

GEO Capacity Building Committee Meeting, Melbourne, 14-17, September, 2009



GEO Capacity Building Initiative in Central Asia (SEOCA)

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Location:	Central Eurasia
Area	447.400 km ²
Population	26,021 mln.
Population density per 1 km ²	62 with maximum of 575



Central Asia is a huge region located in close proximity to the EU, with significant population, rich of natural resources and potentials for development.

Although the countries of Central Asia share common history and problems, each country has unique peculiarities, which shall be taken into account to achieve maximal progress.

For instance, Kazakhstan and Uzbekistan possess stronger technical, as well as RTD and educational, capabilities than other regional countries.

Turkmenistan is now economically progressing due to its natural gas resources and capable of significant investments in capacity building.

Different countries face different environmental problems and, thus, require different types of EO data.

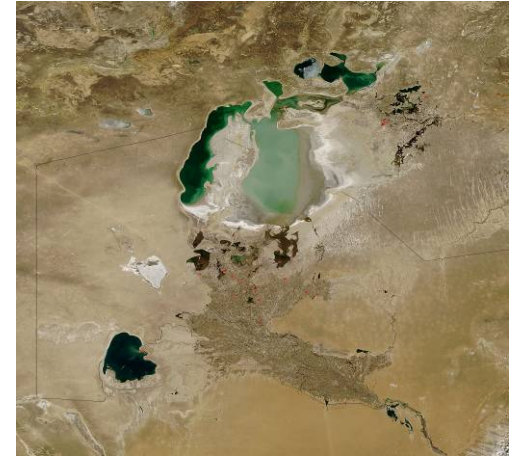




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The region of Central Asia is facing ever growing environmental problems and challenges which require effective and efficient systems of environmental situation monitoring and decision-making.

- Rapid desertification as a result of irresponsible agriculture based on excessive exploitation of limited water resources. A most visible sign -the Aral Lake problem.
- Contamination of air and soil as a result of environmental protection negligence. Examples: the Semipalatinsk nuclear test fields and areas around the Baykonur rocket-launching site.
- Increasing risks of floods and landslides in mountain regions caused by fast melting of glaciers as a result of climate change.
- Considerable worsening of drinking water quality for local population. This question is now considered as a political rather than pure economic issue.
- Constant threat of earthquakes





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Before 1991 all countries of the region used the EO data from integrated monitoring system of the Soviet Union.

The countries of the region have started the development of their own national plans of EO capacities development.

There are efforts aimed at development their own GIS and other information resources of EO, but these efforts are not coordinated, based on different technological and methodological standards

As a result, all these efforts are not harmonized with European and international standards and this makes impossible the access to centralized databases of geo information.



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- There is a strong demand in Central Asia for international cooperation in the framework of GEO. At the same time, if integrated, Central Asia may be a valuable source of information for European users;
- The region has possessed certain elements of the GEO-related capacities (elements of organizational and technological infrastructure, capable human resources, potential users, etc.) which makes the region better prepared for the real integration into GEO than many other clusters of developing countries;
- In order to convert the existing cooperative *potential* into real and mutually beneficial cooperation there is a need for an action which would play a role of a catalyst directing local policies towards GEO-based solutions, bridging existing technological and methodological gaps, raising awareness of the benefits of active participation in GEO, building direct links to European partners.



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The project composition is firmly based on the operational principles of CBC to contribute towards GEO CB Strategy.

Overall objective to further strengthen the cooperation between Europe and the countries of Central Asia within GEO by implementing a coherent set of activities aimed at building GEO-related capacity in the domain of Earth Observation in the target countries.

Duration: 3 years



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Participants

Organization	Acronims	Country
Technical University Berlin, Aerospace Institute	TUBerlin	Germany
Engineering, Consulting and Management Office	ECM Office	Germany
TUBITAK UZAY, Uzay Teknolojileri Arastirma Enstitusu	TUBITAK	Turkey
JeoDijital Bilisim Teknoloji Madencilik Insaat Sanayi ve Ticaret Limited Sirketi	JeoDijital	Turkey
Aratos Technologies S.A.	ARATOS	Greece
GIRAF PM Consultants	GIRAF PM	Germany
Hydrometeorological Research Institute of the Centre of Hydrometeorological Servise on Cabinet of Ministers of the Republic of Uzbekistan	NIGMI	Uzbekistan



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Participants

The State enterprise “Center of remote sensing and GIS technologies”	UZSENSING	Uzbekistan
Tashkent State Technical University	TSTU	Uzbekistan
Joint-stock company “The National Center of Space Researches and Technologies	NCSRT	Kazakhstan
L.N. Gumilyov Eurasian National University	ENU	Kazakhstan
Agency of hydrometeorology on the Ministry for Emergency Situation of the Republic of Kyrgyzstan	KGHYDROMET	Kyrgyzstann
State Agency of hydrometeorology of the Republic of Tadjikistan	TJHYDROMET	Tadjikistan
National Institute of Deserts, Flora and Fauna of the Ministry of Environment Protection of Turkmenistan	NIDFF	Turkmenistan



