

G E B C O

GENERAL BATHYMETRIC CHART OF THE OCEANS



Thirty Seventh Meeting of the GEBCO Guiding Committee (GGC37)

18 – 20 January 2021, Virtual Remote Meeting

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

Session 1 – 50 participants

Session 2 – 51 participants

Session 3 – 49 participants

1. Opening

1.1 Opening Remarks and Introductions

The Chair welcomed all and noted the previous week of excellent virtual events, in particular the GEBCO Symposium, which was a highly successful series of sessions and demonstrated the wide aspects of activities related to the GEBCO Project and its Seabed 2030 Project.

He highlighted the role and function of the GGC, noting the governance and leadership responsibility. He highlighted how much the profile of GEBCO has risen over the past 6 years and a great deal of this was attributed to the Nippon-Foundation - GEBCO Seabed 2030 Project (Seabed 2030) success. He noted the significant amount of work which the GGC needed to address during its meeting, despite the shortened time of the virtual format.

1.2 Working Arrangements

The Secretary confirmed that all current GGC members were in attendance. He reminded presenters to keep introductions to topics short and to focus on the items on which the GGC needed to take action or discuss. It was requested microphones were kept off except when invited to speak, use the 'raised hand' to request to speak and turn on camera.

1.3 Adoption of the Agenda and approval of report from GGC36 (GGC37/1/6/1 and GGC36/12)

The agenda was adopted without change. The report of the GGC36 was approved as published.

Decision 1: GGC37 meeting agenda adopted

Decision 2: GGC36 meeting report approved

1.4 Review of Action Items from GGC36 (GGC37/1/7)

The Secretary went through the action list from GGC36, he highlighted the continuous actions, which needed to be considered and enacted as necessary throughout the intersessional periods. He noted that review and revision of relevant IHO resolutions remained outstanding tasks from GGC35. He highlighted a number of actions on which limited progress had been achieved or progress had not been reported to the Chair nor the Secretary and therefore remained outstanding. It was agreed that a number of uncompleted actions were

covered by agenda items and therefore these would be addressed during the meeting. All participants were urged to keep the Chair and Secretary informed on progress of actions for which they were responsible. The IOC Secretariat noted that the postponed EC-53 would be taking place in 1-9 February 2021, although there would be no time to discuss GEBCO matters as the limited meeting time would be devoted to urgent IOC business.

1.5 Report from IRCC12 and IOC Executive Council 53

The Chair reported on the IRCC12 meeting, he highlighted the outcomes relevant to the GGC and GEBCO, particularly the encouragement for engagement and actions in support of the GEBCO Project and Seabed 2030. The Secretary provided a short brief on the relevant items discussed at IRCC12.

2. Reports from Parent Organizations and GGC Subordinate Bodies

2.1 IHO update (GGC37/2/1)

Luigi Sinapi (**LS**) provided a brief summary of IHO activities since GGC36. He highlighted the main events since GGC36, which included the 3rd session of the IHO Assembly and the IRCC12 meeting. He highlighted the new IHO strategic plan and the items relevant to GEBCO and the relationship and support to the IOC UN Decade of Ocean Science for Sustainable Development (UN Decade). He noted the actions expected of the Regional Hydrographic Commissions and other IHO subordinate bodies to support the IHO engagement with the UN Decade and Seabed 2030.

2.2 IOC update (GGC37/2/2)

Julian Barbière (**JB**) provided a presentation on the IOC activities since GGC36. He provided details of the draft medium term strategy 2022-2029 and recent developments of IOC activities. He provided an update on the activities and reporting of the IOC Working Group on User Requirements and Contributions to GEBCO, he noted that the GGC would expect to participate. He also noted the UN Negotiation on the High Seas (BBNJ process). He particularly noted the start of the UN Decade on 1 January 2021, for which he provided details of targets and goals.

2.3 Financial update, including funds status report (GGC37/2/3)

The Secretary provided a brief overview of the current state of the GEBCO finances; he highlighted the current balances of the funds administered by the IHO Secretariat. He brought the GGC's attention to the expenditure from IHO operational funds to support the SCUFN Gazetteer; he requested the GGC obtain confirmation of the ongoing support by the USA for the Web service for the Gazetteer. He noted the transfer of SCRUM travel funds to the Fundraising Working Group to support Fund Raising initiatives, as agreed at the GGC intersessional virtual meeting. He highlighted the general lower expenditure of allocated funds in 2020 due to the reduced physical activities over the past year as a result of the Global pandemic.

2.4 Digital Atlas Manager (GGC37/2/4)

Helen Snaith (**HS**) provided a brief presentation report on the Digital Atlas on behalf of the Digital Atlas Manager; she highlighted a number of key activities and responsibilities undertaken by BODC in respect to the GEBCO Project and Seabed 2030. She noted the release of the GEBCO_2020 grid in April 2020 and the proposed release of the GEBCO_2021 grid. She provided details and statistics on the visits to the website and the download applications as well as the Web map services downloads. She highlighted the on-going work on the enhancement of the GEBCO website, including the IBC mapping pages and the GEBCO community contact list from the DCDB. It was noted that statistics for the individual websites were available in the report.

Post meeting note: agreement has been reached between IHO Secretariat and BODC to transfer the Edition 1 to 5 map sheet digital files and responsibility for the web map service to BODC, to allow for continued maintenance and further development as a valuable historical and educational resource.

2.5 DCDB update, including relevant CSBWG issues (GGC37/2/5)

The Director IHO DCDB, 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. She also highlighted the Crowdsourced Bathymetry Working Group (CSBWG) activities. In particular she highlighted the new data contributions received. The positive list of coastal states which had indicated their support for the provision of data from their waters of national jurisdiction was highlighted; it was noted that non-IHO Member States and those who verbally supported the activity but had not formally indicated their support, were all considered to have a restriction on the activity and therefore any data received could not be made available. She highlighted the Seabed 2030 funded CSB pilot programmes in Palau, Greenland and South Africa. The report generated a number of questions and discussion. **JB** suggested to make the status of the response to the IHO letter on sharing data in national waters (including EEZ), part of the GEBCO report to the IOC Assembly 31.

