



# **GIO-EMS**

## **One year of operational service**

**Prague, 29-30. May 2013**

*Serving society*

*Stimulating innovation*

*Supporting legislation*

**[www.jrc.ec.europa.eu](http://www.jrc.ec.europa.eu)**

# GMES Initial Operations- Emergency Management Service

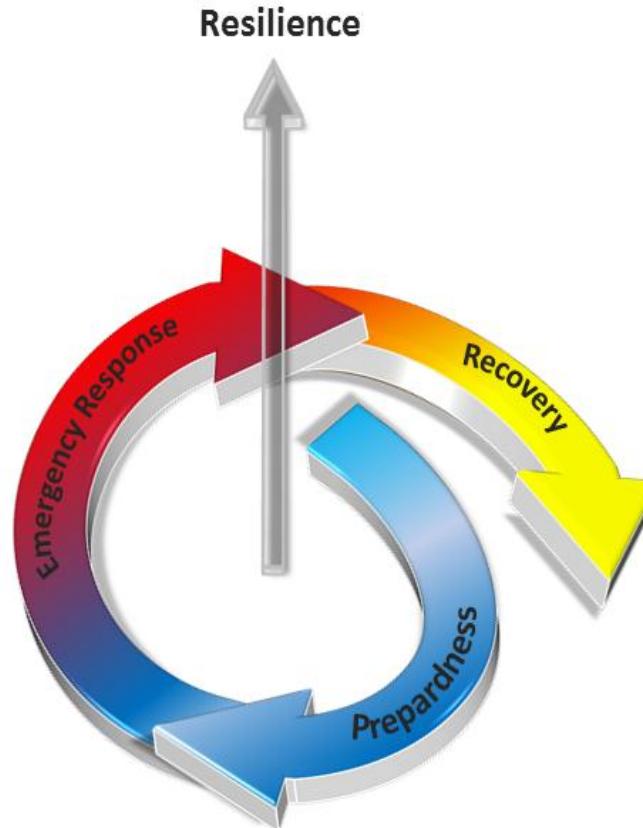


## Rush mode

- On demand
- “Standardized”
- Hours-days

Reference maps

Disaster response maps



## Validation

## Non-rush mode

- On demand
- Standard base widely adaptable to user requests
- Weeks-months

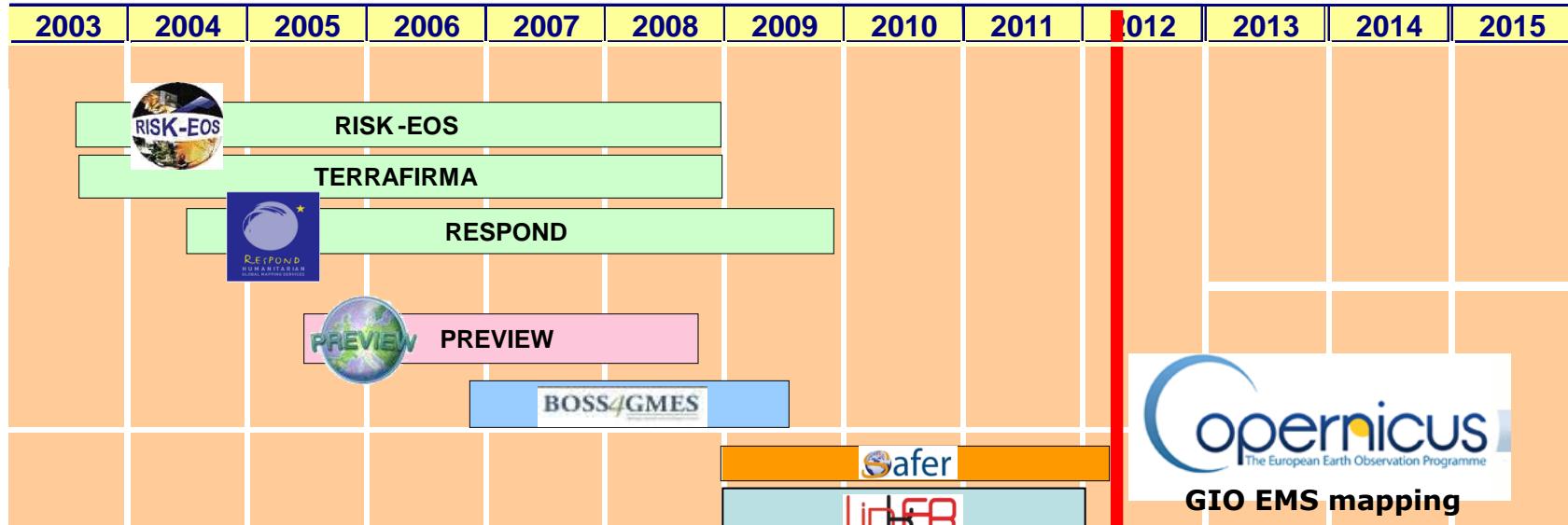
Reference maps

Pre-disaster situation maps

Reference maps

Post-disaster situation maps

# Service evolution



**Research Project**

**Operational  
Service**

