The Nippon Foundation-GEBCO

Seabed 2030 Project

Update

12th November 2018

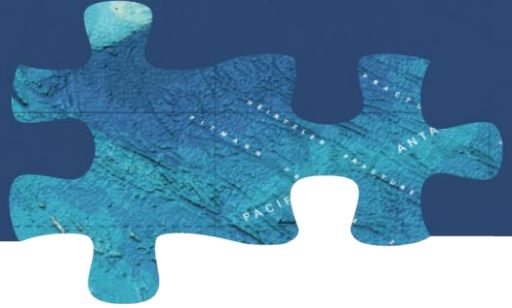
Presented by: Dr Graham Allen

Establishment Team member, Acting Seabed 2030 Director, Member of GEBCO Guiding Committee,

Co-author of: Seabed 2030 10 year Business Plan, Year 1 Proposal, Seabed 2030 Road Map, Seabed 2030 Project Plan.

Day job is
Chief Information Officer (CIO)
National Oceanography Centre, UK

Project Funding



The Nippon Foundation

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

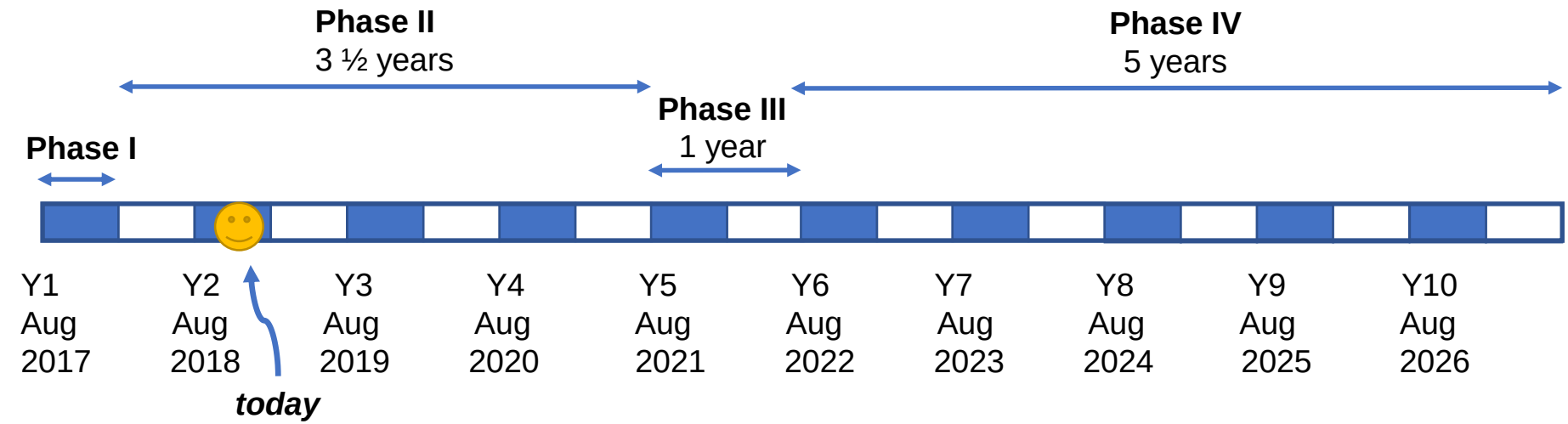
Center Hosts

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

Stockholm Uni, NOC & Robin Falconer

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

Project Strategy – time line



PHASE I - Establishment Phase

PHASE II - Publishing existing data

PHASE III - Start to map the gaps

PHASE IV – Leveraging tech innovation

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 further 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

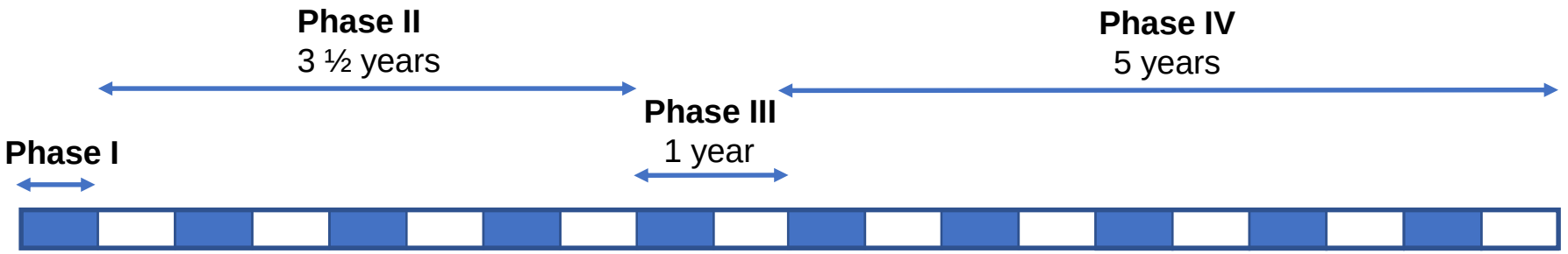
PHASE I - Establishment Phase (6 months)

