



Emergency Management Service



What data?

The EU delivers its assistance to the victims of disasters occurring both in EU member countries and throughout the world.

The European Commission's Communication "Towards a Stronger European Union Disaster Response" adopted and endorsed by the Council in 2010, underpins the importance of strengthening concerted actions regarding natural and man-made disasters. The strategy therefore aims to help mobilise skills and resources in the area of civil protection and humanitarian assistance.

Copernicus EMS supports players in the field of crisis management by providing information based on space data combined with other sources of data, taking into account national capacities.

It addresses disasters caused by natural hazards (floods, forest fires, earthquakes, tsunamis, volcanic eruptions, landslides, storms, etc.), as well as man-made hazards (industrial accidents, oil spills, etc.), inside and outside the EU.

The **EMS Mapping component** provides timely and accurate geo-spatial information derived from satellite remote sensing and complemented by available *in situ* or open data sources.

The EMS Early Warning component aims to improve the preparedness, and therefore the responsiveness, of national authorities in relation to floods and wildfires.

What for?

Copernicus EMS represents a key asset in the global satellite Emergency Management, continuously increasing the number of observed disaster events analyzed per year.

The target users are entities and organizations at regional, national, European and international level, active in the field of crisis management.

Private companies can also access and exploit historical data from past EMS Mapping activations, as well as the EFFIS and EFAS databases.

Insurance companies are able to check the stability of critical infrastructures in regard to human activities and natural phenomena likely to seriously affect buildings up to their collapse. Such assessment might save people's lives and strategic assets.

Oil and gas companies can manage and monitor the assets and facilities scattered in the remote areas of the globe.

Agriculture gains the means to assess crop conditions following seasonal natural hazards or man-driven events (e.g. in conflict areas), and therefore are able to properly plan relevant counter-measures.

Cartographic applications can retrieve up-to-date reference information generated in third or remote countries, where public cartographic information is scarcely available.

Scientists are free to exploit the EFFIS database for retrospective analysis of fire events, e.g. to assess the potential soil loss in fire-affected areas and identify critical prevention measures that should be applied after the incident to avoid further damage.

Where?

The EMS Mapping component is the first Copernicus service to become operational in 2012. The whole database of past activations, including mapping products in different format, is accessible without need to register and is freely downloadable on the Copernicus EMS website: emergency.copernicus.eu/.

The Early Warning (EFFIS) landing page provides fire danger forecast and active fire and burnt area mapping. The database currently

contains more than 1.60 million forest fire records starting from 2000. It is freely accessible through a Web-GIS:

forest.jrc.ec.europa.eu/effis/.

The Early Warning (EFAS) portal provides a wide range of real-time flood forecast products to the relevant national and regional authorities. A bi-monthly bulletin and the flood forecast archive are freely available at: www.efas.eu.





How?

 The EMS Mapping can be activated on request by contacting the National Focal Points, who usually belong to the Civil Protection mechanisms in their own country, or directly by getting in touch with the Emergency Response and Coordination Centre (ERCC) at DG-ECHO:

echo-ercc@ec.europa.eu

- +32-2-29-21112
- All EMS Mapping products are available for free download standard raster formats (pdf, tiff, jpeg) or as vector data compressed in a zip file.
- The EMS EFFIS "Current situation" provides up-to-date information on several physical parameters: Fire Weather Index, Initial Spread Index, Build up Index, etc. Any request of information or data that is not available through the EFFIS Web services can be requested by filling-in the data request form and sending it to: effis@jrc.ec.europa.eu.
- EMS EFAS: real-time forecasts are provided to national, regional or local authorities that are legally obliged to provide flood forecasting services or have a national role in flood risk management within their country. If you are interested in becoming an EFAS partner please contact: info@efas.eu.

Other information

- EMS Mapping User Guide: emergency.copernicus.eu/mapping/ ems/copernicus-ems-user-guide
- EFAS video tutorials: www.efas.eu/efas-videos.html
- EFFIS technical background: forest.jrc.ec.europa.eu/effis/abouteffis/technical-background/

EMS in numbers

More than 4 years

of undiscontinued 24h/365 operations

More than 180 activations

in rapid mapping mode

More than 40

worldwide Users organizations triggering the service

Providing support

in more than 50 different countries worldwide

More than 2,300 maps

delivered to the end users







