

BLUE PLANET

Oceans and Society

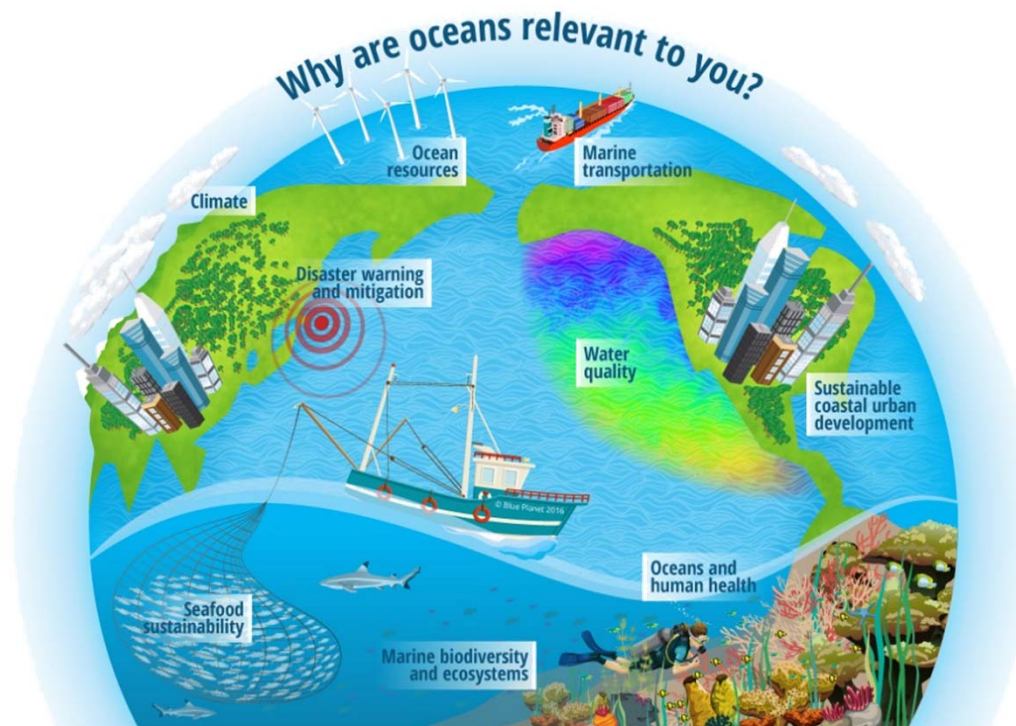
a GEO Initiative

Introduction to GEO Blue Planet

Sophie Seeyave (POGO), Paul DiGiacomo (NOAA), Andy Steven (CSIRO)

Steering Committee Co-Chairs

Emily Smail –Blue Planet Scientific Coordinator



Group on Earth Observations (GEO)

- GEO is a voluntary partnership of governments and organizations that is working to link Earth observation resources world-wide for the benefit of society



- GEO currently has 100+ member countries and 100+ participating organizations

Global Earth Observation Systems of Systems

- The GEO community seeks to build a Global Earth Observation System of Systems (GEOSS).



Global Earth Observation Systems of Systems

- GEOSS seeks to link Earth observation resources across societal benefit areas



GEO Implementation and Strategic Objectives

Engage – Advocate – Deliver



GEO Priorities

- The GEO Programme Board has identified three priority focus areas for GEO:

- The United Nations Sustainable Development Goals



- The Sendai Framework for Disaster Risk Reduction



- The Paris Agreement

Need for Blue Planet

- Blue Planet was created to:
 - raise the visibility of oceans within GEO and to demonstrate the impact of oceans and ocean observations on all GEO SBAs
 - increase linkages and collaborations across the various ocean observing groups and organizations
 - increase engagement with end-users and support improved decision making

