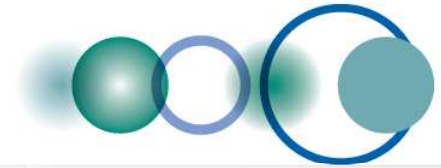


# Introduction to GEO

**Douglas Cripe, GEO Secretariat**  
**3rd African Water Cycle Coordination Initiative Workshop**  
**4-5 February 2013**  
**El Jadida, Morocco**



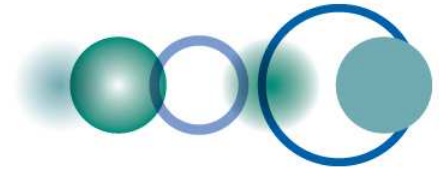


# Space-based Assets

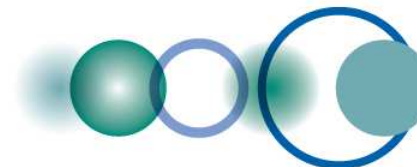




# In-situ Systems





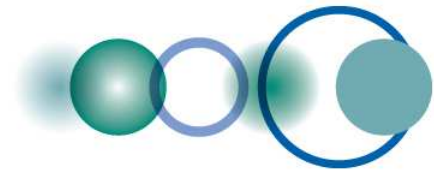


# **GEO: the Group on Earth Observations**

**An Intergovernmental group with 89 Members and  
67 Participating Organizations**

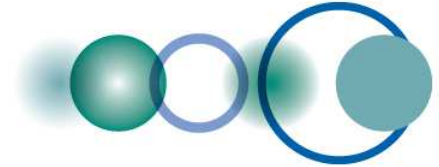


U.S. Department of State, Washington DC  
July 31, 2003



## What is GEO?

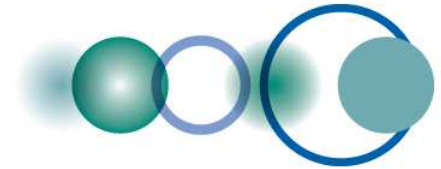
- launched in **response to calls for action** by the 2002 World Summit on Sustainable Development, Earth Observation Summits, and by the G8 (Group of Eight) leading industrialized countries
- **voluntary partnership** of governments and international organizations
  - 88 member governments + EC
  - 67 Participating Organizations (PO)
- provides a **framework** within which these partners can develop new projects and coordinate their strategies and investments
- charged with **developing GEOSS**



## What is GEOS?

- **Global Earth Observation System of Systems**
- an **integrating public infrastructure**, interconnecting a diverse, growing array of Earth observing instruments and information systems for monitoring and forecasting changes in the global environment
- supports policymakers, resource managers, science researchers and other experts to **support informed decision making for society**
- **10-year implementation plan**
- **2015: Global, Coordinated, Comprehensive and Sustained System of Observing Systems**

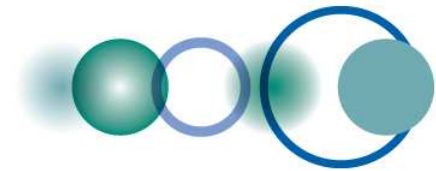




# GEOSS: A Global, Coordinated, Comprehensive and Sustained System of Observing Systems

THE GLOBAL EARTH OBSERVATION  
SYSTEM OF SYSTEMS

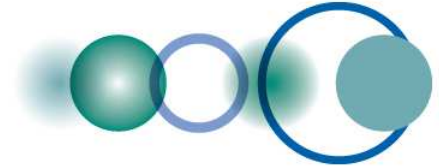




## ***GEOS* Targeted Gaps**

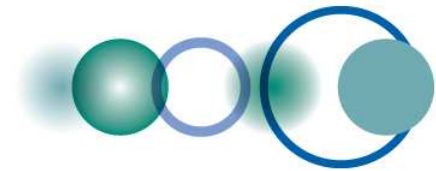
- 1. Lack of access to data and associated benefits in developing world**
- 2. Eroding technical infrastructure**
- 3. Large spatial and temporal gaps in specific data sets**
- 4. Inadequate data integration and interoperability**
- 5. Uncertainty over continuity of observations**
- 6. Inadequate user involvement**
- 7. Lack of relevant processing systems to transform data into useful information**





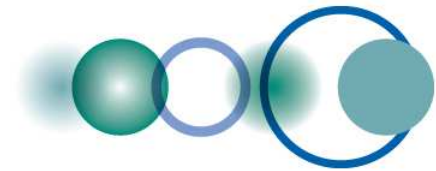
# Governance

- GEO comprised of **Members governments and Participating Organizations**
- Membership in GEO is contingent upon formal endorsement of the **GEOSS 10-Year Implementation Plan**
- The **GEO Plenary** is the main body of designated representatives of the Members and Participating Organizations, and is GEO's primary decision-making body
- All members belong to a regional caucus (5), which nominates members of the **Executive Committee**
- The Executive Committee oversees GEO's activities when the Plenary is not in session
  - consists of 13 representatives elected from the 5 GEO caucuses, including three each from the Americas, Asia and Europe, two from Africa, and one from the Commonwealth of Independent States
  - guides/oversees Secretariat

