

The Nippon Foundation-GEBCO

Seabed 2030 Project

Year 1 Status Report V2.2

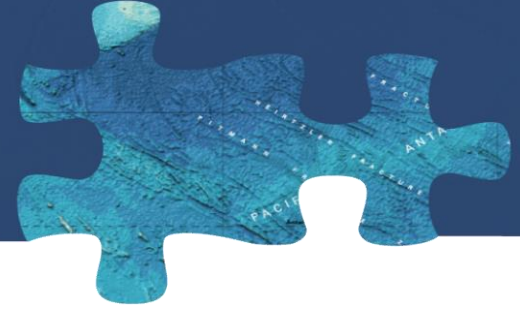
GGC35

15th November 2018

Dr Graham Allen



Agenda



INFORMATION:

- ✓ Scene setting
- ✓ Year 1 Achievements
- ✓ Lessons Learnt

DISCUSSION:

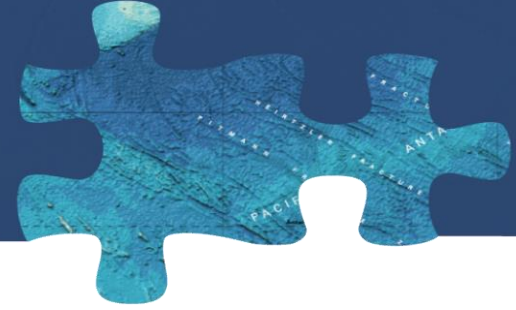
- ✓ GGC discussion & questions to Project Team

DECISION:

- GGC decision to endorse Year 1 Annual Report

Year 1 (operational) = 1st February 2018 to 31st July 2018

Introduction to me



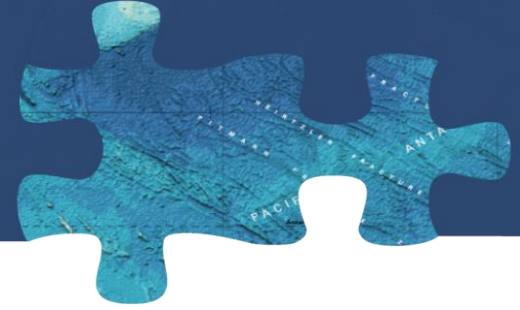
I am:

- Acting Seabed 2030 Director
- GEBCO Guiding Committee member
- Seabed 2030 Establishment Team member
- Co-author of the Seabed 2030 foundational documents:
 - Seabed 2030 10 year Business Plan, Seabed 2030 Year 1 Funding Proposal, Seabed 2030 Road Map, Seabed 2030 Project Plan.
- Chief Information Officer (CIO), National Oceanography Centre, UK
- Head of the British Oceanographic Data Centre (BODC)

I was:

- Physical Oceanographer, Software Development Manager in SaaS start ups, software developer (java, C, C++, Delphi, matlab, fortran, Haskell, mathematician,....

Introduction...



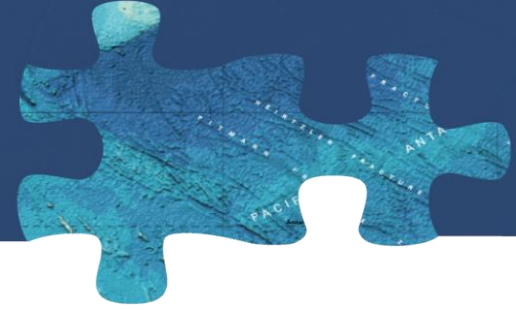
I am not (and never was):

- An ocean mapper

I will be:

- A fast cyclist!

One day ,..... In my dreams.....



IHO appointed members

- Vice Admiral (ret) Shin Tani (Chair)
- Dr Graham Allen*
- Rear Admiral Patricio Juan Carlos Carrasco Hellwig
- Mr David Millar
- Prof Hyo Hyun Sung

IOC appointed members

- Prof Martin Jakobsson* (Vice-Chair)
- Dr Robin K H Falconer
- Dr Johnathan T Kool
- Dr Marzia Rovere
- Captain Leonid Shalnov

Ex-officio members

- Dr Karen M Marks
 - Chair of TSCOM
- Dr Vicki Ferrini*
 - Chair of SCRUM
- Ms Jennifer Jencks
 - Director, IHO DCDB
- Dr Hans-Werner Schenke
 - Chair of SCUFN
- Mr David Wyatt
 - Permanent Secretary

Key:

Operational contribution

Establishment or management contribution

GGC involvement in Seabed 2030



Martin Jakobsson

- ✓ On Seabed 2030 Project Team
- ✓ On Director Recruitment Teams #1 & #2
- ✓ Establishment Team
- ✓ Attends Sponsors Meetings
- ✓ Co-author of 'foundational' document

Vicki Ferrini

- ✓ On Seabed 2030 Project Team

Graham Allen

- ✓ Head of BODC (= Global Center)
- ✓ On Director Recruitment Team #1
- ✓ Establishment Team
- ✓ Attends Sponsors Meetings
- ✓ Co-author of 'foundational' document
- ✓ Acting Director (not Year 1)

Robin Falconer

- ✓ Co-author of 'foundational' document
- ✓ Establishment Team
- ✓ On Director Recruitment Teams #1 & #2
- ✓ Attends Sponsors Meeting (when he can)

David Millar & Marzia Rovere

- ✓ On Director Recruitment Team #1 & #2
- ✓ Establishment Team

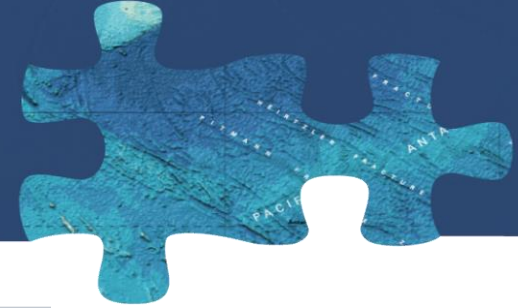
David Wyatt

- ✓ Project Finance management
- ✓ Attends Sponsors Meetings

Shin Tani

- ✓ Attends Sponsors Meetings

Establishment Team

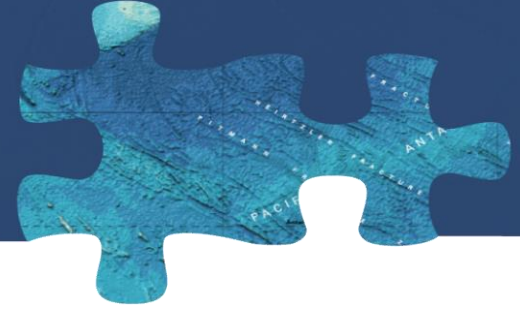


Given Name	Family Name	Organization	Country	
Graham	Allen	British Oceanographic Data Centre	United Kingdom	core
Robin	Falconer	Robin Falconer Associates Ltd	New Zealand	core
David	Heydon	Deep sea mining expert	Australia	
Martin	Jakobsson	Stockholm University	Sweden	core
Larry	Mayer	Center for Coastal and Ocean Mapping/Joint Hydrographic Center UNH	USA	
David	Millar	Fugro	USA	
Marzia	Rovere	Istituto di Scienze Marine - CNR	Italy	
Lisa	Taylor	National Centers for Environmental Information/NOAA	USA	

