

THE NIPPON FOUNDATION-GEBCO

SEABED 2030

SWPHC18 17-19 February 2021

Jamie McMichael-Phillips
Project Director



International
Hydrographic
Organization



Intergovernmental
Oceanographic
Commission

GEBCO



GEBCO Guiding Committee

‘ The **G**eneral **B**athymetric **C**hart of the **O**ceans’

‘... a joint project of **IHO** & **IOC**, managed by the GEBCO Guiding Committee (GGC)’

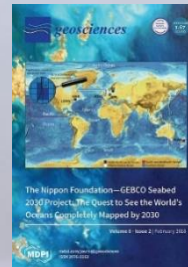
‘...aiming to provide the most authoritative, publicly-available bathymetry data sets of the world’s oceans.’

‘... largely a **voluntary** community of international **scientists** and **hydrographers** collaborating with the support of their parent organizations.’



SEABED 2030

A collaborative project between The Nippon Foundation and **GEBCO** to inspire the complete mapping of the world's ocean by 2030 and to compile all bathymetric data into the freely-available **GEBCO Ocean Map**.



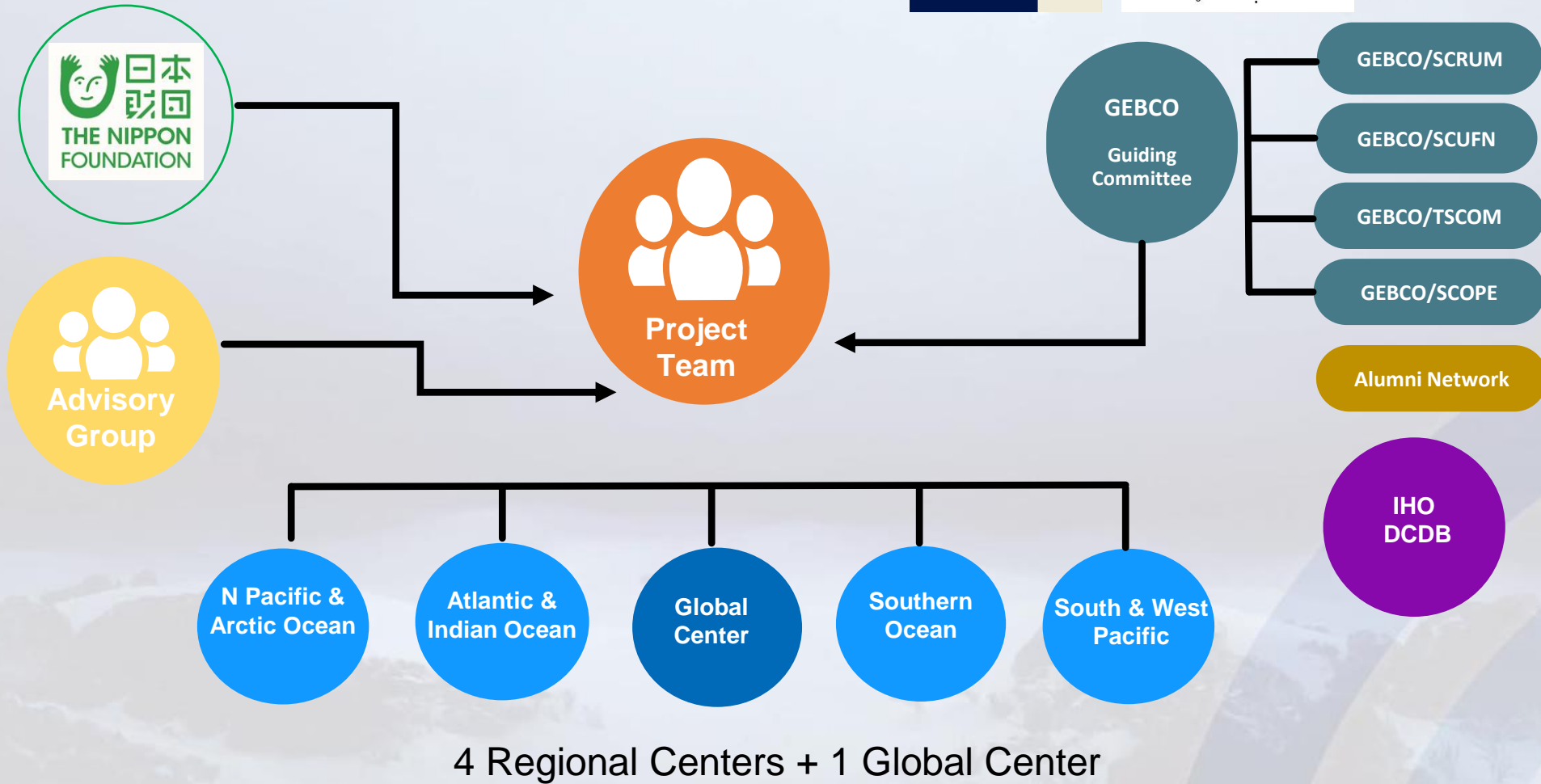
June 2016



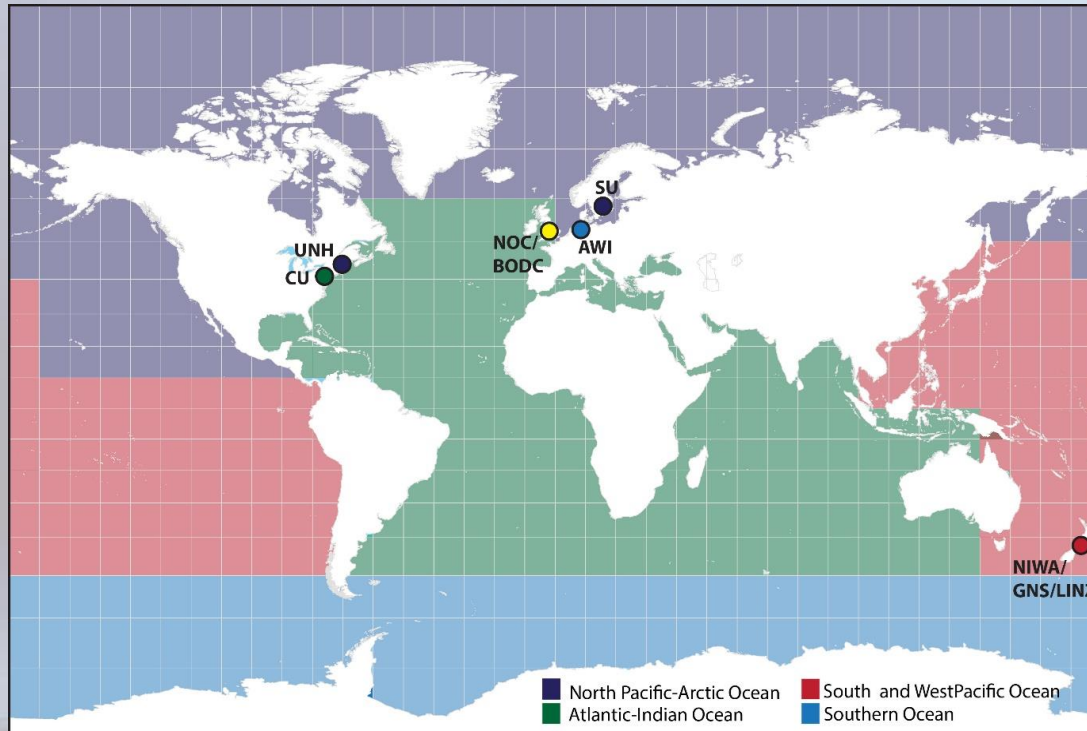
June 2017



Seabed 2030 Network



The Network of Centers



North Pacific –Arctic Ocean

Stockholm University & University of New Hampshire
(SU & UNH)

Southern Ocean

Alfred-Wegener-Institut (AWI)

Atlantic-Indian Ocean

Lamont-Doherty Earth Observatory,
Columbia University (CU)

South-West Pacific Ocean

National Institute of Water & Atmospheric Research (NIWA)
Land Information New Zealand (LINZ)
GNS Science (GNS)