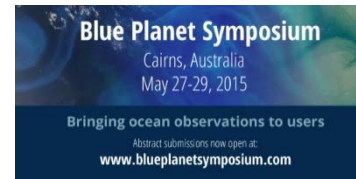
Blue Planet Initiative – History

Blue Planet submitted as a Task proposal to GEO for 2012-2015 Work Plan

Kick-Off Symposium in Brazil



2nd Symposium in Australia



Secretariat established

2011

2012

2013

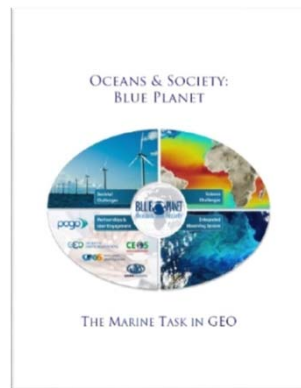
2014

2015

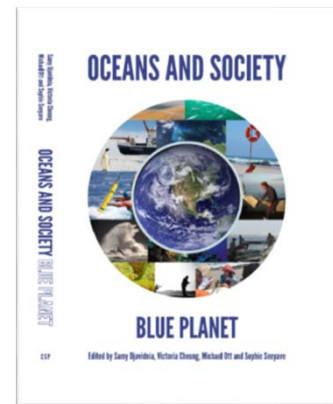
2016

Blue Planet Task SB-01 accepted by GEO Plenary and incorporated into 2012-2015 Work Plan

White Paper



Book published



GEO Ministerial in Mexico

Blue Planet accepted as a GEO Initiative

 **GROUP ON EARTH OBSERVATIONS**

BLUE PLANET
Oceans and Society
a GEO Initiative

Mission

Mission

- advance and exploit synergies among ocean and coastal observational programmes
- increased integration of and access to in situ and remote sensing ocean observation data
- improve engagement with a variety of users for enhancing the timeliness, quality and range of services
- raise awareness of the societal benefits of ocean observations at the public and policy levels

Goal

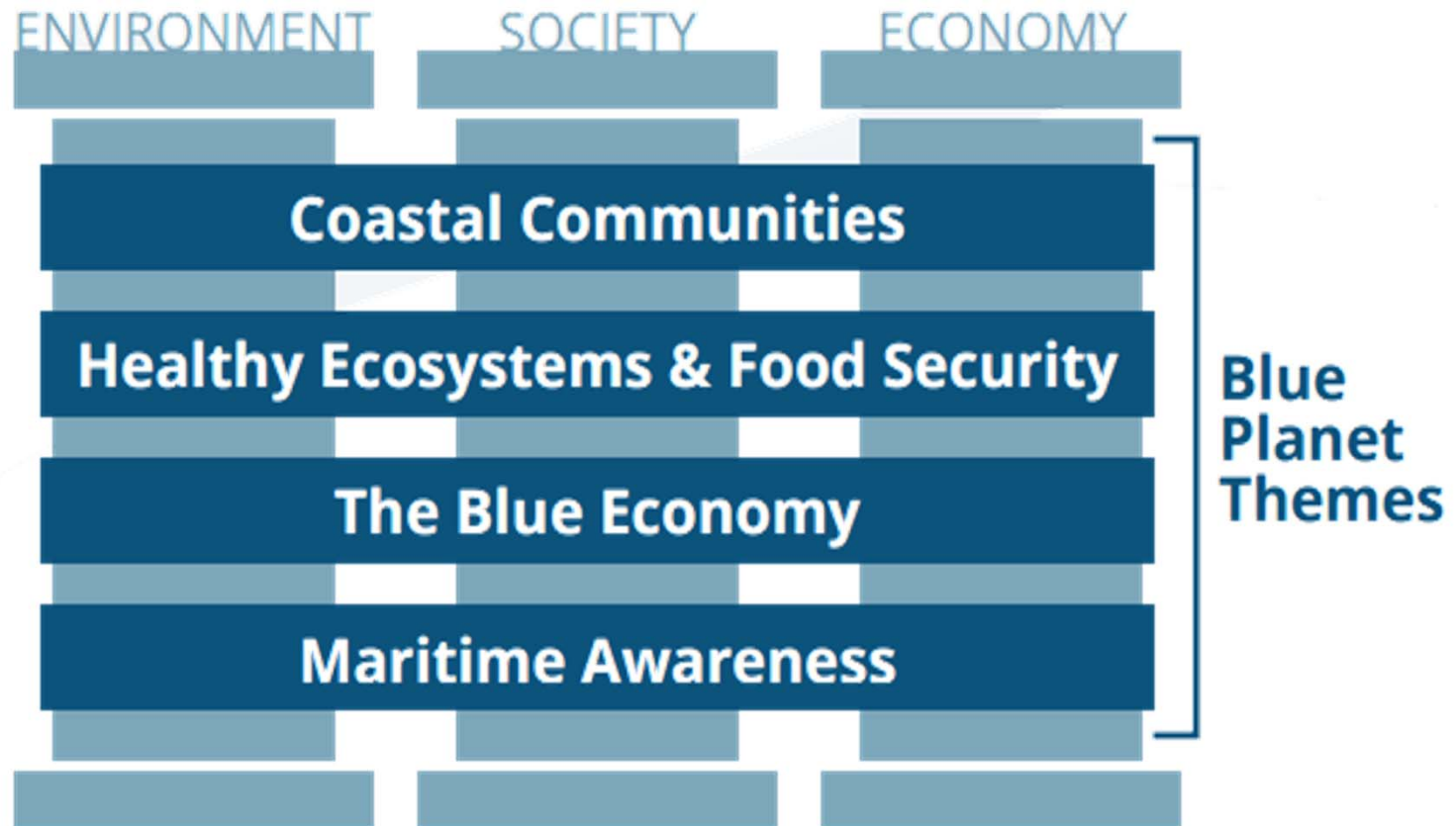
The overall goal of Blue Planet Initiative is to ensure the sustained development and use of ocean and coastal observations for the benefit of society



