

**G E B C O**  
GENERAL BATHYMETRIC CHART OF THE OCEANS



**Thirty Fifth Meeting of the GEBCO Guiding Committee (GGC35)**

15 – 16 November 2018, Canberra, Australia

*(Paragraph numbering is the same as the Agenda Item numbering and does not necessarily reflect the order in which matters were discussed.)*

**1. Opening**

**1.1 Opening Remarks and Introductions**

The Chair GGC welcomed all and noted the successful previous three days, in particular the GEBCO Symposium, which was a highly successful day and demonstrated the wide aspects of activities related to the GEBCO Project and The Nippon Foundation-GEBCO Seabed 2030 Project (Seabed 2030). He thanked all the sponsors – Geoscience Australia, Land Information New Zealand, Kongsberg Maritime, Teledyne CARIS, James Cook University, Terrasond and Fugro,

The Chair GGC highlighted how much the profile of GEBCO has risen over the past 12 months together with an increasing desire for greater understanding of the seafloor as a result of numerous highly publicised external initiatives, he noted that the Seabed 2030 Project successes could be attributed, in part, to this raised awareness as well as the significant efforts and work that had been undertaken by those directly involved since the Project launch earlier in the year. He noted the significant amount of work which the GGC needed to address during its meeting.

1.2 Dr Johnathan Kool (JK) welcomed all on behalf of the Geoscience Australia and hoped all had a productive and successful meeting.

**1.3 Opening remarks by parent bodies (IHO and IOC)**

Mustafa Iptes (MI) welcomed all participants on behalf of the IHO Secretariat. He noted the importance now given to the GEBCO Project by the IHO member States with the increased visibility in line with the numerous Oceans related initiatives sponsored by the UN and its specialized agencies.

Julian Barbière (JB) welcomed all and thanked the hosts for the excellent facilities provided. He highlighted the increased engagement of the IOC member States through the recently established IOC Working Group and the GEBCO Project connection with proposed UN Decade of Ocean Science for Sustainable Development 2021-2030. He noted the IOC Assembly 30 in 2019 as an important opportunity.

**1.4 Arrangements**

No apologies had been received, only one GGC member was not present, Captain Leonid Shalnov (Russian Federation), who had attended GGC34. The Secretary reported that the number of GGC voting members present constituted a quorum; the list of participants is at Annex A

## 1.5 Working and Administrative Arrangements

Secretary provided details of the arrangements for the GGC35 meeting days.

## 1.6 Adoption of the Agenda and approval of report from GGC34

The agenda was adopted without change. The report of the GGC34 was approved as published. (GGC34-12).

## 1.7 Review of Action Items from GGC34 (GGC35-1.7)

The Secretary went through the action list from GGC34, he highlighted a number of actions on which limited progress had been achieved, a number of items were identified as being covered by agenda items. All participants were urged to keep the Chair and Secretary informed on progress of actions for which they were responsible. It was noted that an approach had been made to Scrips regarding the SRTM use, see paragraph 11.1.

## 1.8 Report from IRCC10 (GGC35-1.8.1 and GGC35-1.8.2)

The Chair reported on the IRCC10 meeting, he highlighted the outcomes relevant to the GGC and GEBCO, particularly on the encouragement for engagement and actions in support of the GEBCO Project and Seabed 2030. He noted that the IRCC had recommended the continued use of the Regional Hydrographic Commissions (RHCs) to obtain permission for the use of existing and future data sources.

## 2. Reports from Parent Organizations and GGC Subordinate Bodies.

### 2.1 IHO update

MI provided a brief summary of IHO activities since GGC34 (GGC35/2/1).

### 2.2 IOC update

JB provided a presentation on the IOC activities since GGC34. He highlighted that the Executive Council had established a regular working group tasked with collecting and assessing the user requirements for GEBCO products and services; the next assessment was due in 2020. He noted the IODE planned to attend GGC36 in 2019 (GGC35/2/2).

### 2.3 Financial update, including funds status report

The Secretary provided a brief overview of the current state of the GEBCO finances (GGC35/2/3), he noted that allocated funds had not been spent, which suggested either the work was being funded by host organizations or it was not being undertaken. Sub-Committee chairs were encouraged to spend the funds allocated to support their Work Plans. It was suggested that the GGC needed to be more active intersessionally to monitor the tasks and activities agreed at the meeting. Generated a number of questions and a wide ranging discussion on how to use the accumulated funds. It was agreed that some funds could be allocated to support attendance at regional mapping meetings, it was acknowledged that any expenditure must follow the laid down processes and that it should be for discrete items to assist accounting and auditing. It was suggested that the IOC allocation could be used by the new Outreach Sub-Committee to encourage the increased use of GEBCO products. The Secretary also noted that it was not clear whether the University of New Hampshire (UNH) had received any funds from John Hall, as indicated at GGC34, how they intended to transfer those funds to the IHO for inclusion in the GEBCO Fund.

### 2.4 Digital Atlas Manager

Helen Snaith (HS) provided a brief report on behalf of the Digital Atlas Manager (GGC35/2/4); she highlighted a number of key activities and responsibilities undertaken by BODC in respect to the GEBCO Project and Seabed 2030. She highlighted the proposed release of the GEBCO 2018 grid at 15 arc second,

although it will be based on the unpublished 30 arc second GEBCO 2017 grid. She highlighted the work undertaken on the enhancement of the GEBCO and Seabed 2030 websites and to harmonize their appearance.

## 2.5 DCDB update, including relevant CSBWG and ASMIWG issues

Jennifer Jencks (JJ) provided an update on IHO DCDB activities, developments and proposed future developments to enhance the viewer functions as well as data discovery and accessibility (GGC335/2/5). She also highlighted the Crowdsourced Bathymetry Working Group (CSBWG) activities, in particular the presentation of B-12 Edition 1.0.0 (IHO Guidelines for Crowdsourced Bathymetry) to the IHO Council2 meeting and the focus of the CSBWG for 2019. She also noted the activities related to the Atlantic Ocean Research Alliance (AORA). It was highlighted that the IHO Secretariat was in the process of generating an IHO Circular Letter which lays out the IHO DCDB role and responsibilities.

## 2.6 SCUFN

Hans-Werner Schenke (HWS) provided a brief report on the recent SCUFN-31 meeting held in Wellington, New Zealand, 23 to 27 October 2018. He reported on the changes of membership and the election of a new Chair (Hyun-Chul Han) and vice-Chair (Yasuhiko Ohara). He noted there remained one IOC vacancy to be filled. He highlighted some changes proposed to B-6 (Standardization of undersea features names) to make the supporting bathymetric data available to the DCDB as part of a submission. He highlighted the support provided by the USA to enable the maintenance and development of the SCUFN Gazetteer hosted by NOAA. He requested the GGC endorse an amendment to the ToRs article 2.8 to increase the submission deadline from 30 days to 60 days for all formats of submissions. He reported on the activities of the Undersea Feature Names Project Team (UFNPT) and the proposed future activities related to the development of an S-100 base Product Specification and the registration of terms in the IHO S-100 Registry. He highlighted the organizations with which the fast-track procedure was used to process their submissions. In addition the GGC was asked to endorse the B-6 Edition 4.2.0. The GGC endorsed the proposed changes to the ToRs and endorsed the election of the new Chair and vice-Chair of SCUFN; the GGC felt the proposal to release data to the DCDB needed to be investigated further to ensure the feasibility of the proposal along with what actual data should be provided, the Chair GGC requested the vice-Chair GGC, the Chairs SCUFN, TSCOM, SCRUM, and Directors DCDB and Seabed 2030 to consider the issue and provide a final solution before the end of the meeting. The Chair thanked HWS for his long service to SCUFN and the GEBCO Project.

The Chair SCUFN presented the proposed revised changes for inclusion in B-6 on the provision to IHO DCDB of data used in support of submissions, the GGC endorsed the proposed changes with minor amendments. It was noted these proposals would be presented to the IRCC11 by the Chair GGC in his report. **Action 1 - Chair**

## 2.7 TSCOM

Karen Marks (KM) provided a brief report on the TSCOM activities and the outcomes of the recent meeting (GGC35/2/7+2/8). She highlighted ideas for the development of the B-11 (*GEBCO Cookbook*). She also highlighted the huge success of the GEBCO Symposium. She highlighted the outcomes of the breakout sessions conducted during the TSCOM-SCRUM meeting. She cautioned against up-sampling the 30 arc-second GEBCO grid to achieve 15 arc-second spacing, and suggested GGC officials contact Scripps to use SRTM15\_PLUS as the base grid instead. The GGC was asked to endorse the elections of the new Chair and vice-Chair (Thierry Schmitt and Caitlyn Raines respectively) for TSCOM for the next three year period, the GGC recognised the significant work and contribution made by the outgoing Chair (Karen Marks) over the past eight years. The GGC endorsed the elections. The Chair noted that KM would continue as editor of B-11 and engagement with TSCOM and other GEBCO activities.

## 2.8 SCRUM

Vicki Ferrini (VF) provided a brief report on the SCRUM activities and the outcomes of the recent meeting (GGC35/27+2/8). She noted the low level of attendance of the listed members of SCRUM. She highlighted the regional mapping activities and meetings, although the participation at RHC was lower than desired. She highlighted the main challenges which need to be addressed by SCRUM in support of Seabed 2030 to

improve participation and increase data inclusion in the GEBCO grids and regional products. She highlighted a need to refresh the membership, consider removing those who have not participated actively for a number of years and look at ways to increase membership and their activity intersessionally through regional networks and meetings. David Millar (DM) suggested a Google calendar could be created to highlight relevant meetings for people to identify as potential participants. This generated numerous comments and a wide ranging discussion on how to involve SCUFN more closely with the other GEBCO bodies and to allow time for all the activities which need to be addressed.

## 2.9 Outreach WG

Hyo Hyun Sung (HHS) provided a report on the outreach activities and developments since GGC34 and the discussions and outcomes from the Outreach Working Group meeting. She requested the GGC approve the creation of the new Sub-Committee on Communications, Outreach and Public Engagement (SCOPE). She highlighted the educational material created and proposed future products under consideration. MI highlighted the events at which the IHO Secretariat had had the opportunity to raise awareness and the profile of GEBCO and Seabed 2030.

It was agreed that the current Chair of the OWG, HHS, should lead the initial development of the SCOPE ToRs. **Action 2 - Chair OWG/SCOPE** Noting the numerous differences between the structures of the subordinate bodies and the lack of harmony between their respective ToRs, it was agreed that a more fundamental examination of the governance and structures of the GEBCO Project and its subordinate bodies was required, particularly in light of the raised profile of GEBCO and the broadening scope of its activities. As an initial step, the Chair GGC requested the Chairs of TSCOM, SCRUM, SCUFN and SCOPE to review their respective ToRs to ensure they were harmonized between the three Sub-Committee and to report back to GGC36 with proposed revised drafts. **Action 3 - Chairs TSCOM/SCRUM/SCUFN/SCOPE** On completion of the review, the Secretary was requested to circulate to the GGC for comment. **Action 4 - Secretary** In addition the Chair GGC requested the Chair SCOPE to generate a draft communications strategy for consideration at GGC36; David Miller (DM) agreed to investigate whether Fugro could assist. **Action 5 - Chair SCOPE/DM** In addition it was suggested that a communications specialist could be contracted to assist with the GEBCO strategy development, VF agreed to investigate. **Action 6 - Chair SCRUM**

## 3. Nippon Foundation Related Programmes

Robin Falconer (RF) and Karolina Zwolak (KZ) provided brief updates on projects and initiatives supported by the Nippon Foundation (NF) (GG35/3). The NF-UNH Ocean Mapping Programme and the NF Alumni and Ambassador programmes were highlighted. The GGC agreed to formally recognise the contribution made by the NF in support of GEBCO activities; the Chair was requested to write to the NF to thank the NF for their support. **Action 7 - Chair GGC** The Chair noted that RF was stepping down from the GGC at the end of the meeting and he thanked him for all his efforts and hard work over his many years of involvement with GEBCO.

## 4. GEBCO Engagement with External Bodies

### 4.1 Participation at IHO RHC meetings

The Secretary displayed details of forthcoming IHO RHC and IOC Regional meetings at which GEBCO should be represented (GGC35/4/1). The IOC provided details of forthcoming meetings of IOC Regional Sub-Commissions and Regional Committees at which GEBCO and Seabed 2030 could consider representation:

#### i. IOC Regional Sub-Commissions

IOC Sub-Commission for Africa and the Adjacent Island States (IOCAFRICA):

2019 - 5<sup>th</sup> session of IOCAFRICA possibly in Lagos, Nigeria in the first quarter of 2019

IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE):

2019 - 15<sup>th</sup> session of IOCARIBE in Aruba during the first quarter of 2019

IOC Sub-Commission for the Western Pacific (WESTPAC):

2019 - 12<sup>th</sup> Intergovernmental Session in Philippines in early 2019

2020 WESTPAC International Marine Science Conference in Indonesia

ii. IOC Regional Committees

IOC Regional Committee for the Central Indian Ocean (IOCINDIO):

2019 - 7<sup>th</sup> session of IOCINDIO should be organized in the first half of 2019

It was agreed that the details of IOC Regional meetings should be added to the table of RHC meetings uploaded to the GEBCO website. **Action 8 - Secretary/GDA Manager**

It was agreed that there was a need to develop a generic GEBCO presentation, which could be tailored to the relevant region. **Action 9 - GDA Manager/Chair SCRUM**

It was agreed that Chair SCRUM should coordinate the GEBCO representation at appropriate IHO and IOC regional meetings. **Action 10 - Chair SCRUM**

#### 4.2 GEBCO Engagement with External Bodies

Participants highlighted the international programmes and organizations with which they have engaged over the past year. It was noted that AORA and SCAR were additional organizations with GEBCO was involved. It was agreed that there was a need to clarify the difference and engagement between GEBCO/Seabed 2030 and EMODnet. Marzia Rovere (MR) suggested that the Seabed 2030 regional graphic could display areas that were already covered by other regional initiatives. DM highlighted the recently signed Belem Statement between European Union, South Africa and Brazil, although it was not clear whether an ocean mapping programme had been started.

#### 4.3 Covered during Sub-Committee reports.

### 5. Documents and Publications

#### 5.1 Document Review and status

It was agreed that the status of the publications had been covered adequately in the Sub-Committee reports.

