

Presentation to the Water Workshop

Koblenz, 11-12 May 2010

EUGENE is an EU FP-7 Support Action under topic

ENV.2009.4.1.2.1 „Further structuring the European approach to Earth Observation“



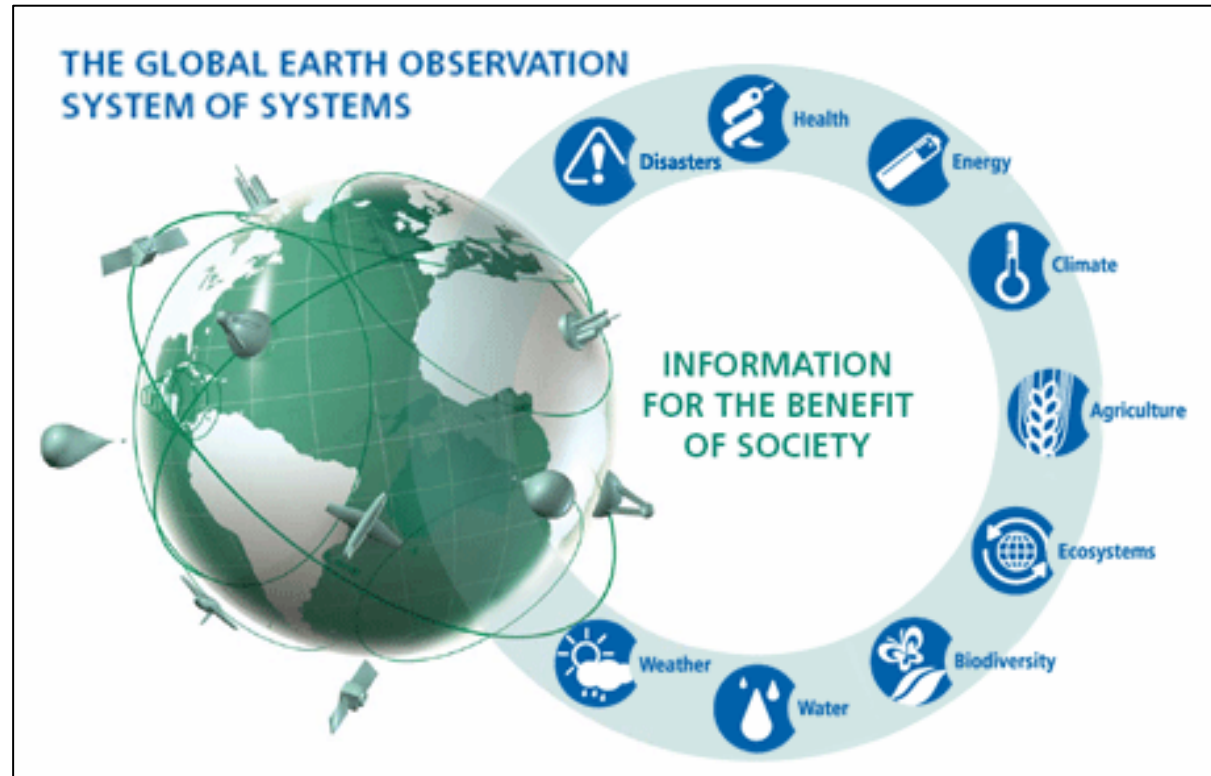
- GEO was launched in response to calls for action by the 2002 World Summit on Sustainable Development and by the G8 leading industrialised countries.
 - Voluntary partnership of 80 governments + EC and 58 intergovernmental, international, and regional participating organisations
 - Establishment of a globally distributed and coordinated Global Earth Observation System of Systems (GEOSS)
 - Forum to improve coordination at international level and to develop new international initiatives

GEOSS



- GEOSS is supposed to
 - qualitatively improve our understanding of the earth system
 - enhance global policy- and decision-making abilities to promote the environment, human health, safety, and welfare
 - generate societal benefit in an increasingly complex and environmentally stressed world by
 - linking observation systems of GEO members (satellite, in-situ, aircraft)
 - enhancing data access and exchange
 - identifying gaps and requirements
 - building capacities

GEOSS (2)



- 9 societal benefit areas (SBAs) addressed
 - Disasters, Health, Energy, Climate, Agriculture, Ecosystems, Biodiversity, Water, Weather.
- 4 cross-cutting themes
 - Architecture & Data, Science & Technology, User Interface, Capacity Building.

