



The Copernicus Emergency Management Service



On-demand mapping

Copernicus is an EU programme aimed at developing European information services based on satellite Earth Observation and in situ data. The Copernicus Emergency Management Service (CEMS) supports all actors involved in the management of natural or manmade disasters by providing geospatial data and images for informed decision making. CEMS constantly monitors Europe and the globe for signals of an impending disaster or evidence of one happening in real time. It immediately notifies national authorities of their findings or can be activated on-demand and offers to provide them with maps, time-series or other relevant information to better manage disaster risk. CEMS products show information about a disaster event on a scale, timeline, and perspective that only geospatial information can provide. They can examine changes to an area of Earth over a series of days, weeks, months, or years. The CEM service is always free of charge for users. The Copernicus Emergency Management service has two main components: On-demand Mapping as well as Early Warning and Monitoring.

On-demand mapping



Rapid Mapping



Risk and Recovery Mapping

Early warning and monitoring



Floods



Fires

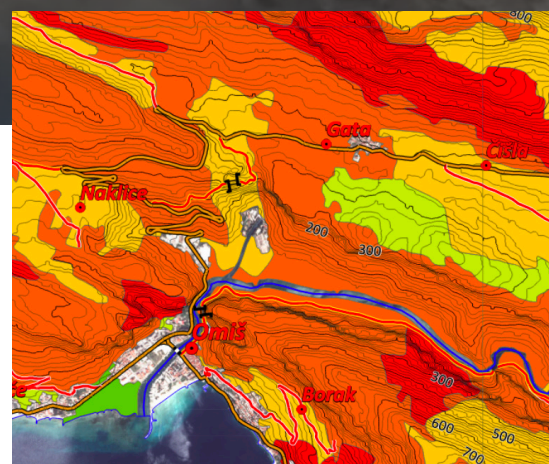


Droughts

RISK AND RECOVERY MAPPING

The On-demand Mapping service provides on-demand detailed information for emergency situations that arise from natural or man-made disasters anywhere in the world (e.g. flood, fire, earthquake, storm, industrial accidents). It supports all phases of the emergency management cycle: Rapid Mapping supports the emergency response; and Risk and Recovery Mapping supports the preparedness and recovery phases.

The Risk and Recovery Mapping service is offered in an international context of the Sendai Framework for Disaster Risk Reduction and targeting information layers that support decision making in the emergency management phases that are not directly related to response. Global efforts in disaster risk reduction recognise the role of satellite and aerial sensor imaging data sets and/or related value-adding information services in preparedness, prevention, and reconstruction. The EMS mapping for disaster risk reduction and recovery service will remain a unique European contribution in this context, as it focuses on the information extraction for hazard characterization in a range of preparedness, recovery, and response contexts.



Assets and Population Exposure Map – Forest Fire Risk Assessment (Croatia)

Space

Geoinformation for Risk Reduction and Disaster Management



RRM Service provides geospatial information and analyses to support all phases of the Disaster Management Cycle not related to the immediate response. For pre-disaster activities, the activity can provide information on the exposure, vulnerability and resilience of people and assets for all type of hazards. For post-disaster activities, it offers detailed impact assessment and assist in the development of recovery plans. The service can be activated through two modalities:

STANDARD PACKAGE

- A set of predefined products
- Efficient delivery of in-depth geoinformation, from 5 to 15 days
- Covers a wide range of disasters and crisis
- Satisfies typical user needs
- Covers all type of natural and human made disasters



List of Activations

FLEX PACKAGE

- Tailor made studies for complex user needs
- Covers a wide variability of situations:
 - Reference Mapping
 - Pre-disaster Situation analyses for Risk Reduction and Preparedness
 - Post-disaster Situation analyses supporting Response, impact assessment and recovery activities
- Delivery time: 1–2 months



RISK AND RECOVERY MAPPING FACTS



FROM **LOCAL** TO **NATIONAL** COVERAGE



SUPPORTING **ALL THE PHASES** OF THE DISASTER MANAGEMENT CYCLE



ADJUSTING TO USER NEEDS: OFFERING **PREDEFINED PRODUCTS & PERSONALIZED ANALYSES**

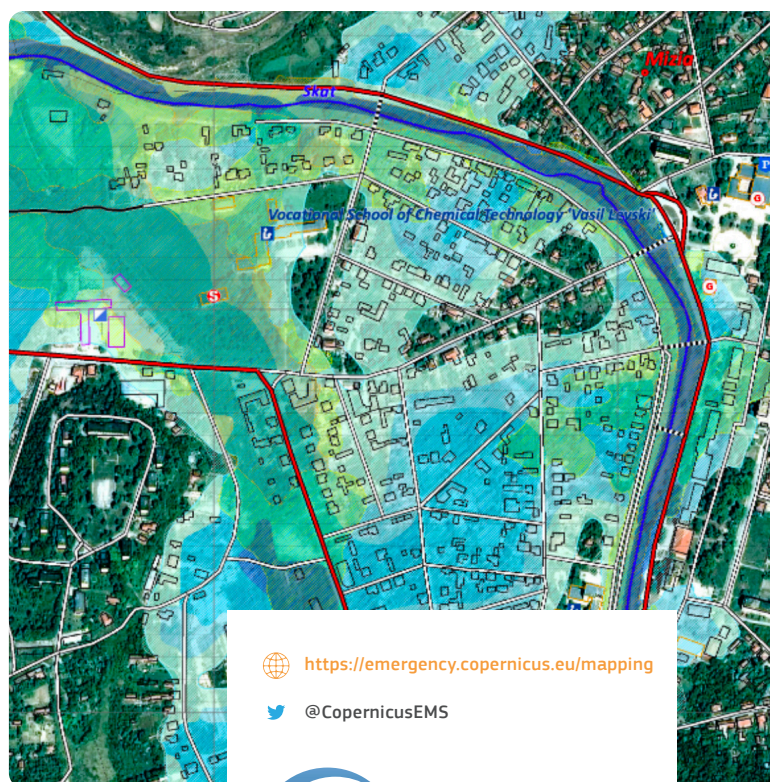
WHO USES THE SERVICE

EMS Risk and Recovery Mapping can be triggered only by or through an Authorised User, which includes National Focal Points in the EU Member States and countries participating in the Copernicus programme, as well as European Commission services and the European External Action Service

<https://emergency.copernicus.eu/mapping/ems/how-use-service>

CEMS supports crisis managers, civil protection and hydro-meteorological authorities, humanitarian aid actors dealing with natural disasters, man-made emergency situations, and humanitarian crises, as well as those involved in recovery, disaster risk reduction and preparedness activities. As an EU service, the CEMS's first priority is responding to EU needs

Image on the right: Assets and Population Exposure Map – Forest Fire Risk Assessment (Croatia)



<https://emergency.copernicus.eu/mapping>
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