safely removed benzoyl peroxide, ammonium hydroxide, plenty of flammable liquids for commercial use, unsafely stored combinations of fuel and oxidisers, and 140 kg of phostoxin. FAO has informed that 9,000 l of malathion 57% EC and 500 kg of methomyl 90% SP were stored at warehouses n. 17 since 2012 and n. 14 since 2018 respectively (not yet found).

Legend

- Hazard Identified
- No Hazard Identified
- Damaged Buildings
- Worksites



Situation Data: International Search and Rescue Advisory Group (INSARAG), UN Environment Programme (UNEP), United Nations Office for the Coordination of Humanitarian Affairs (OCHA), Lebanese CBRN Unit

The depiction and use of boundaries, names and associated data shown here do not imply endorsement or acceptance by MapAction.

Created 13 Aug 2020 / 12:00 UTC +03:00

Projection & Datum WGS 1984 UTM Zone 36N / WGS

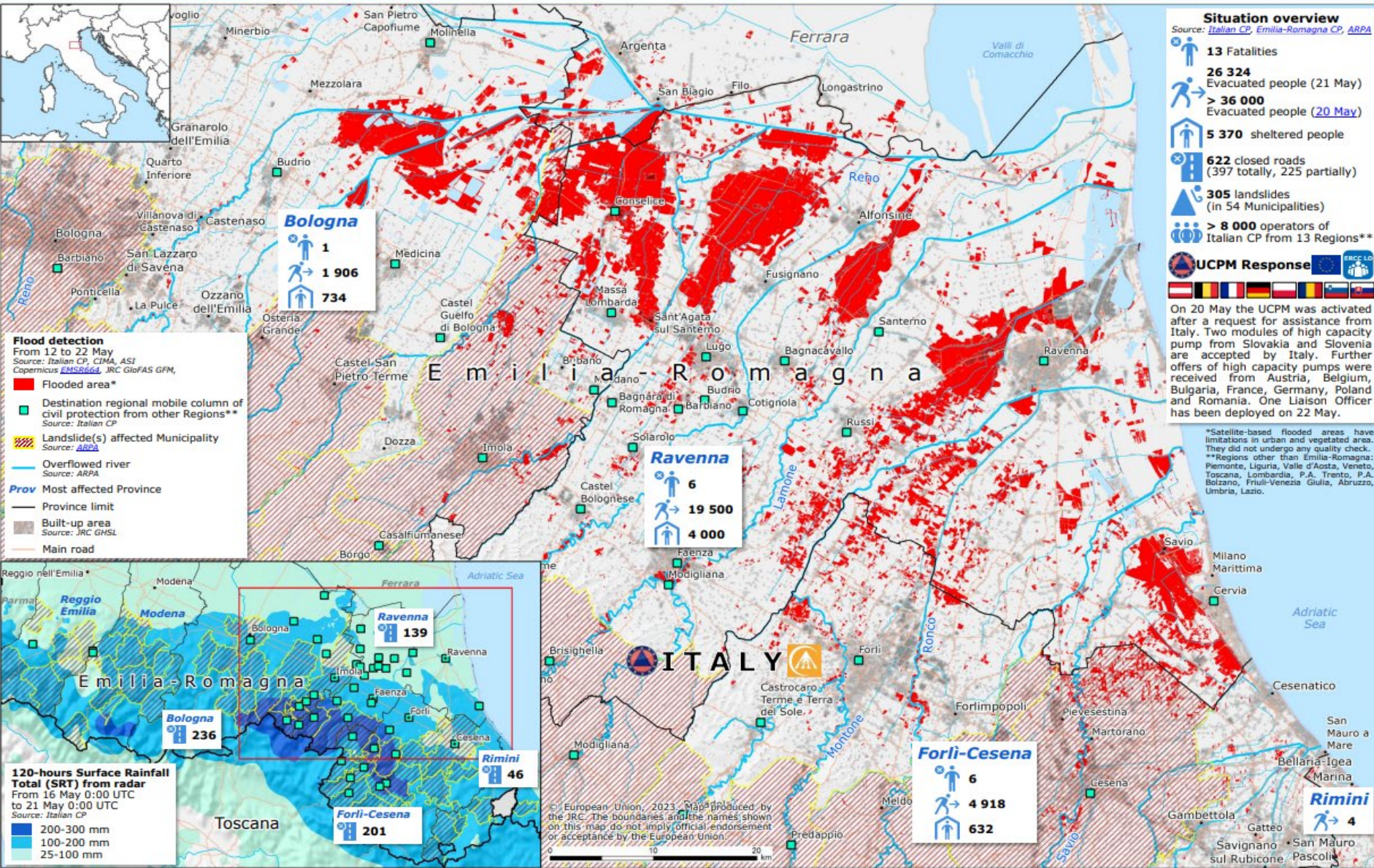
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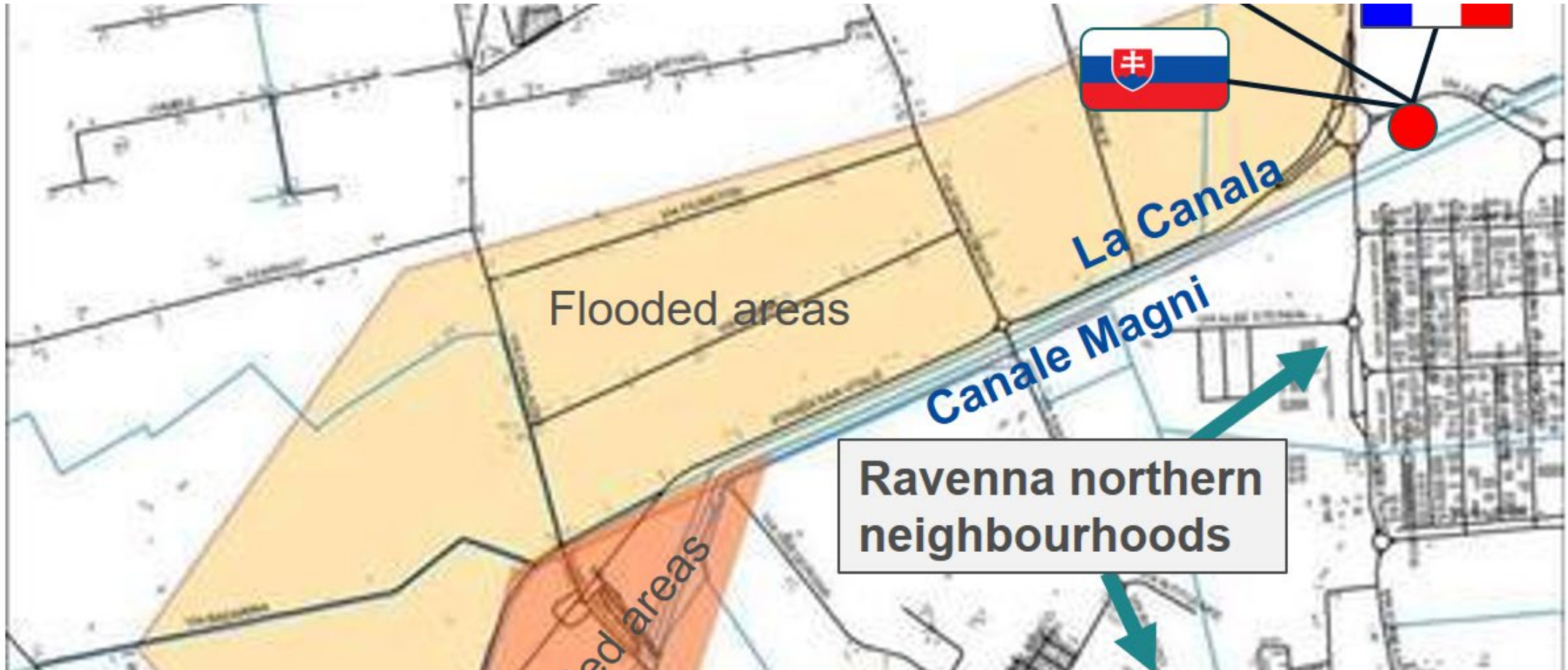


