



Towards a New Phase of GEOSS Implementation :

The GEO 2009-2011 Work Plan

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Work Plan – What is it?

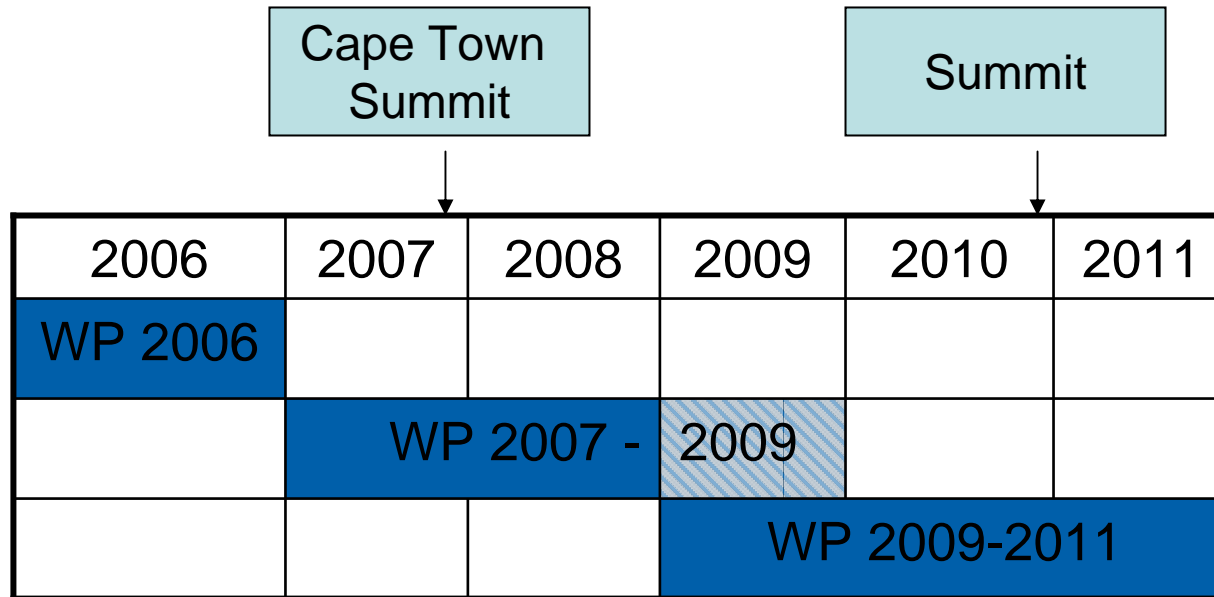
Agreed framework for implementing the GEOSS
10-Year Implementation Plan (2005-2015)

Set of **practical Tasks** carried out by various
GEO Members and Participating Organizations.

Living Document – Annually updated



GEO Work Plan History





Work Plan – How did it come about?

- Followed **recommendations** from GEO-IV **Plenary & Cape Town Ministerial Summit**
- Built upon **2007-2009 Work Plan**
- Included **proposals** & comments made by **GEO community** and Committees
- **Synthesis** proposed by the GEO Secretariat



Recommendations ? *Contents*

- Build upon the **cross-cutting** dimension of GEOSS across:
 - **societal benefit areas** (Disasters, Health, Energy, ...);
 - **transverse areas** (Architecture, Data, User, Capacity Building);
 - **system-type** (observing, data-assimilation, modelling, dissemination, information)
- Enhance **data sharing & distribution**
- Take benefit of **IGOS** Themes transition into GEO
- Realize the potential of the **Communities of Practice**
- Foster the development of **GEOSS information** (products, services) and the **delivery of benefits** to society



Recommendations ? *Structure*

Consolidate 2007-2009 Work Plan Tasks into **overarching strategic Tasks** to:

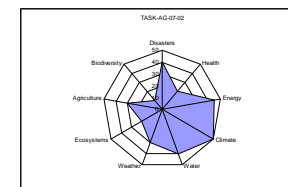
- Improve **coordination** and integration of similar functions
- Foster **linkages** between related Tasks
- Ensure **continuity** of relevant GEO activities