2.6 SCUFN Report (GGC37/2/6)

Chair SCUFN, Han Hyun-Chul (**HHC**), provided a brief report on the activities of SCUFN and the outcomes from the meeting held virtually on 9-10 December 2020. He highlighted the proposals received, highlighting some of the incomplete aspects of some submissions. He noted the data contributions from successful naming applications as well as progress on the development of gazetteer by NOAA/NCEI and of web services by KHOA. He described an automatic discovery process for undersea features. He noted that the SCUFN decision to develop further guidelines on the resolution of features to be considered by SCUFN.

2.7 TSCOM Report (GGC37/2/7/Rev.1)

The Chair TSCOM, Thierry Schmitt (**TS**), provided a brief report on the activities of TSCOM and the outcomes of the meeting sessions held 11 and 14 January.

2.8 SCRUM Report (GGC36/2/8/Rev.1)

The Chair SCRUM, Vicki Ferrini (**VF**), provided a brief overview report the activities of SCRUM and outcomes of the meeting sessions held 12 and 13 January. She highlighted the intersessional virtual meetings and the engagement with the Regional Data Centers and the RHCs. She noted the plan to investigate the various methods of calculating % coverage with the view of providing the GGC with recommendations on use of a standard methodology to ensure consistency and clarity of the figures published by GEBCO and Seabed 2030. She highlighted the successful engagement in the MACHC and the resultant progress. She displayed a graphic developed to indicate the % area mapped for each RHC.

2.9 SCOPE Report (GGC37/2/9)

The Chair SCOPE, Hyo Hyun Sung (**HHS**), provided a brief overview of SCOPE activities, and the outcomes of the meeting sessions held 12 and 13 January. She provided some details of the geographical spread of SCOPE participation. She noted the increased participation in the Symposium and some of the benefits of a virtual event, acknowledging there were also a number of disadvantages.

She requested the GGC to consider a number of items:

- i. Establishment of GEBCO World Map Project Team;
- ii. Establishment of a GEBCO SNS Management Group;
- iii. Intention to hold additional webinars;
- iv. Proposal to generate a certificate of participation at symposia in the future;

- v. Proposal to create a GEBCO master slide template;
- vi. Establishment of a GEBCO Website Project Team; and
- vii. Establishment of the B-10 Revision Project Team.

2.10 Nippon Foundation Related Programmes (GGC37/2/10)

Jamie McMichael-Phillips (**JMcMP**) gave the report on behalf of Robin Falconer (**RF**) covering a background brief on the engagement with the Nippon Foundation (NF); he highlighted the level of funding support that has been provided over the past 17 years. He noted the increased engagement and interaction between the NF, IOC and IHO Secretariats and the GEBCO community. He noted the need to restructure the Nippon Foundation Programme Management Committee and intended to provide recommendations by April 2021. **Action 1 - RF**

Rochelle Wigley provided a brief update on the UNH training programme and its contents. She provided details on the geographic spread of present and past students, it was noted that 90% of the past students were still engaged in ocean mapping related activities.

It was agreed that the meeting report should note the thanks and appreciation of the GEBCO Project to the NF for its on-going support. **Action 2 - Chair/Secretary**

Decision 3: The GGC acknowledged with grateful thanks the ongoing support provided by the Nippon Foundation to a number of areas within the GEBCO Project, in particular the ongoing support to the UNH Ocean Mapping Programme for the Nippon Foundation-GEBCO training programme and the considerable support and engagement on the Nippon-Foundation – GEBCO Seabed 2030 Project.

3. Documents and Publications

3.1 Review of ToRs and RoPs (GGC37/3/1)

The GGC ToRs were reviewed and it was agreed that no amendments were necessary at this time.

Decision 4: GGC ToRs confirmed

4. Seabed 2030

4.1 Review of Year 3 report (GGC37/4/1)

Director Seabed 2030 Project, **JMcMP**, provided a brief presentation on the Project Year 3 documents and reports. He highlighted the amendments and changes which had been made since presentation at the intersessional virtual meetings. He provided highlights from the Year 3 activities, particularly taking the impact of the Global pandemic into consideration. He noted the new people taking on leading roles within the Project and he highlighted the international engagement which had taken place physically and virtually throughout the year. He noted a system of Partners, Contributors and Supporters had been developed to progress the Project work.

JMcMP considered the biggest challenge was the limited time remaining compared with the area of the seabed unmapped, therefore data acquisition was the main challenge to overcome, particularly gaining access to embargoed data and initiating operations to gather data in the remaining gaps. The Chair asked for clarification on what had been delivered and what remained outstanding from the Year 3 Work Plan, **JMcMP** went through the Work Plan highlighting each item which had been completed and the actions in place to complete the other items. He noted that the periodic reporting format to the GGC needed to be determined, he highlighted that the reporting to the sponsors and the NF was taking place via various channels and engagement with the IHO Secretariat and NF was undertaken regularly. It was noted that the Seabed 2030 Review Panel had not been appointed and convened by the GGC, although wider engagement with the GEBCO community and the UN Decade had been achieved and remained strong ongoing activities.

VF proposed, in respect to the 'X+Y+Z=100%' equation, a more in-depth assessment of the 'Y' component be undertaken through a GIS study so that a more accurate a figure for the 'Z' component could be calculated; she proposed that TSCOM could lead this task. **Action 3 - TSCOM**

Marzia Rovere (**MR**) asked whether the Seabed 2030 Project structure, funding and team was correctly structured to gain access to the embargoed data. **JMcMP** considered that it was with respect to commercial and academic organizations but lack the ability to approach government departments, which he suggested needed to be undertaken by IOC and IHO connected individuals. He considered the Regional Centers were sufficiently funded and staffed to manage the data flows at present. **MR** asked whether the Project had information on the coverage of data held by Hydrographic Offices (HOs) but not being made publicly available, she proposed that this could be a task to be undertaken and reported to the GGC38. **Action 4 - Seabed 2030**

LS highlighted the efforts being undertaken by the IHO and IOC Secretariats to engage with governments and other IGOs to gain access to embargoed data holdings. He also asked what impact the pandemic had had on the Seabed 2030 activities, **JMcMP** noted that there had been an impact; however use of virtual technologies and platforms had allowed a larger outreach but had limited individual higher level engagement. He lighted a number of activities which had taken place and been achieved despite the restrictions, he did acknowledge that the main impact had been on mapping missions, which may well have a knock-on effect for Year 4 statistics. David Millar (**DM**) noted that the commercial and private sectors hold significant datasets, however much is owned or controlled by coastal state government departments (as a result of the survey permitting process) which need to be approached to gain access; he considered that the UN Decade was an opportunity to leverage data release. The Chair noted that approaches through Regional meeting participants should be maximised to use the member state connections. **JB** noted that the education process within the IOC research community needed to be continued and would be aligned with the UN Decade efforts to make all ocean data available and to nurture a culture of open data. He proposed that the model employed by the Argo floats could be used for depth data.

