# Overview of the Early Warning 4 All Initiative

## Rui Kotani, GEO

The UN Global Early Warning Initiative for the Implementation of Climate Adaptation

https://youtu.be/ptDZGYyY30s

# Timeline



Preparatory

Implementation on

**5-6/9 September**
Cairo Round Table

Maputo Ministerial
Meeting on Early
Warnings in Southern
Africa

**21-22 Sept**
UNGA High-Level
Political Event

**October 2022**
WMO Services
& Infrastructure
Commissions

Early Warnings
for All Technical
Conference

**November 2022**
COP27
Heads of State
Launch of
Action Plan

**March 2023**
UN Water
Conference

**May 2023**
Sendai Midterm
Review

**September 2023**
UN SDG Summit

UN Future Summit (TBD)

**November 2023**
COP28

**3 January 2024**

November 2027
COP32

December 2027

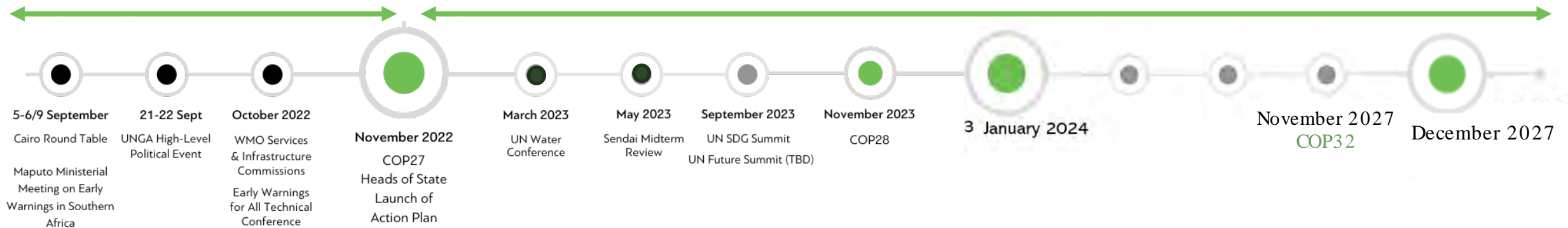**GEO** GROUP ON EARTH OBSERVATIONS

**EWS** Early warning systems are key elements of climate change adaptation and disaster risk reduction

- Actively involve people and communities at risk from a range of hazards

**ACTION** Enable early action, incorporating risk factors – whether arising from climate - hazards and social vulnerabilities

- Focus sectors mostly exposed to risk, from short - term or long -term processes