#### 5.2 Review of ToRs and RoPs

The Secretary displayed the proposed revisions to the ToRs to reduce the length of terms of the Chair and vice-Chair from five to three years, renewable for one further term. The GGC agreed the proposed revisions and requested the Chair submit them to the IHO and IOC for approval. **Action 11 - Chair GGC**

#### 5.3 Relevant IHO Resolutions

It was agreed that the Seabed 2030 Project Team needed to review the proposed revisions to the IHO resolutions before they were presented to the GGC for endorsement and submission to the IHO. The Secretary agreed to provide the current versions to the Director for consideration by the Seabed 2030 Project Team and subsequent presentation to the GGC36. **Action 12 - Secretary/Director**

## 6. Seabed 2030

6.1 Graham Allen (GA), interim Seabed 2030 Project Director, provided a comprehensive presentation on the establishment and activities of the Seabed 2030 Project Team and the regional centres. He highlighted the key personnel involved in the Project Team and the Sponsors, he highlighted the initial goals and work packages included in the initial establishment documentation and the overall goal of the project being to complete the GEBCO Grid started in 1903.

The GGC was requested to endorse the Seabed 2030 Year 1 Annual Report. The GGC agreed to endorse the report with conditional recommendations, which it was felt would be finalized after review of the Year 2 Work Plan; although there was general agreement that the structure and focus of the report should be revised.

## 7. GEBCO Future

### 7.1 GGC Subordinate Bodies Funding

Secretary displayed the Sub-Committee funding requests for 2019, which were adjusted by the GGC. The Secretary was requested to provide Word version copies of their WP for review and updating by the relevant Chairs to reflect the discussions at GGC35 and for the final versions to be included as annexes to the meeting report. **Actions 13/14 - Secretary/Chairs TSCOM/SCRUM/SCUFN/OWG**

### 7.2 Seabed 2030

The GGC endorsed of the changes to the budget for the Seabed 2030 Year 2 Work Plan. The GGC raised the question whether it was a problem that the Seabed 2030 only is funded year by year. It was noted that this remained a significant challenge and it was further noted that this remained a weakness of the project structure and highlighted the need to raise additional funding to support the work needed to achieve the ultimate goal of completing the GEBCO-grid by 2030

The proposed change on time line was discussed. GA suggested the time line for the Seabed 2030 project annual reporting and submission of work plan should be amended. He proposed that the GGC would review the report documents in May in order for the Project Team to submit the documents to Nippon Foundation in June for the NF budget meeting. The GGC agreed in general with the proposed time line, however the GGC decided that it should review a “preliminary” annual report in April, the next year’s Work Plan and the associated budget for initial endorsement. It was agreed that the annual report should be completed at the end of the project year and presented as a meeting document at the annual GGC meeting during the following autumn.

It was suggested that this cycle could raise a complication with the GEBCO reports to IRCC, which has a normal deadline of April. It was noted that the current level of detail required for the IRCC report does not require an in-depth report on the Seabed 2030 Project annual Work Plan or budget, therefore, it was agreed the new proposed time line would not cause a problem.

The GGC reviewed the Seabed 2030 Work Plan, GA highlighted the original goals of the Project in relation to the Work Plan. JJ noted that a goal of developing a data flow was lacking. The Project Team acknowledged that this should be included and agreed to add it to the work plan. MR suggested retitling the “goals” in the Work Plan to be “tasks”. It was agreed to alter Goal 4.1 to High priority: “Designing a strategy for increasing funding for the Seabed 2030 project”. The GGC approved and adopted all the proposed amendments suggested by GA. It was agreed that the updated Work Plan addendum would be provided as an annex to the meeting report.

GGC endorsed the Year 1 Annual Report with the proposed recommendations having been taken into account and endorsed the Year 2 Work Plan including the Appendix and Annex. MI suggested the Project Team could consider organizing a one day seminar or similar event focused on Seabed 2030 to continue to raise the profile and to be an opportunity for fund raising.

## 8. Secretary Responsibilities

8.1 The GGC endorsed the current roles and responsibilities of the Secretary (GGC35/8/1) and noted that the current Secretary would have completed his five year term at the next meeting, GGC36.

## 9. GGC Membership

9.1 The GGC reviewed the state of membership (GGC35/9/1) and noted that Shin Tani had completed his first five year term, the GGC supported his request to serve a further five year term. Patricio Carrasco indicated his desire to step down from the GGC at the end of the current meeting. The Chair thanked him for his contribution to GEBCO over the past five years. The Chair GGC requested the IHO Secretariat to take the necessary actions to fill the vacancy created. **Action - 15 IHO**

9.2 The Secretary noted that Hyo Hyun Sung would complete her second five year term at GGC36 and Marzia Rovere would be completing her first five year term at the same meeting. The Chair GGC requested the IHO and IOC Secretariats to note this forthcoming vacancies and consider the necessary actions or preparations.

## 10 Next Meeting

10.1 Dates and venue for GGC36

The Secretary noted that the tentative proposal to host GGC36 by Canada had not been confirmed and that it was unlikely for Canada to be able to host the meeting, therefore an alternative host was invited. MJ indicated that discussions were underway to investigate holding GGC36 in the east coast of the USA. MJ was requested to provide details before end of the year. **Action 16/17 – Vice-Chair GGC** TS and JB indicated that a proposal was being developed to host GGC37 in France. **Action 18 - TS/IOC**

10.2 Draft Agenda for GGC36

The Secretary requested participants look at the draft agenda for GGC36 and propose any amendments or changes, Annex N.

## 11. Any Other Business

11.1 The GGC delegated the Seabed 2030 Project team to take immediate appropriate actions in order to remove the registration required to download the GEBCO grid. **Action 19 - MJ**

11.2 It was agreed that a 'lessons learnt' document could be generated to provide guidance and noted experiences of meeting host organizations. Kim Picard agreed to create an initial document, which could be revised by successive hosts. **Action 20 - KP**

11.3 RF introduced discussions on the proposed question 'How does one join GEBCO?'. This initiated a wide ranging discussion and comments from a number of participants, who described their experiences. It was suggested that there could be a way of joining the gebco\_folk list directly via the GEBCO website to subscribe to receive information on GEBCO activities and events. It was agreed that this could be investigated as a new facility in the updated website. **Action 21 - BODC**

11.4 It was agreed that a Working Group focused on the Funding Strategy should be created under the initial leadership of the vice-Chair.

12. Election of Chair and Vice-Chair

12.1 The GGC elected Shin Tani and Martin Jakobsson as Chair and vice-Chair respectively for up to two years.

### 13. Review of Actions

The List of Actions generated from the meeting were reviewed and agreed.

All Action Items are marked in this report and are collated together at Annex D. An updated list of the Action Items will be maintained on the GGC35 document web page and all those who have actions to complete should keep the Chair, vice-Chair and the Secretary informed of progress. **Action 22 - All**

It was agreed that the Secretary would circulate a draft meeting report to all attendees by 24 November. **Action 23 - Secretary** Attendees were requested to provide any comments and input by 8 December. **Action 24 - All** It was intended the final meeting report would be published by 15 December. **Action 25 - Secretary**

The Secretary and the Chair would prepare the final report to IRCC11 and IOC Assembly 30 using the format required by IRCC and the IOC Assembly. It was noted the report to IRCC11 needs to be submitted by 20 April 2018 and that to the IOC Assembly 30 by 25 May 2018. **Action 26 - Secretary/Chair**

### 13. Closure of the Meeting

HWS made a brief address noting that it was his final meeting. The Chair closed the meeting, he thanked HWS for all his hard work and leadership of SCUFN and his long involvement with GEBSCO. He thanked Geoscience Australia and Land Information New Zealand for hosting the meeting and providing such excellent facilities and such a varied extracurricular programme, their efforts had contributed to the success of the meeting.

The following Annexes are attached:

- A. GGC35 – List of Participants.
- B. GGC35 – Agenda
- C. GGC35 – List of Documents
- D. GGC35 – List of Actions
- E. SCRUM Work Plan and Budget – Final version
- F. SCUFN Work Plan and Budget – Final version
- G. TSCOM Work Plan and Budget – Final version
- H. OWG Work Plan and Budget – Final version
- I. Consolidated GEBSCO Work Plan and Budget – Final version
- J. Consolidated Funding Plan – Final version
- K. Seabed 2030 Year 2 Work Plan addendum
- L. List of GGC Members
- M. Draft agenda for GGC36



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GEBCO Symposium only			

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**G E B C O**  
GENERAL BATHYMETRIC CHART OF THE OCEANS



Intergovernmental  
Oceanographic  
Commission

**Thirty Fifth Meeting of the GEBCO Guiding Committee (GGC35)**

**Canberra, Australia**

15 – 16 November 2018

**Agenda**

*Version 2.0; 6 août 2018*

**1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS – 30 minutes**

- .1 Opening Remarks and Introductions – **Chair**
- .2 Welcoming Remarks by Host – **GeoScience**
- .3 Opening remarks by parent bodies – **IHO and IOC Secretariats**
- .4 Working Arrangements – **Secretary/Hosts**
- .5 Administrative Arrangements – **Secretary/Hosts**
- .6 Adoption of the Agenda and approval of report from GGC34 – **Chair**
- .7 Review of Action Items from GGC34 – **Secretary**
- .8 Report from IRCC10 – **Chair**

**GEBCO TODAY**

**2 REPORTS FROM PARENTAL AND SUBORDINATE BODIES – 120 minutes**

Brief reports (5 minutes) will be received, highlighting only significant events, achievements, outcomes, outputs/deliverables and matters requiring GGC action, full reports can be downloaded from the GGC website:

- .1 IHO update – **Iptes**
- .2 IOC update – **Barbière**
- .3 Financial update, including funds status report – **Secretary**
- .4 Digital Atlas Manager – **BODC**
- .5 DCDB update, including relevant CSBWG and ASMIWG issues – **DCDB Director**
- .6 SCUFN – **Chair SCUFN**
- .7 TSCOM – **Chair TSCOM**
- .8 SCRUM – **Chair SCRUM**
- .9 Outreach WG – **Chair Outreach WG**

**3 NIPPON FOUNDATION – 30 minutes**

Brief reports (5 minutes) will be received highlighting significant events, outcomes and matters requiring GGC action, full reports can be downloaded from the GGC website:

- .1 NF Programme Management Committee (NFPMC) report – **Chair NFPMC**
- .2 UNH training programme update – **Course Manager**
- .3 Nippon Foundation Ambassador programme – **Chair NFPMC**
- .4 NF funds – **Chair NFPMC**
- .5 NFPMC membership – **Chair NFPMC**

**4 GEBCO ENGAGEMENT WITH EXTERNAL BODIES – 60 minutes**

- .1 Participation at IHO RHC meetings – **Chair/Secretary**
- .2 With which international programmes has GEBCO engaged, why and outcomes? – **Chair/All**  
ICSU WDS, IODE, POGO, IRSO, WRI, GEOSS, IIOE2, Atlantos, EMODNet, etc
- .3 Update on who are the users of GEBCO products and datasets? Which methods are appropriate for discovering the users and uses of GEBCO products and datasets – **Head BODC/Director DCDB**

**5 DOCUMENTS AND PUBLICATIONS – 15 minutes**

- .1 Document Review Status – **Chair/Secretary**

Title	IHO Number	IOC Number	Edition/date
<i>Standardization of undersea feature names</i>	B-6	-	Edition 4.1.0 September 2013; new Edition 4.2.0 in preparation
<i>Gazetteer</i>	B-8	-	V1.1.1
<i>GEBCO digital atlas</i>	B-9	-	08 Grid March 2015
<i>The history of GEBCO</i>	B10	-	April 2003
<i>GEBCO Cookbook</i>	B-11	Manuals and Guides 63	September 2018

- .2 ToRs and RoPs review – **Chair/Secretary**
- .3 Relevant IHO Resolutions – **Chair/Secretary**

3/1929 as amended (*Centralization of oceanic soundings*) - TSCOM;  
 3/1932 as amended (*Collecting oceanic soundings*) - TSCOM;  
 4/1932 as amended (*Metadata for oceanic soundings*) - TSCOM/SCRUM;  
 2/1962 as amended (*Oceanographic observations*) - SCRUM/TSCOM; and  
 8/1962 as amended (*Oceanographic information*) - SCRUM/TSCOM.

**6 SEABED 2030 – 60 minutes**

Progress brief on activities of Seabed 2030 Project against agreed Business Plan, including funding state, RDACC and GDACC activities, outcomes from interaction with IOC and IHO Secretariats and endorsement of Work Plan 2019-2020:

- .1 Report on progress and update brief – **Project Director**



**GEBCO TOMORROW****7 GEBCO FUTURE****.1 GGC Subordinate bodies' Work Plans 2019-2020 – 60 minutes**

- .1 Approve funding requests and Work Plans of Subordinate bodies, including outputs/deliverables for next period – **Chair/Secretary**

Chairs will present draft funding requests and Work Plans for their Sub-Committee or Working Group; identifying outputs, deliverables and appropriate milestones for consideration and approval of the GGC.

