

THE NIPPON FOUNDATION-GEBCO

SEABED 2030

MSDIWG 17-18 March 2021

Jamie McMichael-Phillips
Project Director



International
Hydrographic
Organization



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)'

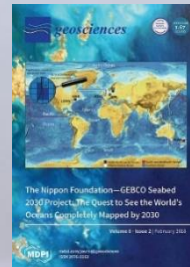
'...aiming to provide the most authoritative, publicly-available bathymetry data sets of the world's oceans.'

'... 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**.

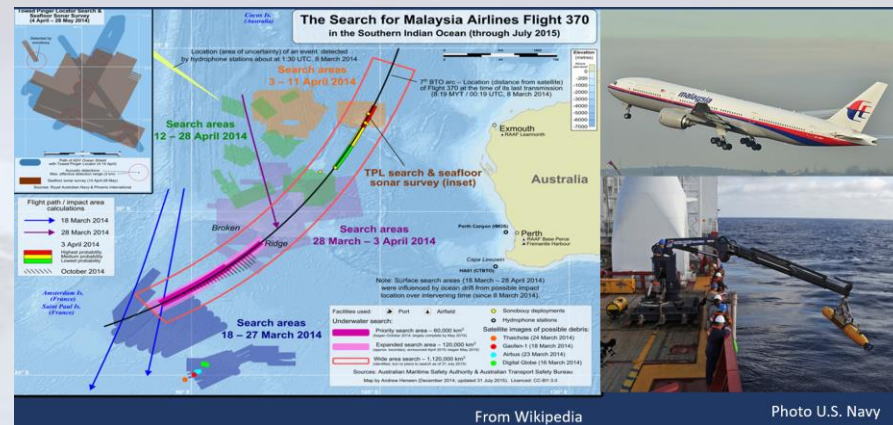
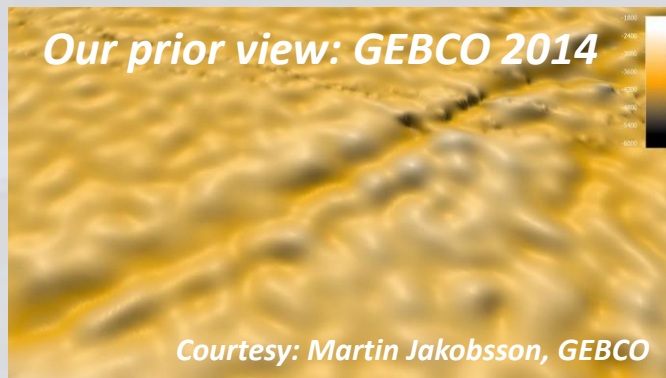
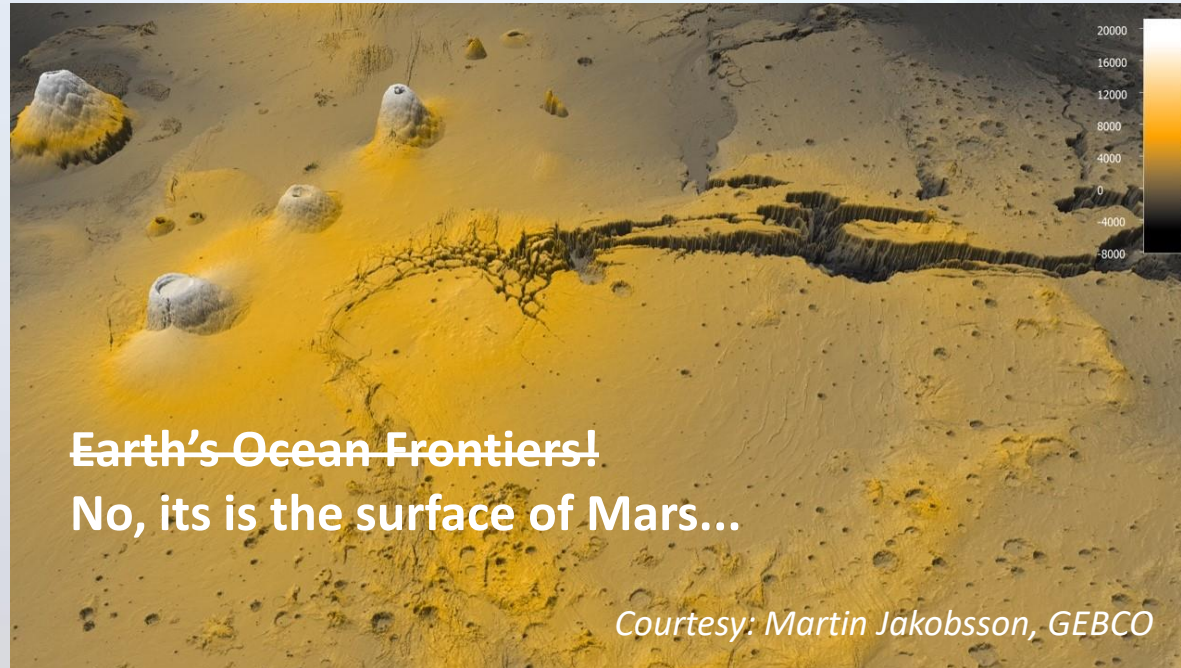