VF noted the proposed task to be undertaken by SCRUM in collaboration with TSCOM and the IHO CSBWG to assess the various methods for calculating the % coverage and to recommend a common methodology to be used within GEBCO to ensure a harmonised message is articulated.

EF proposed that the GGC should provide guidance and answers to the questions for action highlighted in the Year 3 report.

John Lowell (**JL**) asked the GGC to consider capacity building in a broader context as required by the ToRs, rather than a focus on a single programme. **JMcMP** noted that currently he only had funds to support this limited approach, although he had a desire to expand these activities to achieve a broader impact when funds became available. He did note some of the wider activities which had taken place. **EF** suggested that effort should be focused on expanding the roles of the alumni within the GEBCO structure, however he noted, as Chair of the IHO Capacity Building Sub-Committee (CBSC), that Capacity Building (CB) programmes require considerable effort, planning and funding. **JB** reflected the comments by **EF** and warned against trying to create a separate CB programme when the IHO and IOC have extensive programmes in place.

The Chair asked **JMcMP** how often he considered it necessary to report to the GGC, **JMcMP** noted the benefit of the intersessional meeting held in the middle of 2020 and he proposed virtual meetings on a four monthly basis. The Chair proposed this could be achieved with Seabed 2030 advising on the dates. **Action 5 - JMcMP**

Decision 5: The GGC agreed that the Seabed 2030 Project should report on a triannual basis, twice intersessionally and at the GGC, dates to be determined by the Director.

DM asked how much influence the GGC had on setting the budget and the related Work Plan. **JMcMP** provided a brief explanation on the detailed consideration given to the budget by the NF.

JMcMP provided a brief overview of the role and responsibilities of the Review Panel and how it should be selected. The Secretary provided further background to the intended role of the Review Panel and its relationship with the sponsors and NF.

4.2 Review of Funding Strategy

DM provided an update presentation on the activities of the Fund Raising Working Group (FRWG). He highlighted the purpose of the FRWG and the membership; he noted the reasons for the need of additional funding to address all the activities of the Project. He provided the development of the draft Fund Raising Strategic Plan and the actions since the establishment of the FRWG. He highlighted two major items which caused the progress to slow – launching of the UN Decade and the concerns of the NF – both of which have been addressed. He highlighted the proposed activities of the two different consultants engaged to develop the Plan. He highlighted a number of items for consideration by the GGC. He noted that funding provided was to develop the plan and not to refine or execute it; it would therefore require additional resources to undertake these activities.

Jonathan Kool (**JK**) asked where the FRWG should sit and therefore under which budget it would lie. **DM** noted that with the evolving position of the NF, it would be appropriate for it to lie within the Seabed 2030 structure. **JMcMP** suggested that it needed to be presented at a sponsors meeting for a higher level consideration and approval, he also proposed that **DM** should present at that meeting. **JMcMP** reported on a recent meeting with the NF at which Martin Jakobsson (**MJ**) and Professor Larry Mayer were present and the NF views on outreach, awareness raising with the wider public and business communities, communications, and fund raising activities, including stimulating donations. **LS** suggested that a joint resolution with the IOC could be considered to make a stronger statement; he also considered that a revision of existing resolutions could be considered. Sam Harper (**SH**) noted that a formal resolution was often a useful tool when engaging with national governments; he noted the UK *Blue Planet* initiative funded and supported by the United Kingdom government. He considered that there was no time to wait before commencing if the 2030 goal was to be achieved and he suggested that multiple small inputs would be more likely to be successful than trying to gain a single large contribution. **JB** advised that lessons could be learnt from the approach taken by the IOC for the UN Decade. It was proposed that current resolutions could be used as a basis from which to start, the following IHO resolutions were considered relevant:

- 3/1929, as amended (*Centralization of oceanic soundings*);
- 3/1932, as amended (*Collecting oceanic soundings*);
- 4/1932, as amended (*Metadata for oceanic soundings*); and
- 1/2017 (*Improving the availability of Bathymetric data Worldwide*)

Volunteers were requested to generate the initial draft for consideration by the GGC.

Decision 6: It was agreed that a draft version should be generated for consideration by the GGC prior to submission to IHO IRCC and IOC Assembly 31 to seek approval of the respective Member States.

4.3 Seabed 2030 Year 4 (GGC37/4/1)

JMcMP provided an overview brief on the Year 4 planned activities and those which had been achieved already. He highlighted the ongoing recruitment of the Seabed 2030 Alumni Coordinator and the Ocean Frontier Mapping Initiative; he explained how the initiative was expected to operate with the processes and structure in place. He highlighted the Two Ocean Two Technologies missions and successes, which were planned at short notice late in Year 3.

JMcMP displayed the Year 4 Work Plan, which had been provided at the intersessional meeting; he noted that no comments had been received from the GGC. He described the matrix which free-up funding with NF, which include the number of partners involved and the % increase in coverage achieved. **JMcMP** indicated that the current coverage was at 19.2% with additional data still to be uploaded. He proposed delaying the publication of the GEBCO_2021 grid until June from the normal March time, although he was concerned that it could be against a data gathering sparse year, and that it would be released in a single format (NetCDF format) with the other usual formats following later in the year. The Chair asked whether

there was a roadmap towards the 2030 target; **JMcMP** acknowledged that ways of accelerating ocean mapping was fundamental through fund raising and increased data gathering activities, as well as gaining access to more of the embargoed data.

The Year 4 budget bid was displayed. **JMcMP** explained some of the individual line bids and the particular focus place on some activities. He closed with highlighting the Community Survey and the Seabed 2030 Image Stream, which should be focused on people and data images. **JMcMP** requested the GGC to approve the Year 4 Work Plan and budget.

Decision 7: The GGC endorsed the Year 4 Work Plan and budget.

5. GEBCO Communications and Outreach Strategy

HHS provided an introduction and brief overview of the activities of the SCOPE since the GGC36 meeting and the development progress on the Communications and Outreach Strategic elements.

