

GEO & Disaster Risk Reduction

James Norris GEO Secretariat

CEOS WGDisasters, 11th Meeting 5th March 2019 Athens, Greece

GEO update to WGDisasters #11

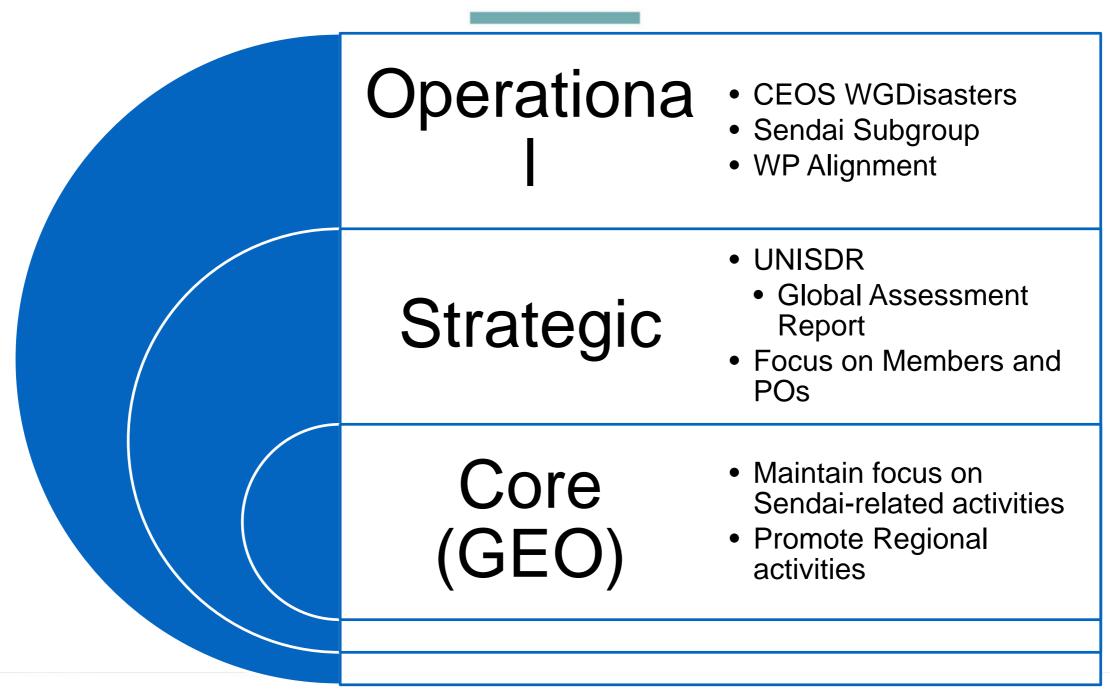
Topics covered:

- Overview of GEO's DRR activities
- GEO Work Programme
- Programme Board Sendai Subgroup



GEO DRR activities

Strategic/operational activities





Disaster Risk Reduction

A GEO Priority Engagement Area

GEO supports Disaster Risk Reduction by improving coordination of Earth observations to increase ability to disaster forecasting, preparation, mitigation, management and recovery.





Disaster Risk Reduction in the GEO Work Programme

GEO Engagement
Priorities

SDGs

Climate Change

Disaster Resilience



Earth observations contribute to disaster mapping, better mitigation and response, working with the Sendai Framework on Disaster Risk Reduction

Initiatives

- •Climate Change Impact Observation on Africa's Coastal Zones (GEO-CCIOoACZ)
- Data Access for Risk Management (GEO-DARMA)
- GEO Cold Regions Initiative (GEOCRI)
- GEO Geohazards Supersites and Natural Laboratories (GSNL)
- GEO Global Network for Observation and Information in Mountain Environments (GEO-GNOME)
- GEO Global Water Sustainability (GEOGLOWS)
- GEO Human Planet Initiative: Spatial Modeling of Impact, Exposure and Access to Resources
- •Global Urban Observation and Information
- Global Wildfire Information System (GWIS)

Community Activities

- African Geochemical Baselines
- Chinese Tsunami Mitigation System
- Earth Observations for Disaster Risk Management
- Earth Observations for Geohazards, Land Degradation and Environmental Monitoring
- Global Ecosystem and Environmental Observation Analysis Report Cooperation (GEOARC)
- Global Flood Awareness System (GloFAS)
- Global Flood Risk Monitoring
- •Land Cover and Land Cover Change
- TIGGE (Thorpex Interactive Grand Global Ensemble) evolution into a Global Interactive Forecast System (GIFS)

GEO Societal Benefit Areas

- Biodiversity and Ecosystem Sustainability
- Disaster Resilience
- Energy and Mineral Resource Management
- Food Security and Sustainable Agriculture
- Public Health Surveillance
- Transport
- Sustainable Urban Development
- Water Resources Management



Developing a fit-for-purpose offering

The 2020-2022 GEO Work Programme is the second three-year Work Programme to be developed within the framework of the GEO Strategic Plan 2016-2025.

GEO Flagships

GEO Initiatives

Community Activities

- Demonstrated or piloted products or services
- Have an active relationship with GEO
- Often has a policy mandate from an international body
- Early stage of development
- Not necessarily delivering a product or service
- Recognised as a GEO Activity



CEOS led disaster-related activities

The focus on the three GEO Engagement Priority areas means that there is direct links between the GEO Work Programme and the Sendai Framework for Disaster Risk Reduction.