Terms of Reference

- [Seabed 2030 Establishment Team Terms of Reference V2.1.docx](#)

Names



The Nippon Foundation – GEBCO Seabed 2030 Project

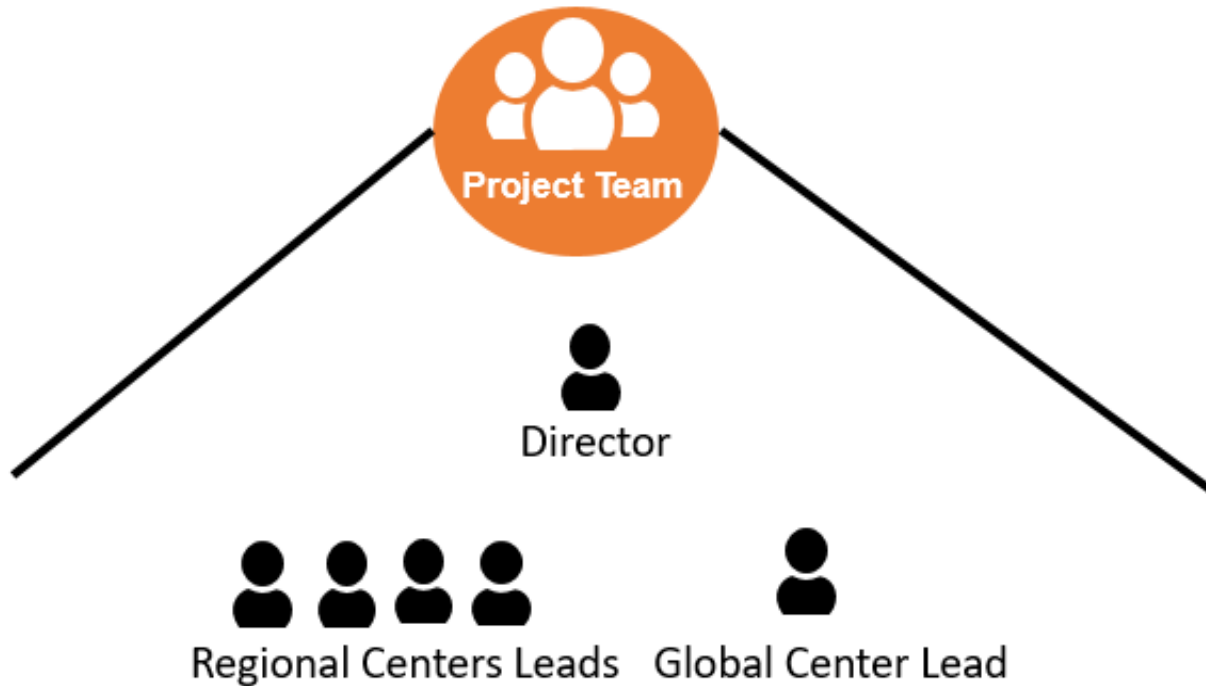
Seabed 2030

Regional Centers

Global Center

RDACC and GDACC = too technical & arcane

Seabed 2030 Project Team



Year 1: Project Management

Southern Ocean



Dr. Boris Dorschel

Atlantic and Indian Oceans



Dr. Vicki Ferrini



Lamont-Doherty Earth Observatory
COLUMBIA UNIVERSITY | EARTH INSTITUTE

South and West Pacific Ocean



Dr. Geoffroy Lamarche

Arctic and Northern Pacific Oceans



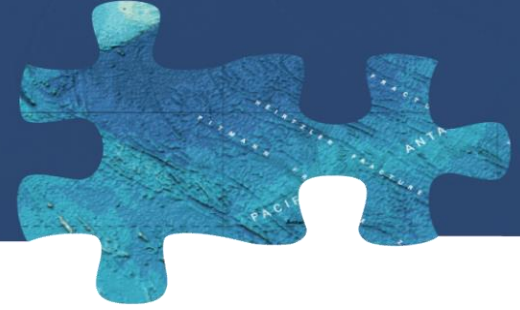
Dr. Martin Jakobsson



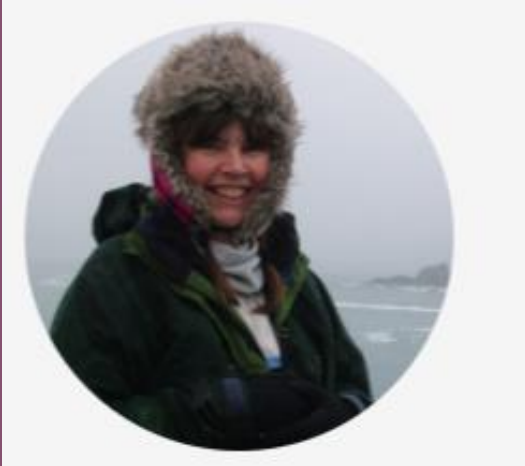
Dr. Larry Mayer



Project Team



Global Center



Dr. Helen Snaith



Pauline Weatherall
GEBCO Digital Atlas Manager
Vice-chair SCRUM



**British Oceanographic
Data Centre**

NATURAL ENVIRONMENT RESEARCH COUNCIL



**National
Oceanography Centre**

NATURAL ENVIRONMENT RESEARCH COUNCIL

Seabed 2030 Sponsors meeting



Also:

- Julian Barbieri (IOC Sec)
- David Wyatt (IHO Sec)
- Mustafa Iptes (IHO Sec)
- Martin Jakobsson (GGC)
- Mao Hasebe (NF)

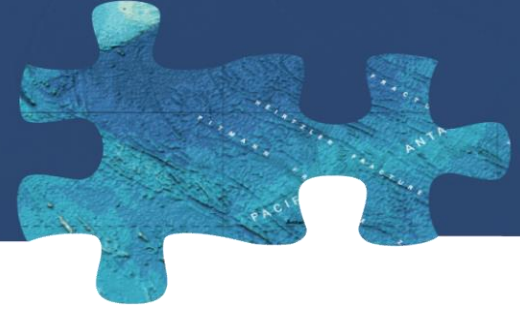
Vladimir Ryabinin
Executive Secretary of
IOC Secretariat

Mitsuyuki Unno
Executive Director,
The Nippon Foundation

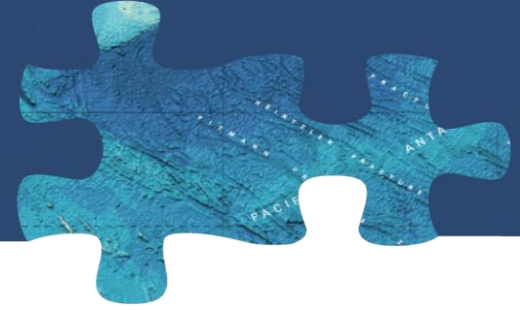
Mathias Jonas
Secretary General of
IHO Secretariat

GEBCO

- What is it?