5.1 Review of GEBCO Communications, Education and Outreach activities

Eunmi Chang (**EC**) provided a presentation covering the outreach activities, which included additional detail resulting from the discussions at the SCOPE virtual meeting sessions. She provided a summary evaluation of SCOPE performance over the 2018-2020 period set against the SCOPE Communications Strategic Plan. She raised the issue of the future of the GEBCO World Map, which continued to be a popular item and useful educational tool, she also noted the need to update B-10 to reflect the changes since 2003.

5.2 Develop of future strategy and activities

Jaya Roperez (**JR**) provided a presentation highlighting the key proposals from SCOPE, which included the updating of B-10 in story map format and the establishment and operation of a GEBCO Social Media Network and Management Working Group to ensure better use of various social network platforms to articulate the GEBCO message.

MR welcomed these initiatives. **EF** supported the proposals, he noted that the key element of education was not being addressed as a separate item, he also noted the importance of careful planning and writing of the content of all forms of public communication to ensure the desired impact. He suggested that individuals with specific skills in these areas need to be involved. The Chair requested clarification on which areas of education should be addressed – new GEBCO members or wider general public awareness, **EF** indicated the latter should be the initial priority, he also highlighted that it was important not to mix outreach and raising awareness with education; he noted outreach activities should be focused on wider general public awareness however the GGC should address education of future oceanographers as a separate topic. **JMcMP** noted the importance of a harmonized approach between SCOPE and Seabed 2030. **VF** suggested there was a need to have an idea of the desired outcomes and an ability to measure impact, thus the target audience needed to be considered and identified.

The Chair noted the effort to create the World Map, which had been undertaken by the alumni. **MJ** suggested that it should belong to SCOPE; however a cartographic editorial board needed to be established to oversee the production. **HHS** indicated that work on the revision of the World Map Production Principles would commence after the GGC37.

Decision 8: It was agreed the World Map production should be under SCOPE.

Decision 9: The GGC supported the initiatives to improve the use of social networks.

Decision 10: The GGC supported the proposal to review the World Map Production Principles and submit a draft revision to the GGC.

The Chair indicated that the SCOPE website should come within the GEBCO website with a link from the GEBCO website, so that users were not aware that there is any separation, also the websites should have a harmonised look. **Action 6 - SCOPE/BODC**

6. GEBCO Work Plans and Funding

6.1 GGC Subordinate Bodies' Work Plans and Funding

6.1.1 Review of Work Plans and Funding Requests. (GGC37/6/1/1/1-4)

6.1.1.1 SCUFN Work Plan 2021-2022

HHC presented the SCUFN Work Plan and budget submission. **HHC** and **JJ** NOAA confirmed NOAA ongoing support for the maintenance and development of the online SCUFN Gazetteer.

Decision 11: The GGC approved the SCUFN Work Plan and budget allocations.

6.1.1.2 TSCOM Work Plan 2021-2022

TS presented the TSCOM Work Plan and budget submission. He highlighted the main tasks to be addressed over the next period. **JK** requested clarification on the exact funding request for the modernization of B-11 and in what way would it be used; **TS** confirmed the request was for 2,000€. Karen Marks (**KM**) clarified the reasons for not using freely available platforms due to its size and content construction of the current version. **EF** and **MJ** supported the conversion of B-11 into an e-Publication format, Caitlyn Raines (**CR**) indicated that initial investigation put the funding needed between 2,000€ to 5,000€. The GGC requested TSCOM to investigate the true costs of the conversion. **Action 7 - TSCOM**

EF asked whether the GGC was content to leave the review of GEBCO products to the IOC Working Group on User Requirements and Contributions to GEBCO or the GGC should undertake the task directly; **JB** provided details of the intended process to be followed by the IOC Working Group on User Requirements and Contributions to GEBCO and when the report would be provided, he noted that the GGC should have a member on this Working Group. The GGC agreed that an individual should be nominated to represent the GEBCO Project on this IOC Working Group and that the Chair and Vice-Chair would seek to identify a suitable individual to take on this position. **Action 8 - Chair/Vice-Chair** **TS** confirmed to the Chair that the B-11 Working Group would be disbanded and the B-11 Editorial Board would be established with **KM** as chair before the end of January.

Decision 12: GGC approved the nomination of a representative of the GEBCO Project on the IOC Working Group on User Requirements and Contributions to GEBCO.

The Chair requested confirmation that coordination had taken place between TSCOM and SCOPE on the website activities to ensure duplication of resources was avoided. He also requested details of the relationship and coordination between TSCOM and SCRUM on the Route Optimisation application development. **VF** provided additional information on the proposed difference between the currently available applications and the proposed Route Optimisation Application. **JMcMP** noted that the Seabed 2030 Work Plan covered this item and could be progressed in coordination with TSCOM and SCRUM, he requested if resources could be made available to support the work. **TS** felt that the TSCOM approach was different to the Seabed 2030 proposal to solve the issue; **VF** suggested that the best solution could be achieved through a combined approach. The Chair requested clarification of the Web Services Working Group and under which body it would fall, **TS** confirmed it would be a TSCOM working group as its focus would be technical, looking at geographic web services rather than associated with the website development. **JJ** noted that it would be a coordinated TSCOM/SCRUM/DCDB effort.

Decision 13: The GGC approved the TSCOM Work Plan and budget allocations.

Decision 14: The GGC supported the intension of TSCOM to investigate the actual cost of converting B-11 into an e-Publication.

Decision 15: The GGC supported the initiative of a coordinated TSCOM/SCRUM/DCDB effort in collaboration with Seabed 2030 to investigate the development of Web Services applications.

6.1.1.3 SCRUM Work Plan 2021-2022

VF presented the SCRUM Work Plan and budget submission. She highlighted the modified and new activities. **EF** requested an indication on the availability date for a harmonised GEBCO slide deck with a common template and band image. **VF** proposed that the task should be undertaken as soon as possible and include sections for Seabed 2030, UNH programme and potentially CSB. It was proposed that the current version should be made available through the Google groups file sharing space used for the GEBCO community. **DM** proposed that the current version could be posted on the GEBCO website as an outreach tool. **VF** proposed that the draft should be approved by the Sub-Committees and then passed to the GGC for endorsement prior to uploading. **JK** suggested a voice over recording could accompany the presentation to enhance the message. The Chair encouraged all to make maximum use of the existing ZOOM Business licence.

Decision 16: The GGC approved the SCRUM Work Plan and budget allocations.