Italy | Floods and landslides

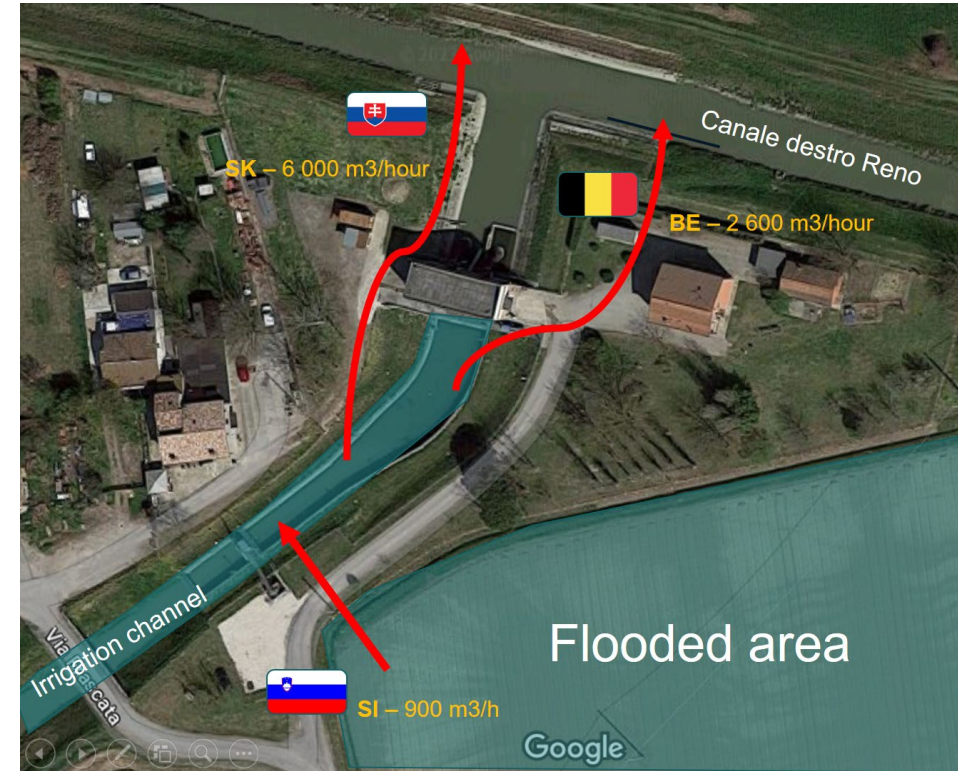
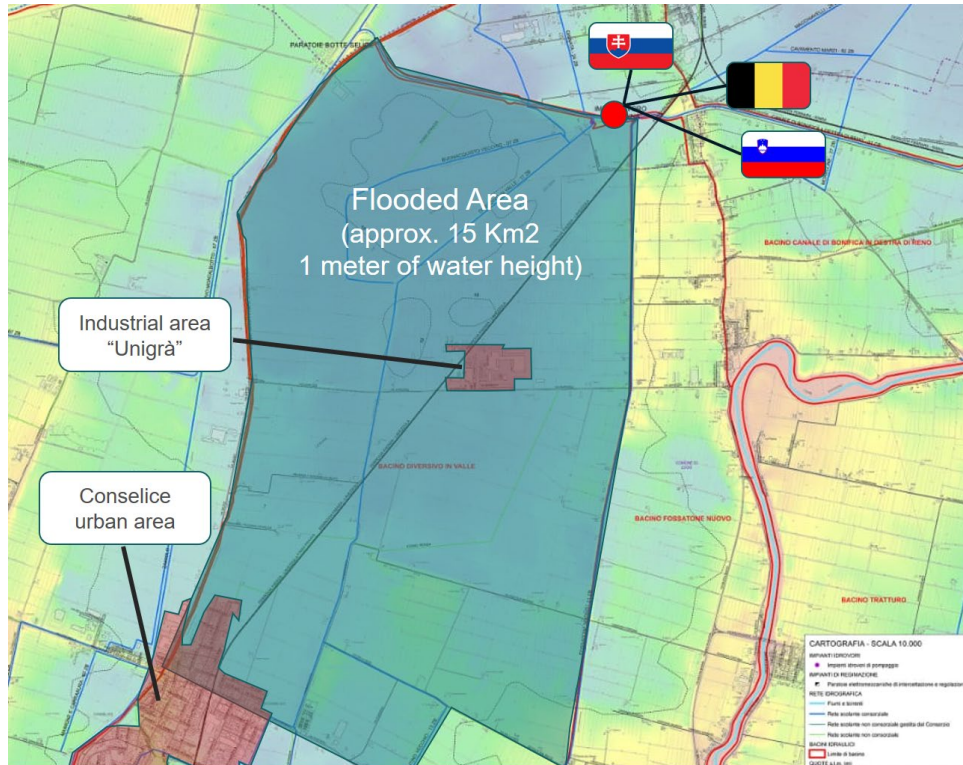