*Source: WMO Cyrille Honoré Presentation at Session 3 at GEO Symposum 2023*

# 4 pillars of EW4All Initiative
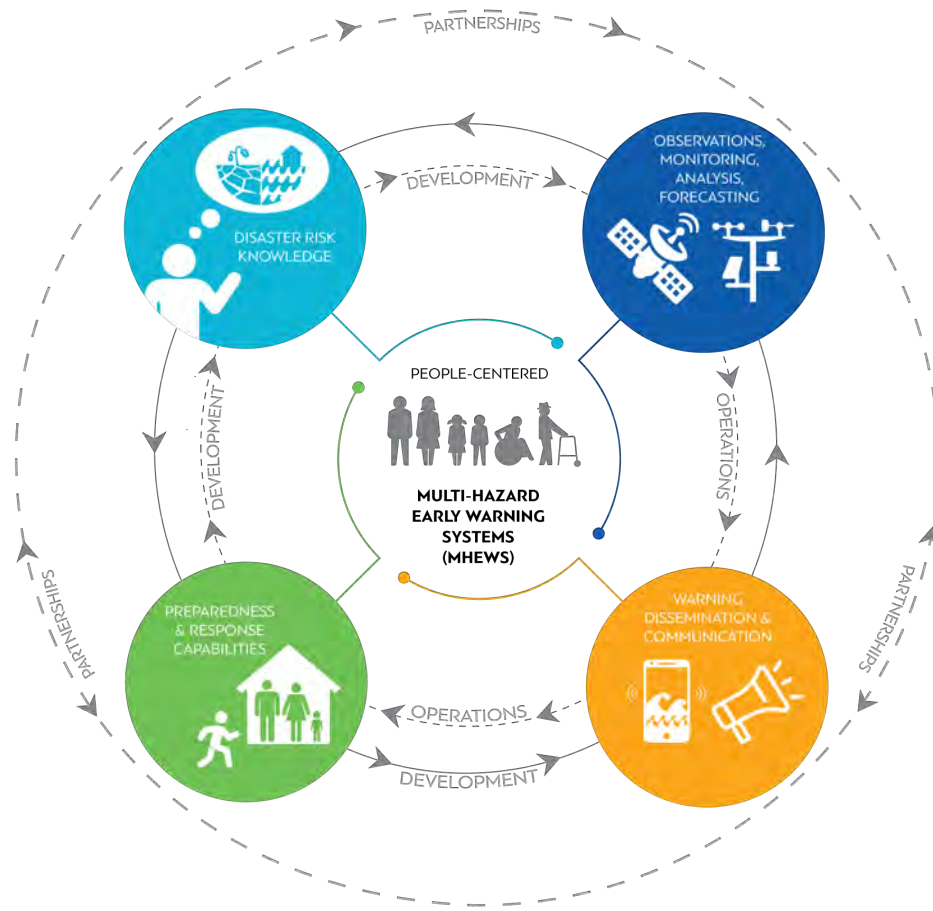


**Disaster risk knowledge**

Systematically collect data and undertake risk assessments

- Are the hazards and the vulnerabilities well known by the communities?
- What are the patterns and trends in these factors?
- Are risk maps and data widely available?

**Detection, observations, monitoring, analysis and forecasting of hazards**

Develop hazard monitoring and early warning services

- Are the right parameters being monitored?
- Is there a sound scientific basis for making forecasts?
- Can accurate and timely warnings be generated?

**Preparedness and response capabilities**
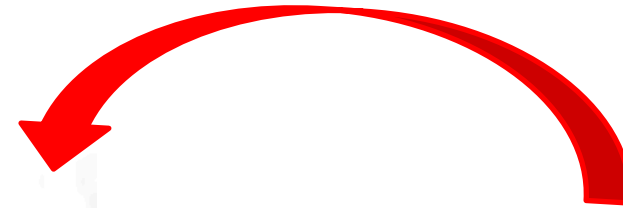
Build national and community response capabilities

- Are response plans up to date and tested?
- Are local capacities and knowledge made use of?
- Are people preapred and ready to react to warnings?

**Warning dissemination and communication**

Communicate risk information and early warnings

- Do warnings reach all of those at risk?
- Are the risks and warnings understood?
- Is the warning information clear and usable?

# GEO as a supporting implementing partner



New investment required to advance towards early warnings for all within five years:(2023-2027)

**USD 3.1 BILLION**

*Estimate based on consultations with pillar lead partners

USD 374 MILLION*

**Pillar 1: DISASTER RISK KNOWLEDGE**

USD 1.18 BILLION*

**Pillar 2: OBSERVATIONS & FORECASTING**

MONITORING & EVALUATION

**Pillar 4: PREPAREDNESS & RESPONSE**

USD 1 BILLION*

**Pillar 3: DISSEMINATION & COMMUNICATION**

USD 550 MILLION

PARTNERSHIPS

Figure 1: Budget overview for the four Pillars of the Early Warnings for All Initiative

in collaboration with the 4 leads and other implementing parters such as:

REAP Risk-informed Early Action Partnership

and WMO WHO **Joint Office for Climate and Health**

On Global Heat Resilience Service (post-2025 incubator)

7

- GEOGLAM Global Agricultural Monitoring   GEO GLOWS GLOBAL WATER SUSTAINABILITY , especially in Pillar 2