Decision 17: The GGC endorsed the generation of a harmonised GEBCO slide deck with a standard template for use by all GEBCO presentations and posting it on the GEBCO website.

6.1.1.4 SCOPE Work Plan 2021-2022

HHS presented the SCOPE Work Plan and budget submission. **JR** requested where the budget allocation would be spent by the GEBCO SNS Management Group, **HHS** indicated it was a fund available for external assistance if required. **EF** asked into what languages would the material be made available, he proposed that the main UN languages should be the initial focus; **HHS** indicated the initial work would be undertaken by volunteers at no cost. **EF** suggested the languages should be targeted to regions where increased GEBCO engagement was considered desirable. **MR** noted that the Italian version was nearing completion. The Secretary confirmed that the IRCC would support carefully targeted use of the resources for areas where no local GEBCO language volunteer was available and there was an identified benefit to engage with that region to increase data provision.

Decision 18: GGC approved the SCOPE Work Plan and budget allocations.

6.2 GGC Work Plan 2021-2022 (GGC37/6/2/1)

6.2.1 It was agreed that the consolidated GEBCO Work Plan would be circulated by the Secretary for comment along with the draft meeting report. **DM** asked whether a line could be included to cover potential expenses associated with future Fund Raising Working Group activities. **Action 9 - DM**

Decision 19: Circulate the consolidated GEBCO Work Planning with the draft meeting report.

7. Secretary Responsibilities

7.1 The Secretary noted that this would most likely be his final meeting, as his term at the IHO Secretariat was due to complete at the end of September. He expressed his disappointment that it was a virtual meeting and that he would not have the opportunity to sign-off physically. He noted how much had changed over the past five years, although he recognised that there remained much work still to be done to complete the modernisation of the GEBCO structures. He wished the GGC and the entire GEBCO Community well and continued success. The GGC expressed their appreciation to the Secretary for his tremendous guidance and support to GEBCO and GGC over the years. (GGC37/7/1)

The Chair acknowledged all the work he had completed and undertaken for the GGC and the Sub-Committees over the past five years.

Decision 20: The GGC confirmed the current duties undertaken by the Secretary.

8. GGC Membership

8.1. Identification of individuals, whose terms are due to complete within the next two years (GGC37/8)

The Secretary noted that no members were due to complete terms in the next 12 months, however a number were due to complete their first 5-year terms in 2023.

8.2. Details of nominations to fill vacancies

It was noted that there were 2 vacancies for IOC appointed members resulting from the cancellation of one appointment and the declared decision by Dr Johnathan Kool not to seek a second 5-year term. The Chair and **JB** thank Dr Kool for his work and enthusiastic engagement over the past five years, in particular he noted the successful meetings held in Canberra in 2018. The IOC was requested to provide details of proposed appointments to the Chair when available. **Action 10 - IOC**

9. Elections

9.1. As a result of the completion of the terms of the current Chair and Vice-Chair and the announcement that the current Vice-Chair would not be seeking to step-up to the Chair position, elections were held for both positions. The GGC unanimously elected Evert Flier (IHO-Norway) as Chair and Dr Marzia Rovere (IOC-Italy) as Vice-Chair for the next triennium.

10. Next Meeting

10.1. It was proposed that, in line with the decision at GGC36, the GGC38 should be held in late January/early February 2022 at the IHO Secretariat in Monaco and that the GEBCO Week, containing the Sub-Committee meetings and the GEBCO Symposium, should be held in late October/early November 2021. A host location was requested, with confirmation of the venue and dates to be provided by the end of March. **Action 11 - Secretary/Sub-Committee Chairs/Symposium Conveners**

Decision 21: The next meeting proposals were supported and approved.

11. Any Other Business

11.1 **JMcMP** noted the comments provided to him by **RF** on the future of the NF Training Programme Management Committee. It was suggested that there remained a need for better engagement between the GGC and the UNH Ocean Mapping Programme; **EF** indicated that this could be addressed with the potential establishment of a Sub-Committee on Education and Training (SCET) to take on the identified tasks and maintain the connection. The Chair proposed a small group should investigate the best way forward and report to the GGC by the end of February. **Action 12 - Chair**

Post meeting note: virtual meeting planned in February by Chair to discuss the future of the NFTPMP and wider aspects and support for Education and Training.

11.2 **JMcMP** noted the importance of referring to the Nippon-Foundation – GEBCO Seabed 2030 Project by its full title. He also noted that he would be looking at the structure of the Seabed 2030 Project. He also proposed that a review of the oversight and governance of the Project needed to be undertaken with possible revisions made.

12. Closure of the Meeting

12.1 The Chair closed the meeting with a brief résumé of his time involved with the GGC, detailing a number of highlights and the increased visibility of GEBCO. He thanked the virtual hosts, IOC and Shom, and all the participants for all their efforts and engagement.

Post meeting note: recognising the continuing expansion of activities of the GEBCO Project and the significantly increased global profile achieved as a result of the successes of the Seabed 2030 project, it is considered appropriate to formalise the way in which those within the GEBCO Community interact and are perceived externally to ensure all actions and activities can be seen to be being undertaken in the best interests of the GEBCO Project without any perception of gain, either institutional/organizational or personal. The IHO and IOC Secretariats have requested the Chair and Vice-Chair of the GGC to lead on the development a GEBCO wide Code of Conduct to provide guidance and clarity to all those involved with the GEBCO Project..

The following Annexes are attached:

- A. GGC37 – List of Participants.
- B. GGC37 – Agenda
- C. GGC37 – List of Documents
- D. GGC37 – 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. SCOPE Work Plan and Budget – Final version
- I. Consolidated GEBCO Work Plan and Budget – Final version
- J. Consolidated Funding Plan – Final version
- K. GEBCO GC ToRs
- L. Seabed 2030 Year 3 Work Plan
- M. List of GGC Members
- N. Draft agenda for GGC38

LIST OF PARTICIPANTS

Country	Name	Organization	E-mail
Australia	Johnathan Kool	Geoscience Australia	johnathan.kool@aad.gov.au
Brazil	Rodrigo de Souza Obino	Diretoria de Hidrografia e Navegação (DHN)	obino@marinha.mil.br
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Bold names – GGC

G E B C O

GENERAL BATHYMETRIC CHART OF THE OCEANS



Thirty Seventh Meeting of the GEBCO Guiding Committee (GGC37)

Remote meeting

18 – 20 January 2021

Agenda

(Note: yellow highlight – Monday, green highlight – Tuesday, blue highlight – Wednesday)