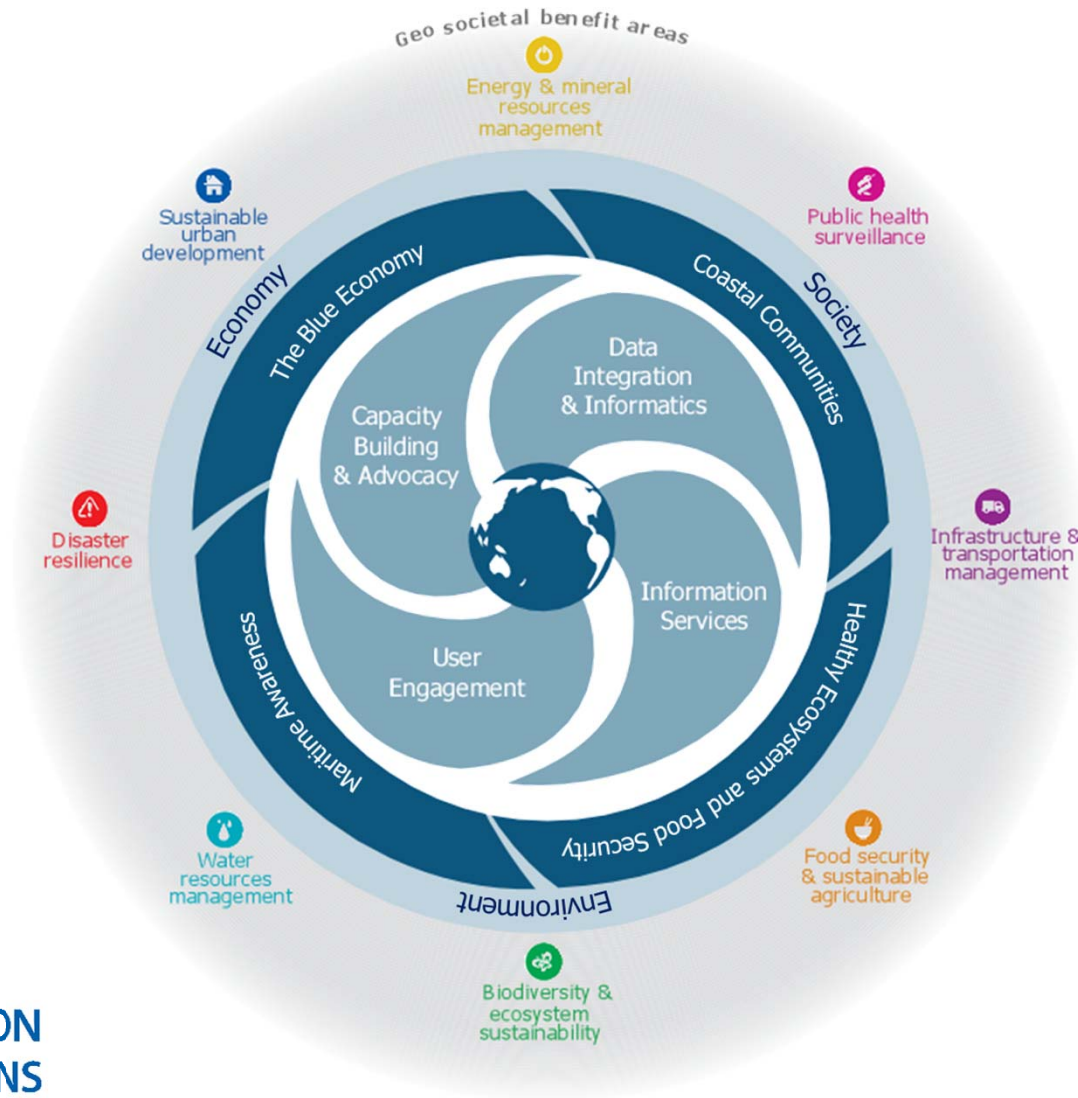
Objectives

- **Objective 1**: Increase integration of and access to in situ and remote sensing ocean observation data
- **Objective 2**: Conceptualize, promote and facilitate the development of end-to-end ocean information services
- **Objective 3**: Improve connections between producers and providers of ocean observation data, products and information and end users
- **Objective 4**: Increase societal support and build capacity for ocean observations

Themes



Conceptual Diagram



Added Value of Blue Planet

Deliver

- Building on and adding to GEOSS infrastructure
- Promoting and facilitating the development of ocean information services through
- technology transfer, upscaling of existing products and conceptualizing new services

Added Value of Blue Planet

Engage

- Improving the mutually beneficial relationship between the ocean observing community and users of observation-derived products, information and knowledge
- Improving the bidirectional feedback mechanisms between the ocean observation community, decision- and policy-makers and society at large