2009-2011 Work Plan V2

- (1) A **Governance** Section (Committees, with committee tasks, Process)
- (2) **Transverse and Societal Benefit Tasks**
- (3) Major **consolidation** of activities
- (4) Stronger « **user-driven** » approach

+ Overview of **Task cross-cutting dimension**
(spider-web diagrams)





(1) Governance

1 THE NEW WORK PLAN

From 2007-09 to 2009-11

2 EVOLVING ROLE OF COMMITTEES

(i) GUIDING THE WORK PLAN

(ii) GCI & DATA SHARING

(iii) ENGAGING THE COMMUNITY

(iv) COORDINATION AND PLANNING

3 TASK MANAGEMENT

HOW? WHO?

LEAD? PoC? CONTRIBUTOR? TASK SHEETS?



EVOLVING ROLE OF COMMITTEES :

COMMITTEES' ROLE IN WP IMPLEMENTATION

This Section responds to...

The **need expressed by Executive Committee** to have
role of Committees revised and updated - and overall
Committee efficiency improved



Key Message

Committees and individual members will need to maintain the momentum of their existing efforts while tackling **new challenges**

While working within their existing terms of reference, Committee will need to take **additional measures** to ensure that GEOSS progresses to the **next level** and that this progress is recognized by **Ministers at the next GEO Summit**



(i) Guiding the Work Plan – Task Allocation

ADC to oversee construction of GEOSS architecture & focus on specific Tasks

CBC to promote capacity of both providers & users to engage in GEOSS; focuses on certain Tasks but also confirms more broadly that all Tasks contribute to CB

STC & UIC to have more cross-cutting mandates ie. review Work Plan to ensure that GEOSS fully reflects user needs and best S&T available.

Together with CBC, **STC & UIC periodically assess** how the Work Plan is progressing from their **unique vantage points, possibly defining a set of priority Tasks.**



(i) Guiding the Work Plan – How?

Committees rely on interactions with Task Leads, reviews of Task Sheets and progress reports issued periodically by the Secretariat.

They then provide **recommendations for corrective actions** when needed. Each Committee also plays an important role in **helping identify Leads and contributors** for all Work Plan Tasks. They provide expertise, ideas, contacts, recommendations and practical support to the Task teams.



(i) Guiding the Work Plan - **ADC**

ADC oversees the Tasks that are dedicated to building a transverse GEOSS (see Chapters 1.1, 1.2 and 1.3).

ADC members are responsible for addressing all issues involving **infrastructure, coordinated observation systems and cross-cutting data sets**. ADC has a particularly important role in guiding the Tasks relating to the GEOSS Common Infrastructure and to Data Sharing Principles.



(i) Guiding the Work Plan - **CBC**

CBC helps define and continuously review the five Tasks dedicated to building capacity for a transverse GEOSS (see chapters 1.1 and 1.4).

CBC members also review capacity-building components in all other Tasks (see CB “box” in Task Sheets) in order to promote synergies, reduce duplication, and address gaps.



(i) Guiding the Work Plan - **STC**

STC ensures that Work Plan Tasks reflect the most up-to-date S&T understanding of Earth systems and Earth observation tools. This responsibility includes developing, reviewing and periodically updating the GEOSS Science and Technology Roadmap.

The Roadmap describes major scientific and technological gaps to be addressed so that GEOSS can achieve its full potential.

STC members interact with the GEO Communities of Practice and other expert fora.



(i) Guiding the Work Plan - UIC

UIC helps ensure that **user needs** are **reflected** in the Work Plan Tasks deliverables

These diverse user groups need to be engaged actively in the design and construction of GEOSS so that it delivers what they truly need.



(ii) GCI and Data Sharing: the Two Cornerstones of the 2009-2011 Work Plan

The 4 Committees need to make essential contribution to advancing two GEOSS cornerstones:

- **The GEOSS Common Infrastructure (GCI)**
- **Implementation of GEOSS Data Sharing Principles**

ADC plays a key role in guiding the construction of these two cornerstones, while other Committees provide additional oversight from their particular perspectives.