1 **OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS** – 15 minutes

- .1 Opening Remarks and Introductions – Chair
- .2 Working Arrangements – Secretary/IOC
- .3 Adoption of the Agenda and approval of report from GGC36 – Chair
- .4 Review of Action Items from GGC36 – Secretary
- .5 Report from IRCC12 and IOC EC 53 – Chair

2 **REPORTS FROM PARENTAL AND SUBORDINATE BODIES** – 60 minutes

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

- .1 IHO update – Sinapi
- .2 IOC update – Barbrière
- .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 SCOPE – Chair SCOPE
- .10 NF related activities and programmes – Chair NFPMC/Course Manager

3 **DOCUMENTS AND PUBLICATIONS** – 5 minutes

- .1 ToRs and RoPs review, to include annual check of GGC ToRs and approval of any proposed amendments to subordinate body ToRs – Chair/Secretary

4 SEABED 2030 – 90 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 2021-2022:

- .1 Present Year 3 report and budget for GGC approval, highlighting main deliverables and communications – **Project Director**
- .2 Funding strategy update – **Millar**
- .3 Presentation of draft Year 4 Work plan and proposed funding bid – **Project Director**

5 GEBCO COMMUNICATIONS AND OUTREACH STRATEGY – 60 minutes

- .1 Review of GEBCO Communications, Education and Outreach activities – **Chair SCOPE**
- .2 Development of future strategy and activities – **Chair SCOPE**

6 GEBCO WORK PLANS AND FUNDING – 60 minutes**.1 GGC Subordinate bodies' Work Plans 2021-2022**

- .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 SCOPE – **Chair SCOPE**

.2 GGC Work Plan 2021-2022

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

7 SECRETARY RESPONSIBILITIES – 15 minutes

- .1 Confirm responsibilities – **Chair**

8 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 1 vacancy – **Chair/Secretary**

9 ELECTIONS – 15 minutes

- .1 Election of Chair and Vice-Chair for triennium 2021-2023 – **Secretary**

- 10 **NEXT MEETING** – *5 minutes*
 - .1 Dates and venue for GGC38 – **Secretary**
- 11 **ANY OTHER BUSINESS** – **Chair/Secretary** – *30 minutes*
- 12 **CLOSURE OF THE MEETING** – **Chair** – *15 minutes*

GGC37 - List of Documents

Document No	Document Title	Date uploaded
GEBCO 2020 Letter	Invitation Letter	
GEBCO 2020 Letter Annex A	Logistic Information	
GEBCO 2020	Outline Week Programme v1.0	
GEBCO Symposium 2020	Symposium Flier	
GEBCO Symposium 2020	Symposium Programme v1.0	
GEBCO 2020	Document Template (Word version)	11 December 2020
GEBCO 2020	Presentation Template (PowerPoint version)	11 December 2020
GEBCO 2021	List of Participants v2.0	21 January 2021
GGC37-1.6.1	Draft Agenda v2.0	27 October 2020
GGC37-1.6.2	GGC36 Meeting Report	18 January 2021
GGC37-1.7	GGC36 List of Actions - updated 18 January 2021	18 January 2021
GGC37-1.8.1	GEBCO Report to IRCC12	
GGC37-1.8.2	IRCC12 Outcomes	
GGC37-2	Report of Remote VTC Meetings 1 & 2	10 November 2020
GGC37-2.1	IHO Report	28 January 2021
GGC37-2.2.1	IOC Report (See Presentations .zip)	
GGC37-2.2.2	Report of the IOC Regular Working Group on user Requirements and Contributions to GEBCO Products	
GGC37-2.3	Financial Report	11 January 2021
GGC37-2.4	Digital Atlas Manager Report	6 Jnauary 2021
GGC37-2.5	DCDB update	8 January 2021
GGC37-2.6	SCUFN Report	17 January 2021
GGC37-2.7	TSCOM Report	17 January 2021
GGC37-2.7/Rev.1	TSCOM Report	20 January 2021
GGC37-2.7.1	TSCOM TorR	17 January 2021
GGC37-2.8	SCRUM Report	17 January 2021

GGC37-2.8/Rev.1	SCRUM Report	18 January 2021
GGC37-2.8.1	SCRUM ToRs	17 January 2021
GGC37-2.9	SCOPE Report	17 January 2021
GGC37-2.9.1	SCOPE ToRs	17 January 2021
GGC37-2.10	NF Related Programmes Report	12 January 2021
GGC37-3.1	GGC ToRs and RoPs	11 November 2020
GGC37-4	Report of Remote VTC Meeting 3	10 November 2020
GGC37-4.1	GEBCO Seabed2030 Year 3 Report Cover Document	17 January 2021
GGC37-4.1	Seabed 2030 Year 3 Report and Annexes.zip	17 January 2021
GGC37-5	GEBCO Education and Outreach Strategy (see presentations)	
GGC37-5	List of IHO Regional Hydrographic Commission and IOC Regional meetings	8 January 2021
GGC37-6.1.1	Consolidated Funding Table	17 January 2021
GGC37-6.1.1.1	SCUFN Work Plan and Budget - Draft	17 January 2021
GGC37-6.1.1.2	TSCOM Work Plan and Budget - Draft	17 January 2021
GGC37-6.1.1.3	SCRUM Work Plan and Budget - Draft	17 January 2021
GGC37-6.1.1.4	SCOPE Work Plan and Budget - Draft	17 January 2021
GGC37-6.2.1	GGC Work Plan and Budget	17 January 2021
GGC37-7.1	Secretary role and responsibilities	11 November 2020
GGC37-8	GGC membership list	11 November 2020
GGC37-10.2	Draft agenda GGC38	11 November 2020
GGC37	GGC37 List of Actions	18 February 2021
GGC37	Presentations .zip	18 February 2021

