

# ERCC and its Situational Awareness Sector

EFAS annual seminar 28-29 September 2023

Olimpia Imperiali

DG ECHO, Emergency Response Coordination Centre

### DG ECHO

EuropeanCivil Protection& Humanitarian AidOperations





#### Why we act



...encourage **cooperation** between Member States for preventing and protecting against natural or man-made disasters.

(Lisbon Treaty, Article 196)





To provide...assistance and relief and protection for people in third countries... victims of natural or man-made disasters... (Lisbon Treaty, Article 214)







"...developing the ERCC as the Commission's cross-sectoral crisis hub for joint situational awareness, early warning, anticipation, information exchange and operational coordination, including between civilian and military stakeholders."

- President of the European Commission VDL



## The ERCC, launched in May 2013, improves coordination between civil protection and humanitarian aid operations and

maintains a direct link to civil protection authorities and humanitarian aid organisations

in EU Member States enabling real-time exchange of information



Monitors disasters around the globe



Maps disaster risks



Provides real-time information



Coordinates joint European response operations





### **EU Civil Protection**



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



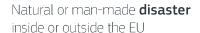
all EU Member States



10 Participating States
(Albania, Bosnia and
Herzegovina, Iceland,
Montenegro, North
Macedonia, Norway, Serbia,
Türkiye, Ukraine and
Moldova)



#### **EU Civil Protection Mechanism Activation**





Affected country requests assistance from the Mechanism through the

Emergency Response Coordination Centre (ERCC)



Once the affected country has **accepted the offers...** 

#### Participating states

offer assistance, such as personnel and equipment



EU Civil
Protection
Mechanism is
activated



#### ...ERCC coordinates

the deployment and delivery of assistance

ERCC may deploy a team of **EU Civil Protection** experts



End of the emergency response

Assistance delivered, experts return.



