GROUP ON EARTH OBSERVATIONS

Energy CoP: Report of activities

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DLR

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Energy CoP

- http://www.geoss-ecp.org

- Manage the activities of the Energy SBA

- 3 Tasks in the actual and future Work Plan (EN-07-01, EN-07-02, EN-07-03)

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US-06-01 activity

- Participation to the Advisory Group (first phone call meeting Oct 10)
- Requirements for solar and wind energies provided

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Answer to ADC AIP call

- Community objectives (from Annex B) linked with Task EN-07-03:
  - Renewable energy sources (RES) for electricity production
  - The exploitation of these energies requires accurate knowledge of the resources and of their availability (in space and time) as well as accurate forecasts in the different phases of an energy system life cycle.

Scenario objectives

- Support the SBA Energy by developing services providing irradiance data among other parameters

- Simulating the case of the sitting of a solar power plant.

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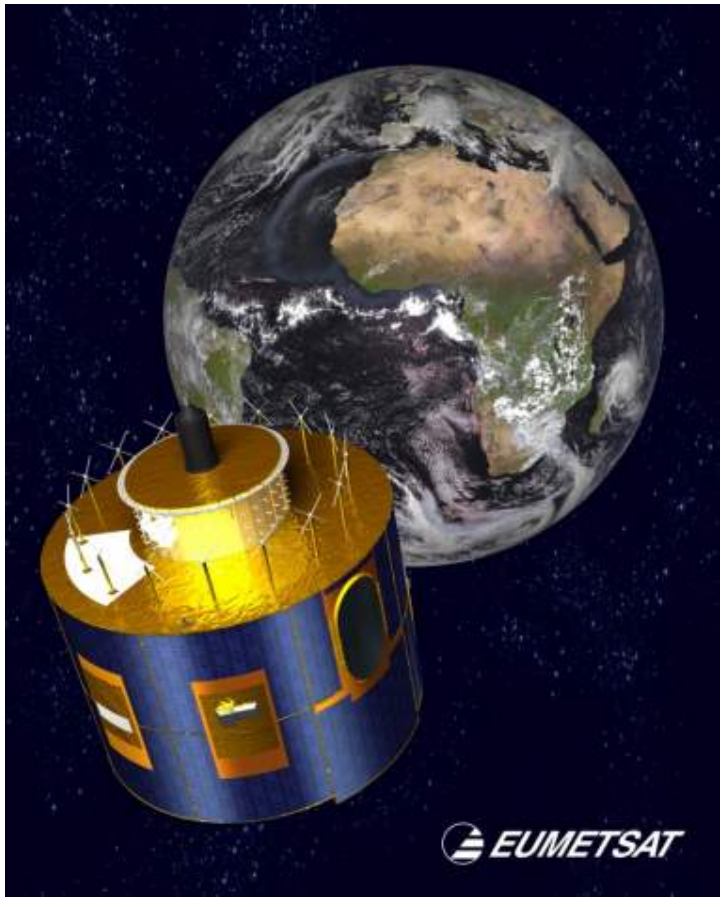

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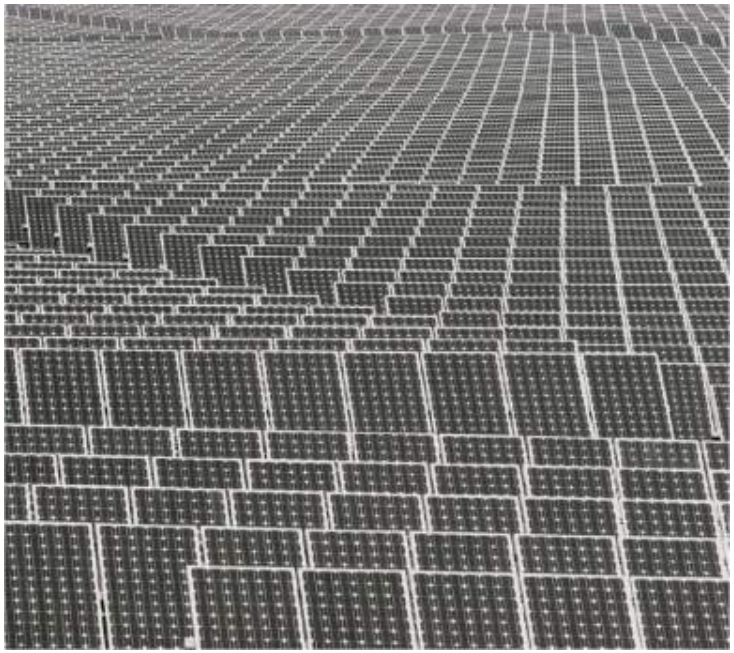

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List of responses

- Data providers:
  - Mines ParisTech (Primary Participant)
  - NOAA NCDC NIDIS (Primary Participant)
  - ACRF, CIESIN, NASA World Wind, NOAA NCDC GOSIC, NOAA SNAAP (Contributing Participants)
- Portal, ClearingHouse and Workflow support:
  - Compusult, ESA, ESRI
- Testing facilities
  - USGS
- Enterprise Modelling:
  - INCOSE

EnerGEO project

Earth Observation for Monitoring and Assessment of the Environmental Impact of Energy Use

Coordinator : Emile ELEWAUT (TNO)

Framework

- Project under negotiation
- European Commission call for proposals
- Framework Programme 7
- Environment, including Climate Change

- Budget > EUR 7 million
- Start date early 2009
- Duration 48 months

- Closely related to EN-07-02 and EN-07-03

Consortium

- Coordinator:
  - Netherlands Organization for Applied Scientific Research - TNO NL

