

# Copernicus



## Emergency Management Service

**The Copernicus Emergency Management Service is part of the Copernicus Programme, which is an EU Programme managed by the European Commission (EC) and implemented in partnership with the Member States, the European Space Agency (ESA), the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), the European Centre for medium-range Weather Forecasts (ECMWF), EU Agencies and Mercator Océan. The Programme is aimed at developing a set of European information services based on satellite Earth Observation and *in situ* (non-space) data.**



### What is the Emergency Management Service?

The Copernicus Emergency Management Service (EMS), managed directly by the European Commission via the Joint Research Centre and DG ECHO, delivers warnings and risk assessments of floods and forest fires and provides geospatial information derived from satellite images on the impact of natural and man-made disasters all over the world (before, during or after a crisis). Through these, it 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 EMS's first priority is responding to EU needs and interests, whether within the EU or abroad. The Emergency Management Service is provided free of charge to authorised users. The service has two main components: Early Warning and Mapping.

### Early Warning Systems

The European Flood Awareness System (EFAS) is the first operational European system monitoring and forecasting floods across Europe. It provides complementary flood early warning information up to 10 days in advance. EFAS provides a variety of different products including flood monitoring, probabilistic flood forecasts, flash flood indicators, flood impact assessments and seasonal flood risk outlooks. To offer similar services at the global scale, the Global Flood Awareness System (GloFAS) is currently in its pre-operational testing phase (expected to be fully operational in 2017).

The European Forest Fire Information System (EFFIS) provides information on forest fires and their ecological impacts in the European, Middle East and North Africa regions. Fire monitoring in EFFIS encompasses the full fire cycle, comprising near-real time information services regarding the current and future fire danger forecast, active fires and burned areas, and post-fire damage assessments. The extension of EFFIS towards a Global Wildfire Information Systems (GWIS) is underway in collaboration with the Group on Earth Observations (GEO).

### EMS Mapping Service

The EMS Mapping Service provides geospatial information (maps) derived from satellite images to assess the impact and respond to natural and man-made disasters. The mapping service operates in two modes: Rapid Mapping for emergencies that require an immediate response, and Risk & Recovery Mapping for situations that do not require immediate action such as prevention and disaster risk analysis and recovery activities.





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## How can the EMS Mapping Service be accessed?

EFAS partners can access the information through a customisable web interface and web services in real-time. Any national, regional or local authority that is legally obliged to provide flood forecasting services or has a national role in flood risk management within its country and the European Commission Services can become an EFAS partner. In addition, if agreed with the national authorities in charge of forecasting, other parties can become partners as well. Real-time access to GloFAS products will be free, subject to registration (products are for information purposes only).

EFFIS and GWIS are open systems and the information can be accessed through a web-based geographic information system. EFFIS data and services are intended to support national fire services in the countries, the European Commission services, the European Parliament, and the citizens. EFFIS disseminates fire information to its network of 40 countries in Europe, Middle East and North Africa. GWIS provides information on wildfires to countries around the world in collaboration with international organisations such as FAO, and supports the interventions of the European Commission Emergency Response Coordination Centre (ERCC) of DG ECHO in areas outside Europe.

EMS Mapping services can be directly activated through DG ECHO's Emergency Response Coordination Centre (ERCC) only by Authorised Users. Each Member State, as well as countries participating in the Union Civil Protection Mechanism, has a nominated Authorised User. Entities of the EU Member States who are not Authorised Users and who wish to activate the EMS Mapping service must identify their National Contact Point; DG ECHO maintains a list of such Authorised Users. Except for sensitive activations, all mapping products are available online open and free.

## What is the Added Value of the EMS?

- Operational service 24/7 all year round;
- Pan-European and global forecasting and monitoring systems for floods and forest fires supporting a wide range of end users;
- The only existing emergency response service, which supplies standard information products derived from satellite data in rapid mode to first disaster responders and humanitarian actors worldwide;
- Risk & Recovery Mapping delivers information and analysis in support of activities for disaster risk reduction, prevention, preparedness, recovery, and reconstruction.

## More information

Users can download maps and see the latest activations on the Emergency Management Service website: [emergency.copernicus.eu](http://emergency.copernicus.eu).

Details of flood forecasts can be found on the EFAS European Commission's Flood Portal: [www.efas.eu](http://www.efas.eu).

Information on wildland fires in Europe can be found on the EFFIS European Commission's Forest Fire Information System Portal: [effis.jrc.ec.europa.eu](http://effis.jrc.ec.europa.eu).



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