6TH GEO EUROPEAN PROJECTS' WORKSHOP

European Commission | National Research Council of Italy | ISPRA | GEO GROUP ON EARTH OBSERVATIONS

ROME, 7 & 8 MAY 2012

Infrastructure

Splinter Session

Chair: M Craglia
Rapporteur: L Fusco

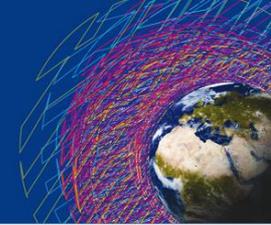*The session was well attended!*
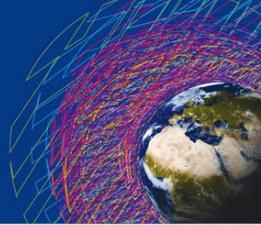
Presentation' Objectives

- *In general, present project's engagement to bring the GEOSS forward*
  - Identify priority contribution from Europe towards the WP 2012-15
  - Discuss European collaboration as needed to implement the relevant WP 2012-15 tasks
  - A shared view of key priorities on which we can demonstrate added value of GEOSS to policy, science, and society
- *In technical terms referring to the future GCI infrastructure:*
  - Clearer view of European R&D Projects' contributions to GEOSS Data CORE
  - Synergy plan to improve re-use of components and project outcomes

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Relevant GEO WP 2012-15 tasks

- *IN-02 Earth Data Sets*
  - **C1 Advances in Life-cycle Data Management**
  - **C2 Development of Regional/Global Information and Cross-cutting Datasets (including socio-economic information)**
- *IN-03 GEOSS Common Infrastructure*
  - **C1 Evolution and Enhancement of the GEOSS Common Infrastructure (GCI)**
  - **C2 Operations and Maintenance of GCI Components**
- *IN-05 GEOSS Design and Interoperability*
- *ID-01 Advancing GEOSS Data Sharing Principles*
- **…**

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Agenda and key outcomes (1)

1. **Lessons from the 2nd GEO Evaluation on Architecture and Data Management, (Paolo Mazzetti, CNR, IT)**
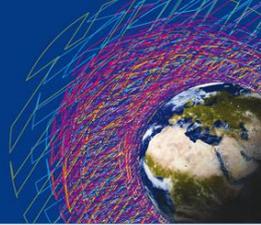
   – **Evaluation** based on web-based survey. Nine dimension analysed, most indicators average, none very high.

   – **key requirements:** multiple way of interacting, from Web 2.0 to GIS analysis, semantic brokering, ranking, IPR and security, quality measures

2. **GEOWOW: Towards an Evolved GEOSS Common Infrastructure" (Roberto Cossu, ESA)**

   – **Engineering approach** to consider various types of communities to access information, products and observations, vision for multiple interactions

   – **Architecture must be flexible and modular**

3. **EUROGEOSS (Stefano Nativi, CNR, IT)**

   – Addresing the semantic and access broekring needs identifeied in the Evaluation (see 1)

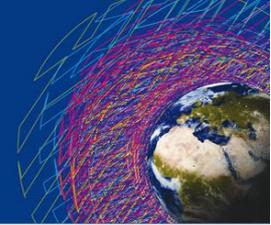   – Connected many communities including WIS, EoE, UNEP live, etc.

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Agenda and key outcomes (2)

4. *GeoViQua. Trustworthy Earth observation data (Joan Maso, CREAF, ES)*
   - **Documenting quality from both producers and users perspectives**
   - New brokering component + work on visualisation of quality and uncertainty
   - Support for GEOLABEL concept but balance needed producer-user needs

5. *Report from the Kick-off meeting of AIP-5 (Athina Trakas, Open Geospatial Consortium, DE)*
   - GEOSS AIP intends to provide a **frame for joint development** of new architecture pilots, test and persistent operations
   - Identified priorities include data CORE and access not just discovery

6. *"Tools, technologies and lessons learnt EC FP7 projects deploying GEOSS infrastructure" (Mike Grant, Plymouth Marine Lab., UK)*
   - Large data provider: challenge in providing good evaluation and use MD
   - Big Data is an issue. Scaleability of WPS and chaining approach for large volumes
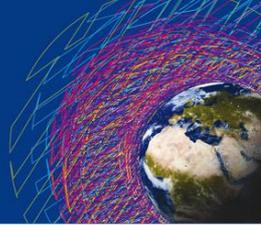
Discussed issues & key words

- Many issues identified in the Evaluation of Data Management being addressed (brokering, semantic, ranking, quality).
- Multiple ways to interact with GCI starting to be addressed. Need better articulation of user scenarios and needs.
- Scaleability of data access and use an issues for BIG data emerging as important.
- Need to quantify effort and resources needed for large data volumes
- Need to work on linking vocabulary across disciplines
- Community-specific or Global data models? Standardization vs harmonisation
- Need to share not just data but also understanding of processes
- Cloud computing may provide solutions for large processing services, but we need more experience on use for scientific purposes.

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Conclusions

- We are making progress and European contribution proving crucial

- Need to Strengthen synergies across projects. Support for some joint activities on selected areas in new calls?

- Big Data and processing needs becoming an issue. Need to involve private sector more to support processing needs?

- Data CORE contributions need strengthening.