- Italy activated the EU Civil Protection Mechanism on 20 May, requesting to deploy high-capacity pumping modules (HCP).
- Assistance was offered by 9 countries, with Italy accepting offers from 4 countries (SK, SI, FR, and BE). The modules of these 4 countries were deployed in Emilia-Romagna.
- The estimated combined volume of water pumped by the 4 teams of the EU Civil Protection Mechanism is 2 968 260 cubic metres.

'La Canala' working site – Ravenna



'Sabbanica' working site - Conselice



Lessons identified- Floods (Extract - December 2023)

- In the context of climate change, it seems crucial to increase Europe's resilience by **enhancing risk understanding** and better communication to local communities. Building a risk culture by empowering people could be an added value.
- Early Warning Systems are essential to better anticipate and act early. In this respect, it would be beneficial to further **strengthen links between early warnings and early actions**, as well as between national and European early actions. More support in capacity building at national level is needed to improve early warning systems and crisis management arrangements.
- The Commission underlined the importance of **the involvement of CP authorities**, who are directly involved in the response phase, in the broader flood risk management process.

Preparedness: UCPM Capacities

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rescEU reserve



CBRN



Medical



Energy



**Aerial
forest
firefighting**



**CBRN
strategic
stockpiles**



**Medical
strategic
stockpiles**



Shelters



**CBRN
decontamination
capabilities**



EMT-2s



**Transport &
Logistics**



**CBRN detection
capabilities and
mobile labs**



MEDEVAC



CBRN capacities

European Civil Protection Pool

- 7 registered CBRN Detection capacities
+ 1 CBRN Decontamination capacity
- 5 candidate capabilities (detection and decontamination)