GEBCO is



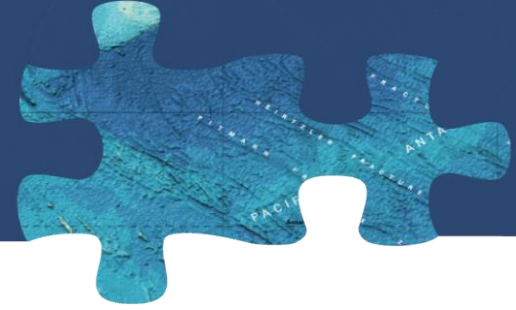
'... an open ended joint project of the IHO & IOC managed by the GEBCO Guiding Committee (GGC)'

' The **G**eneral **B**athymetric **C**hart of the **O**cean'

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

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

Seabed 2030 - What is it to do?



Finish the job that **GEBCO** *(the joint project)*

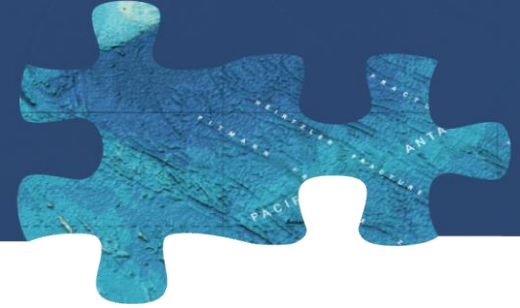
started in 1903, which is to deliver **GEBCO** *(the chart)*
to the world

Finish GEBCO

- ***Finish the GEBCO map***
- Finish the GEBCO chart
- Finish the GEBCO Grid

Yes, they are all tautological.....and incorrect, but to the general public/non-expert the most appropriate

Seabed 2030 *complete GEBCO*



June 2016



Mr Sasakawa, Chairman of The Nippon Foundation proposed ‘...to map 100% of the topography of the World Ocean by 2030’



June 2017

The Nippon Foundation -
GEBCO Seabed 2030 Project
announced

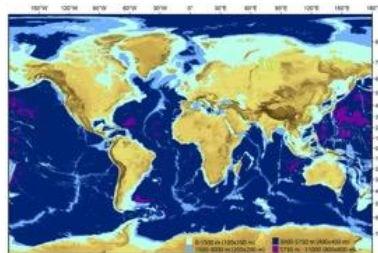


Mr Sasakawa – 1 of 8 IOC-UNESCO
“Champions of Global Ocean Science”



SDG-14

Project Operational

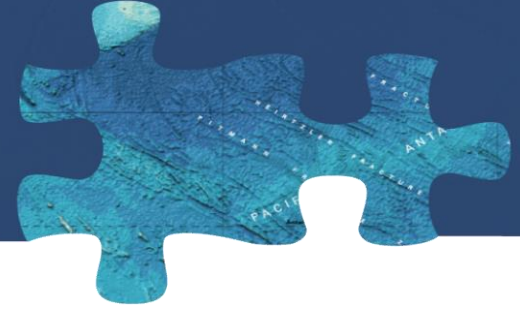


1st February 2018

2030

100% of GEBCO DONE

Agenda – 60 mins



INFORMATION:

- ✓ Scene setting
- ✓ Year 1 Achievements
- ✓ Lessons Learnt

DISCUSSION:

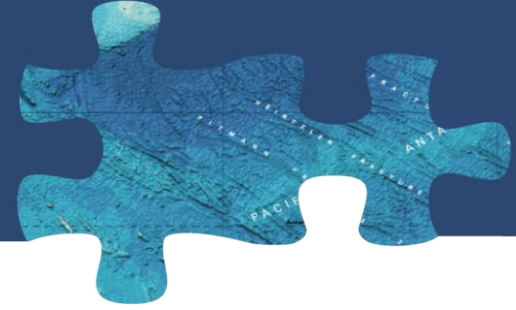
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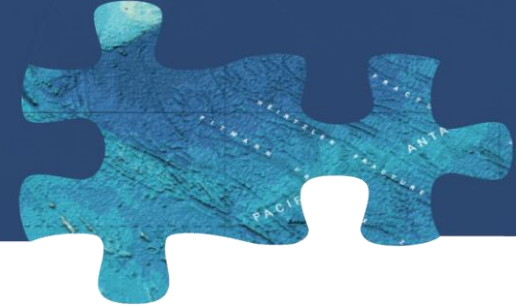
Project Strategy - Principles



Completing a high-resolution ocean map:

- ✓ Will make the World a better place
- ✓ Quick & low cost progress by including existing data collected but not yet available to GEBCO
- ✓ Is a Global community endeavour, best championed by GEBCO
- ✓ Requires technology innovation
- ✓ Requires funding of expeditions
- ✓ Requires funding of project & centers

Project Strategy - Work Packages



WP 1: PUBLISHING THE GRID – DATA (SCRUM)

- Focused on existing data not yet available to GEBCO
- Identifying where data exists and where data does not exist ('the gaps')

WP 2: TOOLS AND SYSTEMS DEVELOPMENT (TSCOM)

- The tools and systems to deliver the new multi-resolution GEBCO products

WP 3: TECHNOLOGY INNOVATION

- How to encourage/accelerate the required technical advances?