LIST OF ACTIONS – Updated 12 February 2021

Agenda Item		Subject	Status/Date	Comments	Action
Continuous					
-		Participation at IHO RHC meetings	On going	Published and maintain list of RHC meetings on the GEBCO website	Secretary/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
-		IHO RHC and IOC Regional meetings	On going	Coordinate direct engagement with IOC and IHO regional meetings	Chair/Vice-Chair SCRUM/ Director Seabed 2030
-		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
-		Participation at IHO RHC meetings	On going	Attendees representing GEBCO at meetings to provide short report for publication on GEBCO website	All/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
GGC35					
12	5.3	IHO Resolutions	28 Dec 17 Jan 29 Jan	Provide track change versions for Seabed 2030 Project Team input	Secretary/Director Seabed 2030
GGC36					
2	2.3	Finance Report	GGC37 GGC38	Include annex to report with details of expenditure of allocated funds	Chairs TSCOM, SCRUM, SCUFN, SCOPE
4	2.5	DCDB Report	IOC EC-53 A-31	Raise issue with coastal states to allow the collection and publication of data gathered in	IOC

				their waters of national jurisdiction in support of Seabed 2030 and the CSB initiatives	
5	2.5	DCDB Report	GGC37 GGC38	Develop joint statement in support of data gathering in support of GEBCO	IOC/IHO
6	2.5	DCDB Report	On going	Coordinate direct engagement with IOC and IHO regional meetings	Chair/Vice-Chair SCRUM/ Director Seabed 2030
7	2.9	SCOPE Report	GGC37 GGC38	Incorporate Outreach website content into GEBCO website	BODC/Chair SCOPE
8	3.2	NF Programmes	29 Jan	Provide a copy of the Map the Gaps articles of incorporation to the GGC	Tim Kearns
16	7.2	Seabed 2030	GGC37 GGC38	Generate two year rolling calendar of hosts for subordinate bodies and symposium	Chairs TSCOM/SCRUM/SCOPE, Symposium co-conveners
19	7.2	Seabed 2030	17 Jan 30 Apr	Develop GGC position on CSB and draft GGC paper in cooperation with appropriate subordinate bodies	DCDB/Evert Flier/David Millar
20	7.2	Seabed 2030	17 Jan 30 Apr	Develop implementation plan for the communication of the CSB position	DCDB/Evert Flier/David Millar
GGC37					
1	2.10	NF related programmes	30 Apr	Provide recommendations for future of Programme Management Committee to GGC	Robin Falconer
2	2.10	NF related programmes	19 Feb	Record in GGC37 meeting report GGC thanks to NF for ongoing support	Chair/Secretary
3	4.1	Seabed 2030	GGC38	Conduct in-depth assessment for calculating 'Y' component in 'X+Y+Z=100%' equation	TSCOM
4	4.1	Seabed 2030	GGC38	Investigate embargoed data holdings by national HOs	Seabed 2030
5	4.1	Seabed 2030	26 Feb	Propose to Chair intersessional reporting meeting dates	Seabed 2030
6	5.2	GEBCO Communications and Outreach Strategy	2 Jul	Transition SCOPE website to GEBCO website	SCOPE/BODC

7	6.1.1.2	TSCOM WP	2 Apr	Confirm cost of converting B-11 to e-Publication format and commence process	TSCOM
8	6.1.1.2	TSCOM WP	26 Mar	Identify suitable individual to represent GEBCO Project on the IOC Working Group on User Requirements and Contributions to GEBCO	Chair/Vice-Chair
9	6.2.1	GEBCO WP	19 Feb	Add line to GGC WP budget to support activities of Fund Raising Working Group	David Millar
10	8.2	GGC Membership	26 Feb	Inform GGC Chair of proposed nominations to fill IOC vacancies	IOC
11	10	Next Meeting	26 Mar	Investigate and provide dates and location for next Sub-Committee and Symposium meetings	Secretary/S-C Chairs/Symposium
12	11.1	AOB	26 Feb	Investigate way forward for NF Programme Management Committee (see Action 1)	Chair
13	10	GEBCO Week 2021	26 Mar	Identify host and dates for 2021 Sub-Committee and Symposium	Chairs TSCOM/SCRUM/SCOPE, Symposium co-conveners
14	10	GGC38	29 Jan	Confirm dates for GGC38 in Monaco	Chair/Secretary
15	12	Action List	GGC37	Keep IHO and the Chair and vice-Chair informed of progress with allocated actions	All
16	12	GGC37 Draft Report	29 Jan Complete	Draft to be circulated for comment	Secretary
17	12	GGC37 Draft Report	12 Feb Complete	All to provide comments on draft report	All
18	12	GGC37 Final Report	26 Feb Complete	Publish final report	Secretary
19	12	Report to IRCC13/IOC A-30	7 May/30 Apr	Draft report for review and amendment.	Chair/vice-Chair/Secretary

LIST OF DECISIONS – 20 January 2021

<u>Agenda Item</u>	<u>Number</u>	<u>Decision</u>
1.3	1	GGC37 meeting agenda adopted

1.3	2	GGC36 meeting report approved
2.10	3	The GGC acknowledged with grateful thanks the ongoing support provided by the Nippon Foundation to a number of areas within the GEBCO Project, in particular the ongoing support to the UNH Ocean Mapping Programme for the Nippon Foundation-GEBCO training programme and the considerable support and engagement on the Nippon-Foundation – GEBCO Seabed 2030 Project
3.1	4	GGC ToRs confirmed
4.1	5	The GGC agreed that the Seabed 2030 Project should report on a triannual basis, twice intersessionally and at the GGC, dates to be determined by the Director
	6	It was agreed that a draft version should be generated for consideration by the GGC prior to submission to IHO IRCC and IOC Assembly 31 to seek approval of the respective Member States
4.3	7	The GGC endorsed the Year 4 Work Plan and budget
5.2	8	It was agreed the World Map production should be under SCOPE
5.2	9	The GGC supported the initiatives to improve the use of social network use
5.2	10	The GGC supported the proposal to review the World Map Production Principles and submit a draft revision to the GGC
6.1.1.1	11	The GGC approved the SCUFN Work Plan and budget allocations
6.1.1.2	12	GGC approved the nomination of a representative of the GEBCO Project on the IOC Working Group on User Requirements and Contributions to GEBCO
6.1.1.2	13	The GGC approved the TSCOM Work Plan and budget allocations
6.1.1.2	14	The GGC supported the intension of TSCOM to confirm the actual cost of converting B-11 into an e-Publication and to commence the process
6.1.1.2	15	The GGC supported the initiative of a coordinated TSCOM/SCRUM/DCDB effort in collaboration with Seabed 2030 to investigate the development of Web Services applications
6.1.1.3	16	The GGC approved the SCRUM Work Plan and budget allocations
6.1.1.3	17	The GGC endorsed the generation of a harmonised GEBCO slide deck with a standard template for use by all GEBCO presentations and to be posted on the GEBCO website
6.1.1.4	18	GGC approved the SCOPE Work Plan and budget allocations.
6.2.1	19	Circulate the consolidated GEBCO Work Planning with the draft meeting report