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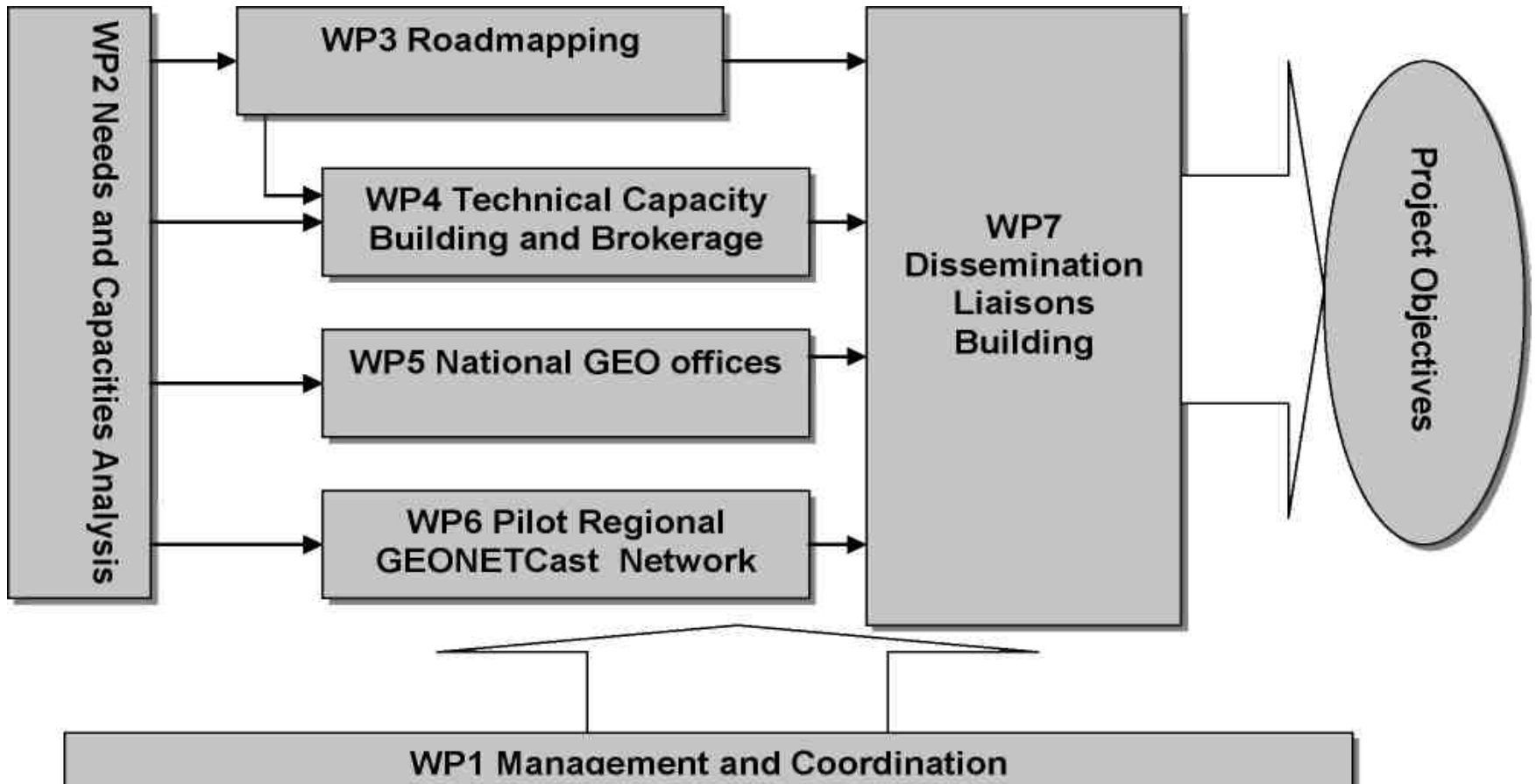
Operational objectives

- To assess the status quo in all Central Asian countries in the view of existing needs, technical and economic capacities, potential stakeholders/providers and their requirements
- **To roadmap** the future national/international activities in the domain EO targeted at capacity building in GEO.
- To implement the Capacity Building and Brokerage Programme in all the target countries to significantly increase the regional capacity to participate in the running and planned GEO activities.
- To create a sustainable regional network of national consulting GEO offices
- To set up a **pilot regional infrastructure** for gathering and spreading the environmental data.
- **To raise awareness** of the benefits the cooperation within GEO can bring to all stakeholders, disseminate the project findings to relevant target groups, build liaisons and find synergies with other relevant initiatives and projects



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Work plan includes 7 work packages





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Impacts

- *“This support action should make a major contribution to the implementation of the Group on Earth Observation (GEO) Seville roadmap to mobilise capacity building resources for realising the GEOSS”*
- *“It should also demonstrate the capability of the GEO to coordinate resource mobilisation mechanisms and to act as a broker serving EO stakeholders and potential resource providers”*
- *“It should also improve the integration of the GEOSS into regional and national planning processes for sustainable development”*
- *“This support action should strengthen the capability of all countries, and in particular developing countries, to play an effective role in the capacity building activities of the GEO”*

Thank you for your attention!