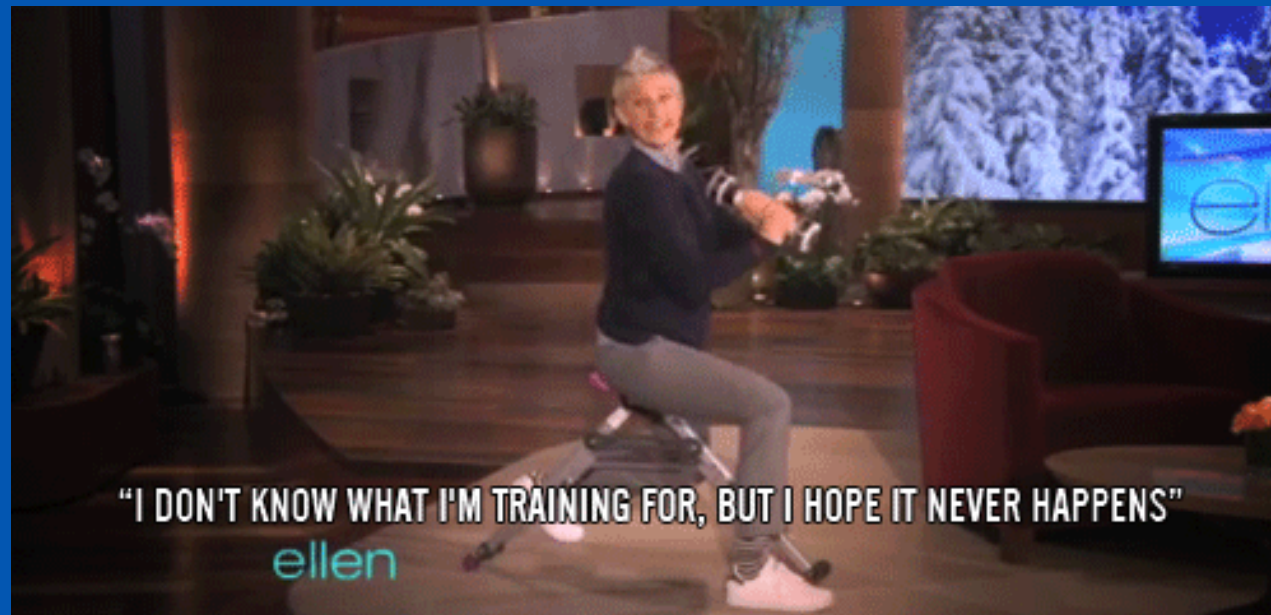
rescEU Decontamination capabilities



rescEU Detection, sampling, identification and monitoring capabilities



Preparedness: UCPM Exercises



CBRN MODEX – LYON

March 2023

Scenario

Terrible storm that devastated the Auvergne - Rhône – Alpes region, especially the industrial area in the south of Lyon known as the 'chemical valley', famous for the large number of **Seveso sites** located there.

In these **industrial sites** and amongst the communities, the storm depicted by the scenario triggered fires, pollution, accidents, killed 15 people, injured 250 people and affected hundreds of residents living in Lyon and its surroundings. Overwhelmed, the French authorities decided to **request assistance through the Union Civil Protection Mechanism**.

Three **CBRN Detection Modules** under certification from Germany, Italy and Romania were present in Lyon to demonstrate their capabilities and skills in sampling and identifying substances.

These modules were deployed on sites, mainly implicating **chemical scenarios** such as the TOTAL refinery, Solvay chemicals, a HAZMAT transportation company, a train in a railway hub or even on the Rhône river due to water pollution.




See more: <https://civil-protection-knowledge-network.europa.eu/news/eu-modex-cbrn-lyon-france>

See video: <https://www.youtube.com/watch?v=3WMdegpY-hk>

See another type of exercise, FORMATEX 2023, based on based on a Natech event: <https://civil-protection-knowledge-network.europa.eu/news/formatex23-europes-simulated-natech-disaster-exercise>

Take aways: UCPM support

- Preparedness, and response to the consequences of accidents
 - Cross-sectorial consequences = cross sectorial coordination
- Coordination role of the Emergency Response Coordination Centre (ERCC) 
 - Operational/technical level to an international environment, and all speaking the same language.
 - Lessons Learned
- Analysis and situational awareness
 - Joint Research Centre - Major Accident Hazards Bureau (MAHB)
 - Scientific Partnership to strengthen the ERCC's capacity in the field of early warning and information, and reinforce impact assessment capacity for chemical events in Europe and beyond (Nov. 2024)

Useful links <https://erccportal.jrc.ec.europa.eu/Useful-links>

- ECHO Video: <https://www.youtube.com/watch?v=xQUIvatKKoA>
- ECHO Website - Factsheets:
 - https://civil-protection-humanitarian-aid.ec.europa.eu/what/civil-protection/eu-civil-protection-mechanism_en
 - https://civil-protection-humanitarian-aid.ec.europa.eu/what/civil-protection/emergency-response-coordination-centre-ercc_en
- ERCC portal <https://erccportal.jrc.ec.europa.eu/Home/About>
- ERCC Virtual Tour:
<https://erccportal.jrc.ec.europa.eu/ERCC%20VIRTUAL%20TOUR/index.htm>
- Union Civil Protection Knowledge Network
<https://civil-protection-knowledge-network.europa.eu/>

Thank you

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