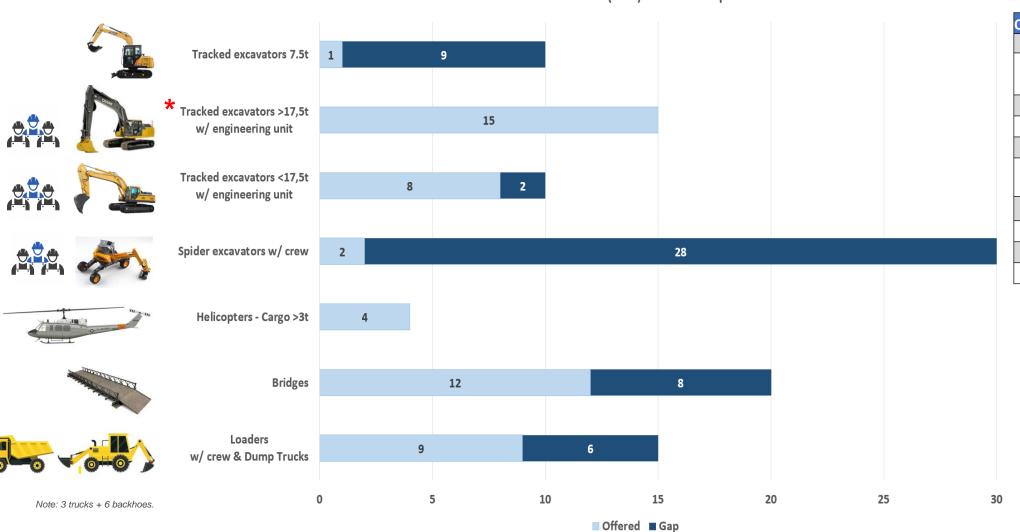






## Example: UCPM response to Slovenia floods in August 2023

UCPM Assistance - Difference (GAP) between Requested and Offered

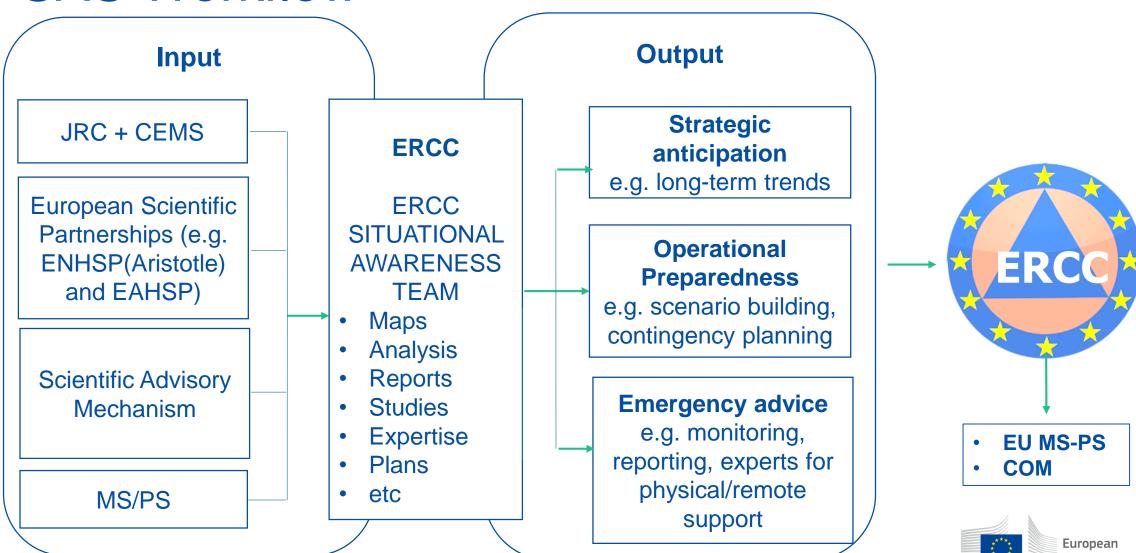


Offering country	Total staff
Austria	13
Bosnia and	
Herzegovina	24
Croatia	48
Czech Republic	8
France	14
Germany	91
Italy	24
Poland	10
Slovakia	6
Total	238

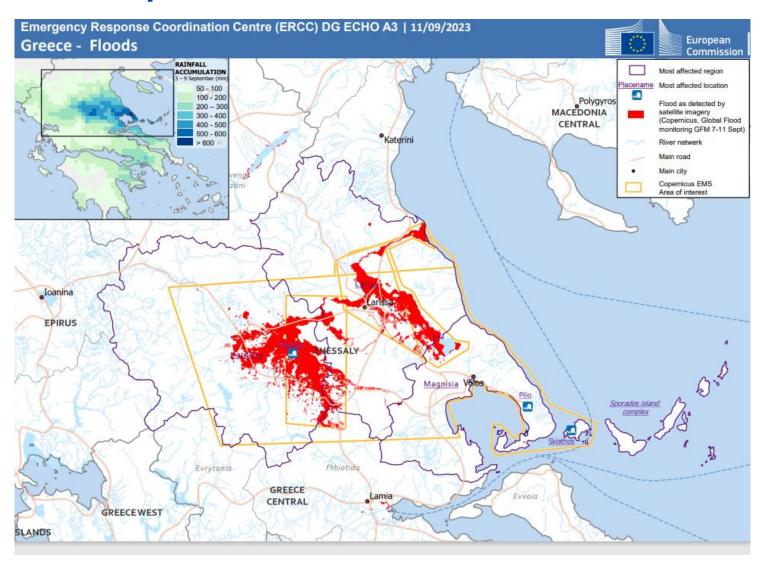
Offered (15) surpasses the amount requested (11) of which accepted (13)



### SAS Workflow



### Example: Storm Daniel - Greece



Greece has not activated the Union Civil Protection Mechanism.

Seven satellite maps delineating the flood extent have been delivered to Greece following the activation of the Copernicus Emergency Management Service.

Director of the meteo authority in Greece praised EFAS for its forecast before Storm Daniel hit Greece.

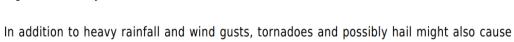


## Monitoring/forecasting from 4 September 2023 => ARISTOTLE monitoring report -Floods forecast are based on EFAS

#### 4: Depression Daniel - Heavy rain and thunderstorms - Greece, eastern Sicily, Malta and northern Libya

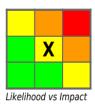
#### Description

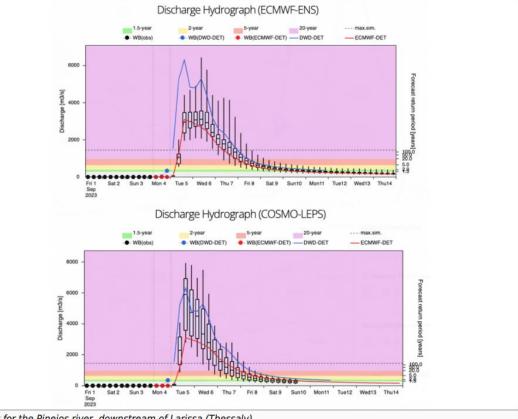
Depression (named Daniel) accompanied by colder air mass will move over Greece from northern Balkans. From Monday until Wednesday there will be thunderstorms and heavy rain, possibly with strong wind gusts (up to 70 kph). Daily rainfall can locally be 50-100 mm, but on Tuesday in some parts of the country, most probably in the central parts of the country, daily rainfall amount of 100-200 mm is possible. From Tuesday onwards the area of heavy precipitation shifts more towards southwest over to the Mediterranean Sea, where it affects eastern Sicily and Malta, and towards the weekend possibly northern Libya. Total accumulated rainfall for the next 3 days can be as much as 200-400 mm. The Greek Meteorological Service has issued orange rain and thunder warnings and for today even a red rain warning for the region of Thessaly.