# What GIO-EMS delivers



Maps and Geographic digital layers

Rush Mode:

Reference Maps (situation on the ground)

Damage Delineation (area of damage)

Damage Grading (damage severity)

Non-Rush Mode:

Pre- and Post- Disaster Situation Maps

Validation:

Reports on map quality from both modes

# Output types and formats (R&NR)



## a) **Printable and Georeferenced map**

- ISO A1
- GeoPDF/GeoTiff/JPEG 100/200/300 dpi
- Metadata file

## b) **Vector files** of all the features derived from the analysis and interpretation stage

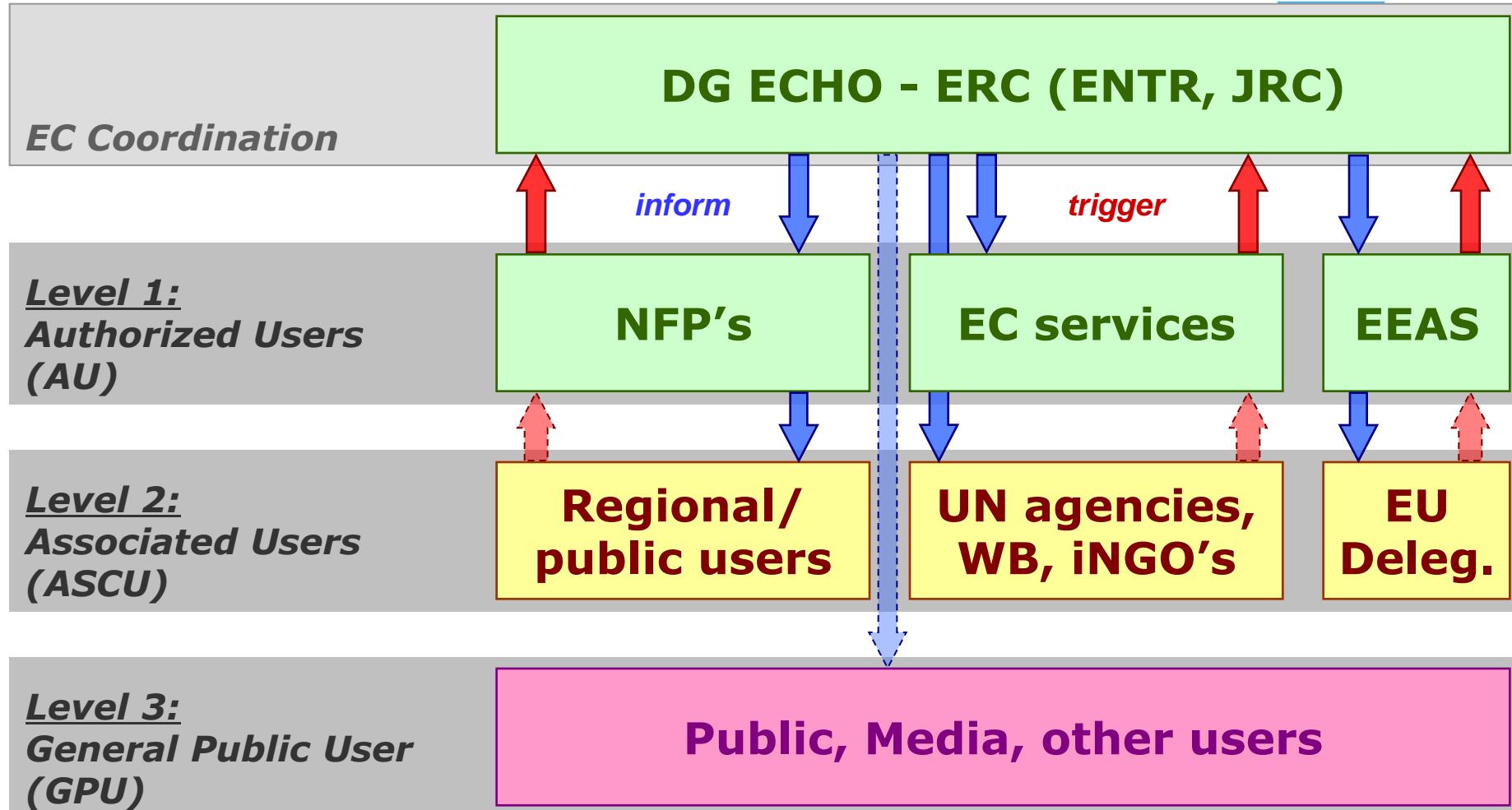
- ESRI shapefiles with projection file (.prj)
- Google Earth KML (or KMZ) format
- Metadata file

