

GMES Operational Services

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Context



- GMES is a flagship of European Union space policy
- Regulation 911/201 establishes the GMES programme and its operations (2011-2013)
- Included in industrial policy initiative of Europe 2020
- Long-term programme needing sustainable funding
- June 2011 Budget Communication proposes that GMES is funded outside the MFF

GMES Overall View



USERS

Policy makers &

Public

Private, commercial

What is their need?









Flood





Examples provided



Farming











Information services

Land

Marine

Atmospher

Emergency

Security

Climate

Space Infrastructure



In Situ Infrastructure Sustainable information

DUF GlobCurrent User Consultation Meeting - IFREMER

OBSERVATION

Added value of an EU operational GMES



- Long term and reliable provision of data and services
- Sustainability of downstream services
- Economies of scale
- Filling observation gaps
- Autonomous access to data and information
- Contribution to international efforts on earth observation such as GEOSS

Global funding overview until 2013



- dedicated investment in GMES up to 2013: EUR
 3.200 million
 - (Service and in situ components)

- EC

€ 520 million

- ESA

€ 240 million)

(Space component

- ESA

€ 1.650 million

- EC

€ 780 million)

Global funding overview after 2014



- annual cost after 2013: € 834 million
- June 2011 Budget Communication proposes that GMES is funded outside the MFF
- November 2011 GMES Communication launches the institutional debate on the future of GMES and clarifies:
 - funding: by proposing the setting up of a GMES fund to be made available by MS taking account of contribution keys based on GNI
 - governance: by proposing the outsourcing of management tasks to the GNSS agency

Funding: Way forward



- Need for full continuity of GMES services
- Need to advance quickly to have a programme adopted by end 2013
- Competitiveness Council on 21 February: underlined the need to find an appropriate form for further operational follow-up
- 'Friends of the Presidency'-Group
- General Affairs Council in June

Services implementation



- Land Service: GMES Initial Operations
 - implementation delegated to EEA
 - mix of centralised/decentralised implementation
- Emergency service: GMES Initial Operations
 - direct procurement by the Commission
 - 3 ITTs: rush mapping, non-rush mapping and validation
- Marine and Atmosphere services : FP7
 - MyOcean2 and MACC II
- Climate Service: FP7
 - Call5 and Call6

GMES Marine Service implementation



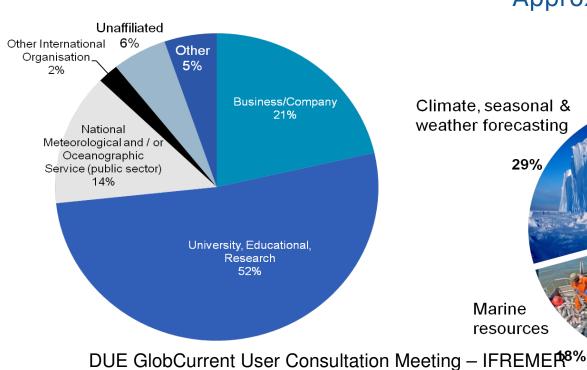
- The Marine Service is one of the central GMES services.
- The pre-operational service is implemented by means of the FP7 project "MyOcean"
- "MyOcean2" will close the gap until 2014+:
 - Mix of Research and Support Action
 - 28 M€ € EU contribution
 - From April 2012 to September 2014

Marine GMES Users



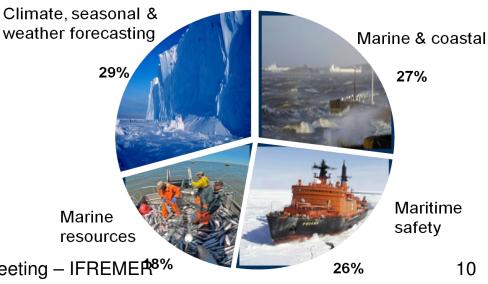
Total of 526 users already subscribed

users by type of organisation



- Mostly public (80%)
- Approx. equal per area

Areas of benefit



07-03-2012 ———

FP7 Research Activities



Downstream GMES services

FIELD_AC
Operational service
for coastal areas

SeaU Satellite based oil spill detection

OPEC

Biogeochemical & ecological parameters

R&D to enhance GMES applications in the Marine area

OSS2015 Biogeochemical products

MyWAVE
Ocean surface
waves modelling

SANGOMA
New data assimilation techniques

ASIMUTH

AQUAMAR

Water quality services

Forecast harmful algal bloom

MyOcean 2
Core service

CoBiOS
Predict high biomass
blooms in coastal
waters

OPERR CSA SIDARUS
Sea Ice downstream
services

MAIRES

Cooperation RU
Sea Ice

EAMNeT G&A CSA

GMES User requirement handling: FP7 phase



- User requirements directly expressed to the MyOcean project
 - Users linked to the project
 - Implementation group
- Service specifications written by the MyOcean project
- MyOcean(2) conducts both research and preoperations
- transitional phase prior to GMES operational phase

GMES User requirement handling: GMES operational Phase



 Structured process set-up for gathering user needs and translating to requirements/service specification in the marine and atmosphere domain: GMES-PURE (FP7 support action) led by FUMETCAT.

• **User**users covered: Are an equirements reaconsistently? Have priorities been applied is the expected evolution of the user requirements.

ecification: best suited service to eet the user required service (observation, modelling, a compatition of both), best suited input data to provide the service, vervice evolution sufficient or need for new services, scientific evolution in the area of retrieval techniques and algorithms.

- User forum advises the Commission on user requirements
- User requirements and service specifications endorsed by the Commission
 - Service implemented through GMES operational line
 - Future research supported through H2020

Research coordination



- GMES Marine service will constantly evolve
 - Long term user requirements will lead to new research activities
 - Mature research will lead to updated service specifications for enhanced service
- Duplication of services and overlapping research activities shall be avoided.
- Coordination is necessary:
 - Output of research (FP7 and non-FP7) should be consolidated in marine operational services (MyOcean and its evolutions)
 - Research should primarily focus at meeting the user needs formulated in the EU framework

Summary



- User Communities (public and commercial) have strong interest in GMES
- Multitude of research projects, service projects, networks are launched (EU, national, regional)
- Research coordination is essential to provide consistent service at EU level that benefits the marine user community.



Thank you for your attention

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http://ec.europa.eu/enterprise/space_research/index_en.htm