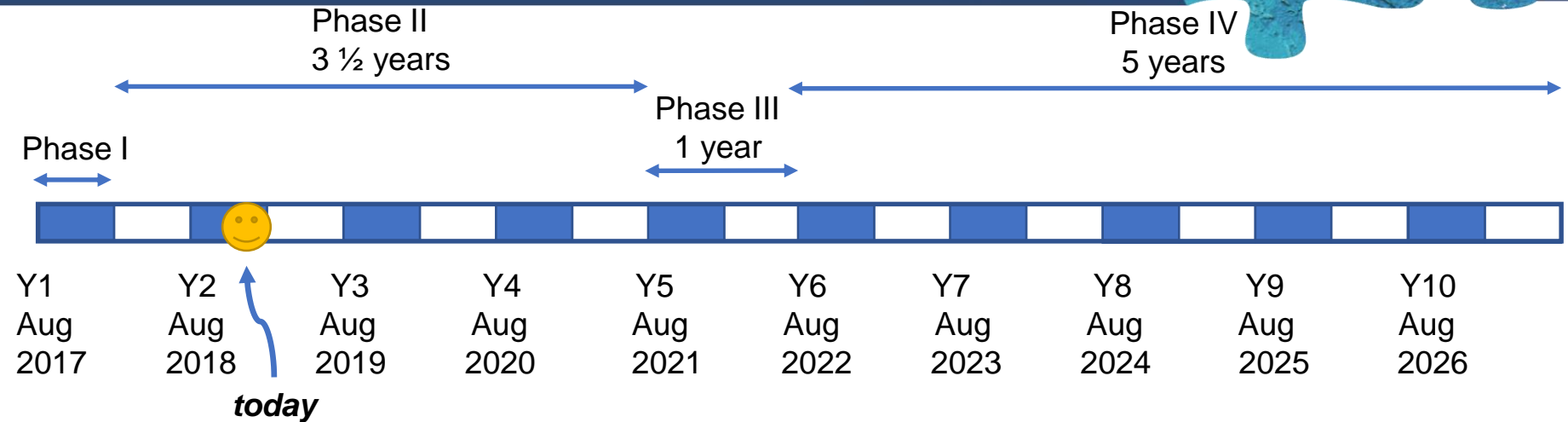
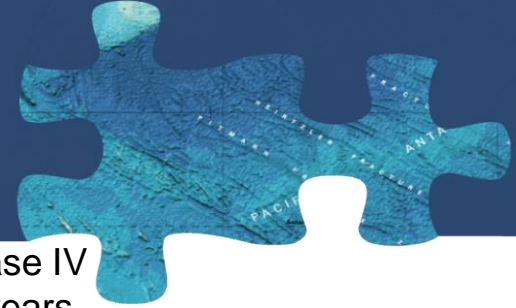
WP 4: MAP THE GAPS

- How to champion/facilitate data collection in areas devoid of data?
- Funding expeditions?

WP 5: MANAGEMENT

- Communication and outreach
- Human capacity development
- Operational management
- Strategic direction
- Funding raising

Project Strategy – time line



PHASE I - Establishment Phase

- Focus on WP5: management

PHASE II - Publishing existing data

Focus:

- WP2 Tools and System
- WP1 Publish data
- Design WP3 Tech innovation
- Design WP 4 Map the gaps
- WP5: Tell the world about Seabed2030

PHASE III - Start to map the gaps

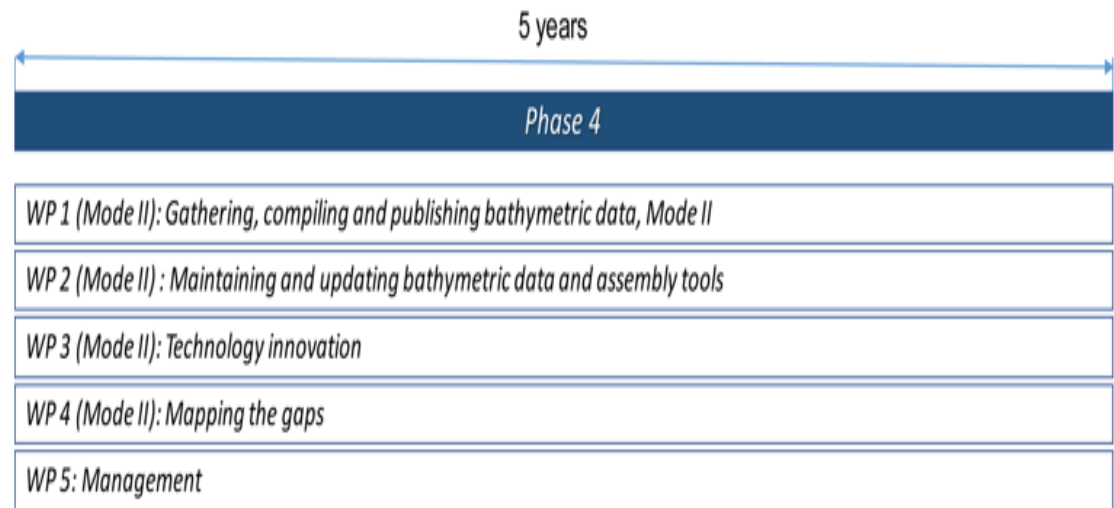
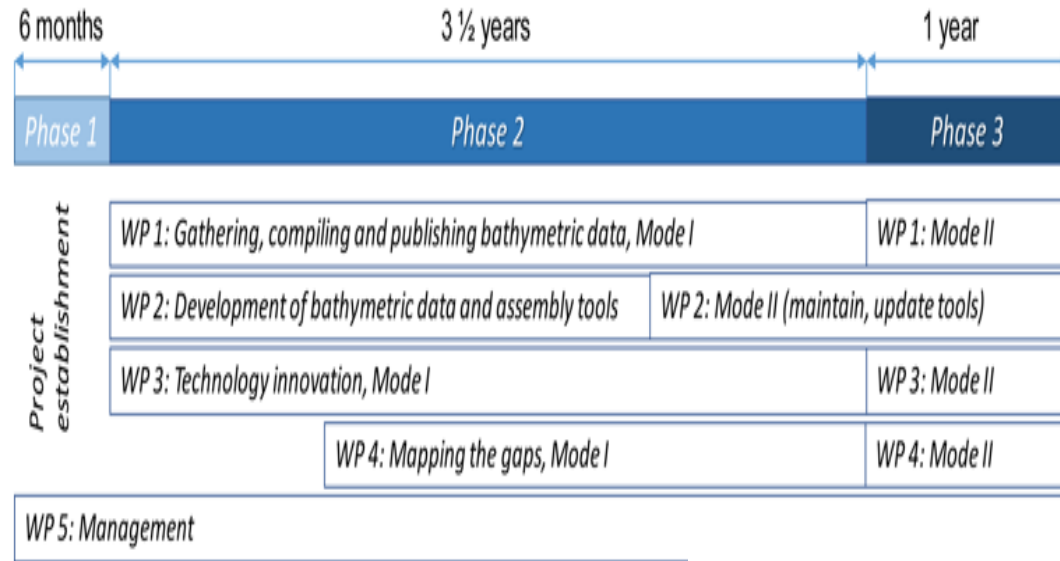
- Focus shifts to WP 4 Map the gaps
- WP1 Business as Usual

PHASE IV – Leveraging tech innovation

Focus:

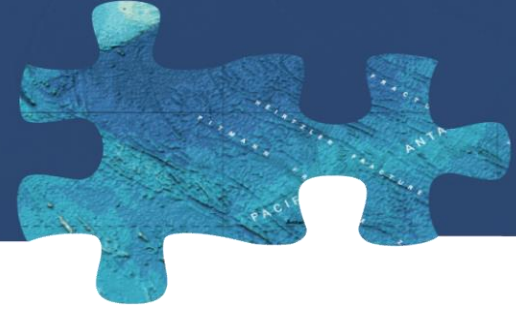
- WP 4 Map the gaps
- WP 3 Tech innovation
- WP1 and 2 ready for increase in data vols from WP3 & WP4