# GIO-EMS setup



- EC service
  - Funded from EC budget (DG ENTR)
  - 24/7 focalpoint at DG ECHO/MIC
  - Technical coordination by DG JRC
- Service contracts for
  - Mapping in Rush Mode;
  - Mapping in Non-rush mode;
  - Validation
- Complemented by ESA-DAP for satellite data procurement
- Free of charge

# GIO EMS TRIGGERING/INFORMATION FLOW



# Rush mode after one year



- 1.4.2012-17.5.2013: 42 activations (~350 maps)

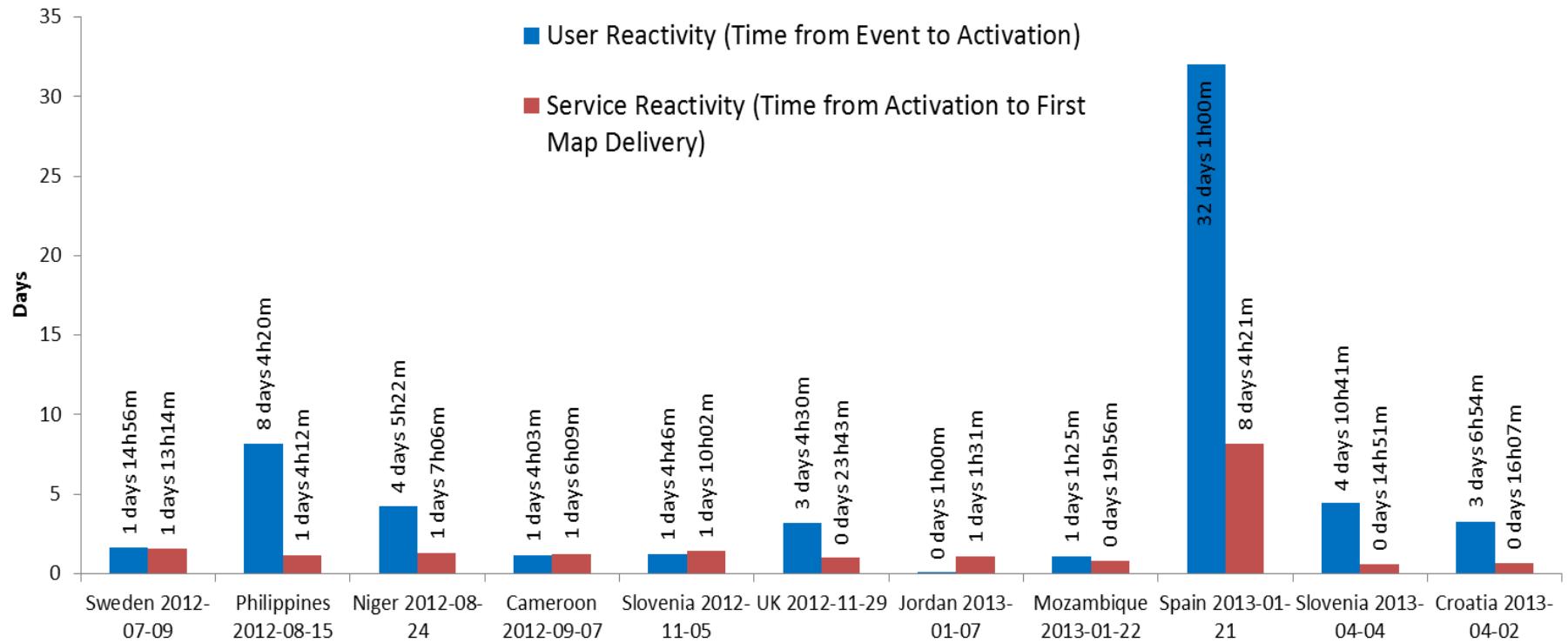
Type of disaster	Number	In Europe
Forest Fires	8	8
Floods	12	6
Earthquake	2	2
Industrial Accident	2	1
Wind storm	1	0
Others (mostly refugee camp monitoring)	17	4
Total	42	21