- Focus on WP5: management

PHASE II - Publishing existing data (3 ½ years)

Focus:

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



Project Strategy – time line

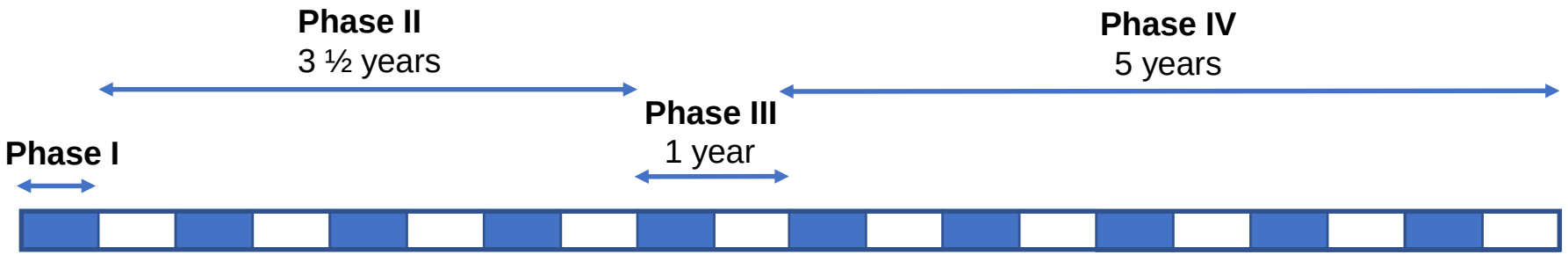
PHASE III - Start to map the gaps

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

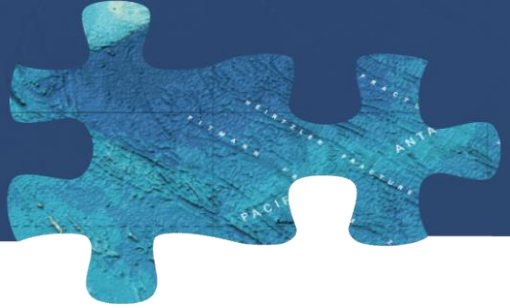
PHASE IV – Leveraging tech innovation

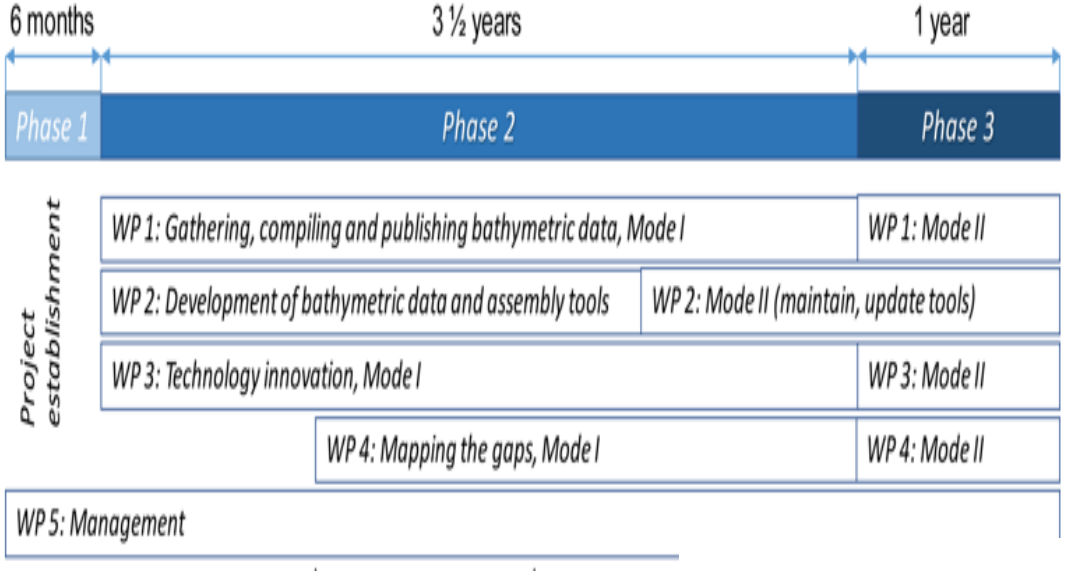
Focus:

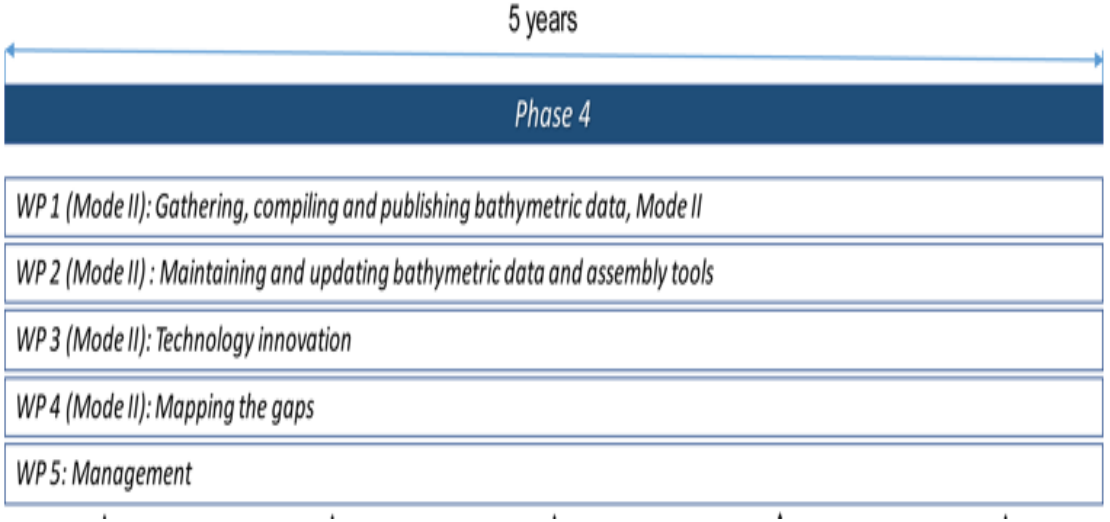
- WP 4 Map the gaps
- WP 3 Tech innovation
- WP1 and 2 ready for increase in data vols from WP3 & WP4



Project Strategy

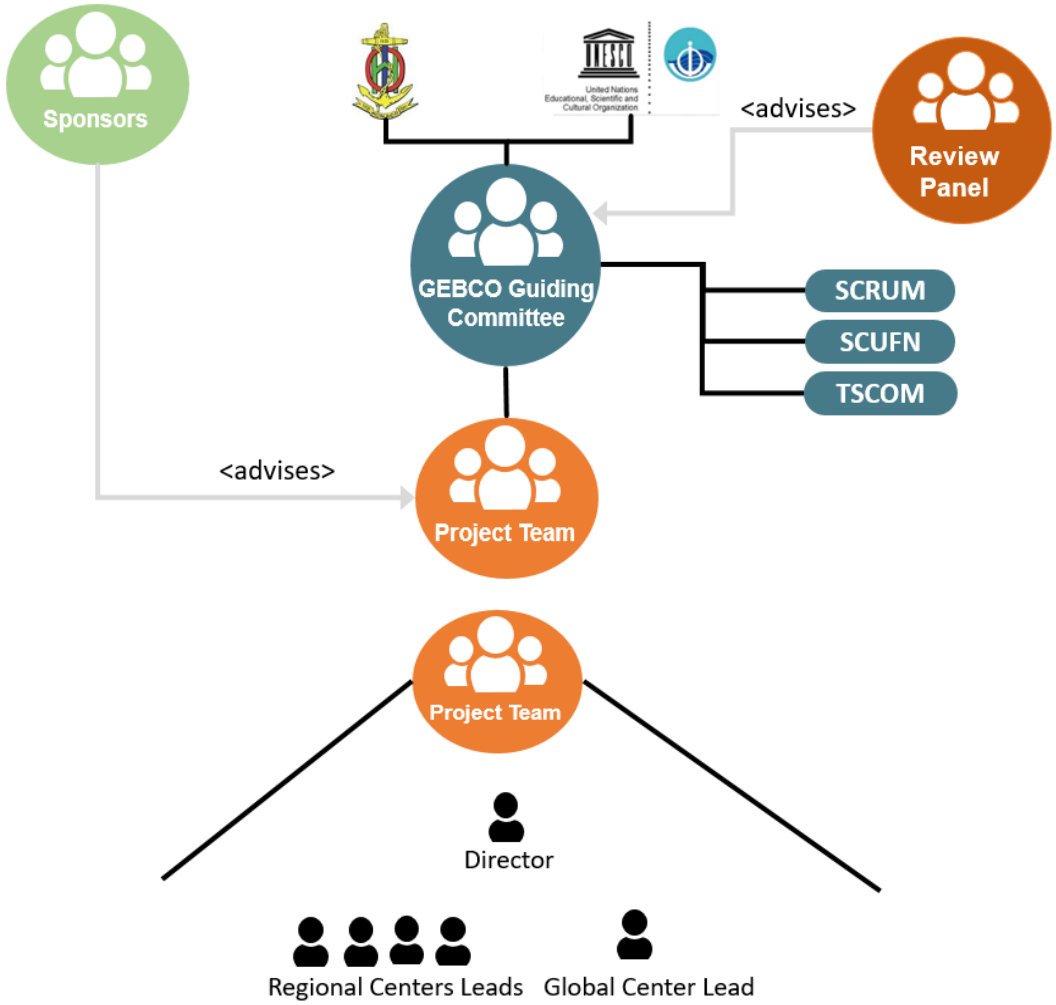






from
Seabed 2030 Project Plan

Project Governance



Year 1: Project Management

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

THE NIPPON FOUNDATION

For Social Innovation

GEBCO Guiding Committee

SCRUM

SCUFN

TSCOM

Advisory Group

Project Team

IHO DCDB

Regional Centers

N Pacific & Arctic Ocean

Atlantic & Indian Ocean

Global Center

Southern Ocean

South & West Pacific

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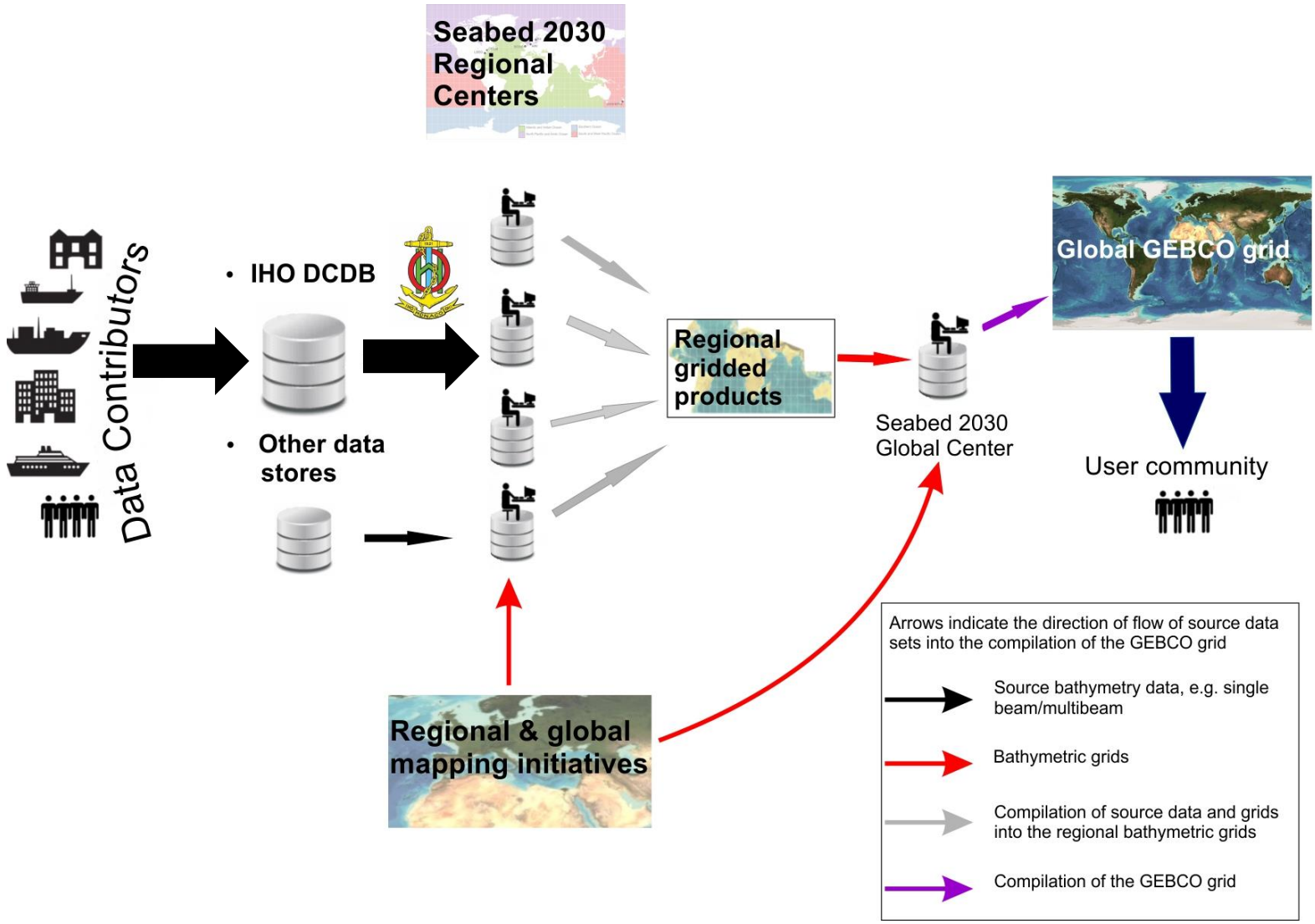
Preferred data flow