June 2016

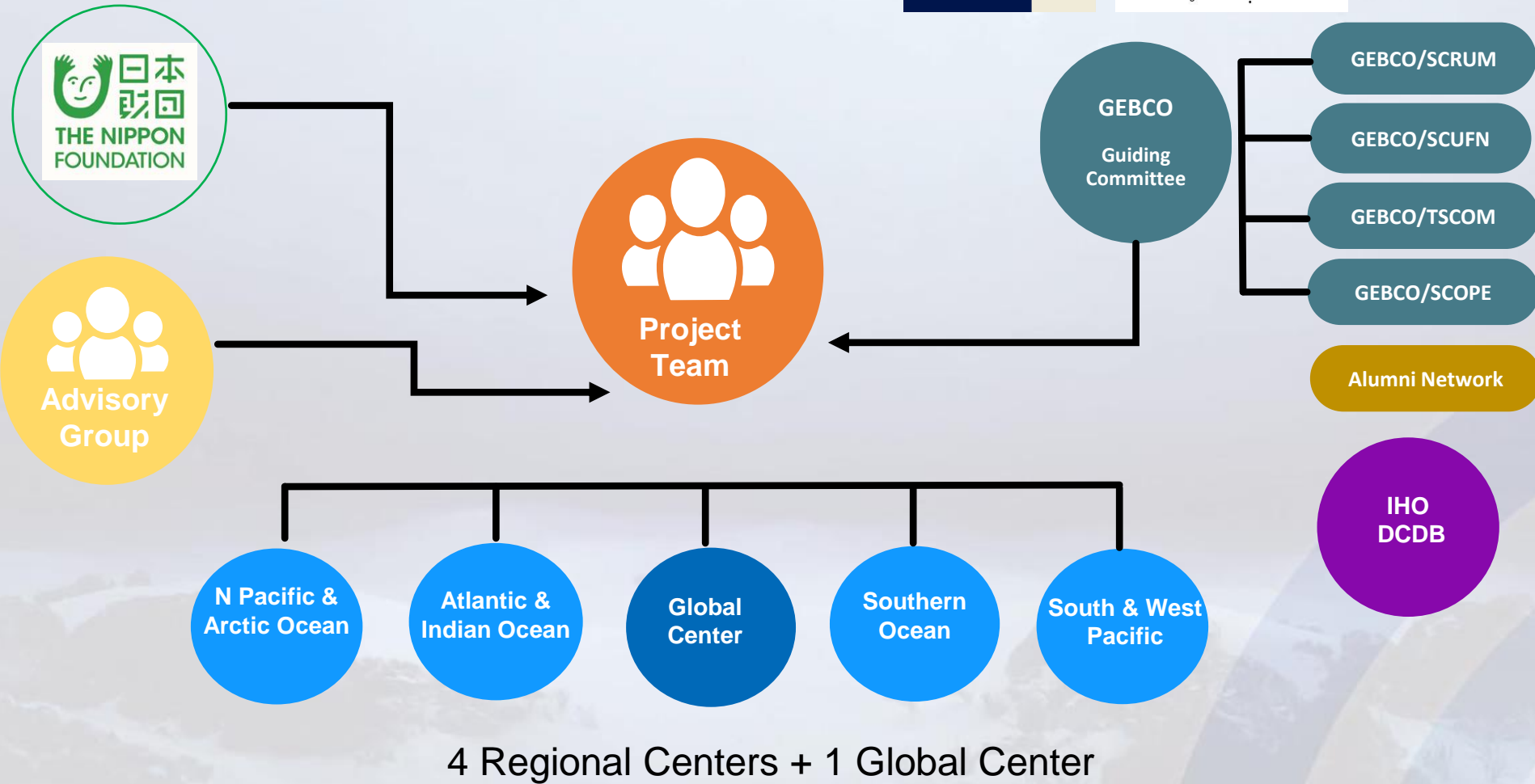


June 2017

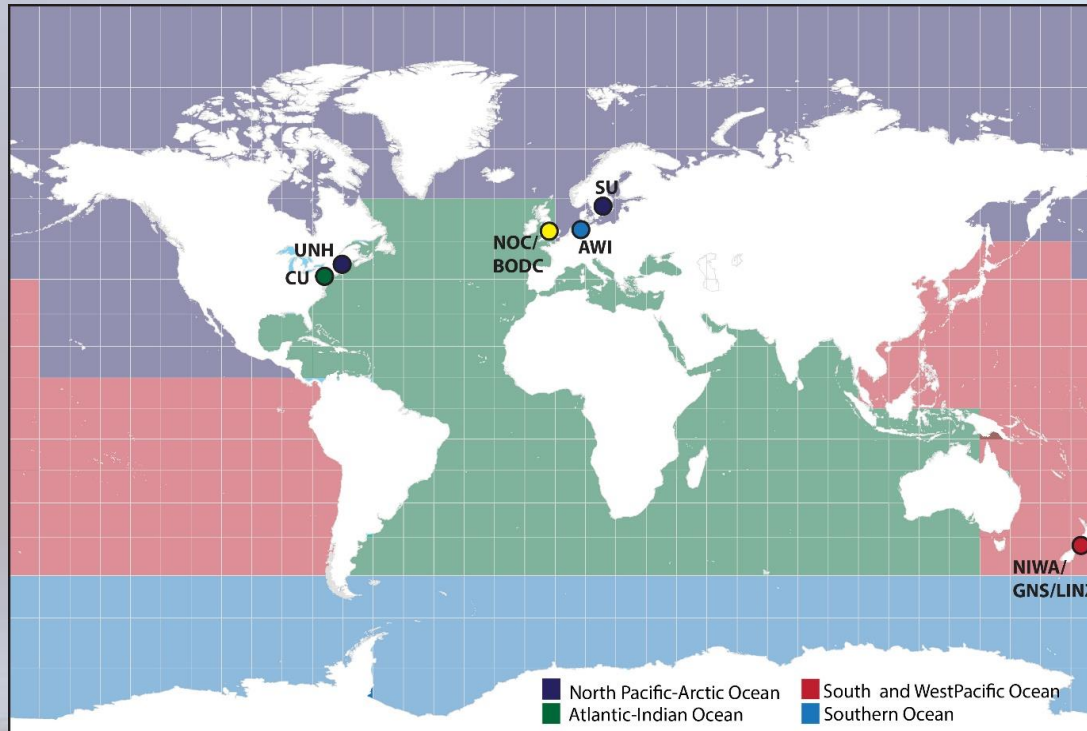




Seabed 2030 Network



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)