# Rush mode after one year



- User and Service Reactivity

**GIO-EMS: Floods (1.4.2012-9.4.2013)**



# Rush delivery time



Product TYPE	Full package	First available map
<b>REFERENCE</b>	<b>Max 6h</b>	<b>Max 6h</b>
<b>DELINEATION (+Reference)</b>	<b>Max 24h</b>  6h [ref map]	<b>Max 3h (flood, fire) Max 8h (others)</b>
<b>GRADING (+Delineation +Reference)</b>	<b>Max 24h</b>  24h [del map] 6h [ref map]	<b>Max 3h (flood, fire) Max 8h (others)</b>

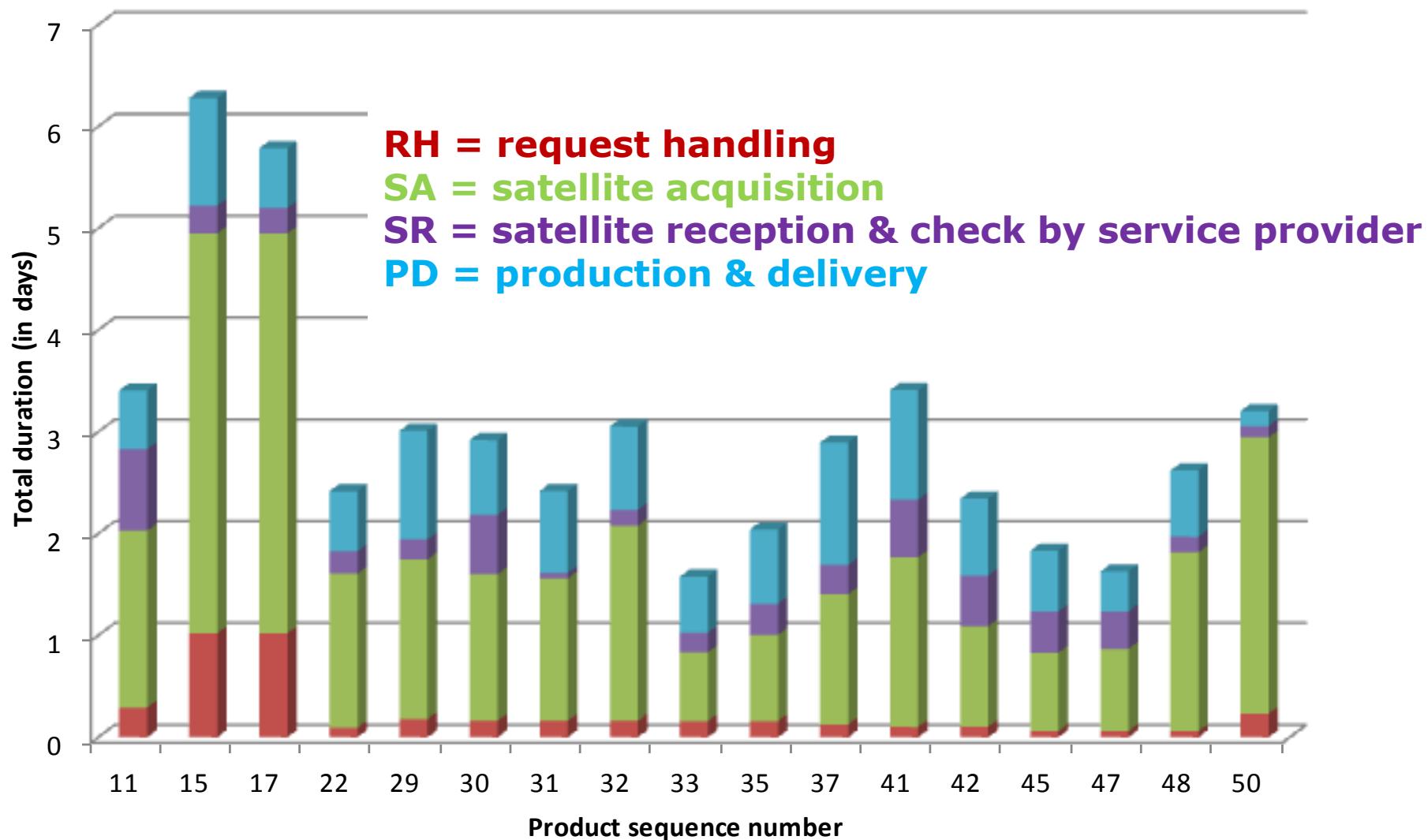
## First available map

Post event, 1 map, 1 format, not quality checked

## Time after satellite data reception and quality acceptance.

Target delivery time from activation: 6h (reference), 24h (delineation, grading).

# Duration of activation phases



# Non-Rush mode and Validation



Non-Rush Activated only 3 times:

- Post fire risk assessment on Chios Island in Greece
- Population density estimate and land use database for Nyala, Sudan
- Monitoring of the volcanic episode: eruption and landslide risk (El Hierro, Canary Islands, Spain)

Validation campaign:

- Floods in Niger in August 2012



The image shows the homepage of the GMES Emergency Management Service (EMS) EMS - MAPPING PORTAL. The top navigation bar includes links for Home, What is GMES, and The Emergency Management Service. On the left, there's a sidebar with sections for GIO EMS-MAPPING (links to service, users, how-to, products, quality control, user guide), Early Warning (European Flood Awareness System), and a photo of