Motivation for the EUGENE project



- Europe is one cornerstone of GEO, along with US etc.
- Europe intends to provide a strong and sustaining European component as part of GEOSS.
 - Visibility of European GEO contributions to be enhanced
 - Better marketing of existing elements
- A European GEO strategy needs to be specified
 - Europe has made its commitment. Its participation should aim at maximising both the GEO added value and the European benefit from GEOSS.
- Coordination among European GEO related activities to be improved

Objectives and expected outcome

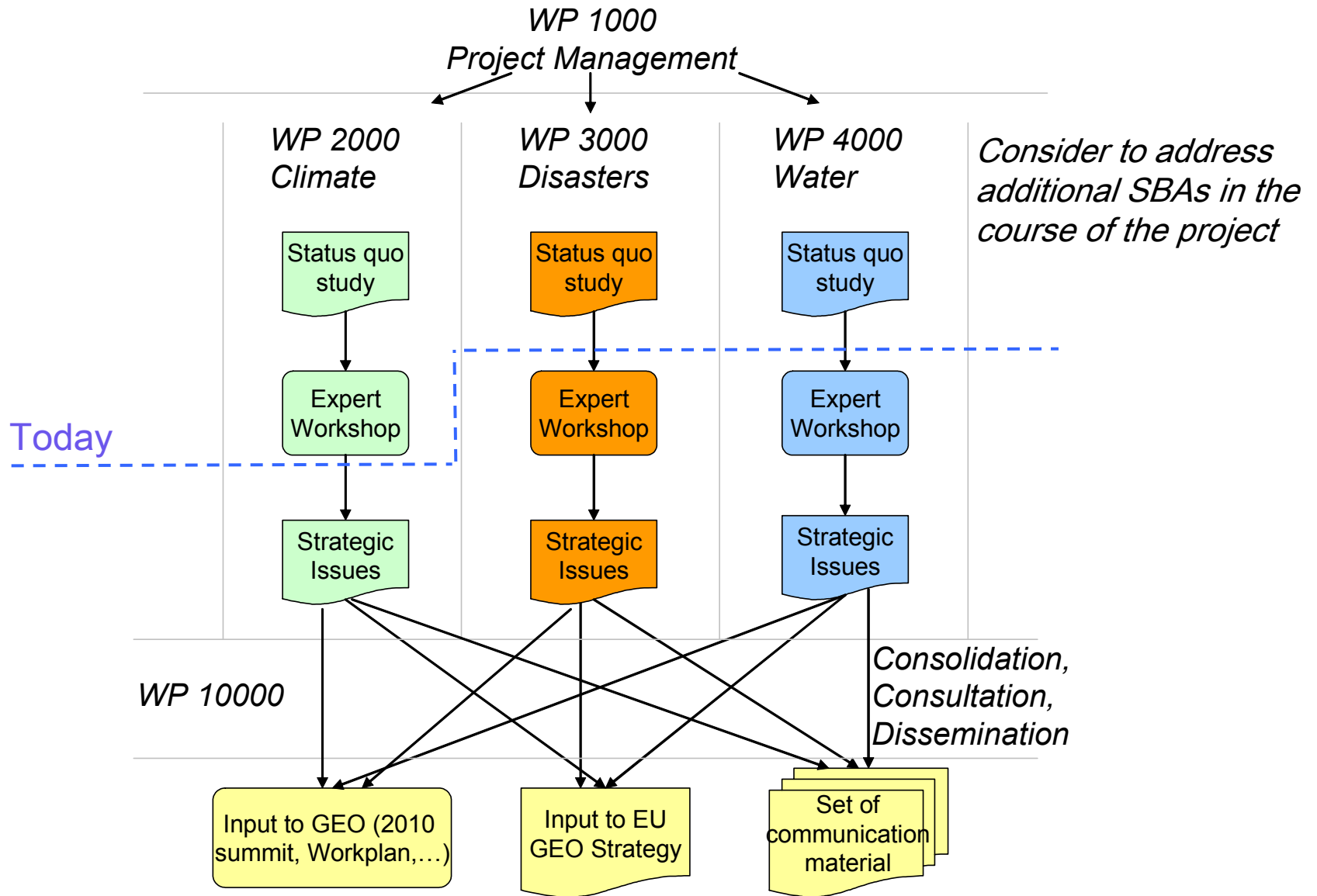


- Foster collaboration and strengthen coordination of European programmes and organisations in the field of earth observation
 - Significant national programmes and organisations also addressed