- Facilitating more effective and frequent use of ocean observation data in monitoring and implementation of critical international frameworks and policy

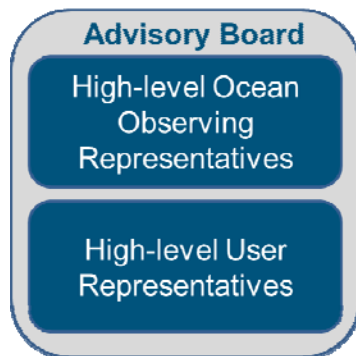
Added Value of Blue Planet

Advocate

- Providing additional exposure and visibility to existing ocean observing programmes
- Promoting communication with decision makers and the general public on the societal benefits of ocean observations
- Championing for enhanced access to and integration of ocean observation data

Governance

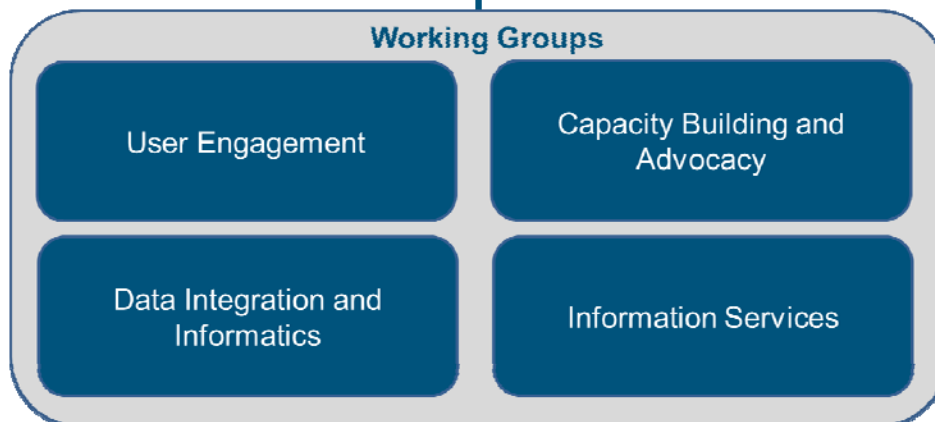
HIGH LEVEL ADVOCACY,
STRATEGIC DIRECTION AND
RESOURCING



DAILY OPERATIONS AND
LOGISTICAL SUPPORT



PROJECT SELECTION AND
COORDINATION



PROJECT IMPLEMENTATION

Advisory Board

- Advisory Board Duties are:
 - To provide strategic direction for GEO Blue Planet
 - To advocate for GEO Blue Planet and identifying potential funding mechanisms
- Terms are 2 years, renewable once
- Advisory Board will meet quarterly via telecon