Project Strategy



from
Seabed 2030 Project Plan

Project Strategy funding



The Nippon Foundation

- '...plan on funding Seabed 2030 for 10 years ' at an annual rate of \$1.8m
- Consider proposals June/July
- Approve funding on an annual basis: 1st Aug to 31st July

Center Hosts

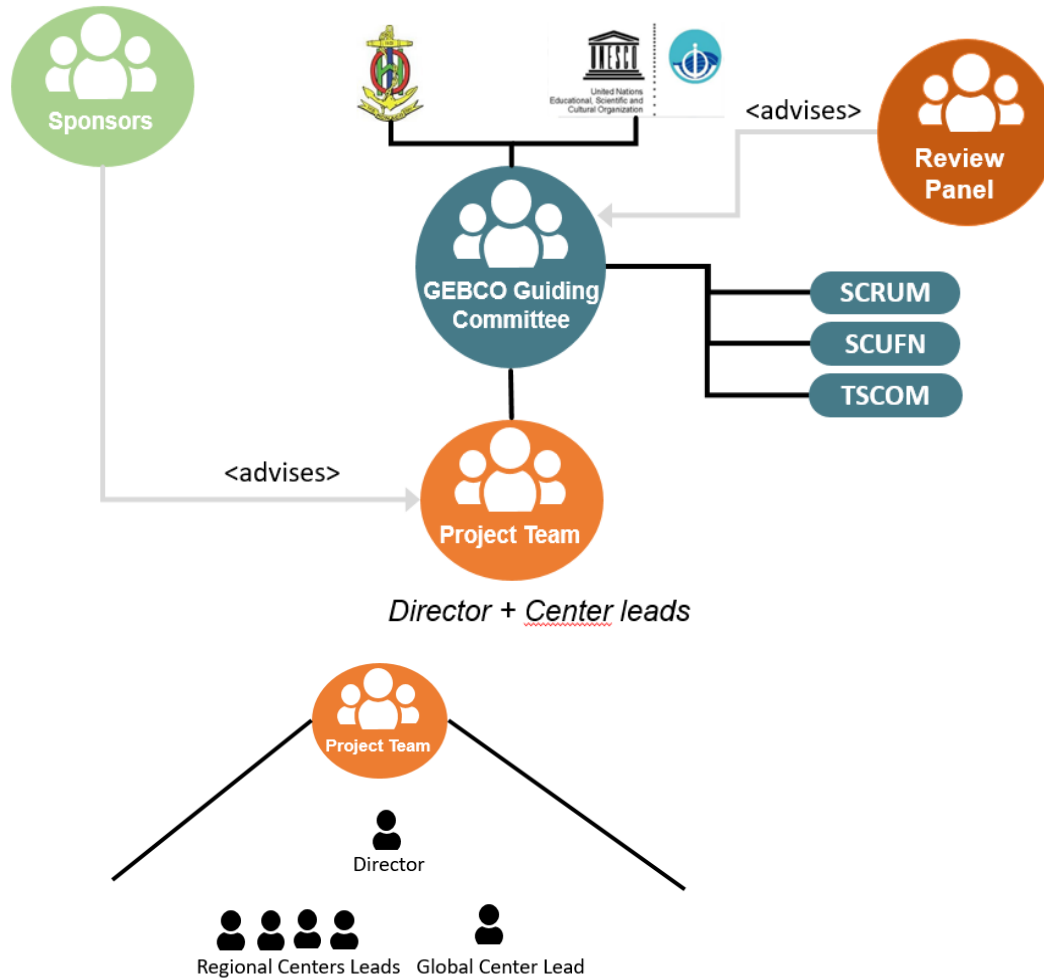
- Stockholm Uni
- UNH
- AWI
- NIWA
- Columbia University
- NOC

are providing significant support to Regional and Global Centers

Stockholm Uni, NOC & Robin Falconer

Are providing in kind/travel support to core Establishment Team :
Martin Jakobsson, Robin Falconer & Graham Allen

Project Governance



GGC:

1. Endorses progress
2. Endorses direction
3. Reports to IHO and IOC

Review Panel:

1. Provides independent view of progress & direction

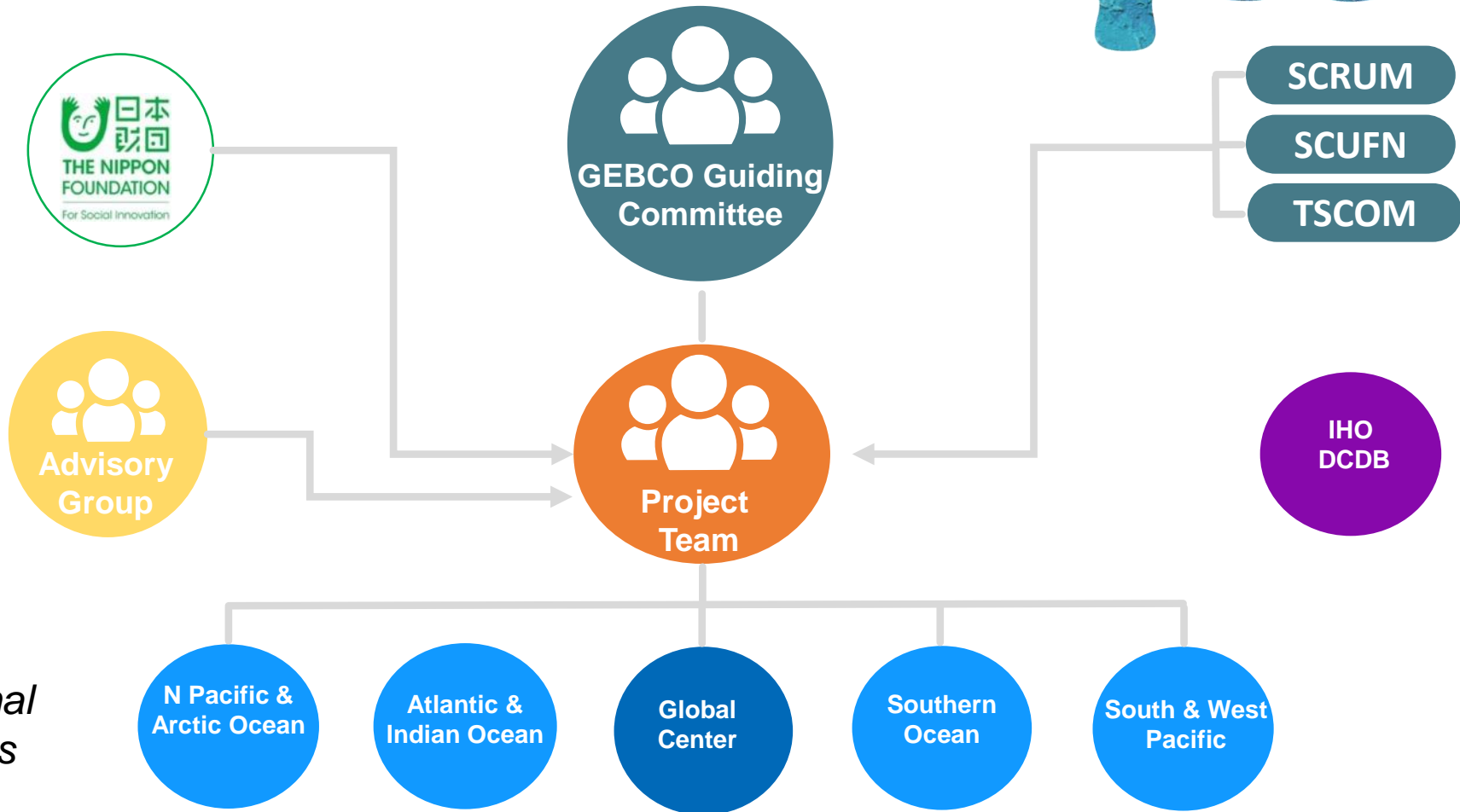
Sponsors:

1. Advise Director on direction
2. 'Exec' view of progress

Project Team

- 1 Reports to GGC on progress & direction

Seabed 2030 Operations



*Regional
Centers*

Year 1 Goals



REGIONAL CENTERS

- **Sourcing regional data**
 - **Build** working relationships with all potential contributors
 - **Start** gathering bathymetric data
 - **Start** crowd sourcing to source data
 - By end of Year 1, all regional Editorial Boards **set up**.
- **First high-resolution map**
 - **Initiate** compilation of each regional map
- **Technical meeting**
 - RDACC staff to attend first technical meeting

GLOBAL CENTER

- **Establish data standards for regional map integration**
 - **Hold** first technical meeting of Seabed 2030 by end of Year 1
 - **Publish** data standards for data integration by end of Year 1
- **Prepare for production of the first updated world ocean map**, at the end of 2018
- **Design website and user interfaces.**
 - **Begin** development of data assembly tools

PROJECT TEAM

- **Complete the Capacity Development Review**
- **Establish the Strategic Advisory Group**
 - First meeting **completed** by end of Year 1.
- **Establish a technology innovation working group**
 - **Complete** first meeting of working group by end of Year 1
 - Strategy for future work **completed** by end of Year 1
- **Progress towards a complete world ocean map**
 - **Confirm** the actual extent of current mapping coverage.
 - **Increase** data coverage to 17%

Year 1 = 6 months of forming

Year 1 Achievements

WP 5: MANAGEMENT

Forming the project team & centers

- ✓ Set up of Centers
- ✓ Form the Project Team
- ✓ Induction of Project Director



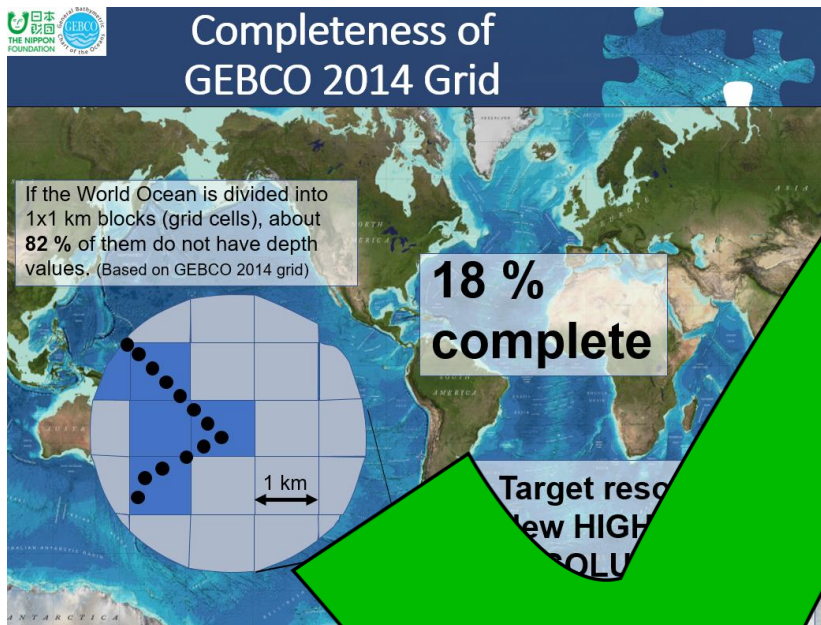
Patrick Orr & Henry Gilliver
Comms and PR