(ii) GCI

Including web-based portal, clearinghouse for searching data, information and services, registries of GEOSS components, standards and best practices

Contributions from each Committee made via GCI Initial Operating Capacity (IOC) Task Force:

CBC on proper development of GEOPortal CB component

STC on best scientific knowledge & technol.

UIC on data set, product and tool specifications



(ii) Data Sharing

Development and implementation of **GEO Data Sharing Principles** key priority for all Committees
To build consensus for adoption of the Principles at the GEO-VII Plenary and Ministerial Summit in 2010.



(iii) Engaging the GEO Community

CBC, STC & UIC to contribute to Work Plan implementation by engaging users & producers of Earth observations and reaching out to resource providers and other interested groups.



(iii) Engaging the GEO Community - **CBC**

Resource Mobilization

CBC responsible for implementing Seville Roadmap on Resource Mobilization.

Road map to support the GEO Capacity Building Strategy by positioning GEO as a **coordinated mechanism and broker for mobilizing resources**.

Committee members individually and collectively to identify priorities and resource needs for addressing human, institutional and infrastructural capacity in Earth observation. Then seek to identify and engage donors and other providers of resources.



(iii) Engaging the GEO Community - CBC

A Coordinated and Effective Approach to Capacity Building

More broadly, CBC members to ensure that GEO community maintains a **coordinated and effective approach to CB and resource mobilization**.

Analyze national strategies for CB and proactively seek to ensure that they are coordinated and mutually supportive.

Ultimate aim to ensure that all countries have the capacity to use Earth observation data and products and to contribute observations and systems to GEOSS.



(iii) Engaging the GEO Community - **STC**

Engaging the **Research** Community in GEO

STC members to reach out to S&T communities and make GEOSS more visible and attractive to them.

Organize a GEO presence at major symposia and other meetings, e.g. through plenary presentations or side events.

Contact universities and laboratories to involve them in GEOSS activities, form links with major scientific research enterprises in each SBA, and actively encourage experts to contribute to GEOSS; see “The Role of S&T in GEOSS”



(iii) Engaging the GEO Community - **STC**

Catalyzing R&D **Funding** for GEOSS

Committee members to contact national governments & international organizations and encourage them to **integrate GEOSS S&T needs into national, regional and international R&D programmes.**

Develop proposals and guidelines to assist R&D agencies to respond to GEO needs and dialogue with key decision makers & funding entities.

Identify programmes relevant to GEO's scientific and technological priorities and encourage them to collaborate with one another



(iii) Engaging the GEO Community - UIC

Communities of Practice and Partnership Development

CoPs are a **priority** mechanism for engaging users

Deserve particular attention because they provide Leads and participants for many Task teams, offer strategic insights and fresh ideas, and **promote dialogue between the users & providers** of Earth observations.

UIC members directly interact with CoPs as a way of identifying user needs, in particular for cross-cutting issues.

They obtain and analyze information provided by national, regional and project-level surveys



(iii) Engaging the GEO Community - UIC

Identifying **Synergies** between Societal Benefit Areas

UIC to identify cross-cutting issues and data sets that could strengthen synergies between societal benefit areas.

Develop and maintain processes for identifying critical Earth observation needs common to more than one societal benefit area by interacting with scientific and technical experts



(iv) Coordination and Planning

C4 takes responsibility for ensuring that Co-Chairs of various committees share information and ideas

Committees' work kept in synch by **master schedule** adopted at GEO Plenary meetings.

Under current schedule, each Committee to **meet twice a year** within two general time slots. Exact dates to be chosen in a way that best supports the yearly Work Plan process and feeds into meetings of Executive Committee and GEO Plenary.

Meetings to be **co-located** when possible.