- .1 SCUFN – **Chair SCUFN**;  
 .2 TSCOM – **Chair TSCOM**;  
 .3 SCRUM – **Chair SCRUM**; and  
 .4 OutreachWG (SCERC) – **Chair OutreachWG (SCERC)**

- .2 Review of GEBCO Education, External Relations and Communications strategy – **Chair SCERC/Chair /Secretary**

**.2 Seabed 2030 - 120 minutes**

The GGC will be appraised of outcomes and actions arising from the Workshops, seminars and events pursuing the Seabed 2030 Project and vision, in particular:

- .1 Future actions, key outputs, deliverables and milestones – **Project Director**  
 .2 Update on integration with existing GEBCO bodies – **Chair/Project Director**  
 .3 Work Plan and funding bids 2020-2021 – **Chair/Project Director**

**.3 GGC Work Plan 2019-2020 – 60 minutes**

- .1 Approve GGC funding requests and Work Plans including outputs/deliverables for next period – **Chair/Secretary**

**8 SECRETARY RESPONSIBILITIES – 15 minutes**

- .1 Confirm responsibilities – **Chair**

**9 GGC MEMBERSHIP – 30 minutes**

- .1 Identification of individuals, whose terms are due to complete within the next two years – **Secretary**  
 .2 Details of nominations to fill vacancies – **Chair/Secretary**

**10 NEXT MEETING – 15 minutes**

- .1 Dates and venue for GGC36 – **Secretary**  
 .2 Draft Agenda for GGC36 – **Secretary**

**11 ANY OTHER BUSINESS – Chair/Secretary – 30 minutes**

**12 Election of Chair and vice-Chair – Secretary – 15 minutes**

.1 In accordance with article 2.1 of the RoPs

**13 Review of Action Items from GGC35 – Secretary – 30 minutes**

**14 CLOSURE OF THE MEETING – Chair – 15 minutes**

### GGC35 - List of Documents

Document No	Document Title	Date uploaded
GEBCO 2018 Letter	<a href="#">Invitation Letter</a>	8 May 2018
GEBCO 2018 Letter Annex A	<a href="#">Registration Form</a> (pdf version)	26 September 2018
GEBCO 2018 Letter Annex A	<a href="#">Registration Form</a> (Word version)	26 September 2018
GEBCO 2018 Letter Annex B	<a href="#">Logistic Information</a>	8 May 2018
GEBCO 2018	<a href="#">Outline Week Programme</a> v3.0 (Changes in red)	5 November 2018
GEBCO 2018	<a href="#">Social Programme</a> v1.0	5 November 2018
GEBCO 2018	<a href="#">Partners' Programme</a> v1.0	6 November 2018
GEBCO Symposium 2018	<a href="#">Symposium Programme</a> v1.0	7 November 2018
GEBCO 2018	<a href="#">Document Template</a> (Word version)	30 November 2017
GEBCO 2018	<a href="#">Presentation Template</a> (PowerPoint version)	30 November 2017
GEBCO 2018	<a href="#">List of Participants</a>	21 November 2018
GGC35-1.6.1	<a href="#">Draft Agenda</a> v4.0	30 October 2018
GGC35-1.6.2	<a href="#">GGC34 Meeting Report</a>	17 January 2018
GGC35-1.7	<a href="#">GGC34 List of Actions</a> - updated 6 August 2018	6 August 2018
GGC35-1.8.1	<a href="#">GEBCO Report to IRCC10</a>	7 August 2018
GGC35-1.8.2	<a href="#">IRCC10 Outcomes</a>	13 August 2018
GGC35-2.1	<a href="#">IHO Report</a>	15 November 2018
GGC35-2.2.1	IOC Report (See Presentations .zip)	
GGC35-2.2.2	<a href="#">First Report of the IOC Regular Working Group on user Requirements and Contributions to GEBCO Products</a>	15 November 2018
GGC35-2.3	<a href="#">Financial Report</a>	31 October 2018
GGC35-2.4	<a href="#">Digital Atlas Manager Report</a>	29 October 2018
GGC35-2.5	<a href="#">DCDB update</a>	8 November 2018
GGC35-2.6	SCUFN Report	
GGC35-2.7	<a href="#">TSCOM Report</a>	14 November 2018
GGC35-2.8	<a href="#">SCRUM Report</a>	14 November 2018
GGC35-2.9	OutreachWG Report	
GGC35-2.9	<a href="#">SCOPE ToRs - Draft/Rev.1</a>	14 November 2018
GGC35-3	<a href="#">NF Related Programmes Report</a>	5 November 2018

GGC35-4.1	<a href="#">Regional Hydrographic Commission meeting programme</a>	30 October 2018
GGC35-4.2	<a href="#">GEBCO Engagement with International programmes</a>	7 August 2018
GGC35-5-1.1	<a href="#">Draft new edition B-6 (<i>Standardization of undersea feature names</i>) for consideration - SCUFN</a>	20 August 2018
GGC35-5.1.2	<a href="#">GEBCO Cookbook Report</a>	31 October 2018
GGC35-5.2	<a href="#">GGC ToRs and RoPs</a>	7 August 2018
GGC35-5.3	Relevant IHO Resolutions - Proposed amendments	
GGC35-6	<a href="#">GEBCO Seabed 2030 Supporting Documents.zip</a>	15 October 2018
GGC35-6.1.1	<a href="#">GEBCO Seabed2030 Year 1 Report v2.1</a>	15 November 2018
GGC35-6.1.5	<a href="#">Analysis of feedback and comments on Year 1 Report</a>	8 November 2018
GGC35-7.1.1.1	<a href="#">SCUFN Work Plan and Budget</a>	31 September 2018
GGC35-7.1.1.2	<a href="#">TSCOM Work Plan and Budget</a>	14 September 2018
GGC35-7.1.1.3	<a href="#">SCRUM Work Plan and Budget</a>	7 November 2018
GGC35-7.1.1.4	<a href="#">OutreachWG Work Plan and Budget v2.0</a>	31 September 2018
GGC35-7.1.2	GEBCO Education and Outreach Strategy (see presentations)	
GGC35-7.2.2	Seabed 2030 update on integration with existing GEBCO bodies	
GGC35-7.2.3	<a href="#">Seabed 2030 Work Plan and funding bids 2020-2021</a>	15 October 2018
GGC35-7.2.5	<a href="#">Analysis of feedback and comments on Year 2 Work Plan</a>	8 November 2018
GGC35-7.3.1	<a href="#">GGC Work Plan and Budget</a>	7 November 2018
GGC35-8	<a href="#">Secretary role and responsibilities</a>	7 August 2018
GGC35-9	<a href="#">GGC membership list</a>	7 August 2018
GGC35-10.2	<a href="#">Draft agenda GGC36</a>	7 August 2018
GGC35-13	GGC35 List of Actions	
GGC35	<a href="#">Presentations .zip</a>	26 November 2018

**LIST OF ACTIONS** – Updated 20 December 2018

Agenda Item		Subject	Status/Date	Comments	Action
Continuous					
-		NF Programme Management Report	On going	Inform IHO and IOC secretariats as soon as the date for accepting UNH applications is known	Manager NF-UNH Programme
-		Participation at IHO RHC meetings	On going	Published and maintain list of RHC meetings on the GEBCO website	Secretary/BODC
-		Participation at IHO RHC meetings	On going	Attendees representing GEBCO at meetings to provide short report for publication on GEBCO website	All/BODC
-		Participation at IOC Regional meetings	On going	IOC to provide and maintain list of regional IOC meetings for consideration of GEBCO representation	IOC/BODC
-		TSCOM-SCRUM membership	On going	Invited new participants to join the gebco_folk email contact list to maintain their engagement and keep them informed of GEBCO activities	Chairs TSCOM-SCRUM/Symposium conveners
-		IHO RHC and IOC Regional meetings	On going	Inform Chair SCRUM of ability to represent GEBCO at RHC meetings to update list	All/Chair SCRUM
-		IHO RHC and IOC Regional meetings	On going	Provide suitable material for inclusion in generic GEBCO presentation	IOC
-		GEBCO engagement	On going	Identify organizations and conferences at which GEBCO should be represented; provide brief comments on attendance to the BODC to keep the community informed of the awareness actions/activities being undertaken	All/BODC
GGC35					
1	2.6	SCUFN Report	IRCC11	Include proposed revisions to B-6 in GEBCO report to IRCC11	Chair GGC
2	2.9	Outreach WG Report	7 Dec	Lead development of SCOPE ToRs	Chair OWG

3	2.9	Outreach WG Report	7 Dec	Sub-Committees to review ToRs and propose harmonized revisions	Chairs TSCOM/SCRUM/SCUFN/SCOPE
4	2.9	Outreach WG Report	28 Dec	Circulate revised ToRs to GGC for approval	Secretary
5	2.9	Outreach WG Report	28 Feb	Investigate and develop GEBCO communications strategy	Chair OWG/DM
6	2.9	Outreach WG Report	31 May	Investigate contract support to develop communications strategy	Chair SCRUM
7	3	NF Programmes Report	28 Dec	Send Thank You letter to NF to express thanks for their on-going support to the GEBCO Project	Chair GGC
8	4.1	Attendance at IHO and IOC regional meetings	On going	Add details of IOC Regional meetings to list of RHC meeting on GEBCO website	Secretary/GDA Manager
9	4.1	Attendance at IHO and IOC regional meetings	31 Jan	Develop standard generic GEBCO presentation for use at regional meetings	Chair SCRUM/GDA Manager
10	4.1	Attendance at IHO and IOC regional meetings	GGC36	Coordinate GEBCO representation at IOC and IHO regional meetings	Chair SCRUM
11	5.2	GGC ToRs	IRCC11/ IOC A30	Proposed draft revisions of GGC ToRs for approval	Chair GGC
12	5.3	IHO Resolutions	28 Dec	Provide track change versions for Seabed 2030 Project Team input	Secretary/Director Seabed 2030
13	7.1	Work Plans and Budgets	23 Nov Complete	<del>Provide Word versions of Work Plans and Budgets to Chairs TSCOM/SCRUM/SCUFN/OutreachWG for revision, reflecting discussions and decisions of GGC35</del>	Secretary
14	7.1	Work Plans and Budgets	14 Dec Complete	<del>Provide revised Work Plans and Budgets and spread sheet for inclusion in final GGC35 meeting report</del>	Chairs TSCOM/SCRUM/ SCUFN/OutreachWG
15	9.1	GGC Membership	28 Dec Complete	<del>Take necessary actions to IHO appointee vacancy</del>	IHO
16	10.1	GGC36	28 Dec	Investigate opportunity to host meeting in USA	Vice-Chair GGC
17	10.1	GGC36	5 Apr	Circulate an initial letter of invitation and post on the website.	Host/Secretary

18	10.1	GGC37	26 Apr	Investigate hosting and advise Sec of proposed dates for circulation to GGC	TS/IOC/Secretary
19	11.1	AOB	<del>28 Dec</del> Complete	<del>Take appropriate actions to remove registration requirement to download the GEBCO grid</del>	Vice-Chair
20	11.2	AOB	GGC36	Generate initial 'lessons learnt' document for use by future meeting host organizations	KP
21	11.3	AOB	GGC36	Investigate inclusion of a subscription capability in the website for individuals to receive information about GEBCO activities and events	BODC
22	13	Action List	GGC36	Keep IHO and the Chair and vice-Chair informed of progress with allocated actions	All
23	13	<del>GGC35 Draft Report</del>	<del>23 Nov</del> Complete	<del>Draft to be circulated for comment</del>	Secretary
24	13	<del>GGC35 Draft Report</del>	<del>7 Dec</del> Complete	<del>All to provide comments on draft report</del>	All
25	13	<del>GGC35 Final Report</del>	<del>14 Dec</del> Complete	<del>Publish final report</del>	Secretary
26	13	Report to IRCC11/IOC Assembly30	5 Apr/3 May	Draft report for review and amendment.	Chair/vice-Chair/Sec

## 1.1. IHO-IOC GEBCO Sub-Committee for Undersea Feature Names (SCUFN) Work Plan 2019-20

## 1.1 SCUFN Tasks

- B Ensure conduct of SCUFN meeting (IHO Task 3.6.1)
- E Maintain IHO bathymetric publications (IHO Task 3.6.6) including: B-6 and B-8
- J Update and enhance the GEBCO Gazetteer (B-8) for internet access (IHO Task 3.6.10) including providing the GEBCO Gazetteer as a web service via a geospatially enabled database and develop and make available public and management on-line interfaces to the Gazetteer – Develop the integration of undersea feature concepts in the S-100 framework

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard/Comments	Funding Bid (€)	GGC Decision
B1	Ensure conduct of SCUFN meeting	H		Permanent		O	Chair/Sec SCUFN			
B2	Develop a repository of typical cases for helping in the consistency of the decision-making process	M	SCUFN32	2017	2020	O	Roberta Ivaldi			
B3	Renewal of SCUFN Membership	H	March 2019	Nov. 2018	SCUFN32	P	IOC Sec.	Chair/Vice-Chair to be elected at the end of SCUFN31 (Done, subject endorsement by GGC, ROP 2.2). 1 IOC representative to be replaced.		
E	Maintain IHO bathymetric publications	M H		Continuous 2016	Continuous 2019	O	All members of GEBCO GC through the Chair	B-6 - Standardization of undersea feature names (Edition 4.2.0 of B-6 submitted to GGC for endorsement). Then by correspondence to IRCC (tbc), then approval by IHO MS		



Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard/Comments	Funding Bid (€)	GGC Decision
J1	Update and enhance the GEBCO Gazetteer (B-8) database	H		Annual	Annual	O	Chair/Sec SCUFN	B-8 – Gazetteer (implement SCUFN meeting decisions in the database, monitor pending names, chase SCUFN actions with proposers, chase missing data) – Work carried out by contract.	15,000€/year	Funded out of IHO Operational funds
J2	Maintain the GEBCO Gazetteer as a web service via a geospatially enabled database	H		2016	Permanent	O	Chair SCUFN/ Sec./ Jennifer Jencks	B-8 – Gazetteer – Capture user requirements (incl. SCUFN Sec.), develop improvements and general maintenance. Transition plan to be develop if needed. Critical and complex task.	(See Doc. SCUFN31-07.1B). Funding for correcting and basic maintenance agreed by US. Need to keep it maintained for about 4 years.	
J3	Develop and make available public and management on-line interfaces to the Gazetteer	H		2014	2022	O	Dr Han/ /KHOA	B-8 - Gazetteer		
J4	Develop a S-100-based product specification (if confirmed) for Undersea Feature Names	M / L		2015	2019	O	Chair Project Team (Anna Hendi)	S-100, B-6 Harmonized definitions of generic terms across B-6, S-32, IHO GI Registry		
J5	Upgrade the quality of the geometry of major existing undersea features in the Gazetteer which are known as being inaccurate and ambiguous	M		2017	Permanent	P	SCUFN Members	B-8 - Gazetteer (Aim: 10 features / SCUFN Member / per year)		

## 1.2 SCUFN Meetings (IHO Task 3.6.1 refers)

<b>Date</b>	<b>Location</b>	<b>Activity</b>
2-6 October 2017	Genoa, Italy	30 <sup>th</sup> Meeting
23-27 October 2018	Wellington, NZ	31 <sup>st</sup> Meeting
<a href="#">5-9 August 2019</a>	<a href="#">Kuala Lumpur, Malaysia</a>	<a href="#">32<sup>nd</sup> Meeting</a>

Chair: Hyun-chul Han

Vice-Chair: Yasuhiko Ohara (elected)

Secretary: Yves Guillam

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## 1.1. IHO-IOC GEBCO Technical Sub-Committee on Ocean Mapping (TSCOM) Work Plan 2019-2020

### 1.1 TSCOM Tasks

- B Ensure conduct of TSCOM meeting in 2019 (IHO Task 3.6.1)
- C Ensure effective operation of IHO DCDB (IHO Task 3.6.2)
- D Encourage the contribution of bathymetric data to the IHO DCDB (IHO Task 3.6.3), identify priority areas for regional mapping and promote data contribution through GEBCO participation in RHCs meetings
- E Maintain IHO bathymetric publications (IHO Task 3.6.6) including: B-4, B-9, B-10 and B-11
- F Develop the on-line function of B-4 (Information concerning recent bathymetric data) (IHO Task 3.6.6)
- G Contribute to outreach and education about ocean mapping (IHO Task 3.6.7) by development of outreach and educational materials and printing of IHO-IOC GEBCO World Map
- H Ensuring IHO-IOC GEBCO Web site is kept current and updated regularly (IHO Task 3.6.8)
- I Develop short course and course material on compiling digital bathymetric models (DBMs) to be included in GEBCO from a heterogeneous bathymetric source database (IHO Task 3.6.9)
- K Provide technical support and advice to Seabed 2030 Project Director, RDACCs and GDACC