- Global Heat Resillience Service and <u>Ecosystem Atlas</u>

- National GEO

- Data WG

- Indigenous GEO

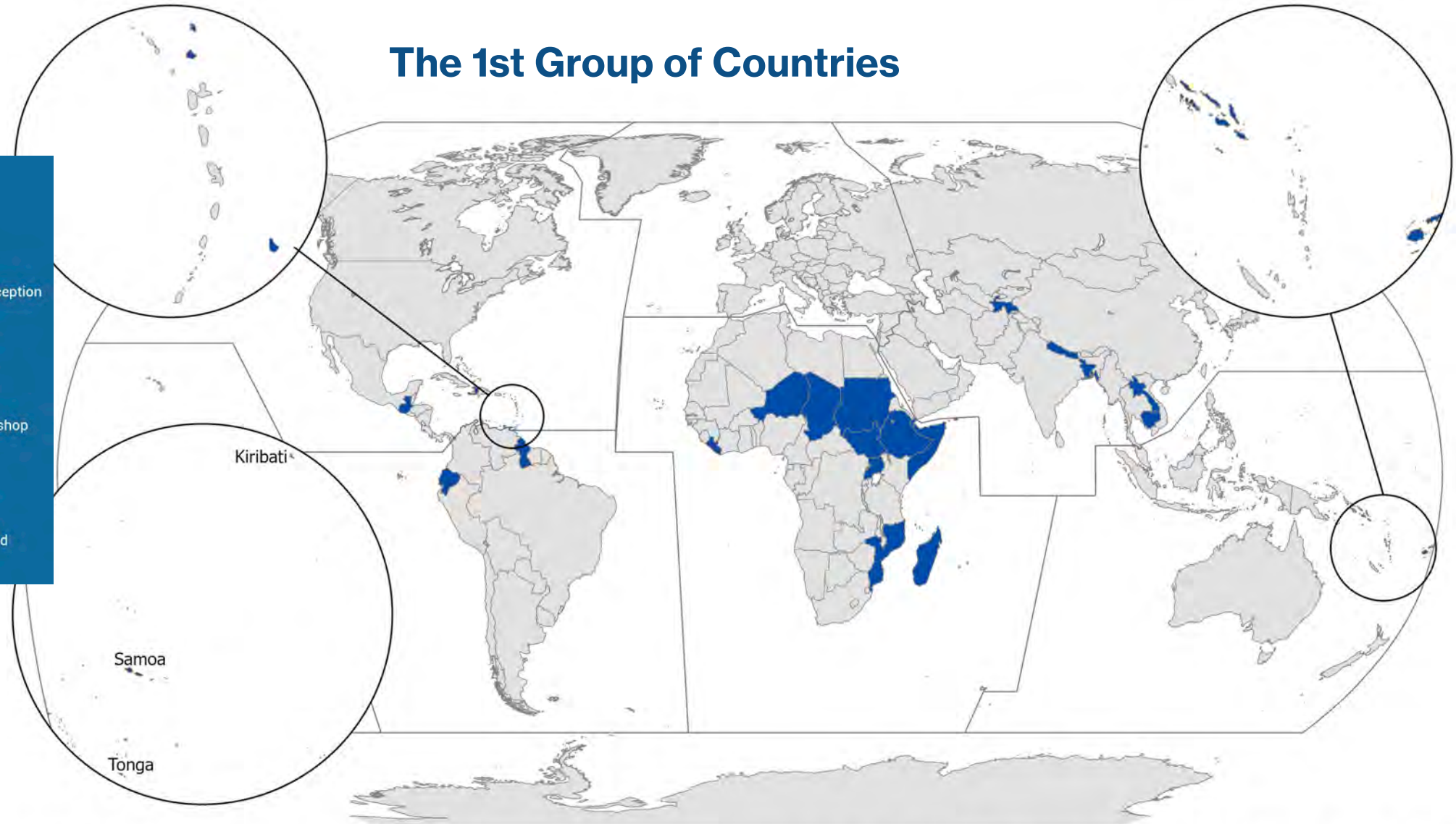Providing inputs for Maldives

along with BLUE PLANET GEO
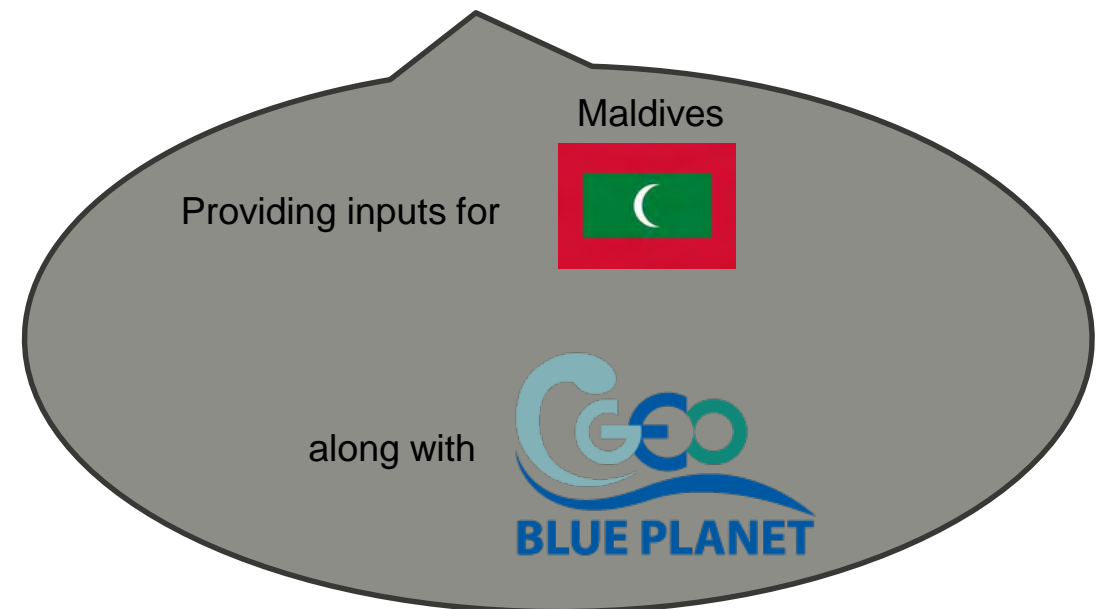
# The 1st Group of Countries

