



European Emergency Response Service - ERCS

to provide space based crisis information -
an element of **Global Monitoring for Environment and Security (GMES)**

Third United Nations International UN-SPIDER Bonn Workshop:
“Disaster Management and Space Technology-from Concepts to Application”
Bonn, October 22nd, 2009



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für Luft- und Raumfahrt e.V.**
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ZKI – Center for Satellite based Crisis Information







Civil Security & Emergency Response

Increasing demand for rapid crisis information on

- ↗ Natural disasters
 - ↗ E.g. Storms, earthquake, tsunami, volcano eruption
- ↗ Environmental disasters
 - ↗ Technical accidents (e.g. oil spills)
- ↗ Humanitarian relief issues
 - ↗ Search & Rescue missions
 - ↗ UN missions (e.g. UNICEF, WHO, UNHCR)
- ↗ Civil security/ Immanent threats for the Population
 - ↗ UN missions (e.g. EUFOR)
 - ↗ Illicit crop monitoring





Satellites can provide information for:

- ↗ Natural disasters preparation, early warning, alertness
- ↗ Damage assessment
- ↗ Rapid overview of a crisis
- ↗ Reconstruction monitoring



What is available today

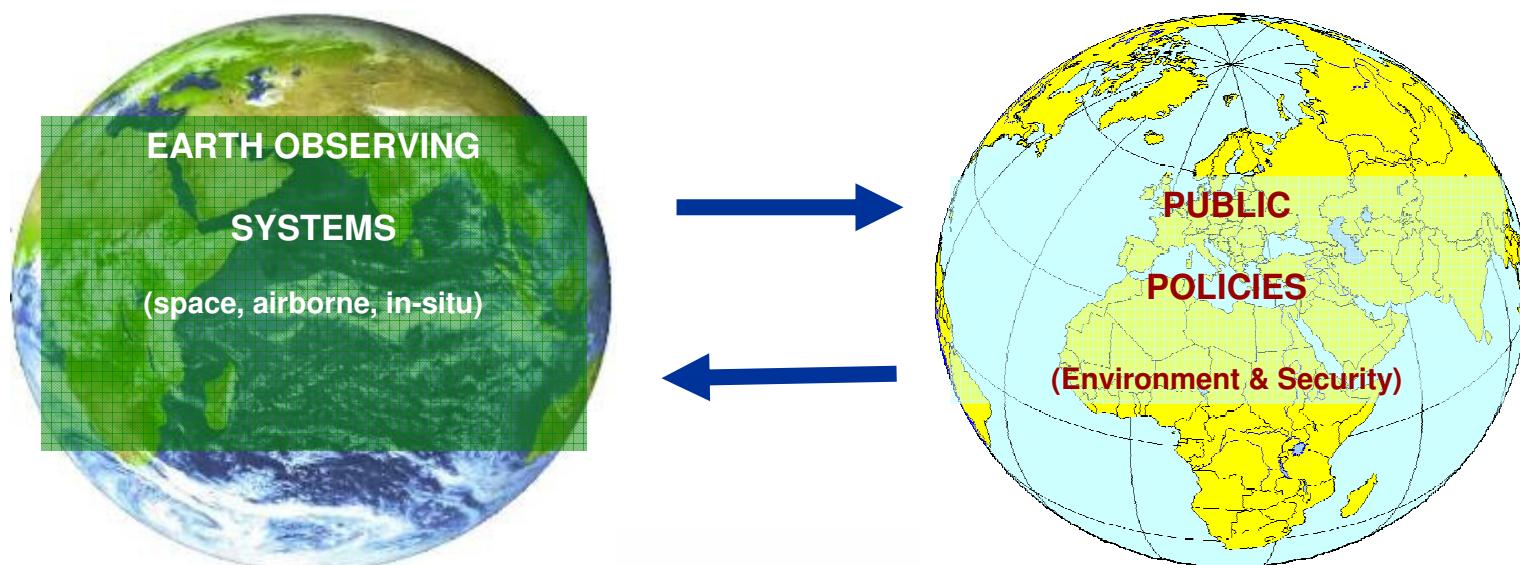
- ↗ Google Earth
- ↗ UN (Charter “Space & Major Disasters”)
- ↗ Web
- ↗ JRC for EC institutes
- ↗ **Establishment of European Service within the GMES initiative to support Emergency Response**





Global Monitoring for Environment and Security

is a European initiative for the coordination, generation and provision of environmental and security-related information to policy-makers and other users



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website: www.gmes.info

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Global Monitoring for Environment and Security

Space Systems

Observational Networks

Data Centers

Three
Core Services



Plus Two Pilot
Services

Downstream Services, t.b.d.



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GMES services EC FP7 Implementation

GMES Emergency Response Services ERCS



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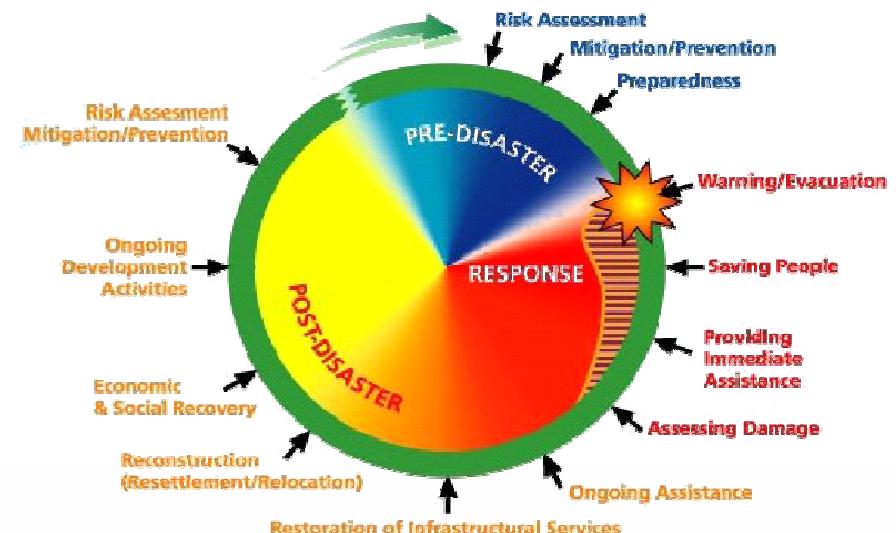


GMES Emergency Response Services

Safer
Services and Applications For Emergency Response

LiNER
Supporting the implementation of operational GMES services in Emergency Response

- The GMES Emergency Response Service reinforces the European capacity to observe and assess emergency situations at **Global, European and National** level
- Supports Emergency Response during the whole crisis cycle - **initial focus on rapid assessment and reference information**
- Both, **natural disasters** and **conflict/humanitarian** topics supported



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Project – Aims 2009-2011

- ↗ Implements a **pre-operational mapping service** of the GMES Emergency Response Service
- ↗ focusing on **rapid & reference mapping** during the response phase, later enrich this service with a wider set of **thematic products**



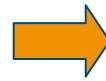
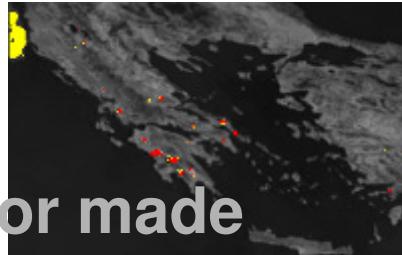
Project – Aims 2009-2011

- ↗ **Facilitates the use of ERCS products** for EU civil protections and humanitarian aid users; integration of ERCS inside the users workflows
- ↗ Define and develop in a joint approach the **necessary IT technical & procedural interfaces** between ERCS and User focal points

ERCS products & services

supporting civil protection and humanitarian relief work

Early warning



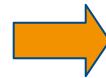
Crisis/Recovery maps



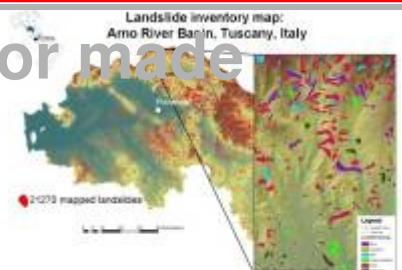
Supporting:

- Headquarters
 - Decision-makers
 - In-field operatives
- In Europe and worldwide

Reference maps



Pre-operational



Development/tailor made Thematic maps



What GMES/ERCS provides - Products

→ Emergency Mapping

- Emergency maps
(what, where, what is affected)
- Damage assessment maps
(impact, population affected, severity of damage)

→ Non-Emergency Mapping

- Reference Maps (base maps for orientation, navigation, logistics, situational awareness)
- Situation Maps (status of recovery and reconstruction)
- Refugee / IDP Maps (camp location, layout, infrastructure, assessment)

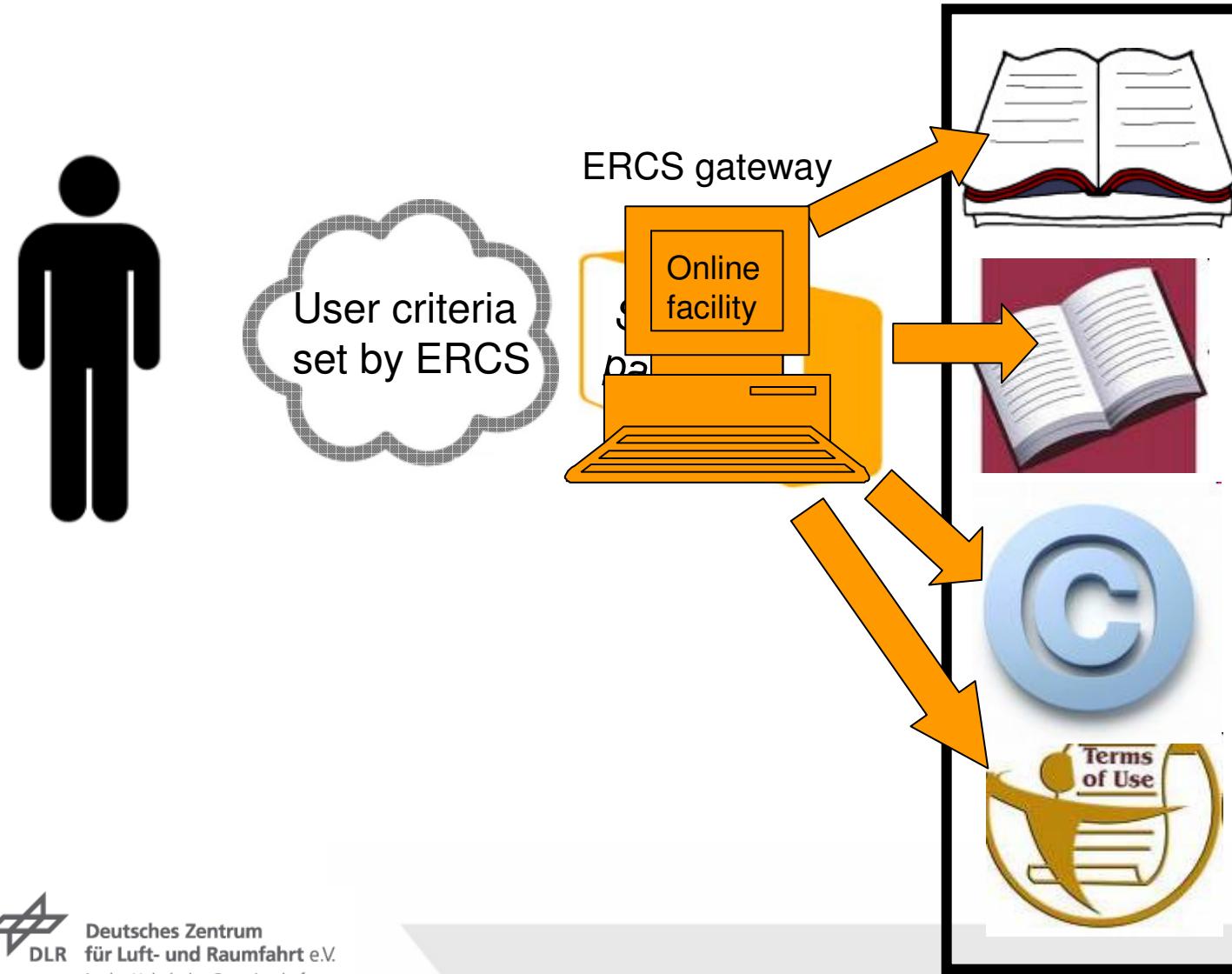
customized satellite images and maps can be requested on a 24d/7h basis



Rapid Land Cover Maps



ERCS - User Authorisation Process





ERCS works in close coordination with the end users

- **Users are in Europe and outside Europe**
 - Civil protections (27 national focal points + MIC)
 - Humanitarian aid actors (Red cross, NGO, etc.)
 - International organizations (UN, WFP)
 - In-field operatives
 - and decision-makers (European DG, national authorities, local and regional authorities, etc.)
- **Training** provided for better understanding of maps & services for **field experts & headquarters** like
 - Seminars, Trainings & Exercises, dedicated workshops, Services' & Products' support



How to learn more about ERCS

- Website: www.emergencyresponse.eu

The screenshot shows the homepage of the Safer project website. At the top, there's a banner with a globe and the text "open the movie". Below the banner is the Safer logo and the tagline "Services and Applications for Emergency Response". A navigation menu on the left includes links for Home, Project presentation, Services, Latest activations, Stakeholders, News, Success stories, and Communication. The main content area features several images: a destroyed building complex, a satellite map of Europe, and a fire-fighting aircraft dropping water. On the right, there are two sections: "Latest Activations" (with news items about floods in the Philippines, fires in Northern Italy, and flooding in Turkey) and "Latest News" (with news items about EU projects against forest fires and the first EUAC meeting). A "PRIVATE AREA" button is located at the bottom left.



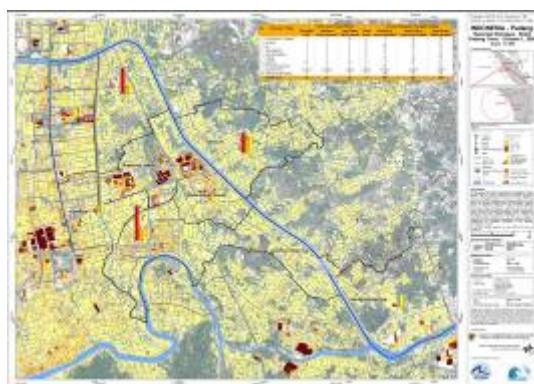
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To conclude...

- ERCS is a pre-operational service of GMES
- GMES/ERCS is in it's implementation phase
- It is developed in close cooperation with users
- It is an open service
- It is available 24h/7d



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Thanks for your attention!

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