Year 1 Achievements



GOAL: Confirm the actual extent of current mapping coverage

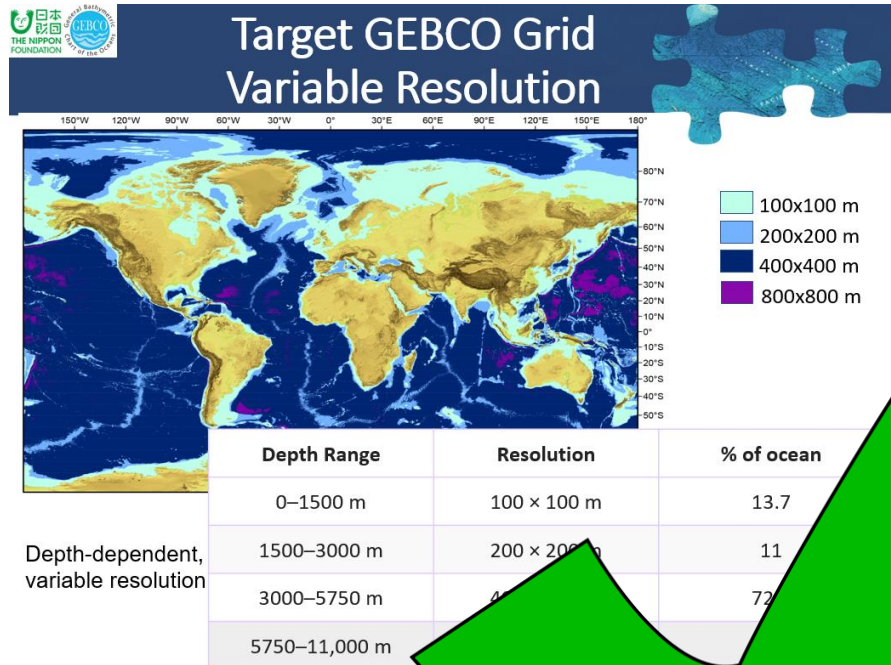


WP 1: PUBLISHING THE GRID - DATA

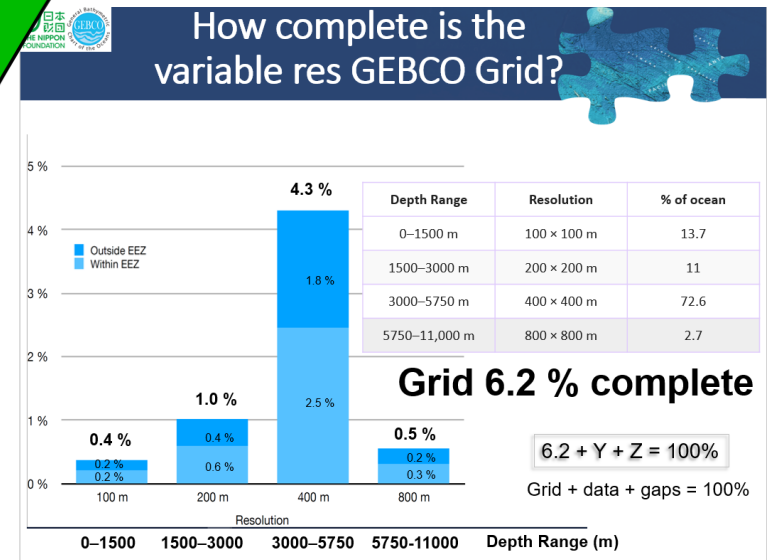
Year 1 Achievements



WP 2: TOOLS AND SYSTEMS DEVELOPMENT



PUBLISHING THE GRID - DATA

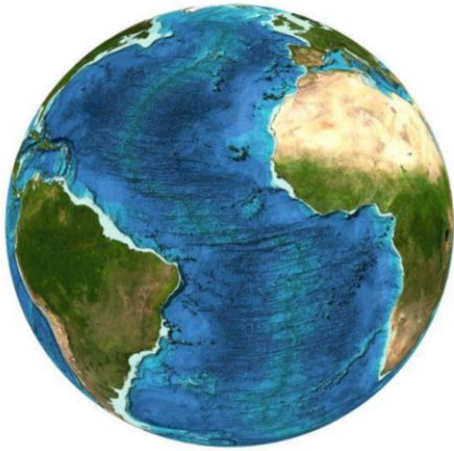


GOAL: First high-resolution
Initiate compilation of each re

Year 1 Achievements



WP 1: PUBLISHING THE GRID - DATA



GOALS:

Build working relationships with all potential contributors

Start gathering bathymetric data

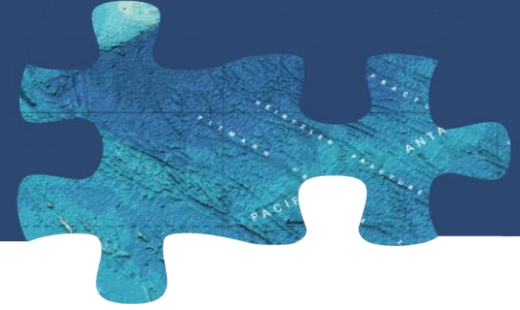
Start crowd sourcing to source data

By end of year all regional Editorial Boards (Regional Mapping Committees) set up.

Regional Mapping Meetings held or planned:

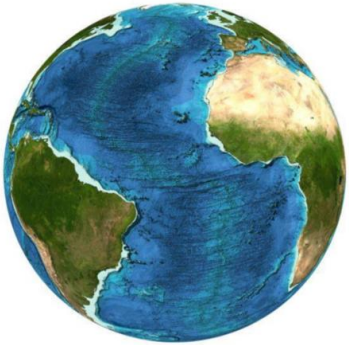
- Arctic, Antarctic & North Pacific Mapping Meeting 8th to 10th Oct 2018
- Atlantic & Indian Oceans Regional Mapping Meeting 30th Oct to 1st Nov 2018
- South & West Pacific Regional Mapping Meeting 11th to 13th Feb 2019

Year 1 Achievements

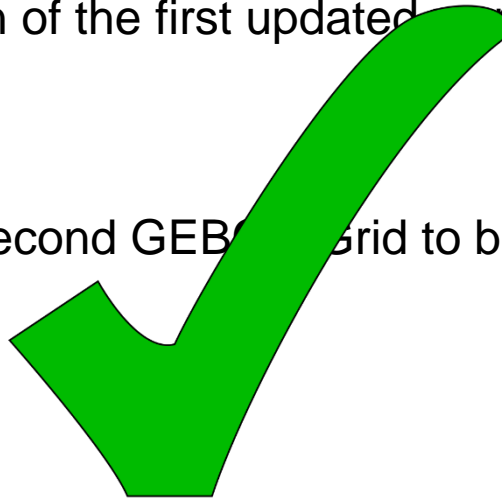


WP 1: PUBLISHING THE GRID – DATA & WP 2: TOOLS AND SYSTEMS DEVELOPMENT

GOAL: Prepare for production of the first updated world ocean map, at the end of 2018



15 arc second GEBCO Grid to be published by 31st December 2018



GOAL: Establish data standards for regional map integration

- Hold first technical meeting of Seabed 2030 by end of Year 1



1st Seabed 2030 Technical meeting held April 2018,
hosted by ESRI



Year 1 Achievements



WP 2: TOOLS AND SYSTEMS DEVELOPMENT

GOAL: Design website and user interfaces.



Home About Us Data Centers Get Involved FAQs Resources for Journalists

The Nippon Foundation-GEBCO Seabed 2030 Project

Seabed 2030 is a collaborative project between the Nippon Foundation and GEBCO. It aims to bring together all available bathymetric data to produce the definitive map of the world ocean floor by 2030... make it available to all. It builds on more than 100 years of GEBCO's history in global mapping.

Get involved News & media resources

Read more Read more Read more

Stage 1: Go Live October 2018

Year 1 Achievements



WP 1: PUBLISHING THE GRID - DATA

GOALS:

Build working relationships with all potential contributors

Start gathering bathymetric data

Start crowd sourcing to source data

Mapping organization contribution data to Seabed 2030



100,000 Km²



100,000 Km²

OCEAN INFINITY
Seabed Intelligence

PERFORMANCE

**OCEAN INFINITY DONATES
120,000 SQUARE KILOMETERS OF
DATA FOR MISSING MALAYSIAN
AIRLINER TO GEBCO SEABED
2030 PROJECT**
21/06/2018

Ocean Infinity donated 120,000 square kilometers of data from the search for missing Malaysian airliner to The Nippon Foundation-GEBCO Seabed 2030 Project.

https://seabed2030.gebco.net/resources_for_journalists/documents/ocean_infinity_press_release.pdf

Year 1 Achievements



WP 5: MANAGEMENT

GOALS:

- Establish the Strategic Advisory Group

NOTE:

Work Package 5 details:

- Communication and outreach
- Human capacity development
- Operational management
- Strategic direction
- Funding raising