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard	Funding Bid (€)	GGC Decision
B	Ensure conduct of TSCOM meeting	H		2019	2019	P	Chair TSCOM			
C	Ensure effective operation of IHO DCDB	H		Continuous		O	Director DCDB			
D1	Encourage the contribution of bathymetric data to the IHO DCDB	H		Continuous		O	All members of GEBCO GC through the Chair			

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard	Funding Bid (€)	GGC Decision
D3	Promote data contribution through GEBCO participation in RHCs meetings	H		Continuous		O	All members of GEBCO GC through the Chair		See SCRUM WP	
E	Maintain IHO bathymetric publications	M M L M		Continuous		O	All members of GEBCO GC through the Chair	B-4 - Information concerning recent bathymetric data B-9 - GEBCO digital atlas B-10 - The history of GEBCO B-11 - GEBCO Cookbook	See SCRUM WP	
F	Develop the on-line function of B-4	M		Continuous		O	Director DCDB			
H	Ensuring IHO-IOC GEBCO Web site is kept current and updated regularly	M		Continuous		O	BODC		2,500	5,000
			Add news items relating to GEBCO's activities	Continuous		O				
			Add documents relating to GEBCO's meetings and events	Continuous		O				

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard	Funding Bid (€)	GGC Decision
I	Add instructive chapters in IHO-IOC GEBCO Cook Book related to Seabed 2030 as needed	M	Provide technical support	2018	2030	O	Chair TSCOM			
K	Support Seabed 2030	H	Provide scientific expertise and outreach	2018	2030	P	Chairs TSCOM, SCRUM, Outreach, SCUFN			
	Travel to assist gathering technical needs from RDACCs and GDACC			2019		P	Chair TSCOM			5,000
	Development of software for documenting and visualizing data			2019		P	Chair TSCOM			10,000

## 1.2 TSCOM Meetings (IHO Task 3.6.1 refers)

Date	Location	Activity
1-4 October 2012	IHB, Monaco	XXVIII <sup>th</sup> Meeting
7&9 October 2013	Venice, Italy	XXIX <sup>th</sup> Meeting
11-13 December 2014	Mountain View, California, USA	XXX <sup>th</sup> Meeting
5-7 October 2015	Kuala Lumpur, Malaysia	XXXII <sup>th</sup> Meeting

10-12 October 2016	Viña del Mar, Chile	XXXIII <sup>th</sup> Meeting
13-14 November 2017	Busan, Korea	XXXIV <sup>th</sup> Meeting
5-6 November 2018	Canberra, Australia	XXXV <sup>th</sup> Meeting
November 2019	tbc	XXXV <sup>th</sup> Meeting

Chair: Thierry Schmitt  
Vice-Chair: Caitlyn Raines  
Secretary: David Wyatt

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## 1.1. IHO-IOC GEBCO Sub-Committee for Regional Undersea Mapping (SCRUM) Work Plan 2019-2020

## 1.1 SCRUM Tasks

- B Ensure conduct of SCRUM meeting in 2019(IHO Task 3.6.1)
- D Encourage the contribution of bathymetric data to the IHO DCDB (IHO Task 3.6.3), identify priority areas for regional mapping and promote data contribution through GEBCO participation in RHCs meetings
- E Maintain IHO bathymetric publications (IHO Task 3.6.6) including: B-4, B-9, B-10 and B-11
- K Provide scientific support and advice to Seabed 2030 Project Director, RDACCs and GDACC

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard	Funding Bid (€)	GGC Decision
B	Ensure conduct of annual SCRUM meeting	H		2019	2019	P	Chair SCRUM		0	
D1	Encourage the contribution of bathymetric data to the IHO DCDB	H		Continuous		O	All members of GEBCO GC through the Chair		0	
D2	Identify priority areas for regional mapping and support the organization of regional mapping projects.	H		Continuous		O	Chair SCRUM		0	
D3	Promote data contribution through GEBCO participation in RHCs and IOC regional meetings	H	Identify GEBCO colleagues who are able to attend meetings in 2019 – 2020	Continuous		O	All members of GEBCO GC through the Chair		0	10,000
D4	Support participation at Regional Mapping Meetings – Capacity Building	H	Provide partial support, as needed, for individuals to participate in regional mapping meetings	2019	2019	P	Chair SCRUM		0	
D5	Develop material to highlight activities and initiatives	H		Continuous		P	Chair SCRUM	Coordinated with Chair OWG	0	10,000
E	Maintain IHO bathymetric publications	M	Update GEBCO global 30 arc-second grid with new compilations	Continuous	Continuous	O	All members of GEBCO GC through the Chair	B-4 - Information concerning recent bathymetric data	0	
		H		2016	2017	O	Chair SCRUM	B-9 - GEBCO digital atlas		
		M	Update GEBCO World Map to include updated versions of GEBCO grid and adopted undersea feature names from SCUFN.	2017	2018	O	Chairs SCRUM/SCUFN	B-6 – Standardization of undersea feature names B-8 - Gazetteer B-9 - GEBCO digital atlas		
		L						B-10 - The history of GEBCO		
J	Support SB2030 RDACCs	H	Provide scientific expertise, regional connections and outreach support	2018	2030	P	Chairs of TSCOM, SCRUM SCUFN, Outreach WG	To support participation in Seabed 2030 regional mapping meetings	0	30,000

## 1.2 SCRUM Meetings (IHO Task 3.6.1 refers)

Date	Location	Activity
7&9 October 2013	Venice, Italy	1 <sup>st</sup> Meeting
11-13 December 2014	Mountain View, California, USA	2 <sup>nd</sup> Meeting
5-7 October 2015	Kuala Lumpur, Malaysia	3 <sup>rd</sup> Meeting
10-12 October 2016	Viña del Mar, Chile	4 <sup>th</sup> Meeting
13-14 November 2017	Busan, Korea	5 <sup>th</sup> Meeting

5-6 November 2018	Canberra, Australia	6th Meeting
November 2019	tbc	7 <sup>th</sup> Meeting

Chair: Vicki Ferrini	Email: ferrini@ideo.columbia.edu
Vice-Chair: Pauline Weatherall	Email: paw@bodc.ac.uk
Secretary: David Wyatt	Email: adso@iho.int



## IHO-IOC GEBCO SCOPE Work Plan 2019-2020

## 1.1 OWGTasks

- G Contribute to outreach and education about ocean mapping (IHO Task 3.6.7) by development of outreach and educational materials and printing of IHO-IOC GEBCO World Map
- I Develop short course and course material on compiling digital bathymetric models (DBMs) to be included in GEBCO from a heterogeneous bathymetric source database (IHO Task 3.6.9)

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard	Funding Bid (€)	GGC Decision
G1	Development of SCOPE webpage	H		2018	2020	O	Chair of OWG		0	0
	-content design						David Millar, Karen Marks *Eunmi Chang Hyo Hyun Sung Jennifer Jenks		0	0
	-web page design					O	Eunmi Chang		2,000(2019)	2,000(2019)
	-web page coding					O	Eunmi Chang		2,000(2000)	2,000(2000)
	-connecting the subpage to the main page of GEBCO					P	Eunmi Chang Pauline Weatherall		0	0
G2	Communication Strategies	H				P	Chair of OWG		0	0
	-Communication Strategies			2019	2020	P	David Millar		0	0

G3	PPT materials with proper content	H					Chair of OWG			
	-development of story board			2019	2020	P	David Millar, Karen Marks Eunmi Chang Hyo Hyun Sung Jennifer Jenks		2,000(2019) 2,000(2020)	2,000(2019) 2,000(2020)
G5	External Relations and Communications	H	Draft strategy plan	2019	2020	P	Chair OWG		10,000	20,000

## 1.2 GGC Meetings (IHO Task 3.6.1 refers)

Date	Location	Activity
7-11 October 2013	Venice, Italy	1 <sup>st</sup> Meeting
13-15 June 2014	IHB, Monaco	2 <sup>nd</sup> Meeting
5-9 October 2015	Kuala Lumpur, Malaysia	3 <sup>rd</sup> Meeting
10-11 October 2016	Viña del Mar, Chile	4 <sup>th</sup> Meeting
13-14 November 2017	Busan, Korea	5 <sup>th</sup> Meeting
5-6 November 2018	Canberra, Australia	6 <sup>th</sup> Meeting
November 2019	tbc	7 <sup>th</sup> Meeting

Chair: Hyo Hyun Sung  
Vice-Chair: Vicki Ferrini  
Secretary:

Email: hhsung@ewha.ac.kr  
Email: ferrini@Ideo.columbia.edu  
Email:

## 1.1. IHO-IOC GEBCO Guiding Committee (GGC) Work Plan 2019-2020

### 1.1 GGC Tasks

- A Organise and conduct GGC XXXV meeting in 2018 (IHO Task 3.6.1)
- B Ensure conduct of TSCOM, SCRUM and SCUFN meetings in 2018 (IHO Tasks 3.6.1)
- C Ensure effective operation of IHO DCDB (IHO Task 3.6.2)
- D Encourage the contribution of bathymetric data to the IHO DCDB (IHO Task 3.6.3), identify priority areas for regional mapping (IHO Task 3.6.3) and promote data contribution through GEBCO participation in RHCs meetings (IHO Task 3.6.3)
- E Maintain IHO bathymetric publications (IHO Task 3.6.6) including: B-4, B-6, B-8, B-9, B-10 and B-411
- F Develop the on-line function of B-4 (Information concerning recent bathymetric data) (IHO Task 3.6.2)
- G Contribute to outreach and education about ocean mapping (IHO Task 3.6.7) by development of outreach and educational materials (IHO Task 3.6.7) and printing of IHO-IOC GEBCO World Map (IHO Task 3.6.7)
- H Ensuring IHO-IOC GEBCO Web site is kept current and updated regularly (IHO Task 3.6.8)
- I Develop short course and course material on compiling digital bathymetric models (DBMs) to be included in GEBCO from a heterogeneous bathymetric source database (IHO Task 3.6.9)
- J Update and enhance the GEBCO Gazetteer (B-8) for internet access (IHO Task 3.6.10) including providing the GEBCO Gazetteer as a web service via a geospatially enabled database (IHO Task 3.6.10), develop and make available public and management on-line interfaces to the Gazetteer (IHO Task 3.6.10) and develop the integration of undersea feature concepts in the S-100 framework
- K Liaise with and provide support to Seabed2030 project (IHO Task 3.6.5)

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard	Funding Bid (€)	Approved Funding (€)
A	Organise and conduct GGC XXXV meeting	H		2019	2019	P	Chair GGC Sec		0	0
B1	Ensure conduct of TSCOM, SCRUM and SCUFN meetings	H		2019	2019	P	Chair GGC, Chair, TSCOM, Chair SCRUM and Chair SCUFN		0	0

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard	Funding Bid (€)	Approved Funding (€)
B2	Oversee work of subordinate bodies – TSCOM, SCRUM, SCUFN and Outreach WG – for completion of directed tasks	H		Continuous	Continuous	O	Chair GGC		0	0
C	Ensure effective operation of IHO DCDB	H		Continuous		O	Director DCDB		0	0
D1	Encourage the contribution of bathymetric data to the IHO DCDB	H		Continuous		O	All members of GEBCO GC through the Chair		0	0
D2	Identify priority areas for regional mapping and support the organization of regional mapping projects.	H		Continuous		O	Chair SCRUM		0	0
D3	Promote data contribution through GEBCO participation in RHCs and IOC regional meetings	H	Identify GEBCO people who are able to attend for meetings in 2019 – 2020	Continuous		O	All members of GEBCO GC through the Chair		0	10,000

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard	Funding Bid (€)	Approved Funding (€)
D4	Organize regional mapping meetings/workshops	H		Continuous		O	Chair SCRUM		0	
	Support participation at regional mapping meetings	H	Provide partial support, as necessary, for individuals to participate in regional mapping meetings	Continuous		P	Chair SCRUM			
D5	Develop material to highlight activities and initiatives	H		Continuous		P	Chair SCRUM	Coordinated with Chair OWG	0	10,000
E	Maintain IHO bathymetric publications	M	Update GEBCO global 30 arc-second grid with new compilations	Continuous	Continuous	O	All members of GEBCO GC through the Chair	B-4 - Information concerning recent bathymetric data	0	0
		M		2016	<del>2017</del> 2019	O	Chair SCRUM	B-9 - GEBCO digital atlas		0
		M	Update GEBCO World Map to include updated versions of GEBCO grid and adopted undersea feature names from SCUFN.	2017	<del>2018</del> 2019	O	Chairs SCRUM/SCUFN	B-6 – Standardization of undersea feature names B-8 - Gazetteer B-9 - GEBCO digital atlas		0
		L M						B-10 - The history of GEBCO B-11 - GEBCO Cookbook		0 0

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard	Funding Bid (€)	Approved Funding (€)
F	Develop the on-line function of B-4	M		2015	On going		Director DCDB		0	0
G1	Contribute to outreach and education about ocean mapping	H		Continuous		O	Chairs TSCOM, SCRUM and Outreach WG		0	2,000
G2	Development of outreach and educational materials (jigsaw puzzle for World Map and presentation files)	H		2015	2018	P	All members of GEBCO GC through the Chair Outreach WG		2,500	
G4	Development of webpage (for secondary school student etc.)	M		2015	<del>2018</del> 2020	O	All members of GEBCO GC through the Chair Outreach WG		2,000	2,000
G5	Developing a communication strategy and resources in GEBCO outreach ( ex- Poster or video for each target)	H		2018	2020	O	All members of GEBCO GC through the Chair Outreach WG	See OWG WP 2019-2020	2,000	20,000
H	Ensuring IHO-IOC GEBCO Web site is kept current and updated regularly	M		Continuous		O	BODC		5,000	5,000
I1	Add instructive chapters in IHO-IOC GEBCO Cook Book related to Seabed 2030 as needed	M	Provide technical support	2019	2030	P	Chair TSCOM	B-11 - GEBCO Cookbook	0	0