GEO Flagships

GEO Initiatives

Community Activities

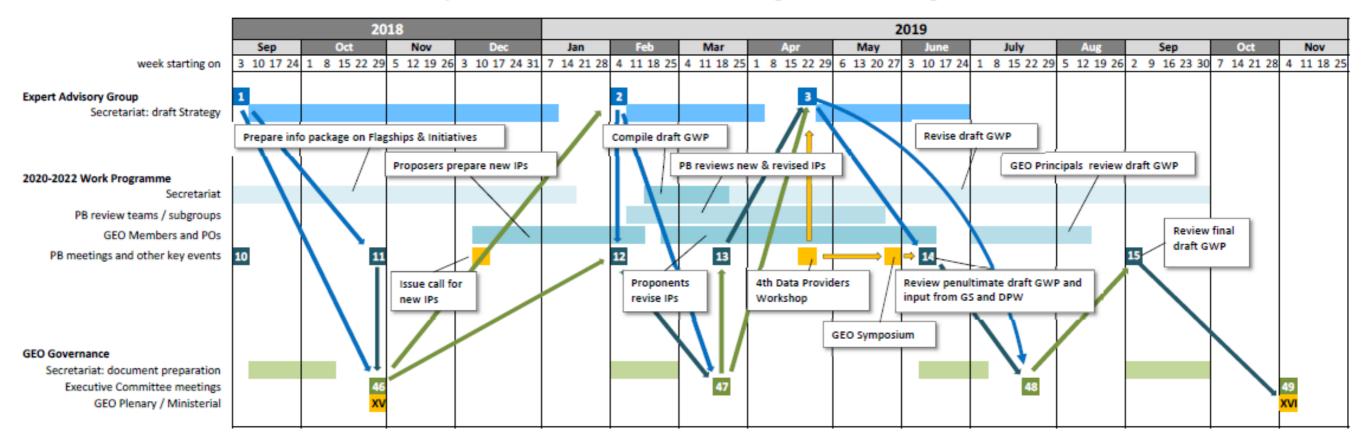
Data Access for Risk Management (GEO-DARMA) GEO Geohazard
Supersites and
Natural
Laboratories
(GSNL)

- Global Flood Risk Monitoring (GFRM)
- Earth Observations for Disaster Risk Management



Planning Chart

Development of the 2020-2022 GEO Work Programme -- Planning Chart





The role of CEOS WGDisaster

- There will be an opportunity for CEOS to help identify where satellite-based Earth observations can support the Work Programme
- Please stay involved in the process!



GEO Sendai Subgroup

Coordinating activities across GEO

Programme Board has set up the Sendai Subgroup to look at:

"How can GEO, through its Work Programme, support and inform the Global Assessment Report on Disaster Risk Reduction and the overarching Sendai Framework."

Subgroup Members:

Australia, China, Ghana, Italy, Norway, United Kingdom, CEOS, COSPAR, ESA, GODAN, IAG, IUGG, OGC, MRI



The Sendai Framework

Seven targets underpin the Framework

Expected outcome

The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries

Goal

Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience

Targets

Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 compared to 2005-2015 Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 between 2020-2030 compared to 2005-2015 Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030 Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030 Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020

Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030

Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030



Supporting Sendai

Coordinating EO for Disasters

GEO supports implementation of Sendai Framework targets E,F and G through engagement with UNISDR.

E: Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020;

F: Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of the present framework by 2030;

G: Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030.



Sendai Subgroup Tasks

Summary of tasks and desired outcomes

Task	Members	Desired outcomes
Identify how the GEO Work Programme can support the Sendai Framework.	COSPAR GEO Secretariat	 Work Programme activities are focused on the needs of UNISDR and national reporting systems for Sendai Framework. Consistent reporting of Disaster Resilience SBA activities to GEO Work Group on Monitoring, including relevance to priority engagement areas.
Identification of appropriate ways to share information and successes.	IAG GEO Secretariat	 Promotion of notable achievements and outcomes from GEO Work Programme activities. Opportunities for promotion and collaboration at national and international events. Increased awareness of Secretariat activities to Members and POs
Strengthen links with International Charter Space and Major Disasters.	Australia CEOS COSPAR ESA IAG UK GEO Secretariat	 International Charter Space and Major Disasters becomes a GEO Partner Organisation. Develop a two-way relationship between the two organisations, including identifying the best way to support Member and Users. Identification in gaps within the uses of it Disasters Charter – and relevant recommendations.



Sendai Subgroup Tasks

Progress against deliverables...

Task	Members	Desired outcomes
Identify how the GEO Work Programme can support the Sendai Framework.	COSPAR GEO Secretariat	 Work Programme activities are focused on the needs of UNISDR and national reporting systems for Sendai Framework. Consistent reporting of Disaster Resilience SBA activities to GEO Work Group on Monitoring, including relevance to priority engagement areas.

Development of consistent language for all disaster-related WP activities, ensuring alignment with goals and indicators of the Sendai Framework.

In early stage discussions with a GEO Member regarding the development of a Sendai specific GEO Community Activity.

Discussion with GEO Secretariat regarding Sendai members participating in the review process for Work Programme 2020-22.

Sendai Subgroup Tasks

Progress against deliverables...

Identification of appropriate ways to share information and successes.

IAG GFO Secretariat

- Promotion of notable achievements and outcomes from GEO Work Programme activities.
- Opportunities for promotion and collaboration at national and international events.
- Increased awareness of Secretariat activities to Members and POs

Creation of an events calendar to capture events that GEO Members are attending.

Commitment make sure that there is a disaster-related write-up within each GEO newsletter.



Please keep in touch...



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https://www.earthobservations.org
/area.php?a=dr



Thank You

Communicate and Collaborate with GEO:











