



# GEO 2012-2015 Work Plan

**IGWCO Planning Meeting**  
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## 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



## Water SBA

- **DS-01 Disaster Risk Reduction and Early Warning**
- **DS-04 Ocean Monitoring, Forecasting and Resources Management**
- **DS-05 Integrated Water-Cycle Information**



## 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-04 Ocean Monitoring, Forecasting and Resources Management

### Deliverables:

- 1. Operational monitoring of marine and coastal ecosystems** (e.g. improve the global coverage and data accuracy of coastal/open ocean observing systems; promote in-situ measurement of chlorophyll in combination with satellite-derived estimates; make ocean data and observations generated on a routine basis available through the GEO portal). To be implemented with in connection with IN-01 (GCI), and IN-02 (Earth Observing Systems)
- 2. A global operational ocean forecasting network** (e.g. connect operational and quasi-operational ocean forecasting centers throughout the world; extend ensemble forecasting techniques to operational ocean forecasting)
- 3. Applications of Earth observations to fishery and aquaculture management** (e.g. facilitate the application of rapidly-evolving satellite technology to fish harvesting and fish health assessment; build capacity at research-level and operational-level)



## 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)



## Where does the IGWCO fit in?

**Planning, guidance and management of:**

**DS-01 Disaster Risk Reduction and Early Warning**

**Deliverable:**

- 3. A global flood monitoring and early warning system**

**DS-05 Integrated Water-Cycle Information**

**Deliverable:**

- 1. Integrated water-cycle information service**



## Where does the IGWCO fit in?

- **Develop definitions for Deliverables**
- **Derive roadmap for implementation of Deliverables**
- **Identify components of Deliverable**
- **Identify Milestones and timeline for components**
- **Streamline component activities with clear link to Deliverable and deadlines**
- **Appoint Deliverable PoCs and Leads**
- **Enhance collaboration with WMO, GTN-H, WCRP/GEWEX, GCOS**



## Components

### **DS-01 Disaster Risk Reduction and Early Warning Deliverable:**

- 3. Global flood monitoring and early warning system includes:**
  - a. Global Flash Flood Guidance System (GFFGS)**
  - b. European Flood Alert System (EFAS)**
  - c. Flood Forecasting Initiative (FFI)**
  - d. International Flood Alert System (IFAS)**
  - e. ....?**
  - f. ....?**



## Next Steps

- **Technical review of Work Plan through mid-May 2011**
  - **Feedback from IGWCO to Secretariat**
- **Elaborate task sheets for Deliverables**
  - **Global water quality information system as model**
- **Telecons with Secretariat as needed for planning**
- **GEO Work Plan Symposium 4-6 May 2011**

**Thank you!**

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