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard	Funding Bid (€)	Approved Funding (€)
I2	Develop short course and supporting material on compiling digital bathymetric models	H		2019	2021	P	All members of GEBCO GC through the Chair Outreach WG		0	0
J1	Update and enhance the GEBCO Gazetteer (B-8) for internet access	H		Annual	Annual	O	Chair SCUFN	B-8 – Gazetteer	15,000 /year	Funded out of IHO Operational funds
J2	Maintain the GEBCO Gazetteer as a web service via a geospatially enabled database	H		2016	Permanent	O	Chair SCUFN Director DCDB	B-8 – Gazetteer	(See Doc. SCUFN31-07.1B). Funding for correcting and basic maintenance agreed by US. Need to keep it maintained for about 4 years.	
J3	Develop and make available public and management on-line interfaces to the Gazetteer	M		2014	<del>2018</del> 2022	O	Chair SCUFN KHOA	B-8 - Gazetteer	0	0
J4	Develop a S-100-based product specification for Undersea Feature Names	M / L		2015	2019	O	Chair Project Team (Rowena Orok)	S-100, B-6 Harmonized definitions of generic terms across B-6, S-32, IHO GI Registry	0	0

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard	Funding Bid (€)	Approved Funding (€)
J5	Upgrade the quality of the geometry of major existing undersea features in the Gazetteer which are known as being inaccurate and ambiguous	M	10 features/ SCUFN member per year	2017	Permanent	P	SCUFN Members	B-8 Gazetteer	0	0
K	Support Seabed2030	H	Provide scientific expertise, regional connections and outreach	2018	2030	P	Chairs TSCOM, SCRUM, OutreachWG, SCUFN	See TSCOM and SCRUM WPs 2019-2020	0	45,000

## 1.2 GGC Meetings (IHO Task 3.8.1.1 refers)

Date	Location	Activity
1-4 October 2012	IHB, Monaco	XXIX <sup>th</sup> Meeting
7-11 October 2013	Venice, Italy	XXX <sup>th</sup> Meeting
13-15 June 2014	IHB, Monaco	XXXI <sup>th</sup> Meeting
5-9 October 2015	Kuala Lumpur, Malaysia	XXXII <sup>th</sup> Meeting
10-14 October 2016	Valparaíso, Chile	XXXIII <sup>th</sup> Meeting
13-17 November 2017	Busan, Korea	XXXIV <sup>th</sup> Meeting
5-9 November 2017	Canberra, Australia	XXXV <sup>th</sup> Meeting
November 2019	tbc	XXXVI <sup>th</sup> Meeting

Chair: Shin Tina  
Vice-Chair: Martin Jakobsson  
Secretary: David Wyatt

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Email: [Martin.Jakobsson@geo.su.se](mailto:Martin.Jakobsson@geo.su.se)  
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**Nippon Foundation GEBCO Seabed 2030 Project  
Year 2 Work Plan Addendum**

**Author: Dr Graham Allen,  
acting Seabed 2030 Director & member of Establishment Team**

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## 1. PURPOSE

Several key events in the early part of Year 2 have resulted in the need to re-assess the Year 2 Work Plan Version 1.0.

Drivers for change:

- I. Alignment of budget to available funds
- II. the GGC feedback on the original Year 2 Work Plan
- III. the resignation of the Project Director.
- IV. Impact of working on an annual budget cycle and timing of GGC meeting and start of Project Financial Year

This paper (the Year 2 Work Plan Addendum) is an update to the Year 2 Work Plan that addresses the drivers for change.

It is anticipated that at the GEBCO Guiding Committee Meeting 35 in November 2018, the GGC will ENDORSE this Addendum as part of ENDORSING (with changes) the Year 2 Work Plan.

### PROPOSED CHANGES:

**CHANGE 1:** The Project Team Activity budget reduced from \$347,000 to \$255,000,

**CHANGE 2:** The Year 2 Work Plan focusses effort and budget on Year 2 Goals as prioritized as Priority 1, 2 or 3 (Priority 1 being most important).

**CHANGE 3:** The Year 2 Goals are re-articulated and mapped to Seabed 2030 Work Packages to allow improved assessment by GGC in the Year 2 Annual Report.

**CHANGE 4:** The time line for submission of the Year 2 Annual Report and Year 3 Work Plan (and later years) is adjusted to allow GGC input to the Annual Report and Work Plan before submission of the next year funding proposal to the Nippon Foundation.

**CHANGE 5:** Future Work Plans and Annual Reports will be reformatted and the content adjusted to reflect the GGC feedback provided on Year 1 Annual Report and the Year 2 Work Plan.

## 2. INTRODUCTION

A key part of the Nippon Foundation GEBCO Seabed 2030 Project Governance is the GEBCO Guiding Committee (GGC) endorsement of the next year's Work Plan. In September 2018, GGC Secretary, David Wyatt, distributed the Year 2 Work Plan as written by the then Project Director Satinder Bindra, for the GGC to review and provide feedback in preparation for the GGC Meeting in Canberra in November. David Wyatt has collated the feedback in preparation for the GGC Meeting.

In mid-September, Satinder Bindra stepped down from the position of Project Director. At a meeting of the Project Sponsors (Nippon Foundation, IHO and IOC) in late September it was decided by the Sponsors that:

- 1) until a full time replacement Director was in post the management of the project would be the responsibility of Graham Allen (as acting Project Director), Martin Jakobsson and Robin Falconer.

- 2) In the absence of a full time dedicated Project Director, the scope of the Year 2 Work Plan would need adjusting
- 3) The Nippon Foundation would fund 3 positions:
  - a. A Project Director
  - b. A deputy Director
  - c. Administrative support for the Project Director

Immediately after taking over the role of acting Director a review of the project finances identified that not all activities were able to be funded from the available Year 2 funds. With approval from the Nippon Foundation the scope of the Project Team activities was reduced to align with the available funds.

### 3. PROJECT STRATEGY

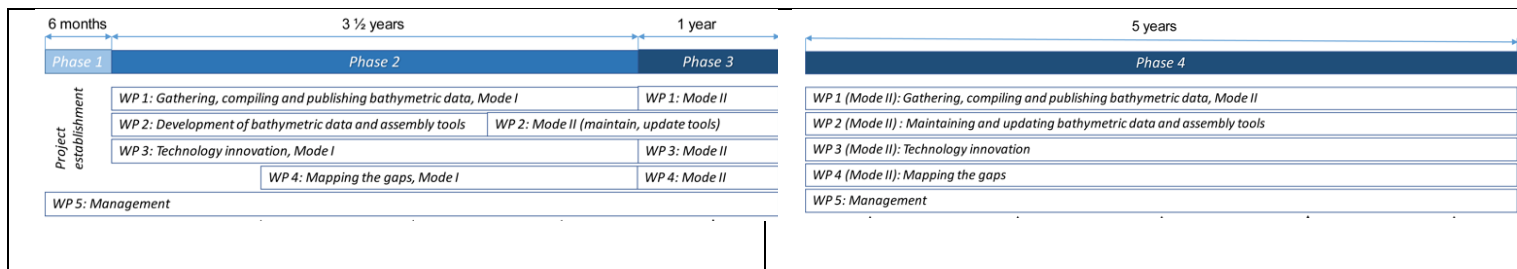
Before presenting the suggested changes to the Year 2 Work Plan, it is useful to provide a reminder of the original strategy for the 10 year Seabed 2030 Project as agreed with the Nippon Foundation in the pre-Establishment Phase of the project and documented in the foundational project documents including:

- I. Project Business Plan V2.1.6
- II. Project Plan V2.1.3
- III. Year 1 Application to the Nippon Foundation V2.1.3

The Project Strategy is based on a small number of principles:

- Large volumes of existing data.  
There existing large volumes of bathymetric data that have been collected but not yet made available to GEBCO.
- Global community project  
The scale of the project is such that no one organization or country can do it alone and a concerted, coordinated global approach is required
- Technology innovation  
Significant advances in mapping technology across the entire data-life cycle are required to drive down the cost and effort to achieve Seabed 2030's vision.

These principles and GEBCO experience resulted in the project being structured in 5 Work Packages across 4 Phases:



#### 3.1. WORK PACKAGES

##### WP 1: Gathering, compiling and publishing bathymetric data

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

**WP 2: Development of bathymetric data assembly and outreach tools**

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

**WP 3: Technology innovation**

- How can Seabed 2030 encourage/expedite the required technical advances?

**WP 4: Mapping the gaps**

- How can Seabed 2030 champion/facilitate data collection in areas devoid of data?

**WP 5: Management**

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

*3.2. PHASES of 10 year Seabed 2030 Project*

**Phase 1 – Establishment Phase – 6 months**

- Set up of project

**Phase 2 – Gathering, compiling and publishing existing data - 3 ½ years**

- Focus on WP1 and WP2, with preparation (ie research and design) for WP3 and WP4
- Target is at end of Phase 2 all existing data has been identified and system in place to incorporate all into GEBCO products
- WP3: design a technology innovation strategy
- WP4: design a mapping the gaps strategy

**Phase 3 – Start to map the gaps - 1 year**

- The focus moves to new expeditions to collect data (WP4)

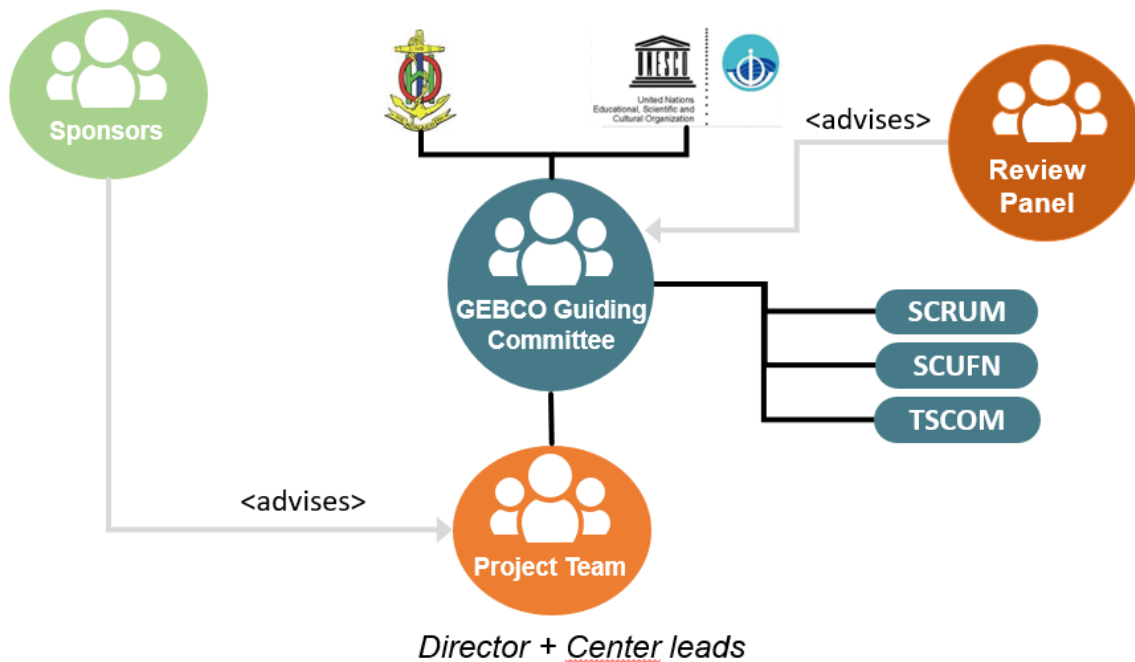
**Phase 4 - Leveraging innovative technologies – 5 years**

- Benefits of WP3 become available as the Project responds to the impact of technology developments
- Data volumes increase and new ocean areas mapped extensively

**4. PROJECT STRUCTURE**

*4.1. Project Governance*

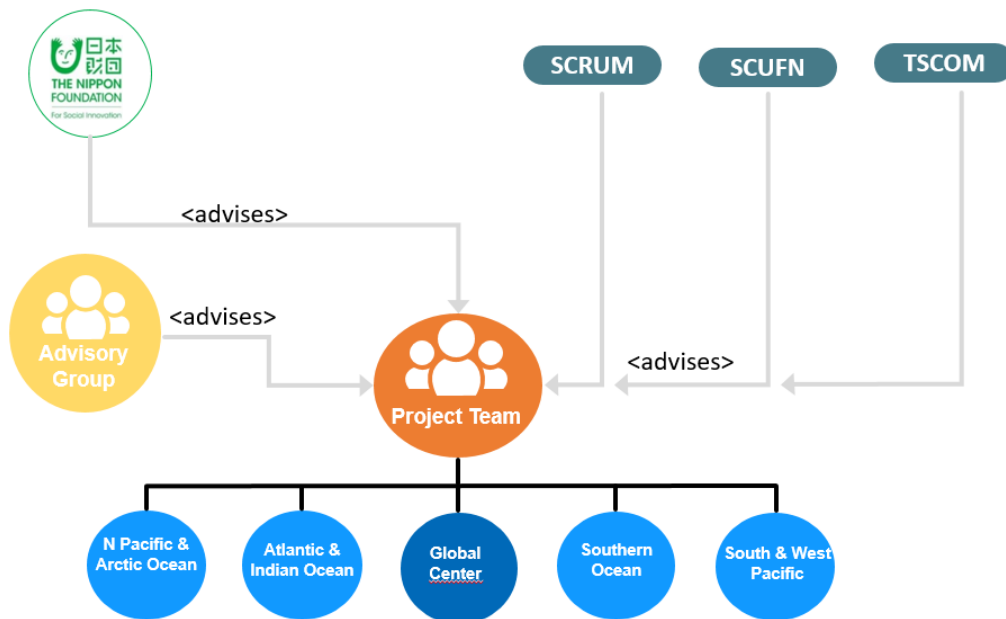
How the project is governed; who is accountable to whom.