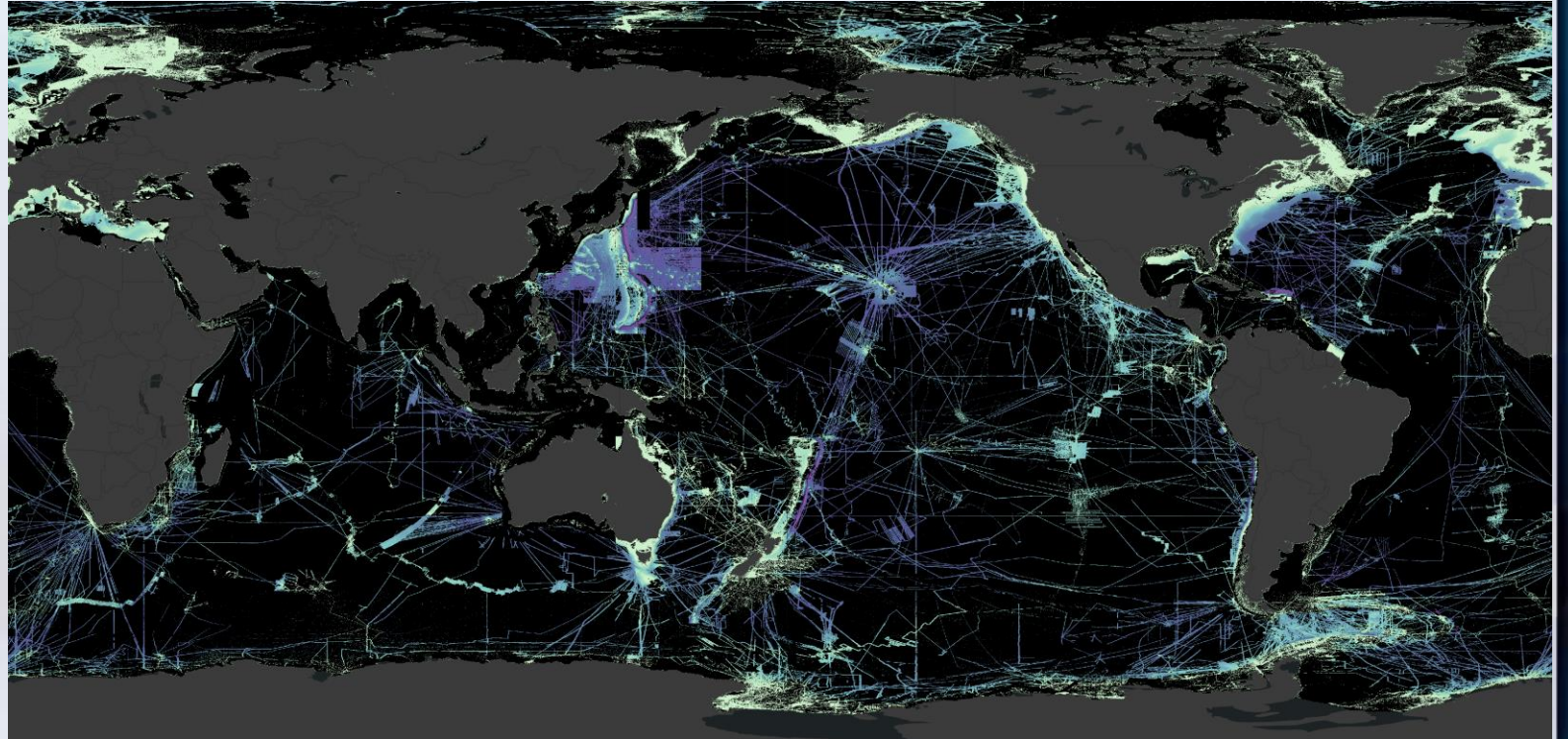
Global Center

British Oceanographic Data Centre,
National Oceanography Centre (NOC/BODC)