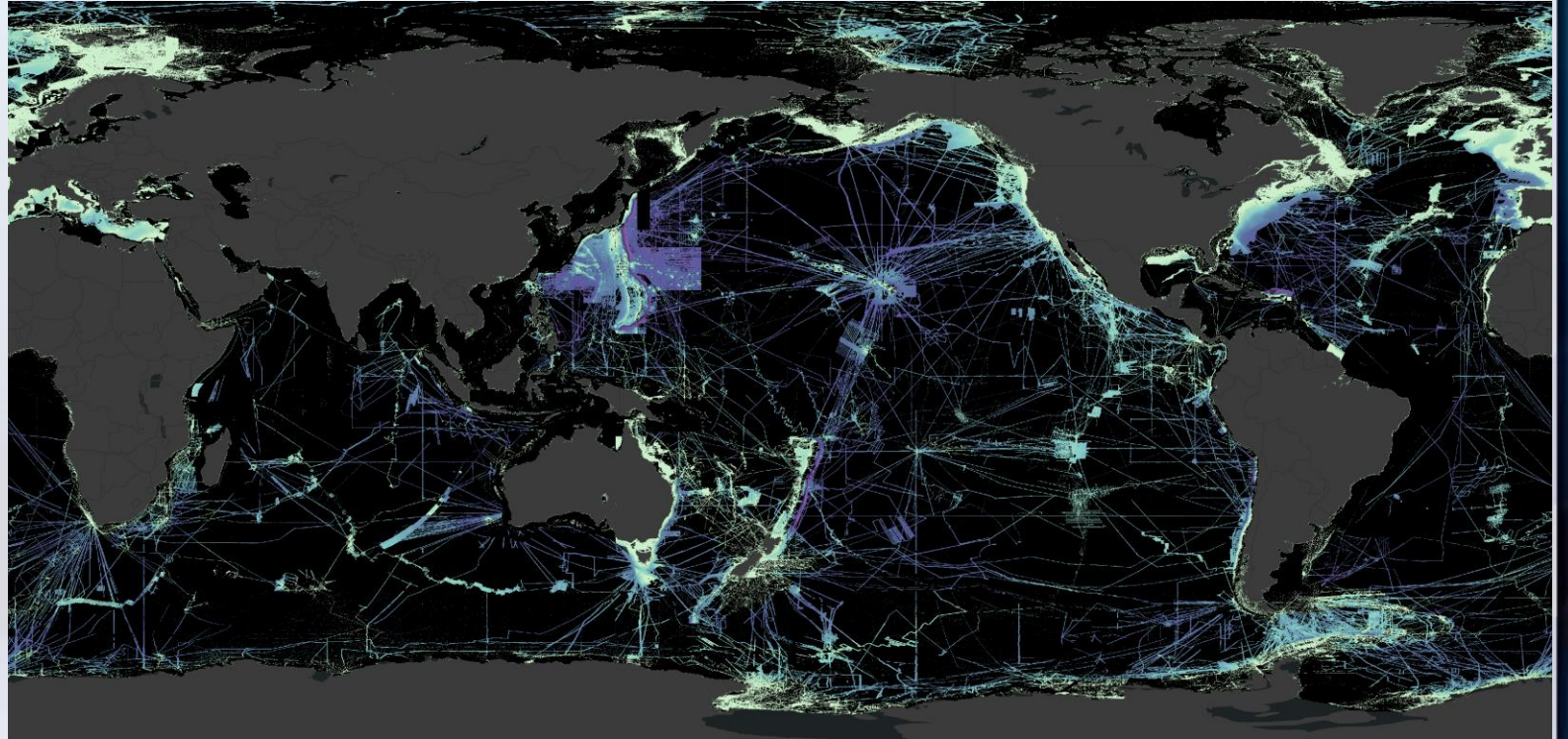
Global Center

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

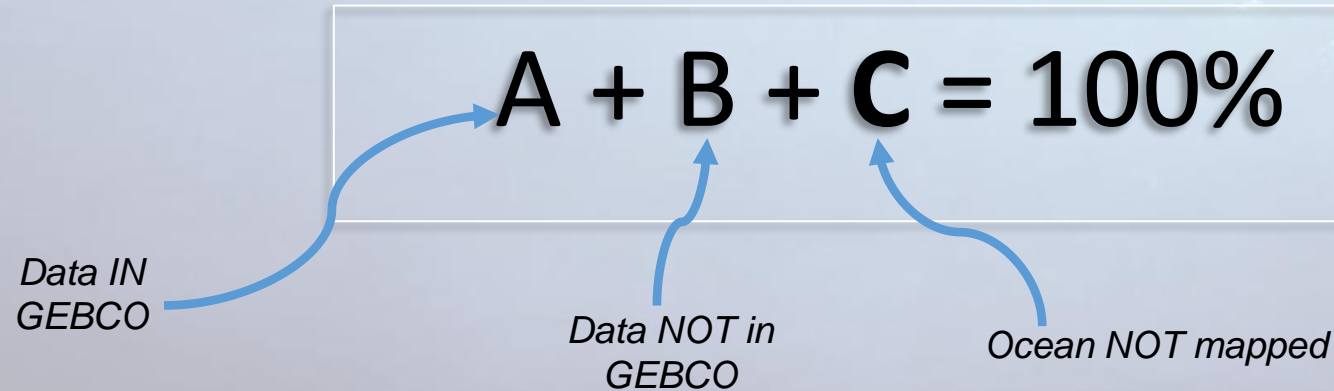


The GEBCO 2020 Grid

- 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?