- GEBCO Guiding Committee
  - Purpose
    - Project oversight and governance
- Review Panel
  - Purpose:
    - Provide independent advice to GGC on the Annual Report and Work Plan
  - Participants
    - Not convened in Year 1
- Sponsors
  - Purpose:
    - Meet 6 monthly to advise Director on strategy
  - Participants:
    - Nippon Foundation Executive Director – Mr Unno
    - IHO Secretary General – Mathias Jonas
    - IOC Executive Secretary - Vladimir Ryabinin
    - Seabed 2030 Director
    - Establishment Team core
- Establishment Team core
  - Purpose
    - Establish the project
    - Support Director through induction period
    - Provide advice on project strategy and history
  - Participants
    - Martin Jakobsson

- Robin Falconer
  - Graham Allen
- Project Team
  - Purpose
    - Delivery of the Seabed 2030 Project
    - Participants
      - Director
      - Center Leads

#### 4.2. Project Management – YEAR 1

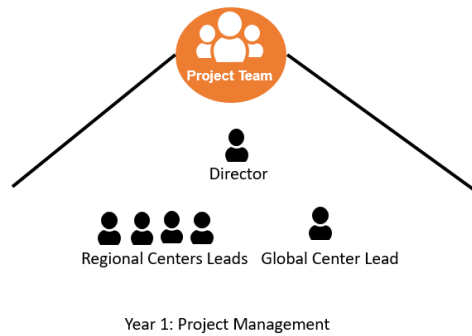


#### Advisory Group

- Purpose:
  - Provide Project Team with Strategic Advice
- Participants:
  - Dawn Wright: Chief Scientist, ESRI
  - Bjorn Jalving: Executive VP, Konsberg Maritime
  - Yulia Zarayskaya: NF-GEBCO Alumni Team Lead XPrize
  - Dr. Kilaparti Ramakrishna: Head of Strategy, Green Climate Fund

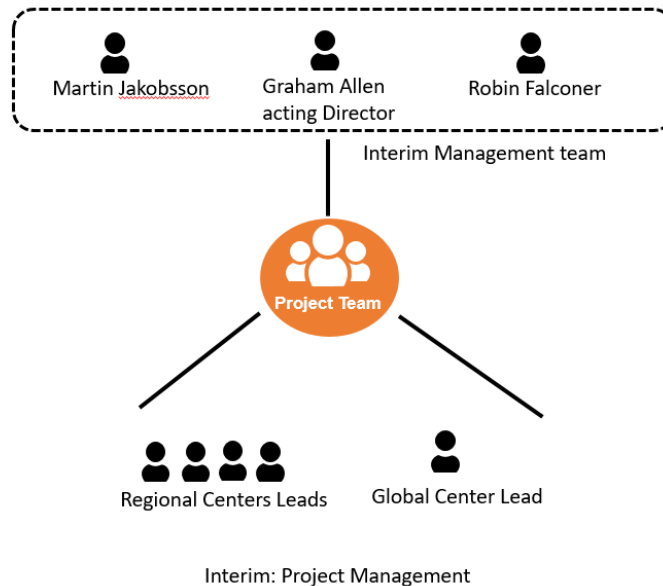
#### SCRUM/SCUFN/TSCOM

- GGC know Purpose & Participants



#### 4.3. Project Management – Interim

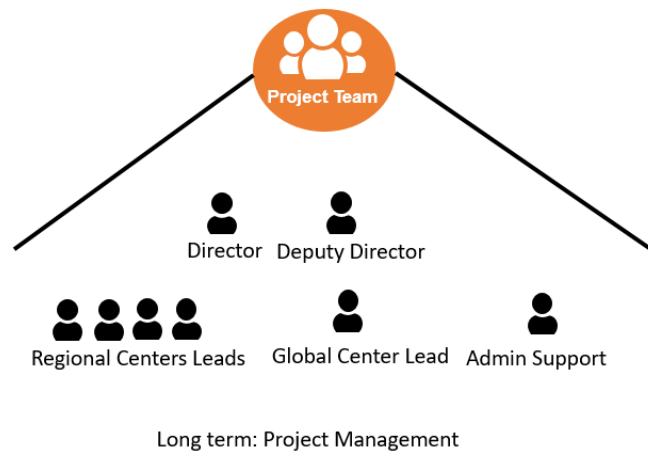
Until a full time, permanent Director is in post, the 3 core Establishment Team members (Martin Jakobsson, Robin Falconer, Graham Allen) will take responsibility for the Project, with Graham Allen designated as acting Director.



#### 4.4. Project Management – Long term

At the Sponsors Meeting in Monaco on 27<sup>th</sup> September, after consultation with the GGC and the Project Team, the Sponsors agreed to recruit for 3 positions:

- i. Director
- ii. Deputy Director
- iii. Project Admin support



## 5. YEAR 2 WORK PLAN – Version 1.0 (as is)

The original Work Plan as approved by the Nippon Foundation and distributed to the GGC for review and endorsement.

### 5.1. Work Plan Budget

- Approved by the Nippon Foundation in July 2018

Note: The budget is not structured to reflect Work Packages in Section 3

But is separated into:

- Project Team Activity budget:
  - To cover centralized Project activities
  - Does not include Project Director costs; this is managed separately directly with the Nippon Foundation through the University of New Hampshire (UNH)
- Center budgets:
  - Staff costs
  - Activities

PROJECT TEAM	Activities		US\$	
PROJECT TEAM	Activities		Crowdsourcing initiative	40,000
PROJECT TEAM	Activities		Comms and outreach	120,000
PROJECT TEAM	Activities		Capacity Development Review	60,000
PROJECT TEAM	Activities		Accounting and Legal advice	15,000
PROJECT TEAM	Activities		Knowledge Center	7,000
PROJECT TEAM	Activities		Training	2,500
PROJECT TEAM	Activities		Travel (Review Panel)	10,000
PROJECT TEAM	Activities		Travel (Director/Project Team)	23,500
PROJECT TEAM	Activities		Travel (Project Team meetings)	20,000
PROJECT TEAM	Activities		Meetings (Director/Project Team)	24,000
PROJECT TEAM	Activities		Meetings (Strategic Advisory Group)	15,000
PROJECT TEAM	Activities		Meetings (Technical Advisory Group)	10,000
<b>PROJECT TEAM</b>			<b>sub-total</b>	<b>347,000</b>



<b>Regional Center</b>				
<b>Regional Center</b>	<b>Staff costs</b>		<b>sub-total</b>	<b>198,000</b>
Regional Center	Activities		Travel	15,000
Regional Center	Activities		Meetings	18,000
Regional Center	Activities		Fishing/merchant vessel data collection	9,000
Regional Center	Activities		consumables	12,000
<b>Regional Center</b>	<b>Activities</b>		<b>sub-total</b>	<b>54,000</b>
<b>Regional Center</b>			<b>TOTAL per Regional Center</b>	<b>252,000</b>

<b>Regional Center</b>			<b>TOTAL for 4 regional Centres</b>	<b>1,008,000</b>
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<b>Global Center</b>				
<b>Global Center</b>	<b>Staff costs</b>		<b>sub-total</b>	<b>220,000</b>
Global Center	Activities		Travel	12,000
Global Center	Activities		Meetings	12,000
Global Center	Activities		consumables	16,000
<b>Global Center</b>	<b>Activities</b>		<b>sub-total</b>	<b>40,000</b>
<b>Global Center</b>			<b>TOTAL for Global Center</b>	<b>260,000</b>

<b>Seabed 2030 Year 2 budget (V1.0)</b>		<b>1,615,000</b>
<b>Seabed 2030 Year 1 roll over (estimated)</b>		<b>360,000</b>
<b>NF Year 2 Allocation</b>		<b>1,255,000</b>

- The budget to complete all proposed Year 2 activities and staff costs amounted to a total of US\$1,615,000
- When preparing the Year 2 proposal to the Nippon Foundation, it was estimated that of the Year 1 budget, \$360,000 would be unspent (comprised of a mix of uncompleted Project Team activities and Center Staff costs)
- The Nippon Foundation:
  - approved the total US\$1,615,000 budget and
  - provided \$1,255,000 of new cash for Year 2. (1,615,000 – 360,000)
  - ie agreed that unspent Year 1 funds would be allocated to Year 2 activities

## 5.2. Work Plan Goals

The Year 2 Goals are detailed in the original POW 2018 – 2019

## 6. Drivers for Change of Year 2 Work Plan

### *Alignment of budget to available funds*

- adjustments made to the scope of the Year 2 Work Plan to re-align activities with the available Year 2 budget.

- In late September, as part of the hand over to the acting Director, a review of the Year 1 end of year financial position, a full reconciliation of cash remaining in the IHO Secretariat Seabed 2030 fund ('the bank account') identified that the Year 1 unspent funds available to 'rollover' into Year 2 was actually \$268,000 (not \$360,000).
- This means there is \$92,000 (360,000 – 268,000) less available to Seabed 2030 in Year 2 than budgeted for, ie available Year 2 funds = \$1,523,000 (1,255,000+268,000)

### *II GGC feedback on the original Year 2 Work Plan*

- See GGC Paper: GGC35-7.2.1-Seabed2030\_Year2\_WorkPlan
- The GGC has identified areas they would like to see improve on in the current and future Work Plan structure and content.

### *III Resignation of the Project Director*

- Planning is underway to recruit the replacement Director
- The budget for the replacement positions will be managed separately and directly between the acting Director and the Nippon Foundation.
- It is reasonable to expect that the new Director will not be in post for most of Year 2 and so the scope of activities needs to be adjusted.
- In the absence of a full-time dedicated Project Director, many of the Year 2 Goals are unachievable due to lack of available of resources.

#### Notes on recruitment:

- Recruitment of the replacement Director is considered an Establishment Team activity; not a Year 2 Work Plan activity.
- The core Establishment Team (Robin, Martin and Graham) will co-ordinate the recruitment keeping the GGC consulted and informed.
- The budget sits outside of the Year 2 Work Plan.

### *IV Impact of project timing.*

Working on an annual budget cycle and timing of GGC meeting and start of Project Financial Year

- The timing of the funding year and the GGC meeting presents some issues.
- The Nippon Foundation awards funds annually from 1st Aug to 31st July.
- Application for next year's Nippon Foundation funding is submitted in May/June
- GGC meeting is in November (upto 6 months after submission of the next funding application).

## 7. Proposed changes

### **7.1. CHANGE 1: Reduction in the Project Team Activity budget**

- Driver: I. Alignment with available funds.
- STATUS: Project Team activity Budget reduction from \$347,000 to \$255,000 approved by the Nippon Foundation

- In discussions between the acting Director and the Nippon Foundation it was agreed, to de-scope some Project Team activities to bring the Year 2 budget in line with the available funds of \$1,523,000.

NOTE: Graham Allen, as acting Director and member of the Establishment Team, and after consultation with the Project Team, made a unilateral, executive decision to implement this solution to the funding shortfall problem. Alternative solutions to balance the books that were discounted included:

- Reducing the Center budgets
- Nippon Foundation increasing the Year 2 allocation

#### Change Details

Project Team activity	VERSION 1.0		Project Team activity	VERSION 2.0
Crowdsourcing initiative	40,000		Crowdsourcing initiative	40,000
Comms and outreach	120,000		Comms and outreach	120,000
<i>Capacity Development Review</i>	<i>60,000</i>			
<i>Accounting and Legal advice</i>	<i>15,000</i>			
<i>Knowledge Center</i>	<i>7,000</i>			
Training	2,500		Training	2,500
<i>Travel (Review Panel)</i>	<i>10,000</i>			
Travel (Director/Project Team)	23,500		Travel	43,500
<i>Travel (Project Team meetings)</i>	<i>20,000</i>			
Meetings (Director/Project Team)	24,000		Meetings	34,000
Meetings (Technical Advisory Group)	10,000			
Meetings (Strategic Advisory Group)	15,000		Strategic Advisory Group	15,000
<b>Sub-total (Version 1.0)</b>	<b>\$347,000</b>		<b>Sub-total (Version 2.0)</b>	<b>\$255,00</b>

#### Changes:

- 1) Removal of Capacity Development Review
- 2) Removal of Accounting and Legal advice
- 3) Removal of Knowledge Center
- 4) Consolidation of travel activities and reduction of budget by \$10,000
- 5) Consolidation of some meeting budget items

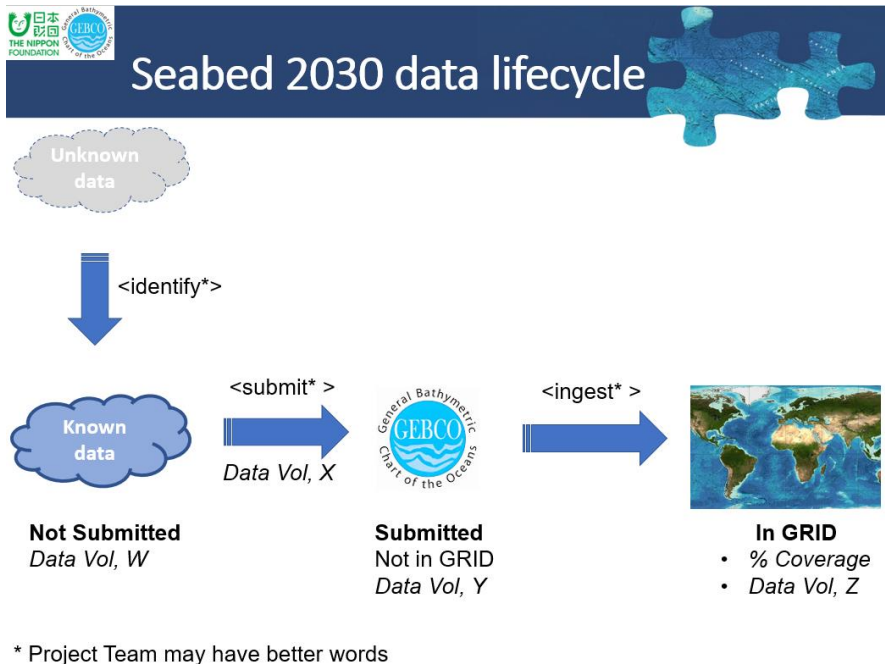
STATUS: Change to Project Team Activity Budget: GGC to discuss and endorse

#### **7.2. CHANGE 2: Re-prioritize the Year 2 Goals**

Driver: II GGC feedback & III Resignation of Project Director

Given the available (reduced) resources in the Project Team and the GGC feedback that the Year 2 scope is overambitious, the scope of Year 2 activity needs to be reduced.

STATUS: Proposed changes in Appendix I: GGC to discuss and endorse



Seabed 2030 data life cycle: useful when reviewing Goals 1.1 to 1.3

### 7.3. CHANGE 3: Re-articulate the Year 2 Goals

Driver: II GGC feedback

The Year 2 Goals need to be re-articulated in response to GGC feedback and mapped to Seabed 2030 Work Packages to allow improved assessment by GGC in the Year 2 Annual Report.

3.1 Map Goals to Seabed 2030 Work Packages

3.2 Re-articulate the Goals to be more specific

3.3. Include Goal metrics to allow assessment in Year 2 Annual Report.

STATUS: Proposed changes in Appendix I: GGC to discuss and endorse

### 7.4. CHANGE 4: Adjust the timing of submission of future Annual Reports and Work Plans to GGC.

Driver: IV Impact of project timing.