GEO BLUE PLANET ADVISORY BOARD



Advisory Board Members

- **Jesse Ausubel**, Director, Program for the Human Environment, Rockefeller University, USA.
- **H.E. Denis Antoine**, Ambassador of Grenada to the People's Republic of China, China.
- **Patricio Bernal**, Program Research Director, Coastal & Marine, CSIRO Chile, Chile.
- **Monica Grasso**, Chief Economist, National Oceanic and Atmospheric Administration, USA.
- **Margaret Leinen**, Director of Scripps Institution of Oceanography; Trustee, Partnership for Observation of the Global Oceans, USA.
- **James Alix Michel**, Executive Chairman, James Michel Foundation; Former President of the Seychelles, Seychelles.
- **Takehiro Nakamura**, Chief of the Marine and Coastal Ecosystems Unit, United Nations Environment Programme, Kenya.
- **Vladimir Ryabinin**, Executive Secretary of the Intergovernmental Oceanographic Commission; Assistant Director General of the United Nations Educational, Scientific and Cultural Organization, France.
- **Steve Volz**, Acting Assistant Secretary for Environmental Observation & Prediction and Assistant Administrator for Satellite and Information Services, National Oceanic and Atmospheric Administration; Co-Chair of the Committee on Earth Observation Satellites Strategic Implementation Team, USA.
- **Gilles Ollier**, Head of Sector, Earth Observations, DG Research and Innovation, European Commission.

Steering Committee

- Steering Committee duties are:
 - To promote the aims and objectives of Blue Planet and expand its profile and prominence;
 - To review and endorse the Implementation Plan and Annual Work Plans of Blue Planet;
 - To monitor and evaluate institutional effectiveness of Blue Planet against aims and objectives outlined in the Implementation and Annual Work Plans;
 - To represent stakeholder and shareholder interests;
 - To provide guidance and support to Blue Planet Components and monitor their progress;
 - To coordinate the production of deliverables for reporting to the GEO Secretariat;
 - To work with the Blue Planet Secretariat and the GEO Secretariat to identify new stakeholders and shareholders that would contribute to and benefit from Blue Planet.
 - To identify opportunities for collaboration between stakeholders/shareholders.
 - To facilitate and coordinate relevant activities and mobilise resources when opportunities arise, in concert with the Advisory Group.

Steering Committee

- Terms are 3 years, with potential for two one-year extensions
- Steering Committee will meet monthly via telecon and in person once yearly

GEO BLUE PLANET STEERING COMMITTEE



Steering Committee Members

Co-Chairs

- **Paul DiGiacomo**, Chief, Satellite Oceanography and Climatology Division (SOCD) in the National Oceanic and Atmospheric Administration (NOAA) National Environmental Satellite, Data, and Information Service (NESDIS) Center for Satellite Applications and Research (STAR); NOAA CoastWatch/OceanWatch Program Manager; NOAA/NESDIS MOBY Project Manager, USA.
- **Sophie Seeyave**, Executive Director, Partnership for Observation of the Global Oceans, UK.
- **Andy Steven**, Research Director – Coasts, Commonwealth Scientific and Industrial Research Organisation Oceans and Atmosphere Unit, Australia.

Existing Members

- **Louis Celliers**, Principal Researcher, Council for Scientific and Industrial Research, South Africa.
- **Francisco Chavez**, Senior Scientist and Biological Oceanographer, Monterey Bay Aquarium Research Institute, USA.
- **Douglas Cripe**, Scientific Officer, Group on Earth Observations Secretariat, Switzerland.

Steering Committee Members

Existing Members Continued

- **Samy Djavidnia**, Senior Project Officer, Integrated Services Design, European Maritime Safety Agency, Portugal.
- **Rene Garello**, President, IEEE Oceanic Engineering Society; Professor, Télécom Bretagne, France.
- **Takeshi Kawano**, Assistant Executive Director, Japan Agency for Marine-earth Science and Technology (JAMSTEC); Director, JAMSTEC Institute of Arctic Climate and Environment Research; Director, JAMSTEC Development Center for Global Change, Japan.
- **Eric Lindstrom**, Physical Oceanography Program Scientist, Science Mission Directorate, National Aeronautics and Space Administration (NASA), USA.
- **Trevor Platt**, Professional Fellow, Plymouth Marine Laboratory, UK.
- **Hans-Peter Plag**, Professor, Ocean, Earth and Atmospheric Sciences, Director, Mitigation and Adaptation Research Institute (MARI), Old Dominion University, USA.
- **Ralph Rayner**, Chairman, Sonardyne International Limited; Professorial Research Fellow at the London School of Economics in the Centre for Analysis of Time Series, UK.
- **Shubha Sathyendranath**, Merit Scientist, Plymouth Marine Laboratory, UK.