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Other supported data flows

If Data Contributors submit data to Regional or Global Centers:

Data Contributors will be asked to commit to 1 of 3 data access protocols:

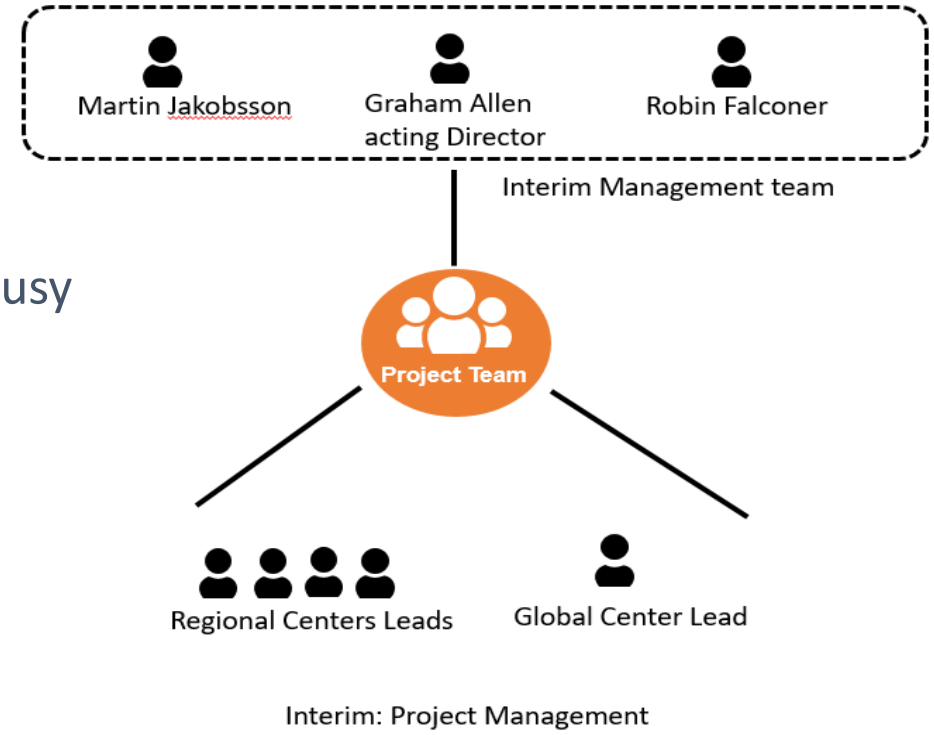
1) **Public data access *(preferred)***
Data forwarded to IHO-DCDB for archive and public access

2) **Restricted data access**
Data forwarded to IHO-DCDB for archive and restricted access

3) **Private data access**
Data not forwarded to IHO-DCDB, archived at Seabed 2030 Center
Usage restricted to only inclusion in GEBCO Products;
no distribution of data

Project Management

- Resignation of the Project Director.