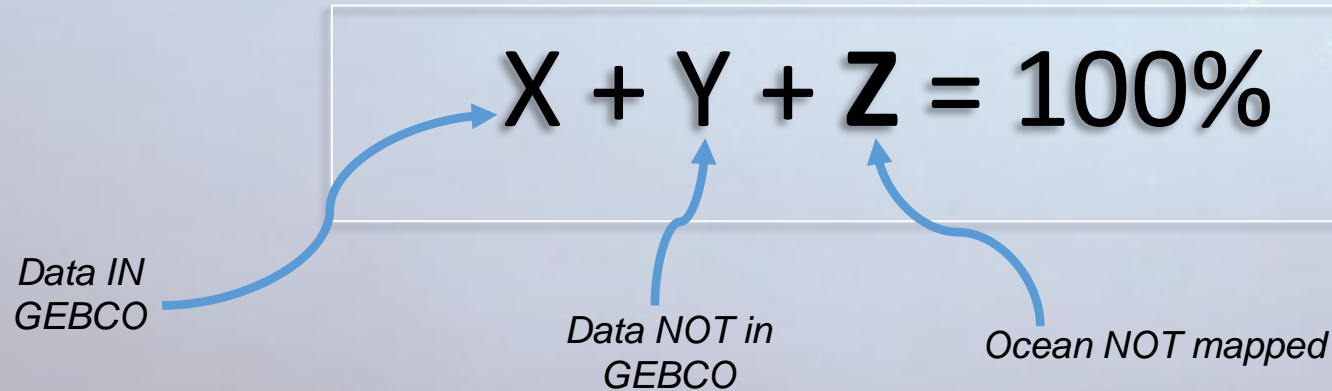


The GEBCO 2020 Grid

- Published June 2020 with **19%** coverage
- 14.5million km² of new data assembled 2019-2020
 - ~54 x size of New Zealand's landmass
- At 6% when Seabed 2030 Project began - so steady progress
- Around **20%** at end of 2020



Seabed 2030 Phase 2: Mapping the Gaps



➤ Ocean Frontier Mapping

- Use GEBCO Grid to inform location of future mapping
- Advocate for greater mapping activity
- Identify funding for mapping expeditions

➤ Crowd Sourced Bathymetry

- Promoting CSB around the world
- Gaining support of, and data from, contributors at all levels

➤ Technology Innovation

- What can Seabed 2030 do to accelerate uptake of technology to accelerate rate of bathymetric mapping?



Making it happen

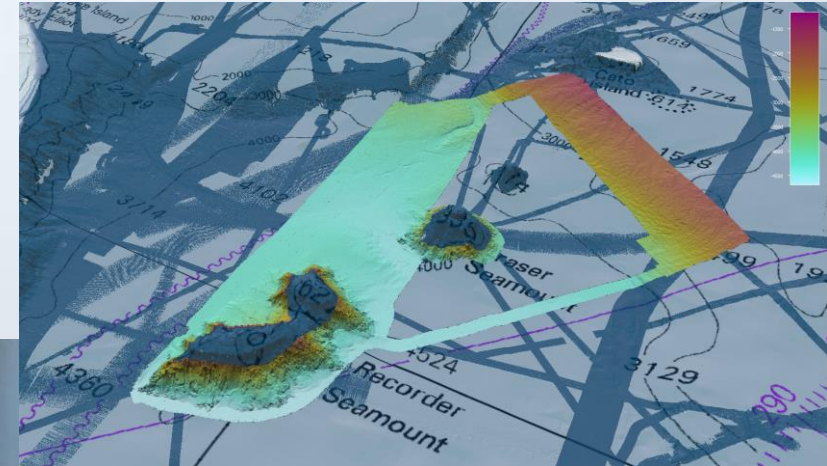


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SCHMIDT
OCEAN
INSTITUTE

First new seafloor map of the Decade collected on New Year's Expedition
in Australian waters



2021 United Nations Decade
2030 of Ocean Science
for Sustainable Development

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Alumni Engagement

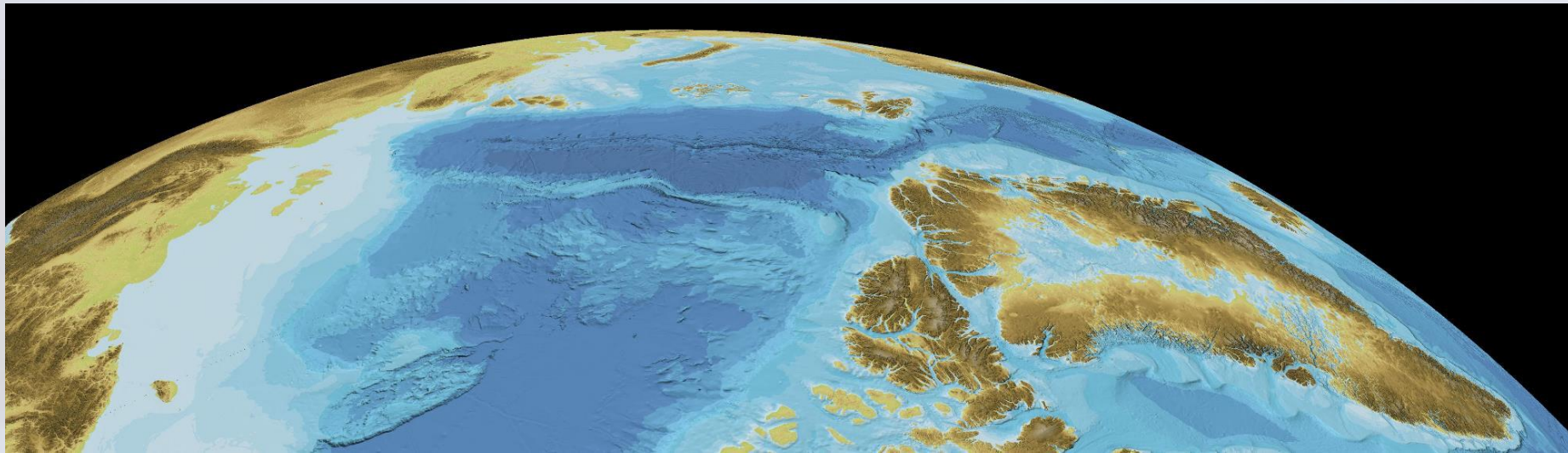
- Nippon Foundation-GEBCO Ocean Mapping Training Program
 - 95 alumni from 42 countries
 - <http://ccom.unh.edu/education/gebco/courses>
- Seabed 2030 Alumni Coordinator
 - To deliver Alumni Engagement & Development Plan
 - ***Utilizing skills & experience of the Alumni to support wide range of Seabed 2030 activities;***
 - ***Providing individual/collective development opportunities across broad spectrum of ocean mapping & tech innovation.***