(2) Transverse and Societal Benefit Tasks

1 A TRANSVERSE GEOSS (*GEOSS fundamentals*)

GEOSS COMMON INFRASTRUCTURE
COORDINATED OBSERVATION SYSTEMS
CROSS-CUTTING DATA SETS
CAPACITY BUILDING

2 THE 9 GEOSS SOCIETAL BENEFIT AREAS (*GEOSS for Society*)

DISASTERS
HEALTH
ENERGY
CLIMATE
WATER
WEATHER
ECOSYSTEMS
AGRICULTURE
BIODIVERSITY



(3) Major Consolidation of Tasks

The 2009-2011 Work Plan:

- Introduces strategic **overarching** objectives
- **Links** relevant 2007-2009 activities
- Ensures **continuity**

This leads to **36 overarching Tasks**

(compared with **73 Tasks** in the 2007-2009 Work Plan)



36 overarching Tasks including...

Part I : A TRANSVERSE GEOSS

1.1 GEOSS COMMON INFRASTRUCTURE

AR-09-01: GEOSS Common Infrastructure (GCI)

CB-06-04: GEONETCast

CB-09-01: Infrastructure Development and Technology Transfer

DA-09-01: Data Management

1.2 COORDINATED OBSERVATION SYSTEMS

AR-06-01: Radio Frequency Protection

AR-09-02: Connecting Observation Systems for GEOSS

AR-09-03: Advocating for Sustained Observing Systems

1.3 CROSS-CUTTING DATA SETS

DA-09-02: Data Integration and Analysis

DA-09-03: Global Data Sets

DA-09-04: Socio-Economic Indicators

DA-09-05: Global Carbon Observation & Analysis System

1.4 CAPACITY BUILDING

CB-09-02: Building Individual Capacity in Earth Observations

CB-09-03: Building Institutional Capacity to Use Earth Observations

CB-09-04: Capacity Building Needs/Gap Assessment



Committee level Tasks

- Resource Mobilisation
- A coordinated and effective approach to CB



CB-09-01: Infrastructure Development and Technology Transfer

- Open source Software
- CBERS
- SERVIR Expansion
- African European GEO Resources Observation System (AEGOS)



CB-09-02: Building Individual Capacity in Earth Observations

- Recognition of cross border education and training in EO*
- Summer institute on climate information for Public health*
- UN Spider/GEOSS summer schools*
- Developing the CBERS GEO CB network*
- Earth Observation for Youth – games contest and GLOBE*



CB-09-03: Building Institutional Capacity to Use Earth Observations

- Building National and Regional Capacity
- Establishing regional capacity building networks
- Building capacity for non technical decision makers in the use and impact of EO



CB-09-04: Capacity Building Needs/Gap Assessment

- Identify best practices, gaps and needs
- Capacity building performance indicators
- User orientated workshops for GEOSS Outreach and Feedback



36 overarching Tasks including...

Part II: THE 9 GEOSS SBAs

2.1 DISASTERS

DI-06-09: Use of Satellites for Risk Management

DI-09-01: Systematic Monitoring to Support Geohazards Risk

DI-09-02: Implementation of Multi-Risk Management Approach

DI-09-03: Warning Systems for Disasters

2.2 HEALTH

HE-09-01: Information Systems for Health

HE-09-02: Monitoring and Prediction Systems for Health

HE-09-03: End to End Projects for Health

2.3 ENERGY

EN-07-01: Management of Energy Sources

EN-07-02: Energy Environmental Impact Monitoring

EN-07-03: Energy Policy Planning

2.4 CLIMATE

CL-06-01: Sustained Reprocessing and Reanalysis of Climate Data

CL-09-01: Information for Decision-making & Risk Management



36 overarching Tasks including...

2.5 WATER

WA-06-02: Droughts, Floods and Water Resource Management

WA-06-07: Capacity Building for Water Resource Management

WA-08-01: Integrated Products for Water Research

2.6 WEATHER

WE-06-03: TIGGE & Global Interactive Forecast System

WE-09-01: Capacity Building for High-Impact Weather Prediction

2.7 ECOSYSTEMS

EC-09-01: Ecosystem Observation and Monitoring Network (EcoNet)

EC-09-02: Human Dimension of Ecosystem Utilization

2.8 AGRICULTURE

AG-06-02: Data Utilization in Fisheries and Aquaculture

AG-07-03: Global Agricultural Monitoring Risk Management

2.9 BIODIVERSITY

BI-07-01: Biodiversity Observation Network (GEOBON)