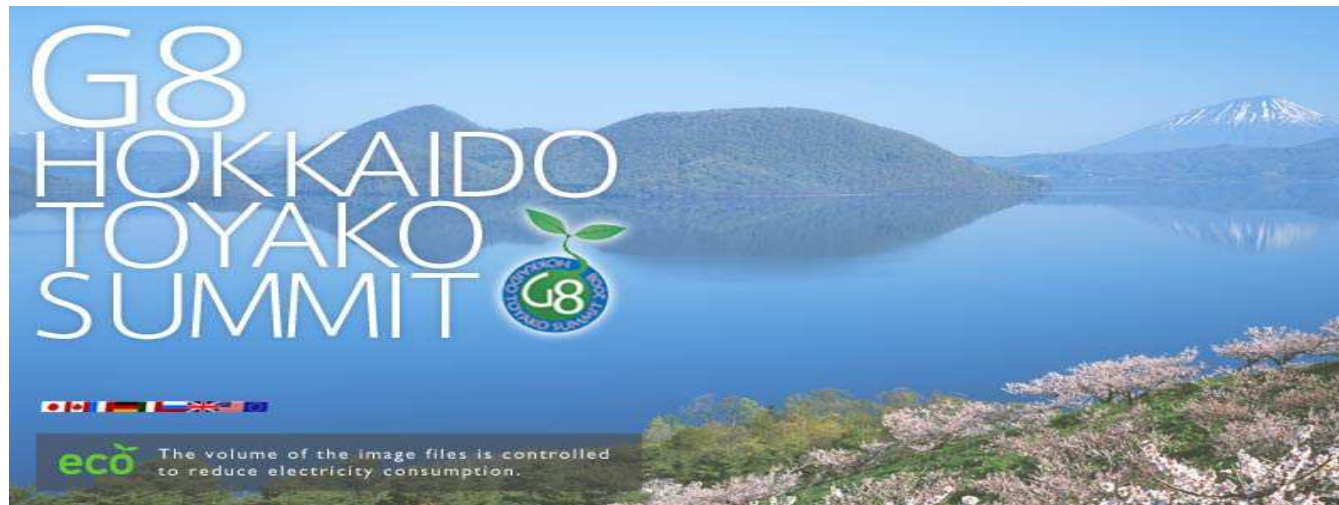


# GEOSS Provides Coordinated Access to Information from Various Sources



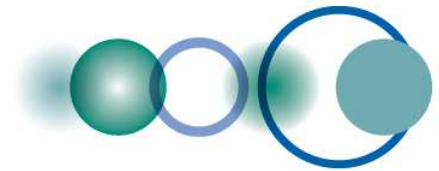


## G8-2008



**“...we will accelerate efforts within the Global Earth Observation System of Systems (GEOSS), ... in priority areas, inter alia, climate change and water resources management, by strengthening observation, prediction and data sharing. ... capacity building for developing countries ... interoperability and linkage ...”**



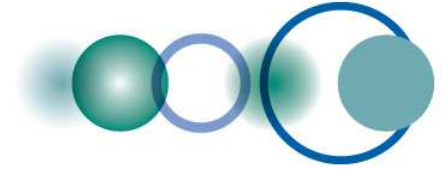


## G8-2009

“To address the increased threats of natural disasters and extreme weather phenomena caused by climate change, such as increased flooding, storm surges, droughts and forest fires, we will act to improve risk preparedness, prevention, monitoring and response times, particularly in developing countries, by...



**... supporting the ongoing work on the development of the Global Earth Observation System of Systems (GEOSS).”**



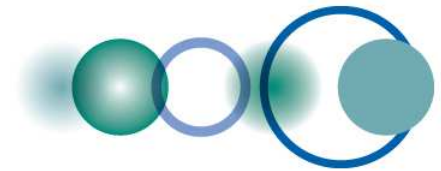
# Rationale for Continuing GEO

## 1: Addressing urgent global challenges

***Humanity currently faces enormous and complex challenges that will only continue to grow over the next few decades***







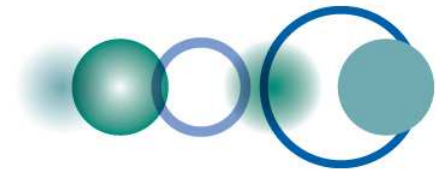
# Rationale for Continuing GEO

## 2: Support for Sustainable Development

***"Rio+20" Outcome Document recognized a specific role to be played by GEOSS in sustainable development***





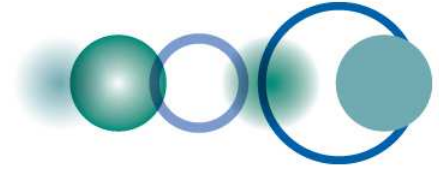


# Rationale for Continuing GEO

## 3: Building on Accomplishments of GEO

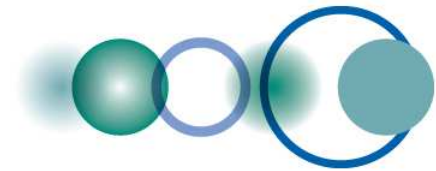
*The flow of data from the various countries and international organizations involved in GEOSS implementation should not stop*





## ***GEO post-2015: Strategic Direction***

- GEO will function as a **catalyst** for Earth observations...
- GEO will commit appropriate resources to implement and sustain a more **robust and expanded GEOSS information system**...
- GEO will **cultivate specific applications and services** based on Earth observations, to be adopted, supported, and managed by specific governments and organizations



## Added-value of GEO

- **Access to EO data/information/services/products**
- **Data sharing and interoperability**
- **Networking and coordination**
  - **Regional/national coordination GEO**
- **Governance structure**
  - **Voluntary, best efforts**
- **Political dimension**
  - *for informed decision-making*
  - *to address urgent global challenges*
  - *to support sustainable development*



**Thank you!**

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***[dcripe@geosec.org](mailto:dcripe@geosec.org)***