Kiribati

Samoa

Tonga

Africa
Asia
South America
Central America & Caribbean
South-West Pacific

| RAI(13) | Chad | Comoros | Djibouti | Ethiopia | Liberia | Madagascar | Mauritius | Mozambique | Niger | Somalia | South Sudan | Sudan | Uganda |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAII(6) | Bangladesh | Cambodia | Lao People's Democratic Republic | Maldives | Nepal | Tajikistan | | | | | | | |
| RAIII(2) | Ecuador | Guyana | | | | | | | | | | | |
| RAIV(4) | Antigua Barbuda | Barbados | Haiti | Guatemala | | | | | | | | | |
| RAV(5) | Fiji | Kiribati | Samoa | Solomon Islands | Tonga | | | | | | | | |

# CEOS potential contribution

- Inventory of data and products available to monitor specific hazards

- Improved access to satellite data and products for all Earth System components
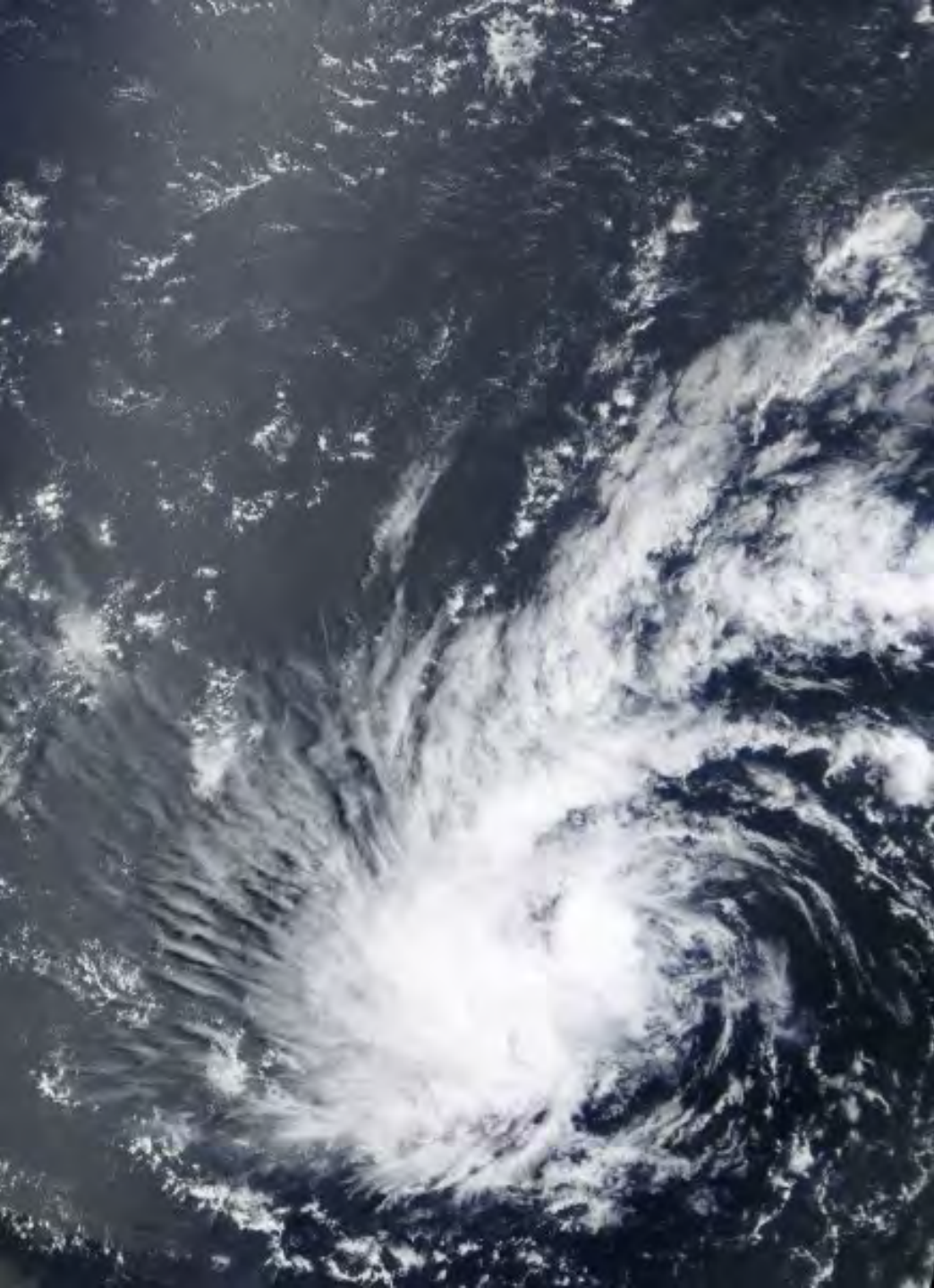    *---i.e. Bathymetry and topography of SIDS (proxies)*
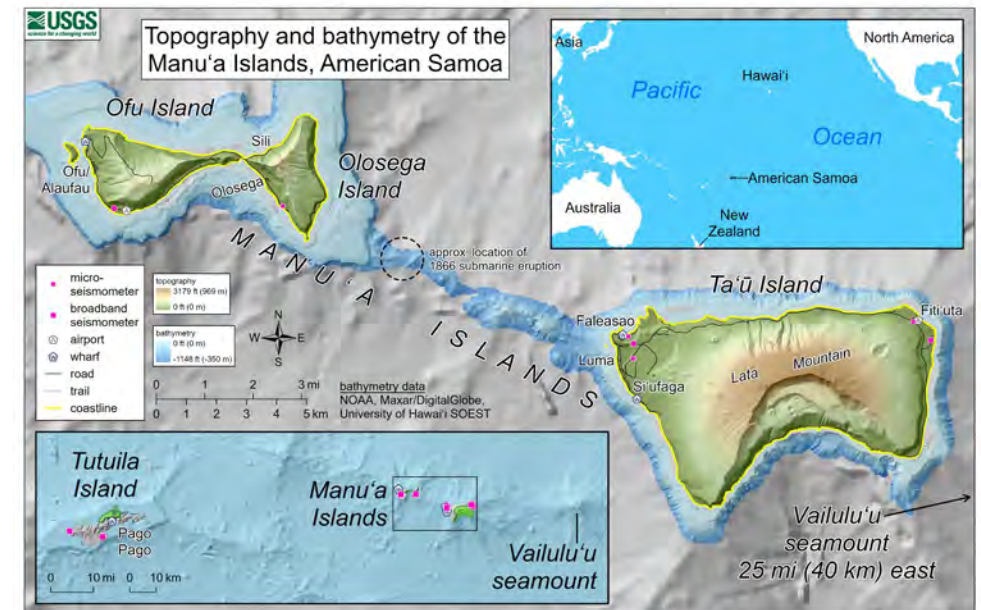
# PILLAR 1 STRUCTURE

**Disaster risk knowledge**

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UNDRR
UN Office for Disaster Risk Reduction

WORLD METEOROLOGICAL ORGANIZATION

IFRC

REAP

GEO

IOM · OIM

FAO

UN environment programme

UNFCCC

GREEN CLIMATE FUND

*Source: UNDRR at CIMA Workshop on*

# Pillar 1 Implementation in countries:

- Preceded by interpillar rollout workshops and – as needed – gap analysis and national roadmap development

- Pillar 1 national workshops bringing together key partners

- Capacity development & trainings using Pillar 1 Handbook

- Technical support with using risk information for EWS (guided by Pillar 1 Handbook)