Changing the time of submission to the GGC will allow the GGC to input to the Annual Report and Work Plan before next year's funding proposal submitted to the Nippon Foundation

STATUS: Proposed change below: GGC to discuss and endorse

The proposed timing is a balance between:

1. Being far enough through current year to provide a meaningful Annual Report and
2. Being close enough to next year to provide an accurate next Year Work Plan and
3. Allowing GGC time to review and form a consensus and

4. Allowing Project Director sufficient time to incorporate GGC feedback and deliver a next year proposal to Nippon Foundation funding year dates.

Change details

- Nippon Foundation funding year remains 1<sup>st</sup> Aug to 31<sup>st</sup> July.
- GGC to review and provide feedback on Annual Report and Work Plan via on-line working, inter-sessionally (outside of GGC meetings)
- GGC to form consensus on endorsement of Annual Report and Work Plan via on-line working, inter-sessionally (outside of GGC meetings)
- Target GGC endorsement of on Annual Report and Work Plan is end of May of each year

Proposed time line

YEAR	Month	Event
<b>2018</b>	<b>1<sup>st</sup> February</b>	<b>Start of Seabed 2030 Year 1 (half-year)</b>
	1 <sup>st</sup> February	Director in post
	June	Year 2 budget submitted to the Nippon Foundation
	July	Year 2 budget approved by the Nippon Foundation
	<b>1<sup>st</sup> August</b>	<b>Start of Seabed 2030 Year 2</b>
	Sep	Year 1 Annual Report and Year 2 Work Plan submitted to GGC for review
	12 <sup>th</sup> to 16 <sup>th</sup> Nov	At 2018 GGC Meeting: <ul style="list-style-type: none"> <li>● GGC endorse Year 1 Annual Report</li> <li>● GGC endorses Year 2 Work Plan</li> <li>● GGC endorses Year 2 Work Plan Addendum</li> </ul>
2019	30 <sup>th</sup> April	Director submits Year 2 Annual Report and Year 3 Work Plan to GGC for endorsement
	May	GGC deliberates on Year 2 Annual Report and Year 3 Work Plan
	30 <sup>th</sup> May	GGC final decision on Year 2 Annual Report and Year 3 Work Plan
	June	Submission of Year 3 proposal to Nippon Foundation
	July	Outcome of submission to the Nippon Foundation
	31 <sup>st</sup> July	End of Year 2
	<b>1<sup>st</sup> August</b>	<b>Start of Seabed 2030 Year 3</b>
	31 <sup>st</sup> Oct	Director submits to the GGC an informational interim status report
	Nov	Director reports on status to 2019 GGC Meeting
2020	30 <sup>th</sup> April	Director submits Year 3 Annual Report and Year 4 Work Plan to GGC for endorsement
	May	GGC deliberates on Year 3 Annual Report and Year 4 Work Plan
	30 <sup>th</sup> May	GGC final decision on Year 3 Annual Report and Year 4 Work Plan
	June	Submission of Year 4 proposal to Nippon Foundation
	July	Outcome of submission to the Nippon Foundation
	31 <sup>st</sup> July	End of Year 3
	<b>1<sup>st</sup> August</b>	<b>Start of Seabed 2030 Year 4</b>

**7.5 CHANGE 5: Format and content of future Work Plans**

Driver: II GGC feedback

Future Work Plans and Annual Reports will be reformatted and the content adjusted to reflect the GGC feedback provided on Year 1 Annual Report and the Year 2 Work Plan.

STATUS: GGC to endorse and Project Team to implement in future years.

Seabed 2030 Year 2 Tasks, priorities and indicators Version 2.12

**Version note: V2.3 was presented and discussed at GGC35. After the meeting, the Seabed 2030 Project Team continued to update the Work Plan in response to GGC comments and developments in the project**

Notes:

- There was no Capacity Development Review Tasks in Version 1.0 Goals

Priority:

- A traffic light system:

Priority	Meaning
<b>HIGH</b>	Most important Tasks to achieve in Year 2. Significant resources and budget allocated to achieve Task
<b>MEDIUM</b>	Only allocate sufficient resources to retain momentum and if does not compromise achieving HIGH priority Tasks
<b>LOW</b>	Low priority: delay activities to future years. Stop: allocate low or no resources and budget
	Removed or superseded by another Task

VERSION 1.0 Goal	VERSION 2.0 TASK ID	VERSION 2.0 TASK	PRIORITY	Deliverable ID	Deliverable	Delivery date	Deliverable Lead
WP 1: Gathering, compiling and publishing bathymetric data	3.1.2. Discover new data that are currently not publicly available through effective mobilization of Regional Mapping Committees and the Strategic Advisory Group.	<b>TASK 1.3</b> Publish Products	<b>HIGH</b>	D1.3.1	<ul style="list-style-type: none"> <li>• Publish GEBCO Grid 2019 at 15-arc second</li> </ul>	By 31 <sup>st</sup> Dec 2018	Helen Snaith
		<b>TASK 1.3</b> Publish Products	<b>HIGH</b>	D1.3.2	<ul style="list-style-type: none"> <li>• Publish IBCAO 2019</li> </ul>	31 <sup>st</sup> March 2019	Martin Jakobsson
		<b>TASK 1.3</b> Publish Products	<b>HIGH</b>	D1.3.3	<ul style="list-style-type: none"> <li>• Publish IBCSO V2 2019</li> </ul>	30 <sup>th</sup> September 2019	Boris Dorschel
WP 1: Gathering, compiling and publishing bathymetric data	3.1.4 Identify data gaps where no data have been acquired and encourage new data acquisition through mapping campaigns.	<b>TASK 1.4</b> Identify data gaps: areas of the ocean where data does and does not yet exist.	<b>HIGH</b>	D1.4.1	Grid metrics: <ul style="list-style-type: none"> <li>• % coverage of GEBCO Grid</li> <li>• Estimate of % of gaps</li> <li>• Visualization of gaps</li> </ul> Gap = NOT (in grid + submitted + not submitted) Metric(s) on crowdsourced data. For example: <ul style="list-style-type: none"> <li>• Volumes of crowdsourced data available to Seabed 2030 but not yet contributed</li> <li>• Volumes of crowdsourced data contributed to Seabed 2030</li> <li>• Volumes of crowdsourced data ingested in Grid</li> <li>• % of Grid completed with crowdsourced data</li> </ul>	Reported in Year 2 Annual Report	Helen Snaith
WP 1: Gathering,	3.1.1. Process and	<b>TASK 1.2</b> Submission of existing data to	<b>HIGH</b>	D1.2.1	Data submission metrics:	Reported in Year 2	Helen Snaith

compiling and publishing bathymetric data	integrate existing data		Seabed 2030			<ul style="list-style-type: none"> <li>Data volume submitted in previous year</li> <li>Total volume of data submitted to Seabed 2030 but not yet ingested into Grid</li> <li>Estimate of equivalent % coverage of Grid</li> <li>Catalogue of major data contributors in previous year</li> </ul>	Annual Report	
			<b>TASK 1.1</b> Identify existing data not yet known to Seabed 2030	<b>HIGH</b>	D1.1.1	Discovered data metrics: <ul style="list-style-type: none"> <li>Vol of data and sources not yet submitted</li> <li>Estimate of equivalent % coverage of multi-resolution Grid</li> </ul>	Reported in Year 2 Annual Report	Helen Snaith
<b>VERSION 1.0 Goal</b>		<b>VERSION 2.0 TASK ID</b>	<b>VERSION 2.0 TASK</b>	<b>PRIORITY</b>	<b>Deliverable ID</b>	<b>Deliverable</b>	<b>Delivery date</b>	<b>Deliverable Lead</b>
WP 2: Development of bathymetric data assembly and outreach tools	3.1.3 Continue to define the required standards for data and metadata being contributed to Seabed 2030.	<b>TASK 2.1</b>	Define the standards for data and metadata being contributed to Seabed 2030.	<b>HIGH</b>	D2.1.1	<ul style="list-style-type: none"> <li>Version 1 of protocols for contributing data are publishing</li> </ul>	31 <sup>st</sup> March 2019	Vicki Ferrini
WP 2: Development of bathymetric data assembly and outreach tools	3.1.7 Create bathymetric data products which will be shared with the public on Seabed 2030's official website in late 2018.	<b>TASK 2.2</b>	Design & plan for publication of the multi-resolution Grid	<b>HIGH</b>	D2.2.1	<ul style="list-style-type: none"> <li>Publish the plan and technical design to create the first multi-resolution GEBCO Product</li> </ul>	End of Year 2: 31 <sup>st</sup> July 2019	Larry Mayer
WP 2: Development of bathymetric data assembly and outreach tools	3.1.8 Enhance data access and visualization tools for effective delivery of the data products.	<b>TASK 2.3</b>	Enhance data access and visualization tools for effective delivery of the data products.	<b>HIGH</b>	D2.3.1	<ul style="list-style-type: none"> <li>Publish Seabed 2030 website updates</li> <li>Update GEBCO data portal website</li> <li>Users can download 15-arc second Grid</li> </ul>		Helen Snaith
		<b>TASK 2.4</b>	Establish consistent data flow policy and mechanisms across the project	<b>HIGH</b>	D2.4.1	<ul style="list-style-type: none"> <li>Publish a Data Flow Process</li> </ul>	31 <sup>st</sup> March 2019	Geoffroy Lamarche
<b>VERSION 1.0 Goal</b>		<b>VERSION 2.0 TASK ID</b>	<b>VERSION 2.0 TASK</b>	<b>PRIORITY</b>	<b>Deliverable ID</b>	<b>Deliverable</b>	<b>Delivery date</b>	<b>Deliverable Lead</b>
WP 3: Technology innovation		<b>TASK 3.1</b>	Establish a Seabed 2030 Technology Innovation Strategy	<b>HIGH</b>	D3.1.1	<ul style="list-style-type: none"> <li>A published Seabed 2030 Technology Innovation strategy document</li> </ul>	To be decided	JAMSTEC
WP 3: Technology innovation	3.3.1 Explore feasibility of potentially using the SEA-KIT to undertake an ocean floor mapping trail or pilot for Seabed 2030.	<b>TASK 3.2</b>		<b>LOW</b>				
WP 3: Technology innovation	3.3.2 Collaborate with industry to explore new technological approaches	<b>TASK 3.3</b>		<b>LOW</b>				



	to seafloor mapping that enhance coverage and reduce costs.							
WP 3: Technology innovation	3.3.3 Examine synergies and work in close tandem with The Nippon Foundation's DeSET project, which is incubating and supporting three companies to develop seabed mapping technology.	TASK 3.4		LOW				
VERSION 1.0 Goal	VERSION 2.0 TASK ID	VERSION 2.0 TASK	PRIORITY	Deliverable ID	Deliverable	Delivery date	Deliverable Lead	
WP 4: Mapping the gaps	3.1.5 Develop a scheme for funding expeditions to map identified data gaps.	TASK 4.1	Design a strategy for funding Seabed 2030 Considering required legal entities	HIGH	D4.1.1	<ul style="list-style-type: none"> <li>Publish a paper: Funding the Maps Strategy.</li> </ul> A review of potential funding strategies and a recommendation of most cost-effective for Seabed 2030 to pursue.	31 <sup>st</sup> March 2019	David Millar
WP 4: Mapping the gaps	3.1.6 Scale up crowdsourced bathymetry from partners such as surveying companies, fishing boats, ocean going carriers and recreational vessels, e.g. through a newsletter or getting a partner to organize a forum at a convenient date.	TASK 4.2	Agree a crowdsourcing approach – how can Seabed 2030 augment and complement existing Crowdsource activity, including DCDB, Crowdsource working group?	HIGH	D4.2.1	<ul style="list-style-type: none"> <li>Publish a Seabed 2030 Crowdsourcing Strategy – how does Seabed 2030 fit in?</li> </ul>	31 <sup>st</sup> March 2019	Jennifer Jencks
VERSION 1.0 Goal	VERSION 2.0 TASK ID	VERSION 2.0 TASK	PRIORITY	Deliverable ID	Deliverable	Delivery date	Deliverable Lead	
<b>WP 5: Management</b> 5.1 Operational management	3.4.1 Strengthen internal communications by routinely sharing memos, best practice and holding regular meetings to create a stronger and more cohesive project team	TASK 5.1.1		LOW				
<b>WP 5: Management</b> 5.1 Operational management	3.4.2 Consult extensively and formalize consensus for the most efficient administrative work flows for Seabed 2030.	TASK 5.1.2		LOW				
<b>WP 5: Management</b> 5.1 Operational management	3.4.3 Create the requisite legal and administrative framework to raise funds.	TASK 5.1.3		LOW				