- Contribute to a coherent European position and strategy
 - proposing a structured approach for selected SBAs
 - special attention to 2010 GEO Ministerial Summit in Beijing







- Contribute to a process that ultimately leads to a strong and sustaining European GEOSS component

Scope and Methodology



Partnership and main tasks



	D-GEO Office @ DLR	Overall coordination, management Consolidation, consultation, dissemination
	EUMETSAT	Climate SBA
	German Remote Sensing Data Center (DLR DFD)	Disasters SBA Communication material
	University of Bonn	Water SBA
	German Federal Institute of Hydrology	Water SBA
	European institutions, organisations, programmes	Support EUGENE by Providing information Participation and contribution to workshops (no formal partnership)

Current project status



- Project kick-off on 5 October 2009
- Project Website www.eugene-fp7.eu
- **Status quo study reports**
 - Draft reports for all three SBAs („Living documents“) so far
 - To be reviewed and further developed
 - To be complemented with strategic issues
- **EUGENE expert workshops**
 - Climate: 26-27 April, EUMETSAT, Darmstadt
 - Water: 11-12 May, Federal Institute of Hydrology, Koblenz
 - Disasters: 1 June, DLR Bureau, Brussels
 - Besides strategic issues, contributions to the Beijing Ministerial to be discussed at the workshops

Situation in Europe in the 3 SBAs considered

➤ Climate:

- National Met.-Offices routinely share their data
- Requirements settled at international level (GCOS Essential Climate Variables) and more and more addressed by European actors
- Significant European activities for climate, but overarching framework and continuity not established

➤ Disasters:

- Prominent role of emergency response in the framework of GMES
- Warning systems for disasters related to meteorology in place
- Not all phases of the disaster management cycle (mitigation and preparedness, early warning, response, recovery) equally coordinated

➤ Water:

- Restrictive data sharing policies and lower level of collaboration
- Requirements consolidation more complex

Feedback from the GEO EU HLWG

- The European GEO High Level Working Group is supposed to act as EUGENE's advisory board.
- EUGENE's approach well received
- Wish to work on European visibility in 2010 Ministerial („showcases“, exhibition, publications) expressed
- High expectations for progress of EU GEO strategy
- „Building blocks“ proposed for consideration
 - Joint ESA/EUM/EC implementation process on climate monitoring
 - EEA conference May 09: A global setting for European environmental monitoring - measuring what we must manage
 - GMES in general, being „Europe's main contribution“

The link between GMES and GEOSS



- GEO/GEOSS continuously mentioned in EC communications on GMES. 3 main issues identifiable:
 - GMES to be main European contribution to GEOSS
 - GEO data sharing principles a driver, among others, for GMES data policy
 - GEOSS to be an important element of a GMES „international cooperation strategy“
 - Details, however, are yet to be defined

Meeting EUGENE and GMES Bureau



- Outcomes of the meeting on 2 March 2010
 - GMES Strategy vis-à-vis GEO to be worked out when regulation on GMES Initial Operations settled.
 - Future GMES operational setup and scope may profit from EUGENE results, e.g. by informing future GMES calls and partnerships.
 - Importance of GMES participation in EUGENE actions stressed
 - Near term GMES contributions to GEOSS (registration of datasets, Beijing visibility) to be made on GMES projects basis. Details to be worked out bilaterally between GMES Bureau and DG RTD. EUGENE may assist.

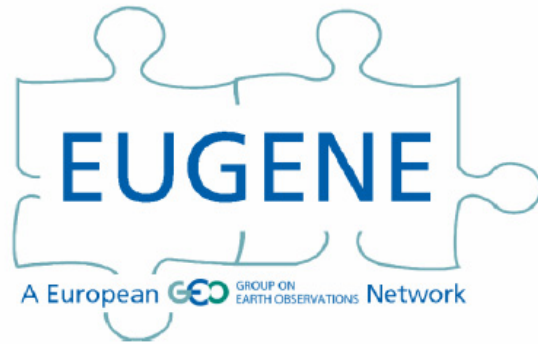
Strategic considerations

- European GEO strategy mainly to be implemented by coordinated actions of established European programmes, such as GMES, EMI, INSPIRE, ESA, FP-7 (→ FP-8)
 - Defining contributions to GEOSS
 - Defining needs from GEOSS
 - Securing continuity of priority elements
 - Developing strategic cooperations
 - Filling Gaps
 - ...