Interim: Project Management

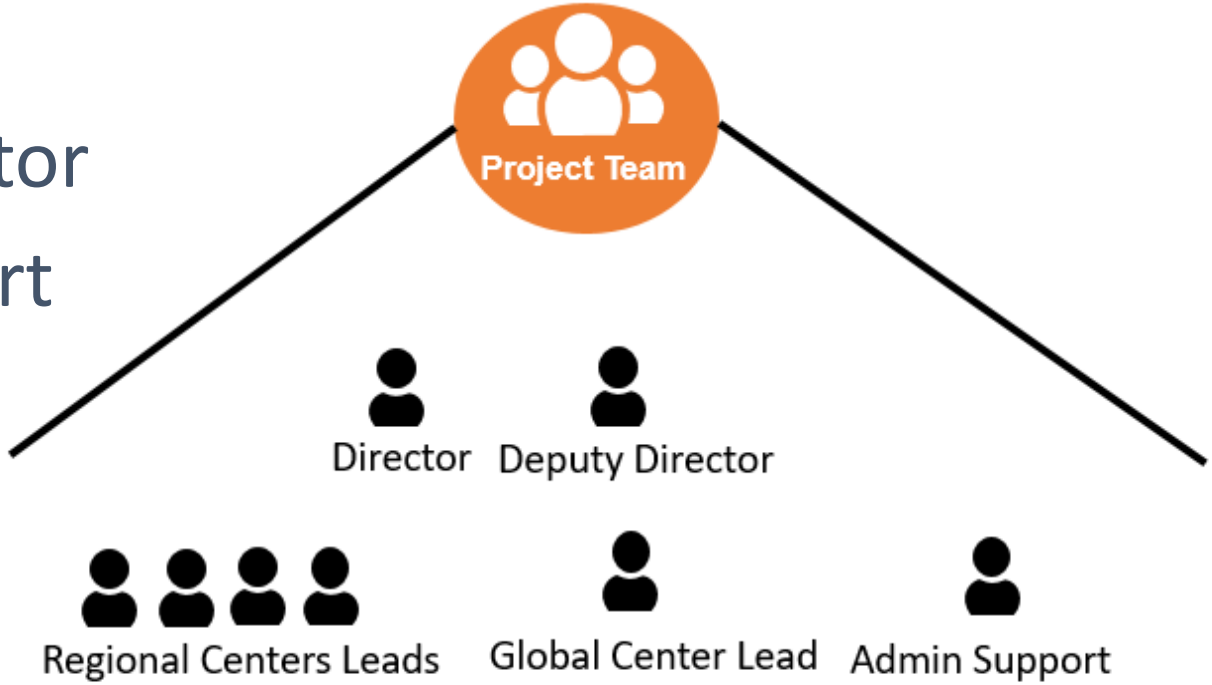
- Core Establishment team
  - Graham, Martin & Robin >100% busy

- **Significantly** reduced effort to complete Director tasks until replacement in place.

Project Management

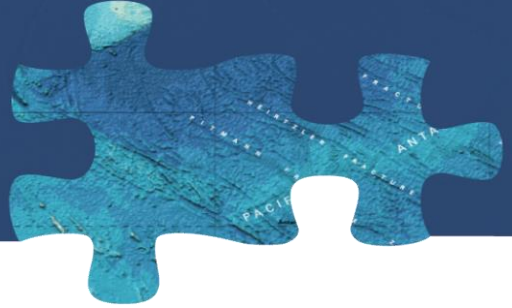
Resignation of the Project Director.

