March 2011 IGWCO Footprint in the GEO 2012-2015 Work Plan

The new GEO 2012-2015 Work Plan

- **Derives directly from the Strategic Targets**
  - top-down approach
  - focus on “Deliverables”
- **Groups Tasks into three thematic parts**
  - ***Infrastructure:***
    - cross-cutting components of an operational and sustainable GEOSS
  - ***Institutions and Development:***
    - “GEO at work”
  - ***Information Services:***
    - services, end-to-end projects, applications
- **Features a reduced number of Tasks**
  - 24 Tasks, implemented through “Deliverables”
- **Proposes an improved Task management structure**
  - 3 management boards, along thematic parts
  - 11 strategic target management boards

DS-01 Disaster Risk Reduction and Early Warning

Deliverables:

1. Disaster management systems (e.g. deliver space data to those affected by natural or man-made disasters; integrate baseline geographic information, and reference maps with real-time data from satellite or in-situ platforms into online Graphical User Interface and Decision Support System tools; develop collaborative, distribute management systems to collect, store, analyze, visualize and disseminate crucial data and information for vulnerability and risk assessment)
2. Sustainable and integrated geohazards risk assessment (e.g. promote retrieval and systematic access to remote sensing & in-situ data in selected regional areas exposed to geological threats ("Supersites"); improve the global coordination of seismographic networks; support global vulnerability modelling and mapping)
3. **A global flood monitoring and early warning system (e.g. integrate regional flood information in a comprehensive framework (visualization in near real time); couple hydrological and Numerical Weather Prediction models)**
4. **A global drought information system (e.g. integrate regional drought information (indices and impact indicators) in a comprehensive framework (composite index and maps))**
5. A global wildland fire warning system (e.g. develop improved fire-weather and fire-behavior prediction capabilities, analysis tools and response-support through satellite and in-situ sensors, vegetation models and risk-assessment models)
6. A global tsunami early warning system (e.g. develop mechanisms for real-time data sharing including seismic and sea-level (deep ocean and tide-gauge data) broadcasting systems and emergency plans). To be implemented in connection with DS-04 (Ocean Monitoring)

DS-05 Integrated Water-Cycle Information

Deliverables:

1. **Integrated water-cycle information service** – supported by in-situ networks and water-cycle virtual constellation [e.g. develop applications for irrigation, hydro-electric/power plant cooling, and other domestic usages; develop a Freshwater Geospatial Tracker (patterned after the GEO Carbon tracking) or a "One Water" initiative (patterned after the geohazards supersites initiative)]

2. **Global water quality information system** (e.g. integrate regional water quality information in a comprehensive framework (visualization in near-real-time)).

3. **Cryosphere information service** (e.g. build upon ongoing initiative to integrate regional cryosphere information in a comprehensive framework; develop global visualization and analysis tools; consider the permafrost state; sea-ice extent and thickness; continental snow water equivalence; changes in continental ice-shelf and glacier-mass)