Seabed 2030 Strategic Advisory Group



Dawn Wright
Chief Scientist



Bjorn Eide
Executive Director



Yulia Zarayskaya
NF-GEBCO Alumni
Team Lead XPrize



Dr. Kilaparti Ramakrishna
Head of Strategy, Green Climate Fund

Year 1 Achievements



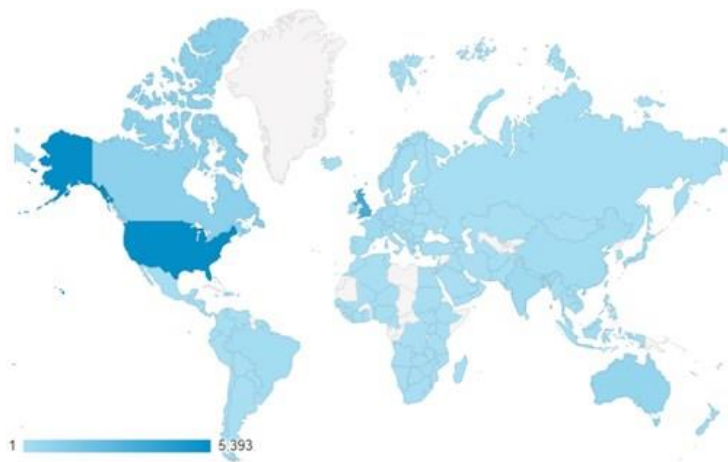
WP 5: MANAGEMENT – no GOALS in Year 1 Plan

Work Package details:

- Communication and Outreach
- Significant global exposure in
 - Mainstream media
 - Mapping community
 - Academic community
 - Policy community

Work Package details

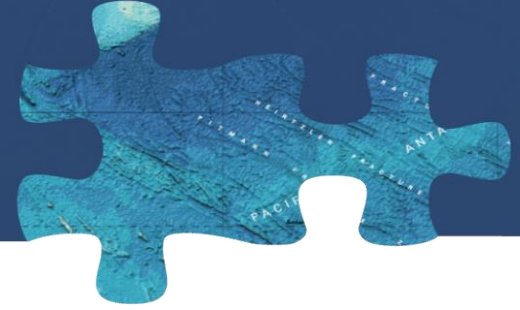
- operational management
- Year 1 Annual Report submitted
- Year 2 Work Plan submitted
- Year 2 funding secured



Seabed 2030 website access



Year 1 Achievements (not)



WP 3: TECHNOLOGY INNOVATION

GOAL: Establish a technology innovation working group

WP 4: MAP THE GAPS

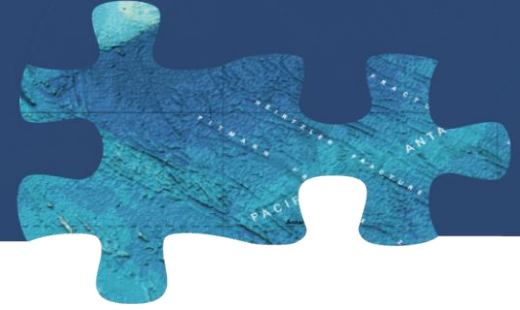
No Year 1 GOAL

WP 5: MANAGEMENT

GOALS:

- Complete the Capacity Development Review
- Establish the Strategic Advisory Group
 - First meeting completed by end of Year 1.

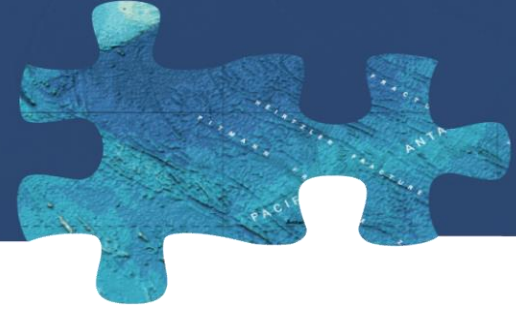
Year 1 Work (unpublished)



Much work on other foundational aspects of Seabed 2030, not in year 1 work plan or communicated outside of Project Team, including:

- Visual identity/branding/marketing - logos
- Partnership agreements
- Legal entities
-

7 Lessons learnt

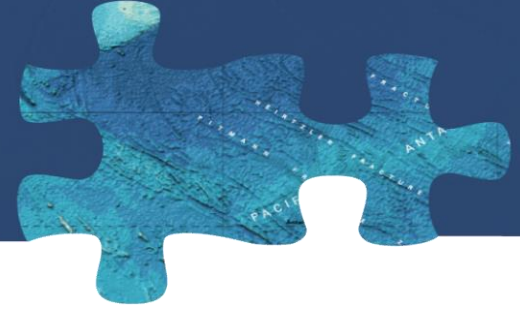


Lessons learnt from Graham:

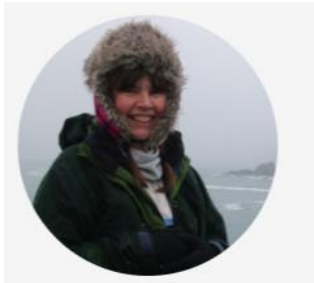
Establishment team, step back from Year 1, re-introduced on Director resignation

1. 6 month Year 1 = Project **initiation**
2. Very **ambitious** to initiate project + complete many tasks
3. **Paper work & timing** significant impact
Contracts preparation → Delay in approval of Center Agreements → delay in recruiting center staff → underspend on staff
4. **Globally distributed/leveraged** project team work is challenging
5. Comms, networking, outreach effort is **immense**
6. **Unspecific** Year 1 Goals

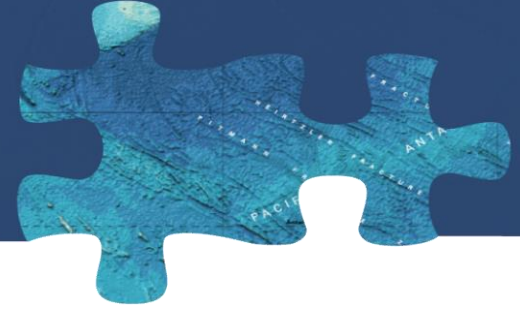
7 Lessons learnt



7. Center Leads – Awesome team; major momentum



GGC Discuss



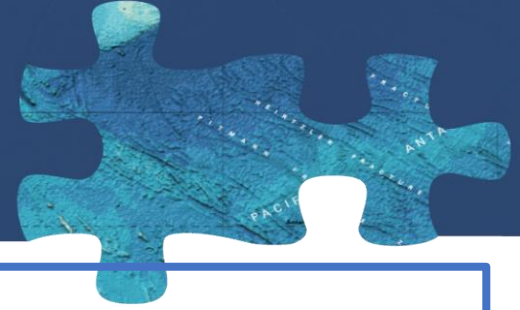
- GGC Discussion on Year 1 Annual Report
- Clarification from PROJECT TEAM

DECISION OPTIONS:

- 1) Endorse the Year 1 Annual Report
- 2) Endorse with recommendations
- 3) Not endorse the Year 1 Annual Report
 - and request a resubmission

Discuss & ask questions.....

GGC Decision



DECISION:

➤ GGC decision to:

- 1) Endorse the Year 1 Annual Report?
- 2) Endorse with recommendations?
- 3) Not endorse the Year 1 Annual Report?
 - and request a resubmission

Thank you