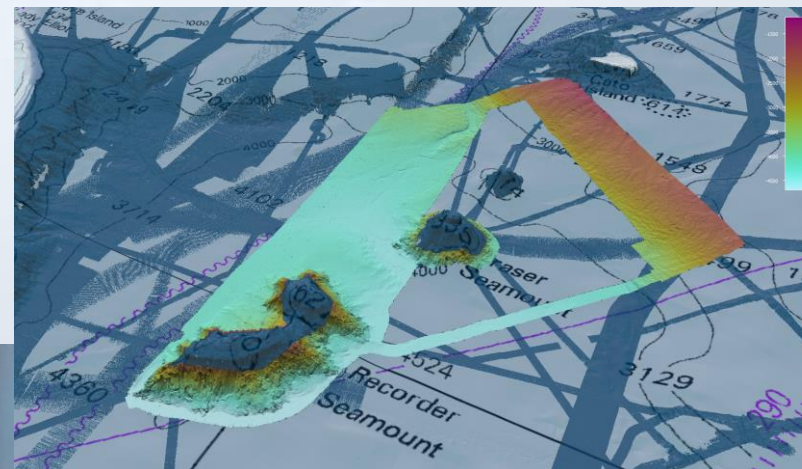


Making it happen





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



Alumni Engagement

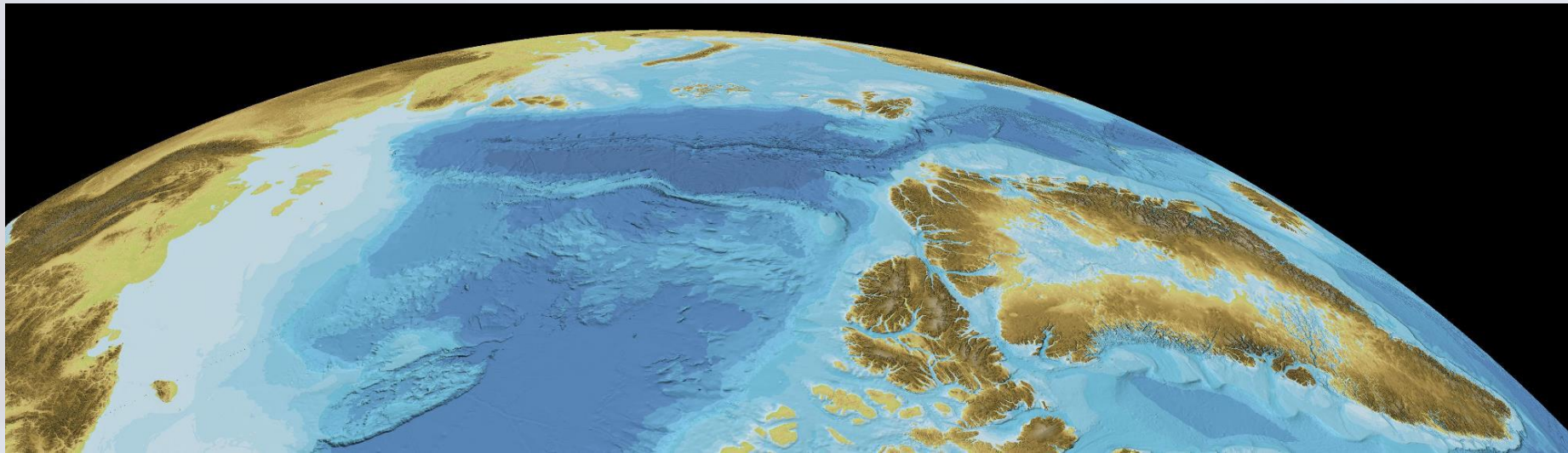
- Nippon Foundation-GEBCO Ocean Mapping Training Program
 - 95 alumni from 42 countries
 - <http://ccom.unh.edu/education/gebco/courses>
- Seabed 2030 Alumni Coordinator
 - To deliver Alumni Engagement & Development Plan
 - ***Utilizing skills & experience of the Alumni to support wide range of Seabed 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

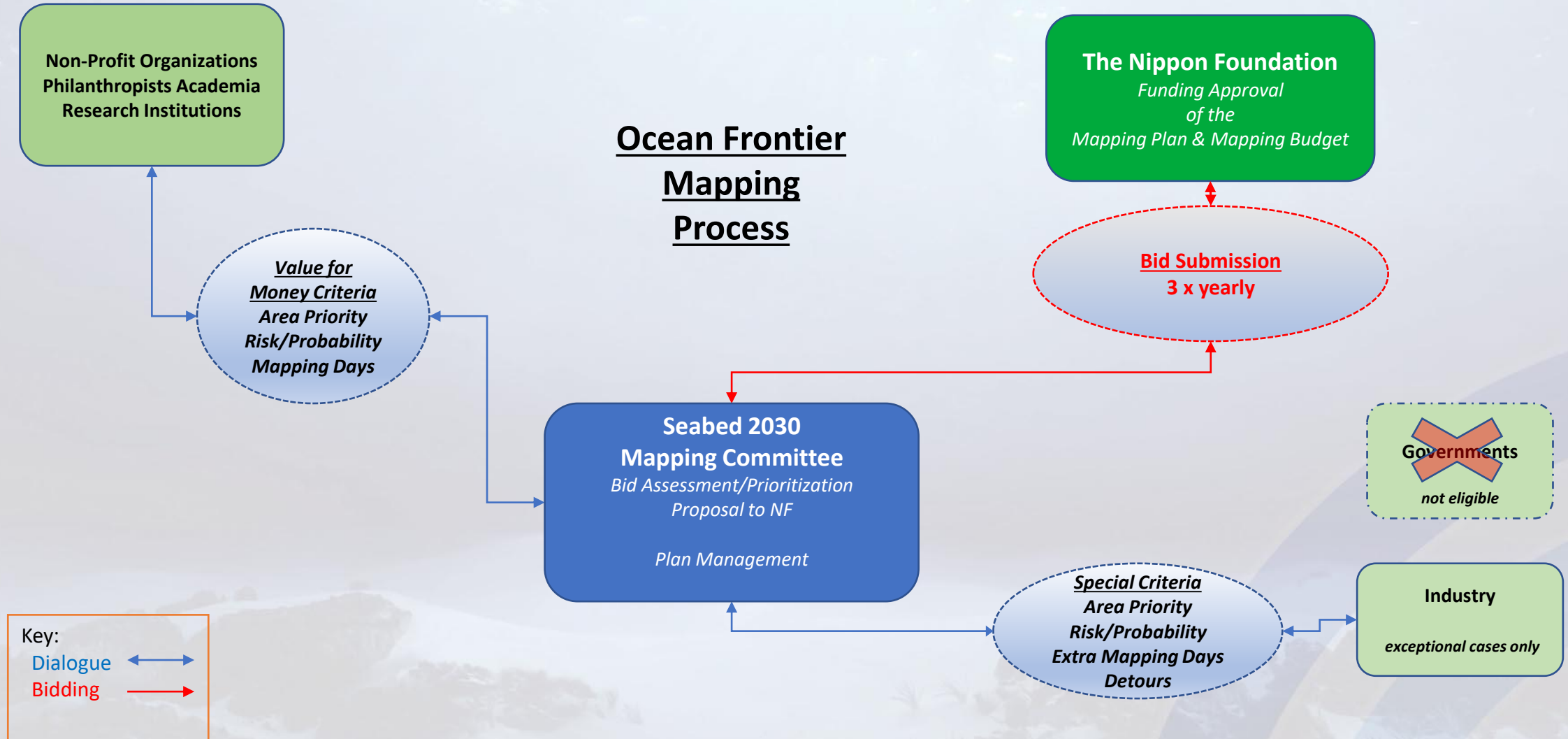


The Nippon Foundation - Seabed 2030 Ocean Frontier Initiatives

- 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



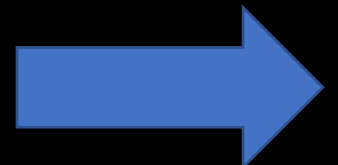
**REQUEST FOR FUNDING TO COLLECT BATHYMETRIC DATA FOR
THE NIPPON-FOUNDATION-GEBCO SEABED 2030 PROJECT
OCEAN FRONTIER MAPPING PROGRAMME**

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

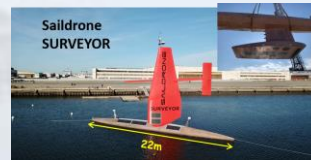


Looking ahead...