- Partners:
  - Association pour la Recherche et le Dévelopement des Méthodes et Processus Industriels (ARMINES) FR
  - Deutsches Zentrum für Luft- und Raumfahrt (DLR) DE
  - Argoss (SME) NL
  - Research Studios Austria (RSA) AT
  - International Institute for Applied Systems Analysis (IIASA) AT
  - Uniresearch (SME) NL
  - Paris-Lodron-Universität Salzburg (PLUS) AT
  - AGH University of Science and Technology/ Krakow (AGH) PL
  - Pakistan Space and Upper Atmosphere Research Commission (SUPARCO) PA
  - Institut für Energie- und Unwelttechnik (IUTA) DE
  - Stichting Ruimte Onderzoek Nederland (SRON) NL

The setting

- With the need for energy diversification, it is imperative that the environmental impact of the exploration, production, transport and transformation of energy resources be adequately monitored and the trends of these changes in energy use be assessed in time and space, in order to optimise the energy balance in function of the environment.

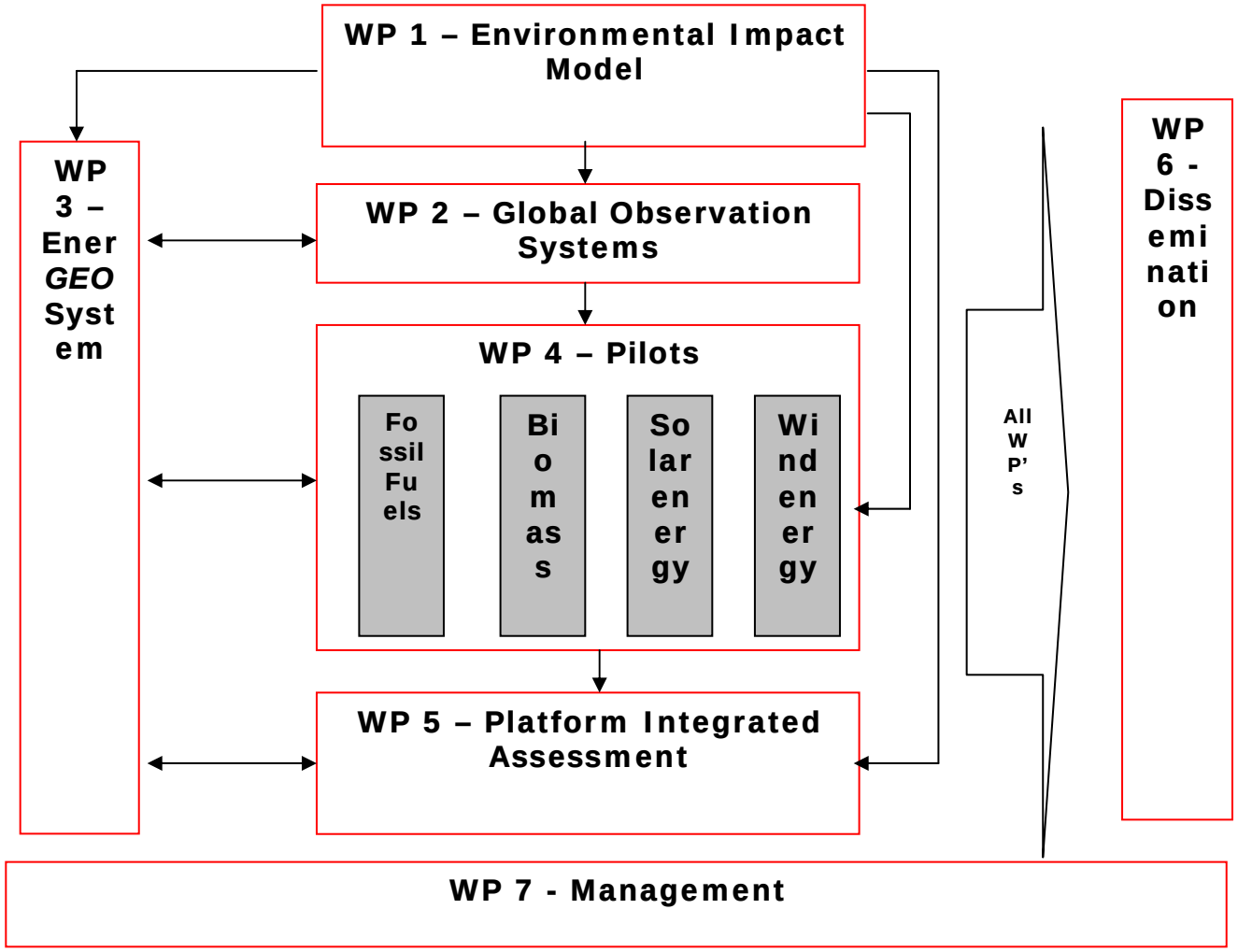
DSS Towards energy diversification

- Information to help assessing current environmental impact of production, transport and use of energy on a global scale
- Information to assess geographically and in time the opportunities to diverse the energy portfolio towards a mix of energy resources to put less pressure on the environment
- Monitoring of the geographical and temporal trends in the impact of production, transport and use of energy to support policies and decisions for energy security and energy diversification

The Goal

- The objective of the project is to develop and demonstrate an integrated strategy for the assessment of the current and future impact on the environment and ecosystems for a variety of energy resources and mixes worldwide and at different scales (geographical and temporal).

Project set-up



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And now…

- Following up of previous activities
- Increase the membership of the Energy CoP in the different working groups
- Improve the user engagements within the CoP
- Link with the Target Task Team (T3)
- Built on the ADC AIP CFP to increase interest of developed and developing countries users
- Energy Strategic Plan implementation