- Training on DLDs & hazard tracking systems

- Focus on Innovation, Inclusion, Indigenous & local Knowledge

- Support with reporting on Sendai Target G

# Pillar 1: The Seven Risk Knowledge Outcome Themes

GEO
GROUP ON
EARTH OBSERVATIONS

**1** Production of Risk Knowledge

**2** Open Access to Risk Knowledge

**3** Use of RK for EWS

**4** Monitoring of effectiveness of EWS

**5** Strengthened collaboration for RK

**6** Inclusivity and Indigenous & local knowledge

**7** Innovation for Risk Knowledge
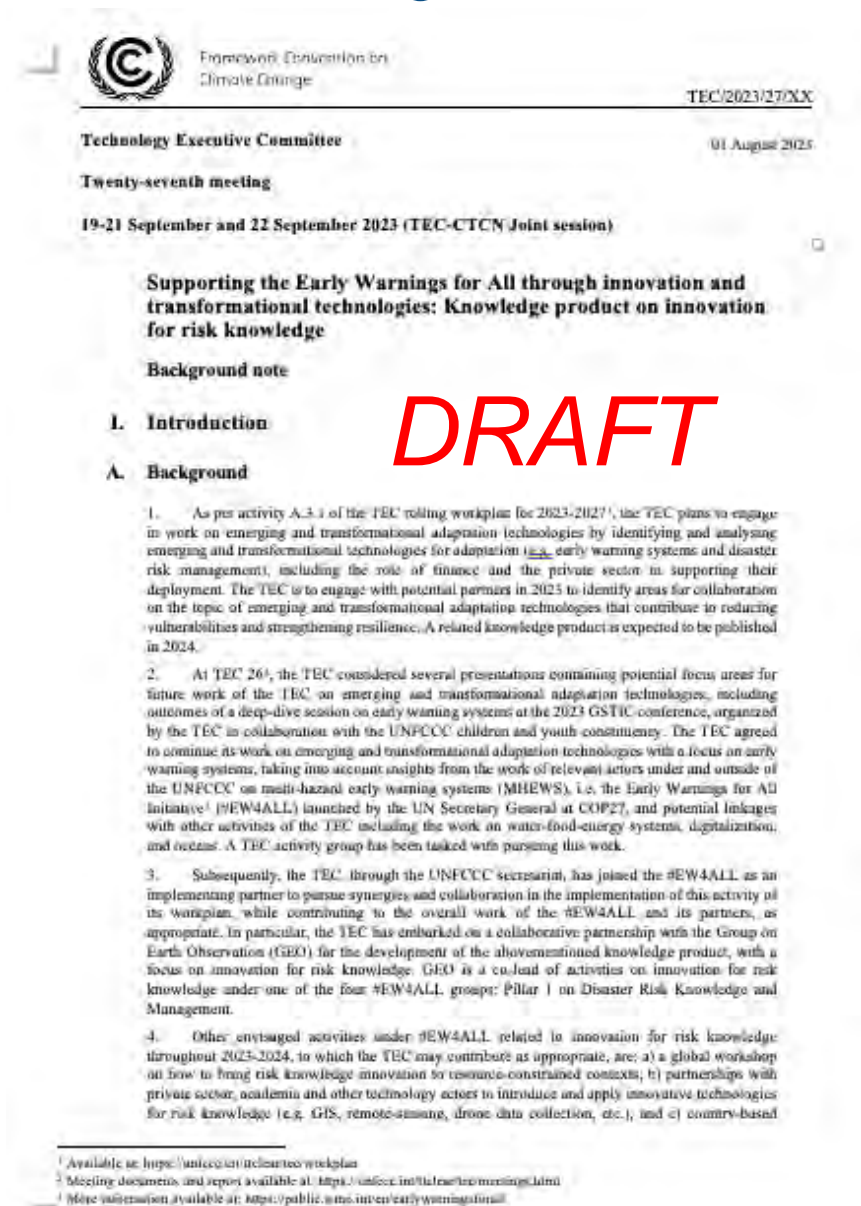
GEO
co-leading with

GREEN CLIMATE FUND

IFRC

also supported by

UNFCCC

# UNFCCC TEC-GEO collaboration:
## A knowledge product on innovation for risk knowledge

- Assessing gaps in available risk knowledge in developing countries, especially in SIDS and LDCs with regards to the early warning systems

- Possible souces of info: GCF, AF, CREWS etc.

- Aiming to provide guidance/insights on how gaps could be overcome through utilizing existing and emerging technologies, tools and innovation

- Proposal to be discussed at TEC meeting (19-22 September) for formal approval

- Hoping to leveradge GEO WGs

# Thank you