Build new networks and partnerships



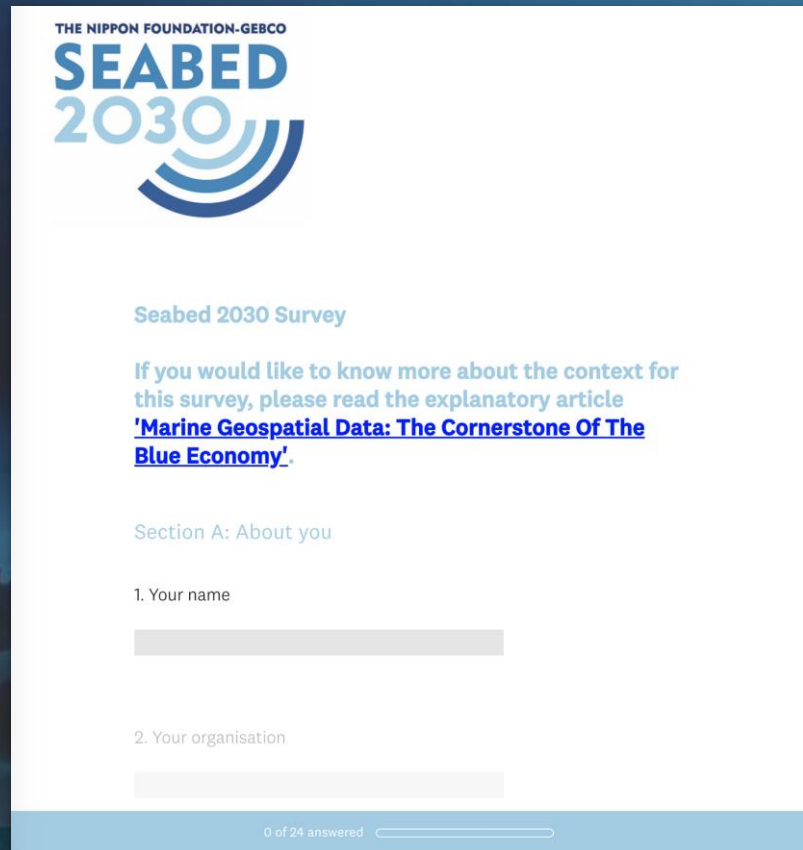
Bring the ocean mapping community together



Crowd-Sourced bathymetry



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



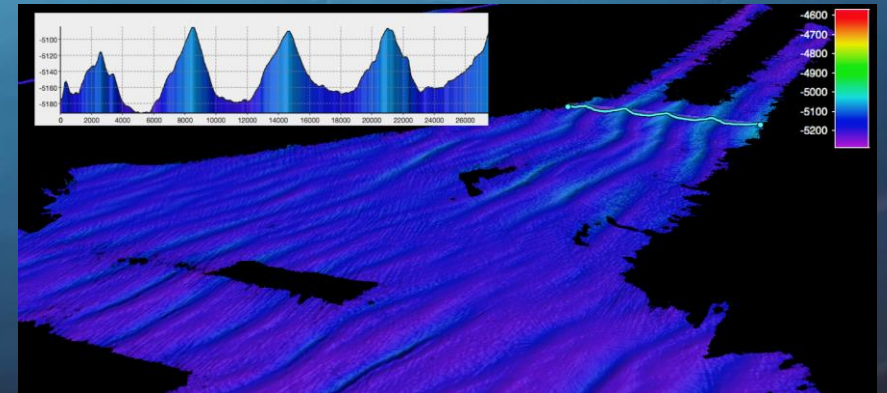
COMMUNITY INPUT REQUESTED: Seabed 2030 Image Stream



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