Steering Committee Members

New Members

- **Zaidy Afrin**, United Nations Nippon Fellow, Japan Fellowship programme on Human Resources Development and Advancement of the Legal Order of the World's Ocean, Grenada.
- **Lenore Bajona**, Director of Data Management, Ocean Tracking Network, Canada.
- **Laura David**, Professor, Marine Science Institute, University of the Philippines Diliman, Philippines.
- **Elva Escobar-Briones**, Director of the Marine Sciences and Limnology Institute of the Universidad Nacional Autonoma de Mexico, Mexico.
- **Jeremy Gault**, Coordinator of Coastal and Marine Management, MaREI Centre; Operations Manager, Beaufort; Coordinator, Future Earth Coasts International Project Office, Ireland.
- **Juliet Hermes**, Manager, South African Environmental Observation Network's Egagasini Node for Marine Offshore Systems.
- **Pierre-Yves Le Traon**, Scientific Director, Mercator Ocean; Research Director, Ifremer, France.
- **Vivian Lutz**, Independent Researcher, National Council of Scientific and Technological Research, Argentina.
- **Glenn Nolan**, Secretary General, EuroGOOS, Belgium.

Steering Committee Members

New Members

- **Linwood Pendleton**, Senior scholar in the Ocean and Coastal Policy Program, Duke University; International Chair of Excellence, European Institute of Marine Studies, France.
- **Christine Pequignet**, Senior Scientist, Met Office, UK.
- **Nadia Pinardi**, Associate Professor of Physical Oceanography, University of Bologna, Department of Environmental Sciences; Associate researcher at Istituto Nazionale di Geofisica e Vulcanologia, Italy.
- **Stephen Adrian Ross**, Executive Director and Chief Technical Officer, Partnerships in Environmental Management for the Seas of East Asia, Philippines.
- **Carlos García Soto**, Director of International Relations and Senior Researcher, Spanish Institute of Oceanography, Spain.
- **Colin Tukuitonga**, Director General, Secretariat of the Pacific Community, New Caledonia.
- **Li Zhang**, Professor, Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences; Vice Director, Hainan Key Laboratory of Earth Observations, China.

Working Groups

- The working groups will be tasked with:
 - Identifying and sharing best practices
 - Contributing ocean and coastal observations to GEOSS
 - Supporting related GEO activities
 - Supporting GEO Blue Planet prototype and pilot projects
- Working groups can form topical task teams based on interests and identified needs

Related GEO Activities

MBON



Asia-Oceania GEOSS



Projects

- GEO Blue Planet will solicit and review proposals for pilot and prototype projects and services on an ongoing basis
- The Steering Committee will review proposals and make selections based on applicability to GEO Blue Planet themes and user needs

Example Project - 4M

- 4M – Multipurpose Marine Monitoring Mechanism
- Project concept (for implementation in Barbados and Grenada) currently being developed by UNDP Barbados and the OECS, IOCARIBE-GOOS and GEO Blue Planet
- 4M will work to support Caribbean SIDS by:
 - Providing technology for effective monitoring of the marine environment
 - Increasing capacity for marine data collection and analysis
 - Improving access to real-time data in the region
 - Increasing data sharing in the region
 - Establishing a data platform for Caribbean SIDS

4M

**Multipurpose
Marine
Monitoring
Mechanism**



Example Project - Caribbean SDG Workshop

- GEO Blue Planet is working on a proposal to fund a workshop in the Caribbean titled: “Implementing and Monitoring the Sustainable Development Goals in the Caribbean: The Role of the Ocean”
- The workshop will be held this August in preparation for the GEO Plenary in Washington, D.C. October 25-26

The GEO Blue Planet Symposium



- The symposium will be an opportunity for GEO Blue Planet to identify and develop pilot and prototype projects and services and build working groups

Thank you

Questions?