- To be complemented by national contributions

- Need of overarching European GEO coordination structure to be assessed

Issues to be discussed (1)



- Major strengths, gaps, challenges and opportunities of European earth observation
 - Effective promotion of European strengths
 - Where could Europe claim a global leading position?
 - International collaboration to close observational gaps?
 - Limits of GMES services to be expanded to the global scale
 - How to achieve a sustained operation of earth observation systems in Europe?

Issues to be discussed (2)

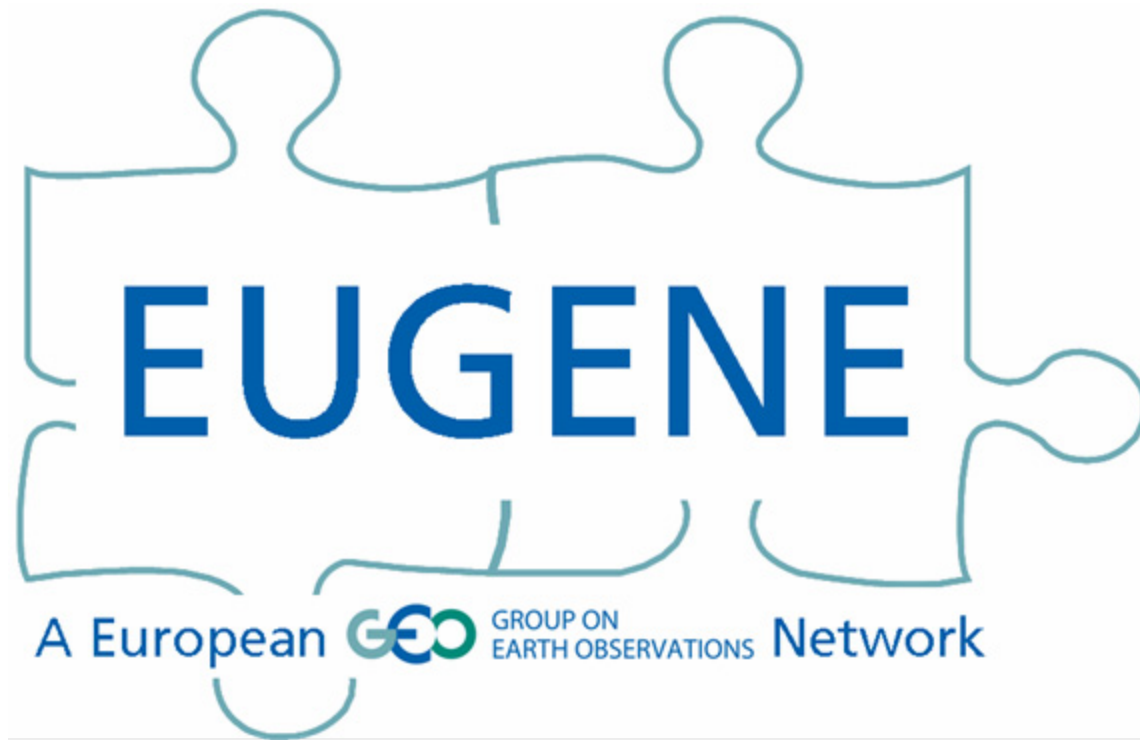


- Benefits from a strong European involvement in GEO
 - Incorporation of international data into European systems and programmes
 - Better coordination of international activities: Closing gaps instead of double work?
 - Influencing GEO to maximise Europe's benefits from GEO/GEOSS
 - Could developments in Europe (GMES, data sharing) be facilitated by a strategic involvement?
 - Could international visibility of European and national achievements increase political support within Europe?

Issues to be discussed (3)



- Effective involvement in GEO and GEOSS
 - Which issues should be addressed by a European GEO strategy?
 - Organisational or structural deficiencies within Europe?
 - Definition of relationship between GMES and GEOSS
 - Is there sufficient political/scientific support? How could it be improved?
 - Utilisation of GEO to facilitate coordination processes within Europe: Are GEO communities (Task Teams, Communities of Practice) suitable vehicles?
 - How could a European GEO strategy be brought into effect?



**Further information available on:
www.eugene-fp7.eu**