CSB Field Trials

- Palau
- South Africa
- Greenland
- We need more where?

Ocean Frontier Mapping Initiative



The Nippon Foundation - Seabed 2030 **Ocean Frontier Initiatives**

- ***Funding for incremental vessel days for missions to “Frontier Regions”***
- ***Funding for MB operators on cruises where no bathymetry would be collected without***
- ***Funding for incremental days to test “Frontier Technologies”***

In all cases – only for mapping unmapped seafloor

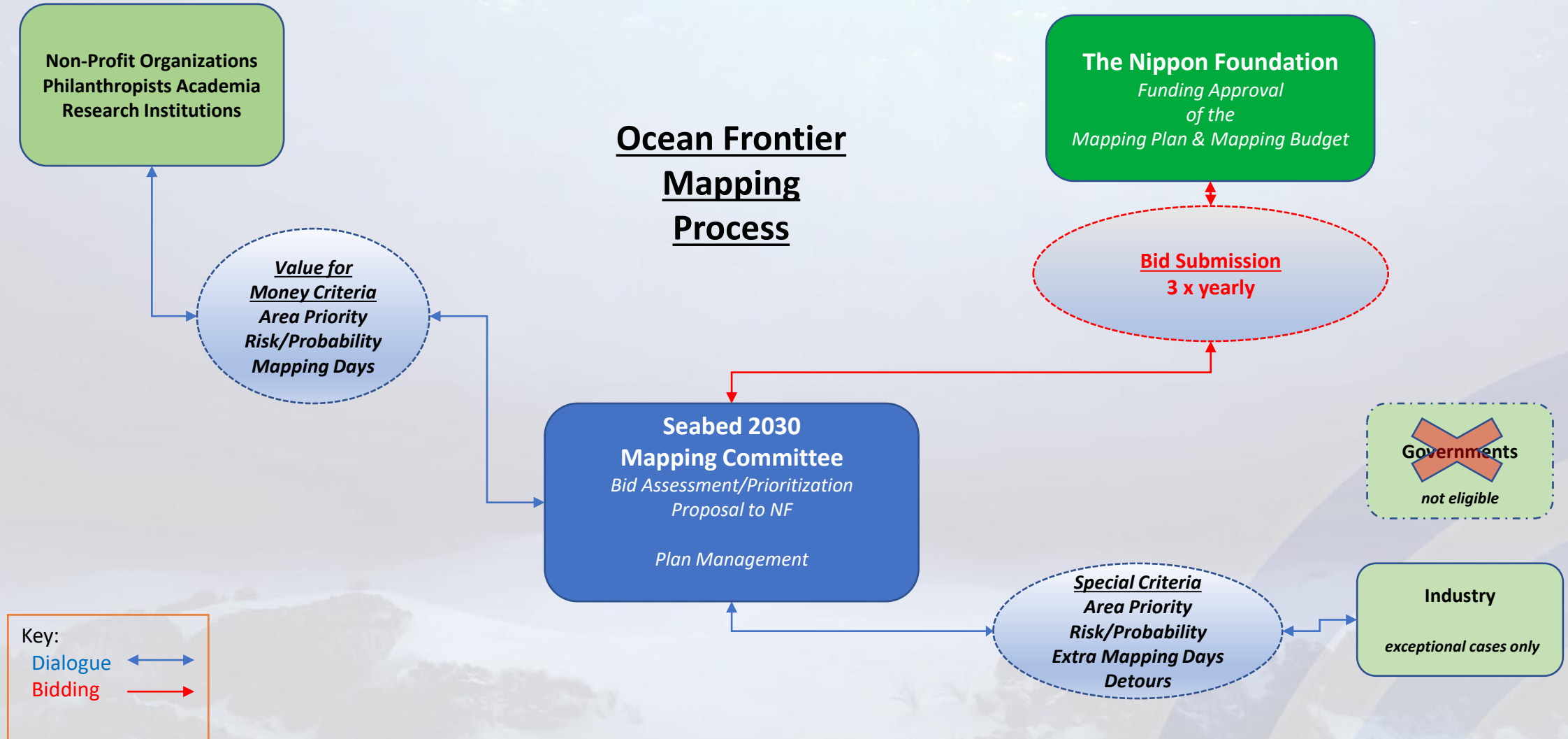


The Nippon Foundation - Seabed 2030 Ocean Frontier Initiatives

- Mapping Committee (MC): (Director, Regional Center leads + 2 external)
 - Assesses/prioritizes bids from
 - Non-Profit Organizations/Philanthropists/Academia/Research Institutions
 - Industry on an exceptional case basis
 - *(Governments bids are not eligible)*
 - Up to 3x yearly proposal to the Nippon Foundation for a funding decision