- Director
- Deputy Director
- Admin support



Long term: Project Management

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

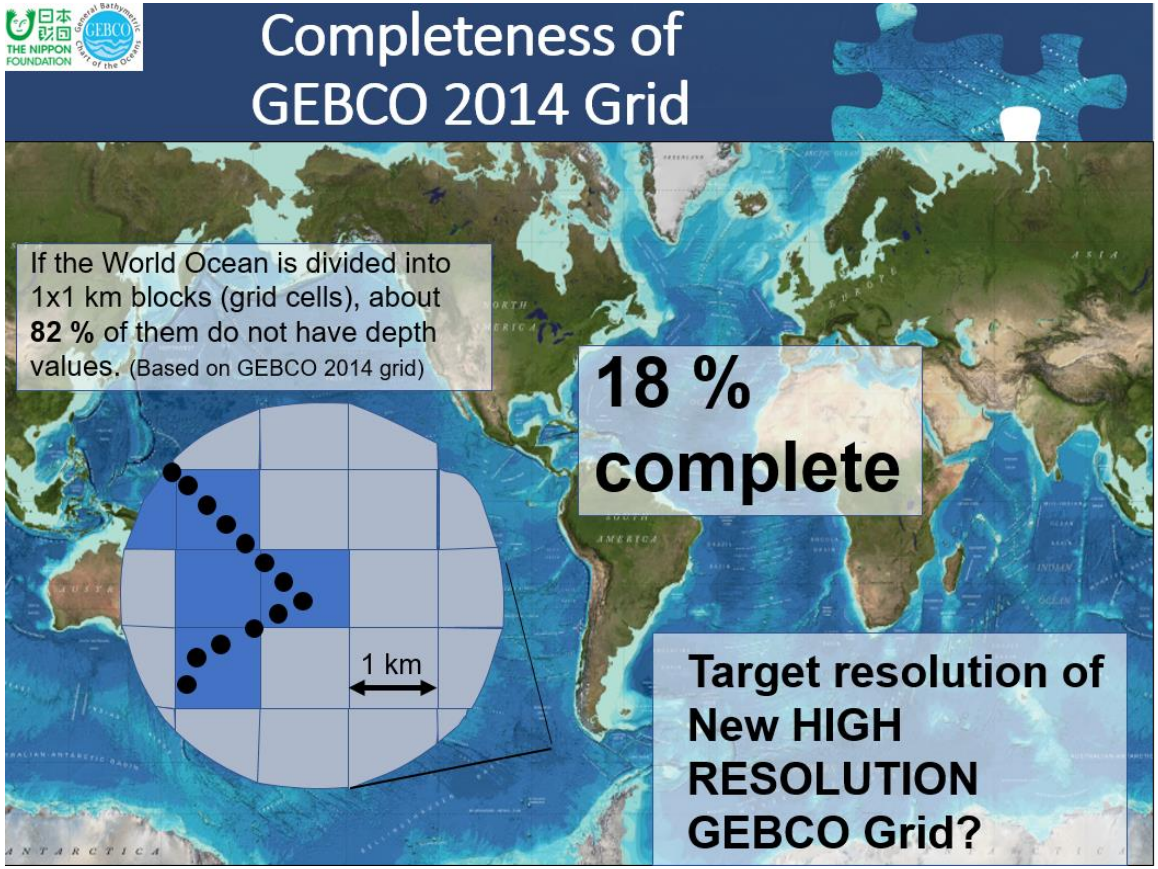
- **Complete the Capacity Development Review**
- **Establish the Strategic Advisory Group**
  - First meeting ***completed*** by end of Year 1.
- **Establish a technology innovation working group**
  - ***Complete*** first meeting of working group by end of Year 1
  - Strategy for future work ***completed*** 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 1: **PUBLISHING THE GRID - DATA**

GOAL: Confirm the actual extent of current mapping coverage.