(4) User-Driven Approach

Work Plan takes **full account** of **IGOS transition** into GEO:

- Atmospheric Chemistry, Carbon, Geohazards, Coastal, Cryosphere, Land, Ocean and Water
- Themes evolved into **Communities of Practice** (see p.43)

Transition marks start of a reinvigorated effort to ensure that:

- **Users are engaged** with GEO
- Strongly involved in implementation



Overview of Task X-cutting Dimension

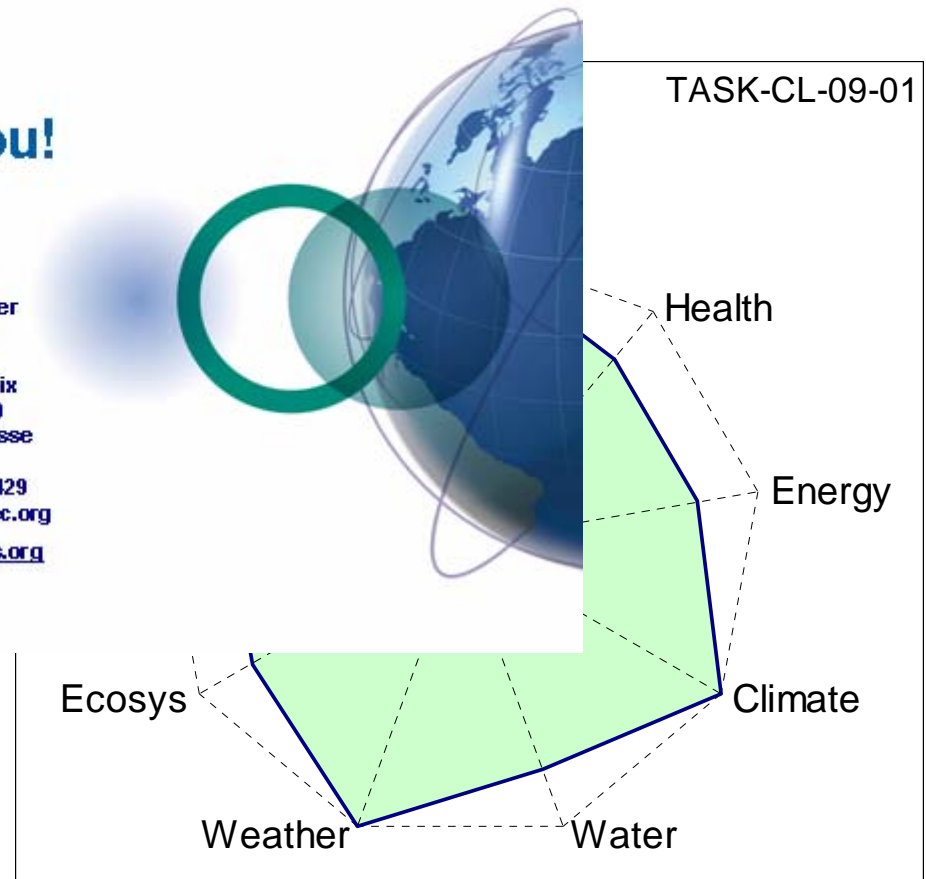
CL-09-01:
Environmental
Information for
Decision-making
Risk Management
and Adaptation

Thank you!