 - Manages funded Mapping Plan within agreed Mapping Budget
 - Manages authorized reprioritization for short-notice changes
 - Due to emergent external factors beyond our control such as:
 - Mission cancellations
 - New higher priority missions are announced (once-in-a-decade opportunities)
 - Remaining within agreed Mapping Budget



Ocean Frontier Mapping Process



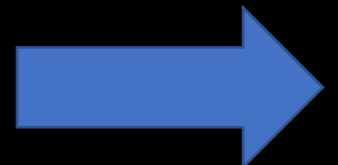
**REQUEST FOR FUNDING TO COLLECT BATHYMETRIC DATA FOR
THE NIPPON-FOUNDATION-GEBCO SEABED 2030 PROJECT
OCEAN FRONTIER MAPPING PROGRAMME**

Please provide as much detail as possible below and return to the Secretary of the Seabed 2030 Mapping Committee on admin@seabed2030.org.

Mission name	
Mission region and geographic limits (please attach a map separately)	
Vessel	
Mapping System (multibeam, frequency, beam width etc.)	

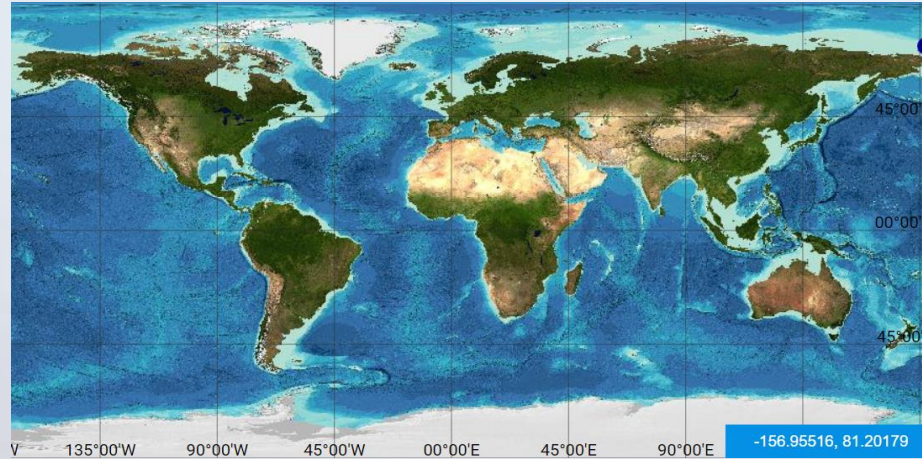
Official call will be announced

First proof of concept



Looking ahead...