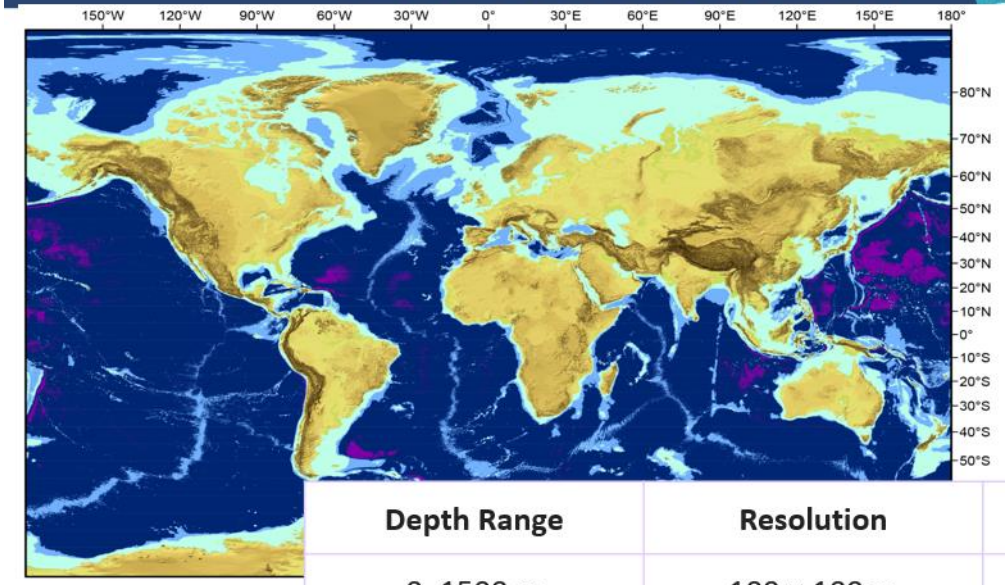
30 arc second grid

Year 1 Achievements

WP 2: TOOLS AND SYSTEMS DEVELOPMENT

GOAL: First high-resolution map: Initiate compilation of each regional map

Target GEBCO Grid Variable Resolution



Depth-dependent, variable resolution

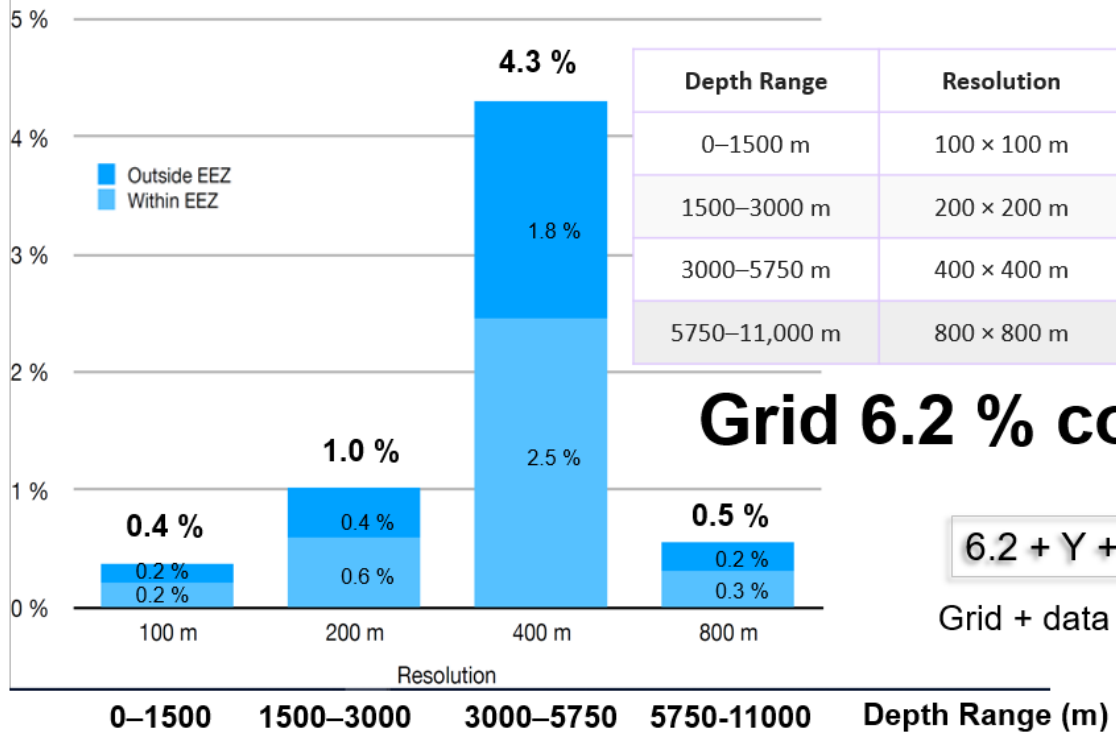
Depth Range	Resolution	% of ocean
0–1500 m	100 × 100 m	13.7
1500–3000 m	200 × 200 m	11
3000–5750 m	400 × 400 m	72.6
5750–11,000 m	800 × 800 m	2.7

Year 1 Achievements

WP 2: TOOLS AND SYSTEMS DEVELOPMENT

GOAL: First high-resolution map: Initiate compilation of each regional map

How complete is the variable res GEBCO Grid?



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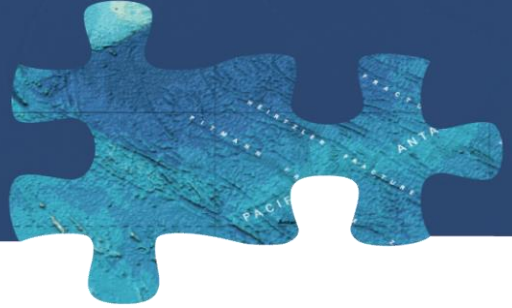
Grid 6.2 % complete

$6.2 + Y + Z = 100\%$

Grid + data + gaps = 100%

Looking forward



GGC 35 to consider:

- Year 1 Annual Report
- Year 2 Work Plan

- 31st Dec 2018 – Publish 15 arc second grid

Year 2

- The Nippon Foundation:
  - funded Year 2: Aug 2028 to July 2019:
  - $1,255,000 new cash
  - $268,000 unspent from Year 1
  - Year 2 budget of **$1,523,000**