#### problems. Impacts

Flash floods are likely. Thunderstorm gusts, hail and tornadoes might cause damage to infrastructure.





Forecast for the Pineios river, downstream of Larissa (Thessaly)



## Collecting reliable information

#### THE COPERNICUS EMERGENCY MANAGEMENT SERVICE















Built-up

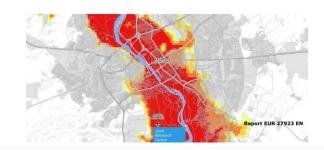


#### JRC TECHNICAL REPORTS

#### Impact of flood by a possible failure of the Mosul dam

Hydrodynamic Simulations

Alessandro Annunziato, Ioannis Andredakis



#### **Partners**





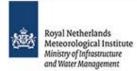












**Droughts** 

























ILMATIETEEN LAITOS

METEOROLOGISKA INSTITUTET FINNISH METEOROLOGICAL INSTITUTE













## Scientific advice to operations on 5 September 2023

#### ARISTOTLE-EENHSP EMERGENCY REPORT (AR0137)

#### FLOODING

MAIN DETAILS			
Area	Greece (Europe)	Operation mode Proactive	
Event start	5 September 2023, 00:00 UTC	Event end	
Report created	5 September 2023, 11:23 UTC	Report finalized	5 September 2023, 15:42 UTC

#### **EXECUTIVE SUMMARY**

- The storm Daniel is dumping heavy rain on central Greece since yesterday and, according to the national weather service, precipitation is expected to intensify today
- 550-700mm of precipitation are expected in the area within 48 hours, the predicted rainfall amounts are
  close to the annual total rainfall yield and at the same time approximately 10-15 times higher than the
  typical values during September (30-60mm).
- On the account of the thunderstorms that are anticipated to hit central and southern Greece, the local smallsized catchments are likely to quickly respond, setting the stage for widespread flash floods possibly occurring today and tomorrow
- Local major rivers are foreseen to see a very steep rise of water levels, exceeding by far the 1-in-20 year threshold by this evening/early tomorrow.
- Floods are predicted to propagate in the main stem of the rivers in the coming 48 hours at least, having the
  potential to unleash extensive flooding in Thessaly and Sterea Ellàda
- Though there is significant uncertainty in the estimation of potentially-affected population, approximately 3,000 to 15,000 people might be at risk, mostly in Thessaly







## Assessing/corroborating/ translating - Analytical Briefs

 Provide corroborated and "translated" information supporting ERCC understanding of the situation as well as decision-making process

#### Content :

- Hazard characteristics and its possible evolution.
- Impact on population and related needs.
- Information on the context, including security.
- Recommended action.

#### **DG ECHO ERCC Analytical Brief**



#### Floods and Wildfires in Greece 8 September 2023, 17:00 CEST

#### FLOODS

#### **OVERVIEW OF THE SITUATION**

Starting on 5 September, Storm Daniel moved over Thessaly region, which is situated in central Greece and is the most affected region in the country. In Thessaly, the regional unit of Magnesia and in particular the municipality of Volos (140k inhabitants) as well as the villages at the mountain Pilio, the Sporades island complex (especially Skiathos) as well as the regional units of Karditsa and Larissa are the most affected areas, either from flash flooding or from fluvial flooding. It is worth underlining that Pilio and the Sporades island complex are amid the touristic season and several hundreds of tourists are already reported stranded.

Extreme precipitation affected the region, which in parts of Pilio reached locally figures of approx. 700mm rain in 24h. This is a national record and exceptional -or maybe even unparalleled in Europe, according to the scientific partnership that supports ERCC, ARISTOTLE<sup>1</sup>. For comparison, this amount represents the typical yearly accumulation for the area, falling in just one day.