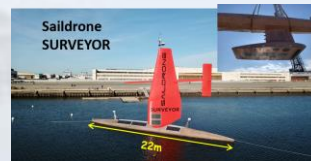
Build new networks and partnerships



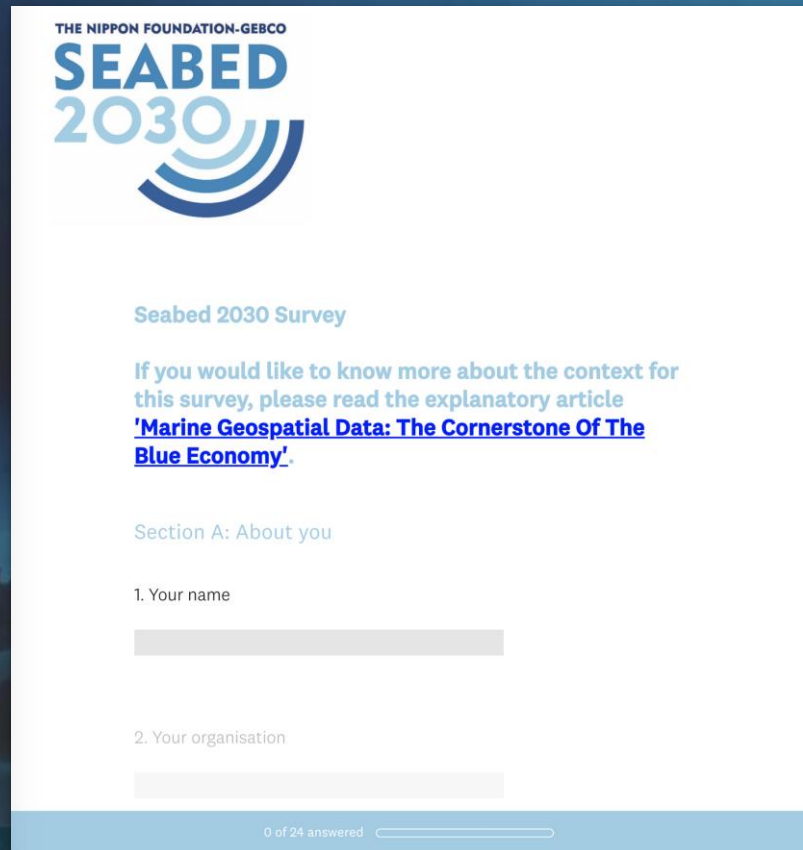
Crowd-Sourced bathymetry



Bring the ocean mapping community together



COMMUNITY INPUT REQUESTED: Community Survey



THE NIPPON FOUNDATION-GEBCO

**SEABED
2030**

Seabed 2030 Survey

If you would like to know more about the context for this survey, please read the explanatory article ['Marine Geospatial Data: The Cornerstone Of The Blue Economy'](#).

Section A: About you

1. Your name

2. Your organisation

0 of 24 answered

<https://seabed2030.org/survey>

- Tell us about your data needs
- Let us know your priority areas
- Point us at available data



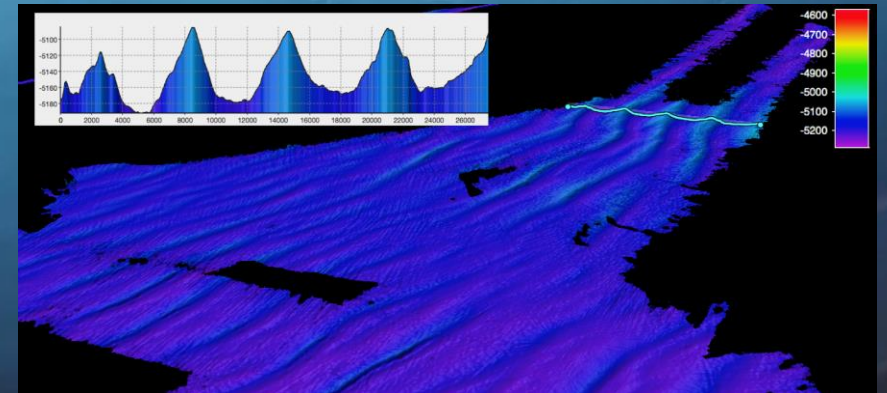
COMMUNITY INPUT REQUESTED: Seabed 2030 Image Stream



Credit: Martin Jakobsson and Seabed 2030



Credit: Martin Jakobsson and Seabed 2030



Credit: Vicki Ferrini and Seabed 2030

seabed2030.org/seabed2030-image-stream



Thank you