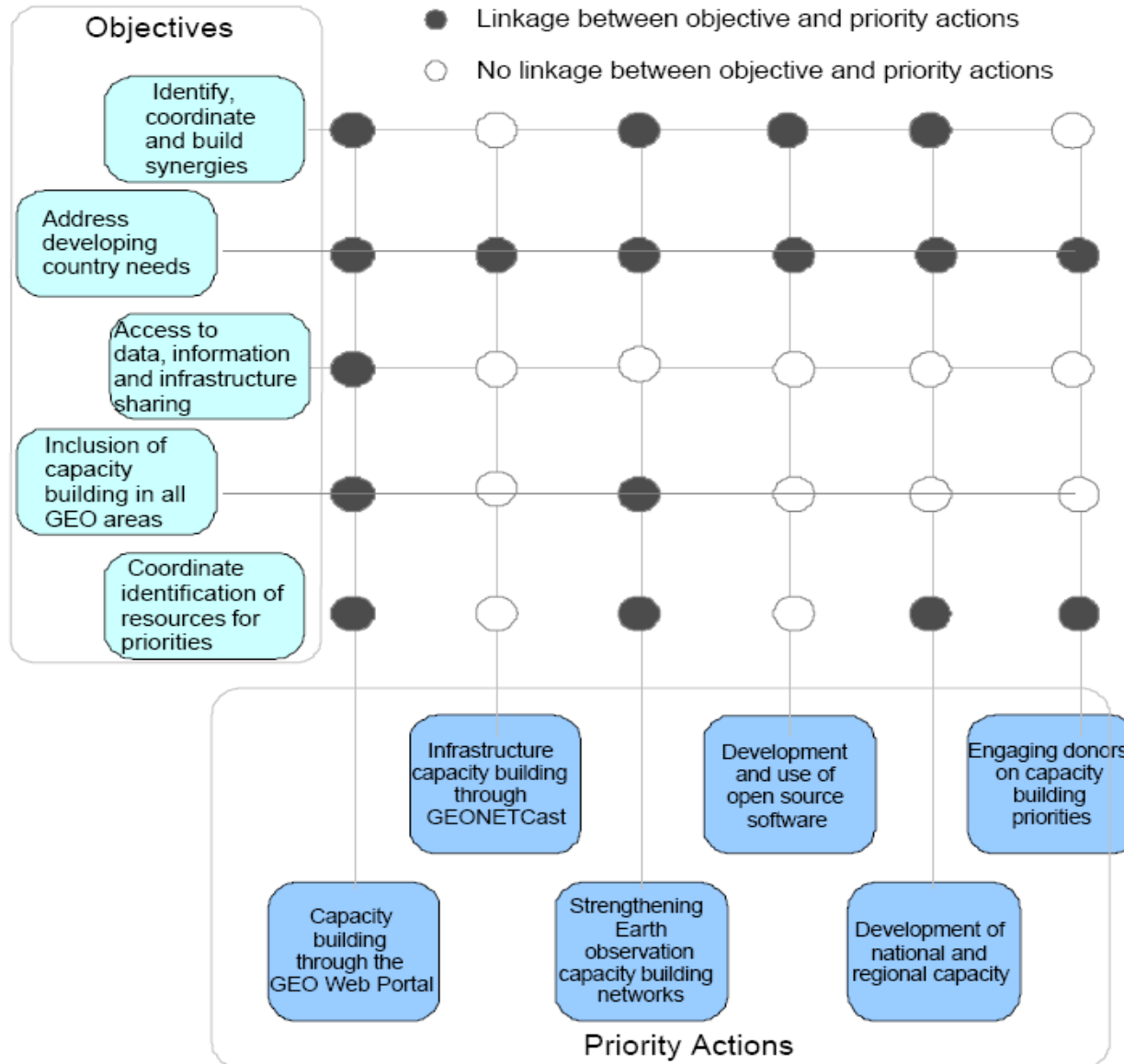
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Capacity Building Strategy



Overarching themes

- **Resource mobilization**
 - *Existing task linkage:* CB0701a
- **Promoting education, training and certification**
 - *Existing task linkage:* CB0801; AG0607; WE0605
 - *Possible new tasks:* GMOSS summer schools; GEONETCast training channel
- **Strengthening and building networks**
 - *Existing task linkage:* EC0607; CB0701d; CB0702(will this end in 08 ?)
 - *Possible new sub task:* Implementing CBERS GEO CB Network; GEOBON; ForrestMonitor
- **Advancing Earth observation through infrastructure development**
 - *Existing task linkage:* CB0701e; WA0607; CB0604
 - *Possible new sub task:* CBERS, SERVIR Africa,
- **Outreach and institutional reinforcement**
 - *Existing task linkage:* CB0701b; CB0701c;
 - *Possible new sub task:* CB Portal; Games Contest