As of 8 September, the water flows in the river of Pinios peak around the city of Larissa which is the largest city and administrative capital of Thessaly region. Reports indicate water levels raised by 5.5m in certain locations, while the mayor has announced that the water level is at 10m and there is serious risk of flooding in the city.

No weather alerts are currently in effect for the areas affected by the floods. A yellow alert is active for Crete, where Daniel could still bring heavy rains.

The Greek Prime Minister Mitsotakis visited affected areas in the regional units of Karditsa, Volos and Larissa on 8 September.

#### FORECAST

Sporadic showers are expected, but otherwise drier and warmer weather is forecasted for the next 5 days.

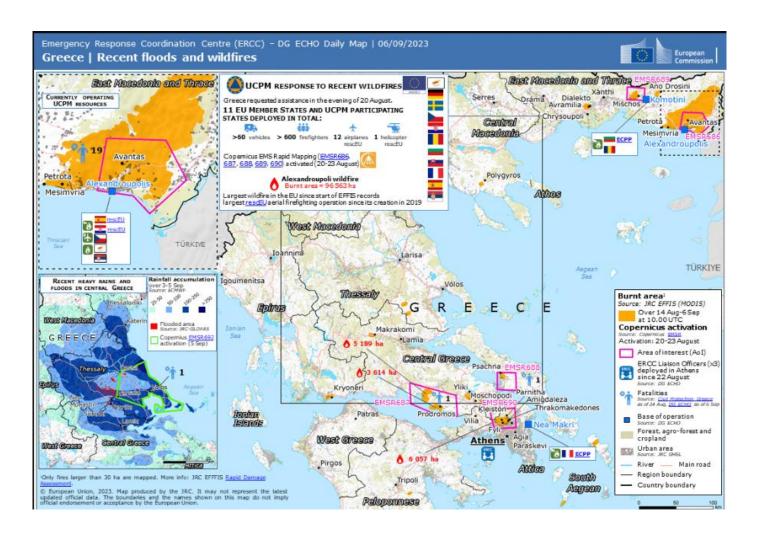
Water levels along the rivers are still very high but overall receding. The evolution could further vary depending on decisions to release water from dams. According to modelling by the European Flood Awareness System (EFAS), river flows are above the 1-in-100 years levels but decreasing towards 1-in-5 years levels. A return to normal conditions is predicted by tomorrow, but in the meantime the situation remains critical for river embankments and other flood defences, which could collapse and result in flooding in urban areas, notably in Larissa (current river flows could be near 1-in-50 years levels near Larissa).

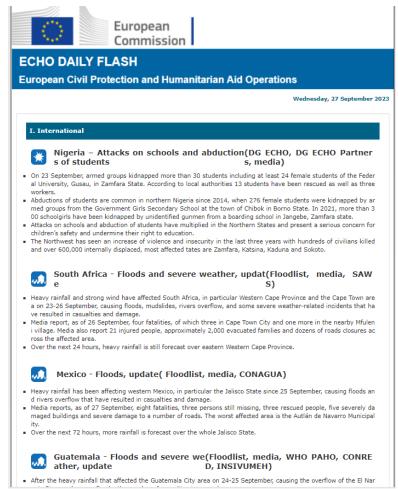
The depression named Daniel, which was responsible for the heavy precipitation, should continue moving slowly southwards out of the Ionian Sea and into the eastern Libyan Sea. The skies over Greece should remain clear with only minor showers, with the possible exception of Crete (see figure below).



## Informing - ECHO Daily Map and ECHO Daily Flash

https://erccportal.jrc.ec.europa.eu/ECHO-Products/Maps#/maps/latest







### Useful links

- ECHO Video: <a href="https://www.youtube.com/watch?v=xQUIvatKKoA">https://www.youtube.com/watch?v=xQUIvatKKoA</a>
- ECHO Website Factsheets:
  - <a href="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/eu-civil-protection-mechanism\_en</a>
  - <a href="https://civil-protection-humanitarian-aid.ec.europa.eu/what/civil-protection/emergency-response-coordination-centre-ercc\_en">https://civil-protection-humanitarian-aid.ec.europa.eu/what/civil-protection/emergency-response-coordination-centre-ercc\_en</a>
- ERCC portal <a href="https://erccportal.jrc.ec.europa.eu/Home/About">https://erccportal.jrc.ec.europa.eu/Home/About</a>
- ERCC Virtual Tour: <a href="https://erccportal.jrc.ec.europa.eu/ERCC%20VIRTUAL%20TOUR/index.htm">https://erccportal.jrc.ec.europa.eu/ERCC%20VIRTUAL%20TOUR/index.htm</a>



## Thank you



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