two people working at computers. The main content area features a large map of the world with various location markers and a legend. Text on the page includes "Welcome to the portal of the GMES Emergency Management Service" and "A service in support of european emergency response". A sidebar on the right provides access modes: Rush Mode (connection for authorised users) and Non-rush mode (Access for authorised users). It also includes a "Download Portal User Manual" link and a thumbnail of a satellite image.

GMES EMERGENCY MANAGEMENT SERVICE

EMS - MAPPING PORTAL

Home    What is GMES    The Emergency Management Service

**GIO EMS-MAPPING**

- The service
- Who can use the service
- How to use the service
- Products
- Quality Control/Feedback
- User Guide

**Early Warning**

- The European Flood Awareness System

List of submitted GIO Rush Mode activations - showing the last 5 activations (within the last 90 days)

Welcome to the portal of the GMES Emergency Management Service

A service in support of european emergency response

Access Rush Mode

connection  
Authorised users only

Non-rush mode

Access  
Authorised users only

Download Portal User Manual

The GMES Emergency Management Service (EMS) is the first GMES service to become operational.

EMS started operations on April 1st, 2012 and consists of a set of



[copernicus.eu](http://copernicus.eu)

[portal.ems-gmes.eu](http://portal.ems-gmes.eu)

[gio-ems-rush@jrc.ec.europa.eu](mailto:gio-ems-rush@jrc.ec.europa.eu)

