



Launching FP7 Conference for Information Multipliers Brussels, 7-8 February 2007

Activity 6.4.1. Earth and Ocean Observation Systems

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Theme 6: Environment *Area: Earth Observation*

- **Research activities will be devoted to the development and integration of the Global Earth Observation System of Systems (*GEOSS*) for environment and sustainable development issues in the framework of the *GEO* initiative...**



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What is Driving the GEO Initiative?

- 3 top science and technology priorities identified at the G8 meeting in Evian in 2003: agriculture, energy and **Earth observations**
- FROM first EO SUMMIT in Washington in July 2003
- CALL FOR A GREATER INTEGRATION OF EARTH OBSERVATION SYSTEMS INTERNATIONALLY
- DEVELOPMENT OF A "GLOBAL EARTH OBSERVATION SYSTEM OF SYSTEMS"



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9 Societal Benefit Areas of GEOSS

- Reducing loss of life and property from natural and human induced disasters;
- Understanding environmental factors affecting human health and well being;
- Improving management of energy resources;
- Understanding, assessing, predicting, mitigating and adapting to climate variability and change;
- Improving water resources management through better understanding of the water cycle;
- Improving weather information, forecasting and warning;
- Improving the management and protection of terrestrial, marine and coastal ecosystems;
- Supporting sustainable agriculture and combating desertification;
- Understanding, monitoring and conserving biodiversity;



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KEY INITIATIVES FOR EARTH OBSERVATION

GEOSS (Global Earth Observation System of Systems): GLOBAL DIMENSION

GMES (Global Monitoring for Environment and Security): SERVICE ORIENTED

INSPIRE (Infrastructure for SPatial InfoRmation in Europe): REGULATORY FRAMEWORK



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Sub-activity 6.4.1

Earth and Ocean observation systems

Call 2007

Indicative Budget : 21 M€

**Call for 5 Small/Medium-scale project
and
6 coordination and support actions**



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4 Areas in the Earth Observation Work programme

- 1) Integrating existing European Earth Observation activities in GEO (global level)**
- 2) Developing cross-cutting research activities relevant to GEO**
- 3) Earth Observation activities in emerging areas of research**
- 4) Developing Capacity Building activities in the domain of Earth Observation in developing countries**



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Integrating existing European Earth Observation activities in GEO (global level)

- Monitoring of the carbon cycle at global level – cooperation between existing European and International initiatives *Coordination and support action (Coordinating type)*
- Contribution to a global biodiversity observation system – relying on GBIF and existing EU projects and collaboration with initiatives such as LTER and LTSER *(small/medium collaborative project)*



Developing cross-cutting research activities relevant to GEO

- **Improving collaboration between European national earth observation programs with special emphasize on programs collecting in-situ data *Coordination and support action (Coordination type)***
- **Contribution to the development of a worldwide research network of borehole observatories for seismogenic hazards taking into account existing projects such as NERIES *(small/medium collaborative project)***
- **Dissemination and broadcasting of scientific observation data and information available from FP6 and FP7 project as a contribution to GEO *Coordination and support actions (Supporting type)***





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Earth Observation Activities in Emerging Areas (New Earth Observation Systems)

- **Promotion and exploration of application of Earth Observation to environmental and health issues**
Coordination and support action (Supporting type)
- **Contributing to GEOSS through monitoring /observing the ocean interior, seafloor, and sub-seafloor basing on initiatives like Mersea, Euroceans, ESONET, HERMES together with international ones like ARGO and NEPTUNE**
(small/medium collaborative project)
- **Contribution to the development of a Global Soil Observing System (small/medium collaborative project)**

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Developing Capacity Building Activities in the Domain of Earth Observation (developing countries)

- **Georesource information system for Africa (groundwater, raw material, energy, mineral resources) *Coordination and support action (supporting type)***
- **Improving observing systems for water resource management – collaboration with participants from developing countries *(small/medium collaborative project)***
- **GEOnetcast applications for developing countries *Coordination & support action (supporting type)***



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Conclusions

- **WP Earth Observation specific to the GEO initiative**
- **Should be well tuned with the other activities of the Environment priority**
- **Should be coordinated as well with WP Space (GMES) and Information Society**
- **Priorities: Global dimension and cross-cutting activities**
- **Importance of the coordination actions**





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THE END

***If you have any questions at any time
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