<b>WP 5: Management</b> 5.1 Operational management	3.4.5 Measure all activities to evaluate what's working/can work better and to ensure best return on donor dollar.		See Task 5.1.6					
<b>WP 5: Management</b> 5.1 Operational management	3.4.6 Engage with the GEBCO community, including its subcommittees, throughout the year.	<b>TASK 5.1.4</b>	Engage with the GEBCO community, including its subcommittees, throughout the year.	<b>HIGH</b>	D5.1.4	<ul style="list-style-type: none"> <li>Diary of Year 2 engagement</li> <li>Demonstrate subcommittee contribution to Seabed 2030</li> </ul>	Reported in Year 2 Annual Report	Vicki Ferrini
<b>WP 5: Management</b> 5.1 Operational management		<b>TASK 5.1.5</b>	Annual Project Reporting	<b>HIGH</b>	D5.1.5	<ul style="list-style-type: none"> <li>Year 2 Annual Report submitted to GGC for inter-sessional endorsement</li> <li>Financial report on activity vs budget at Work Package level</li> </ul>	<ul style="list-style-type: none"> <li>Draft to GGC by 30th April 2019</li> <li>Final to GGC by 30-Sep-19 for GGC36</li> </ul>	Graham Allen
		<b>TASK 5.1.7</b>	Secure Year 3 Funding	<b>HIGH</b>	D5.1.7	<ul style="list-style-type: none"> <li>Year 3 Work Plan and budget submitted</li> </ul>	<ul style="list-style-type: none"> <li>Submitted to GGC by 30th April 2019</li> <li>Submitted to NF in June 2019 (TBC)</li> </ul>	Graham Allen
<b>WP 5: Management</b> 5.1 Operational management		<b>TASK 5.1.6</b>	Reporting to GGC	<b>HIGH</b>	D5.1.6	<ul style="list-style-type: none"> <li>Quarterly status updates sent to GGC</li> </ul>	Updates: <ul style="list-style-type: none"> <li>28-Feb-19</li> <li>30-Apr-19</li> <li>30-Jul-19</li> </ul>	Graham Allen
<b>WP 5: Management</b> 5.2 Strategic direction	3.2.8 Obtain strong internal buy in for a communications, partnership and fundraising strategy.	<b>TASK 5.2.1</b>		<b>LOW</b>				
<b>WP 5: Management</b> 5.3 Communication and outreach	3.2.1 Continue to "map" stakeholders and encourage the entire project team to expand Seabed 2030's "master list" of contacts from 1,200 to approximately 3,000 names.	<b>TASK 5.3.1</b>		<b>MEDIUM</b>				
<b>WP 5: Management</b> 5.3 Communication and outreach	3.2.2. Grow the scientific community that benefit and contribute to seafloor mapping	<b>TASK 5.3.2</b>		<b>MEDIUM</b>				
<b>WP 5: Management</b> 5.3 Communication and outreach	3.2.3. Create a Seabed 2030 logo with a tag line of "Mapping the ocean floor" to showcase the project's mission, energize GEBCO	<b>TASK 5.3.3</b>		<b>LOW</b>				

	supporters and consolidate global support.							
<b>WP 5: Management</b> 5.3 Communication and outreach	3.2.4 Produce riveting content such as films, news releases, brochures and distribute them across a variety of networks such as traditional media, social media etc.	<b>TASK 5.3.4</b>	Publish riveting PR content such as films, news releases,, brochures and distribute them across a variety of networks such as traditional media, social media etc. to increase: <ul style="list-style-type: none"> <li>- Broad public and media knowledge of Seabed 2030</li> <li>- Organizations contributing data to Seabed 2030</li> <li>- Investment in ocean mapping (mapping the gaps)</li> </ul>	<b>HIGH</b>	D5.3.4	<ol style="list-style-type: none"> <li>1. Catalogue of comms &amp; outreach activity</li> <li>2. Catalogue of published PR material</li> </ol>	Reported in Year 2 Annual Report	Graham Allen
<b>WP 5: Management</b> 5.3 Communication and outreach	3.2.5 Build a thought leadership profile by writing and placing op ed columns (opposite editorial in newspaper) with Project Syndicate – the largest distributor of such columns in the world.	<b>TASK 5.3.5</b>		<b>LOW</b>				
<b>WP 5: Management</b> 5.3 Communication and outreach	3.2.6 Promote Seabed 2030 at all relevant maritime community events and develop a “crowdsourcing” newsletter with a view to organizing a forum or workshop	<b>TASK 5.3.6</b>	Promote Seabed 2030 and its mission at all relevant maritime community events to increase: <ul style="list-style-type: none"> <li>• Data contributions to Seabed 2030</li> <li>• Investment in ocean mapping (mapping the gaps)</li> <li>• Broad public and media knowledge of Seabed 2030</li> </ul>	<b>HIGH</b>	D5.3.6	<ul style="list-style-type: none"> <li>• Catalogue of meetings attended at: <ol style="list-style-type: none"> <li>1. IHO Regional Commission Meetings</li> <li>2. Other IHO meetings</li> <li>3. Community meetings to solicit data contributions</li> </ol> </li> </ul>	Reported in Year 2 Annual Report	Vicki Ferrini
		<b>TASK 5.3.6</b>		<b>HIGH</b>	D5.3.6.2	<ul style="list-style-type: none"> <li>• 1 page flyer ‘How to contribute data’</li> </ul>	31 <sup>st</sup> Jan 2019	Vicki Ferrini
<b>WP 5: Management</b> 5.3 Communication and outreach	3.2.7 Appoint patrons or goodwill ambassadors to amplify Seabed 2030’s messaging.	<b>TASK 5.3.7</b>		<b>LOW</b>				
<b>WP 5: Management</b> 5.3 Communication and outreach	3.4.4 Write agreements with a first list of partners.	<b>TASK 5.3.8</b>	Stakeholder Management	<b>HIGH</b>	D5.3.8	<ul style="list-style-type: none"> <li>• Refresh of Supporter types</li> <li>• Agreements in place for all key Partners</li> </ul>	Reported in Year 2 Annual Report	Graham Allen
<b>WP 5: Management</b> 5.3 Communication and outreach		<b>TASK 5.3.10</b>	Stakeholder Management	<b>HIGH</b>	D5.3.10	<ul style="list-style-type: none"> <li>• Visual map indicating key data contributors on website</li> </ul>	Part of GEBCO Grid 2019 release	Helen Snaith
<b>WP 5: Management</b> 5.3 Communication and outreach		<b>TASK 5.3.9</b>	Deliver new version of Seabed 2030 website with new content	<b>HIGH</b>	D5.3.9	<ul style="list-style-type: none"> <li>• New content is published on website</li> </ul>		Helen Snaith
<b>WP 5: Management</b>	3.3.5 Build a “Knowledge	<b>TASK 5.3.9</b>	Note: Budget removed for Year 2	<b>LOW</b>				

5.3 Communication and outreach	Center” so stakeholders, academics and researchers can find all relevant research, press releases, presentations, pictures and videos								
<b>WP 5: Management</b> 5.4 Human capacity development	3.3.4 Work with stakeholders to increase the data processing ability of alumni for their future roles as ocean stewards		<b>TASK 5.4.1</b>		<b>LOW</b>				

## Change History

When	Version	What	Who
20 <sup>th</sup> Dec 2018	V2.12	- Included comments and V2.3 in Change History as this version is to be published on IHO website	Graham Allen
19 <sup>th</sup> Dec 2018	V2.11	- Added new deliverable D5.3.6.2, which is the second deliverable from Task T5.3.6 Promote Seabed 2030	Graham Allen
9 <sup>th</sup> Dec 2018	V2.10	- Included deliverable ids - Moved task: Visual map indicating key data contributors from WP1 to WP5 as this deliverable is to be used to acknowledge key data contributors. There are planned similar deliverables (apis and services) to supply meta data on data for use in layers and mapping gaps, but current deliverable is not this - Is now TASK 5.3.10 and D5.3.10	Graham Allen
4 <sup>th</sup> Dec 2018	V2.9	Post project team meeting and discussion of work plan. Changes include: - Update of IBSCO delivery date, Task 2.4 deliverable lead,	Graham Allen
30 <sup>th</sup> Nov 2018	V2.8	Included deliverables: - IBCAO - IBSCO - Visualization of key data providers (added this after I told Helen about V2.8!)	Graham Allen
30 <sup>th</sup> Nov 2018	V2.7	• Included deliverable owners • Split out a Year 3 secure funding task (Task 5.1.7) and deliverable	Graham Allen
30 <sup>th</sup> Nov 2018	V2.6	• Small corrections • Distributed to Helen and Pauline	Graham Allen
26 <sup>th</sup> Nov 2018	V2.5	• Included <i>TASK 5.3.9- Deliver new content to website</i> • Removed web content from Task 5.3.4	Graham Allen
24 <sup>th</sup> Nov 2018	V2.4	• Post GGc35 clean up	Graham Allen
GGC35	V2.3	Version presented to and discussed at GGC35	Graham Allen

**IHO-IOC GEBCO GUIDING COMMITTEE  
(GGC)**

**List of GGC members – 26 November 2018**

- | <b>1. IHO Appointed Members:</b>                               | <b>Term Period:</b> |
|--|---------------------|
| Dr Hyo Hyun Sung* (Republic of Korea)                          | (2014-2019)         |
| Dr Graham Allen (United Kingdom)                               | (2015-2020)         |
| Mr Shin Tani* (Japan) ( <b>Chair</b> )                         | (2018-2023)         |
| Mr David Millar (USA)  | (2018-2023)         |
| Vacant   |                     |
| <br>   |                     |
| <b>2. IOC Appointed Members:</b>                               |                     |
| Dr Marzia Rovere (Italy)                                       | (2014-2019)         |
| Dr Johnathan Kool (Australia)                                  | (2016-2021)         |
| Captain Leonid Shalnov (Russian Federation)                    | (2016-2021)         |
| Dr Martin Jakobsson (Sweden) ( <b>Vice-chair</b> )             | (2018-2023)         |
| Lieutenant Dr Karolina Zwolak (Poland)                         | (2018-2023)         |
| <br>   |                     |
| <b>3. Ex-officio Members:</b>                                  |                     |
| Dr Vicki Ferrini (USA) ( <i>Chair of SCRUM</i> )               |                     |
| Mr Thierry Schmitt (France) ( <i>Chair of TSCOM</i> )          |                     |
| Mr Han Hyun-Chul (Republic of Korea) ( <i>Chair of SCUFN</i> ) |                     |
| Ms Jennifer Jencks (USA) ( <i>Director of IHO-DCDB</i> )       |                     |
| <br>   |                     |
| * Members serving a second 5-year term.                        |                     |
| <br>   |                     |
| <b>4. Secretary:</b>   |                     |
| Mr David Wyatt (IHO)   | (2015-2019)         |

**NOTE:** Members of the Secretariats of the IHO and IOC are permanent non-voting Members in the Committee.

# G E B C O

## GENERAL BATHYMETRIC CHART OF THE OCEANS



Intergovernmental  
Oceanographic  
Commission

### Thirty Sixth Meeting of the GEBCO Guiding Committee (GGC36)

(tbc)

? – ? November 2019

#### Agenda

*Version 1.0; 26 novembre 2018*

#### **1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS – 30 minutes**

- .1 Opening Remarks and Introductions – **Chair**
- .2 Welcoming Remarks by Host – **CHS**
- .3 Opening remarks by parent bodies – **IHO and IOC Secretariats**
- .4 Working Arrangements – **Secretary/Hosts**
- .5 Administrative Arrangements – **Secretary/Hosts**
- .6 Adoption of the Agenda and approval of report from GGC35 – **Chair**
- .7 Review of Action Items from GGC35 – **Secretary**
- .8 Report from IRCC11 – **Chair**

#### **GEBCO TODAY**

#### **2 REPORTS FROM PARENTAL AND SUBORDINATE BODIES – 120 minutes**

Brief reports (5 minutes) will be received, highlighting only significant events, achievements, outcomes, outputs/deliverables and matters requiring GGC action, full reports can be downloaded from the GGC website:

- .1 IHO update – **Iptes**
- .2 IOC update – **Barbière**
- .3 Financial update, including funds status report – **Secretary**
- .4 Digital Atlas Manager – **BODC**
- .5 DCDB update, including relevant CSBWG and ASMIWG issues – **DCDB Director**
- .6 SCUFN – **Chair SCUFN**
- .7 TSCOM – **Chair TSCOM**
- .8 SCRUM – **Chair SCRUM**
- .9 Outreach WG – **Chair Outreach WG**

**3 NIPPON FOUNDATION – 30 minutes**

Brief reports (5 minutes) will be received highlighting significant events, outcomes and matters requiring GGC action, full reports can be downloaded from the GGC website:

- .1 NF Programme Management Committee (NFPMC) report – **Chair NFPMC**
- .2 UNH training programme update – **Course Manager**
- .3 Nippon Foundation Ambassador programme – **Chair NFPMC**
- .4 NF funds – **Chair NFPMC**
- .5 NFPMC membership – **Chair NFPMC**

**4 GEBCO ENGAGEMENT WITH EXTERNAL BODIES – 60 minutes**

- .1 Participation at IHO RHC meetings – **Chair/Secretary**
- .2 With which international programmes has GEBCO engaged, why and outcomes? – **Chair/All**  
ICSU WDS, IODE, POGO, IRSO, WRI, GEOSS, IIOE2, Atlantos, EMODNet, etc
- .3 Update on who are the users of GEBCO products and datasets? Which methods are appropriate for discovering the users and uses of GEBCO products and datasets – **Head BODC/Director DCDB**

**5 DOCUMENTS AND PUBLICATIONS – 15 minutes**

- .1 Document Review Status – **Chair/Secretary**

Title	IHO Number	IOC Number	Edition/date
<i>Standardization of undersea feature names</i>	B-6	-	Edition 4.1.0 September 2013; new Edition 4.2.0 in preparation
<i>Gazetteer</i>	B-8	-	V1.1.1
<i>GEBCO digital atlas</i>	B-9	-	08 Grid March 2015
<i>The history of GEBCO</i>	B10	-	April 2003
<i>GEBCO Cookbook</i>	B-11	Manuals and Guides 63	December 2016

- .2 ToRs and RoPs review – **Chair/Secretary**

**6 SEABED 2030 – 60 minutes**

Progress brief on activities of Seabed 2030 Project against agreed Business Plan, including funding state, RDACC and GDACC activities, outcomes from interaction with IOC and IHO Secretariats and endorsement of Work Plan 2020-2021:

- .1 Report on progress and update brief – **Project Director**



**GEBCO TOMORROW****7 GEBCO FUTURE****.1 GGC Subordinate bodies' Work Plans 2020-2021 – 60 minutes**

- .1 Approve funding requests and Work Plans of Subordinate bodies, including outputs/deliverables for next period – **Chair/Secretary**

Chairs will present draft funding requests and Work Plans for their Sub-Committee or Working Group; identifying outputs, deliverables and appropriate milestones for consideration and approval of the GGC.

- .1 SCUFN – **Chair SCUFN**;  
 .2 TSCOM – **Chair TSCOM**;  
 .3 SCRUM – **Chair SCRUM**; and  
 .4 Outreach WG – **Chair Outreach WG**

- .2 Review of GEBCO Education and Outreach strategy – **Chair Outreach WG/Chair /Secretary**

**.2 Seabed 2030 - 120 minutes**

The GGC will be appraised of outcomes and actions arising from the Workshops, seminars and events pursuing the Seabed 2030 Project and vision, in particular:

- .1 Future actions, key outputs, deliverables and milestones – **Project Director**  
 .2 Update on integration with existing GEBCO bodies – **Chair/Project Director**  
 .3 Work Plan and funding bids 2021-2022 – **Chair/Project Director**

**.3 GGC Work Plan 2020-2021 – 60 minutes**

- .1 Approve GGC funding requests and Work Plans including outputs/deliverables for next period – **Chair/Secretary**

**8 SECRETARY RESPONSIBILITIES – 15 minutes**

- .1 Confirm responsibilities – **Chair**

**9 GGC MEMBERSHIP – 30 minutes**

- .1 Identification of individuals, whose terms are due to complete within the next two years – **Secretary**  
 .2 Details of nominations to fill vacancies – **Chair/Secretary**

**10 NEXT MEETING – 15 minutes**

- .1 Dates and venue for GGC37 – **Secretary**  
 .2 Draft Agenda for GGC37 – **Secretary**

**11 ANY OTHER BUSINESS – Chair/Secretary – 30 minutes**

**12** **Review of Action Items from GGC36** – **Secretary** – *30 minutes*

**13** **CLOSURE OF THE MEETING** – **Chair** – *15 minutes*

DRAFT