7.1	20	The GGC confirmed the current duties undertaken by the Secretary
10	21	The next meeting proposals were supported and approved

1.1. IHO-IOC GEBCO Sub-Committee for Undersea Feature Names (SCUFN) Work Plan 2021-22

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	2 VTC meetings planned in Jan and June 2021 as part of business continuity measures in addition to plenary in Nov. Significant back log of proposals to be considered.		
B2	Develop a repository of typical cases for helping in the consistency of the decision-making process	M		2017	2022	O	Roberta Ivaldi –Kevin MacKay	SCUFN TORs and ROPs Since 2020, this includes some new developments on geometric definitions of features. Possible impact for the preparation of Ed. 4.3.0 of B-6 in future		
B3	Renewal of SCUFN Membership					C		2 new SCUFN Members in 2020.		
B4	Development a general strategy for UFN (horizontal resolution, minor features	H		2018	2021	O	YasOhara/SCUFN Chair/Kevin Mackay as Head of one Seabed2030 centre	Following guidance from GGC36, draft principles agreed at SCUFN33, some complementary information to be discussed at SCUFN34		

B5	Maintain relationship with other stakeholders (national naming boards, UNGEGN, GEBCO, Marine Regions, ...)	H			Continuous	O	Chair/Secretary Trent Palmer (for UN GEGN)	Database Quality, Interoperability.		
E1	Maintain IHO bathymetric publications	L		Continuous	Continuous	C		Possible amendments to align with scufn.ops-webservices.kr and SCUFN cookbook		
E2	Encourage the provision of bathymetric data associated to UFN	H		2018	Continuous	O	SCUFN Chair/Secretary/SCUFN Members	GEBCO Grid Actions in progress through B-6 and development of integrated web services as well as relations between Secretary and Proposers post-meetings		
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 Key tasks are outsourced to former SCUFN Secretary otherwise would be impossible	15,000€ from 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. New release made in 4.2.0 with major enhancements.		
J3	Develop and make available public and management on-line interfaces to the Gazetteer	H		2014	2023/24	O	Dr Han/ /KHOA	B-8 – Gazetteer Management Plan New requirement from IHO Secretariat to develop an IHO SCUFN Archive as part of SCUFN web services		

J4	Develop a S-100-based product specification (if confirmed) for Undersea Feature Names	M / L		2015	2022	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 majorexisting 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 3.6.1refers)

Date	Location	Activity
2-6 October 2017	Genoa, Italy	30 th Meeting
23-27 October 2018	Wellington, NZ	31 st Meeting
5-9 August 2019	Kuala Lumpur, Malaysia	32 nd Meeting
9-10 November 2020	VTC meeting	33 rd Meeting
15-19 November 2021	St. Petersburg, Russia	34 th Meeting

Chair: Hyun-chul Han
 Vice-Chair: Yasuhiko Ohara
 Secretary: Yves Guillam

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1.1. IHO-IOC GEBCO Technical Sub-Committee on Ocean Mapping (TSCOM) Work Plan 2021-2022

1.1 TSCOM Tasks

- B Ensure conduct of TSCOM meeting in 2021(IHO Task 3.6.1)
- C Ensure effective operation of IHO DCDB (IHO Task 3.6.2)
- D Develop and maintain tools to facilitate the contribution of bathymetric data to the IHO DCDB (IHO Task 3.6.3)
- 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 Support SCOPE in its outreach and education about ocean mapping (IHO Task 3.6.7) by development and dissemination of IHO-IOC GEBCO products such as the Global Gridded Product and Printed World Map
- H Ensure IHO-IOC GEBCO Web site is kept current and updated regularly (IHO Task 3.6.8)
- K Provide technical support, advice, and review to Seabed 2030 Project Director, RDACCs and GDACC
- L Provide support and advice to developing and validating emerging technologies for compiling and disseminating bathymetry

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	Report of TSCOM meeting to GGC	2021	2021	P	Chair TSCOM			
C	Ensure effective operation of IHO DCDB	H	Conduct review	Continuous		O	Director DCDB			
D1	Document dataflow processes	H	Cookbook instructional chapter	Continuous		O	Chair TSCOM Director DCDB Director Seabed 2030			
D3	Conduct DCDB Industry Day and Data Contribution Workshop	H	Conduct workshop	2020	2022	P	Chair TSCOM Director DCDB			
E1	Maintain IHO bathymetric publications	M L H		Continuous		O	All members of GEBCO GC through the Chair	B-4 - Information concerning recent bathymetric data B-9 - GEBCO digital atlas B-11 - GEBCO Cookbook		

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
E2	Add and update instructive chapters in IHO-IOC GEBCO Cook Book	H	Maintain B-11 Add section related to Seabed 2030 Request the GGC to endorse the proposal to convert B-11 into an e-Publication format Convert to e-Publication format for B-11 Seek instructive chapters on contributing data, metadata requirements, platforms for viewing gaps and coverage, CSB, etc.	Continuous 2019 2019 2020 Continuous	 2020 2021 2022 2021	O C C O O	Chair TSCOM Chair, Cookbook Editorial Board Chair, Cookbook Editorial Board Chair, Cookbook Editorial Board Chair, Cookbook Editorial Board	B-11 GEBCO Cookbook	2,000	2,000
F	Develop, review, and maintain the on-line function of B-4	M	Conduct review	Continuous		O	Director DCDB			

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
H3	Review, Update and Maintain IHO-IOC GEBCO and Seabed 2030 Websites	M	Update website with meeting documents	2019	2020	C	BODC		15,000	15,000
			Validate members and contact information for SCRUM, TSCOM, and SCOPE	2019	2020	C	Chairs TSCOM, SCRUM, SCOPE			
			Review and maintain all working links	2019	2022	O	Chair TSCOM, BODC			
			Provide technical and content review of both websites	2019	2022	O	Chairs TSCOM, SCRUM, SCOPE			
K1	Support Seabed 2030	H	Provide scientific expertise and outreach	2018	2030	O	Chair TSCOM			
K2	Travel to assist gathering technical needs from RDACCs and GDACC	H	Attend RMCs for RDACCs	2019	2020	O	Chair TSCOM			
K3	Provide oversight and review of Seabed 2030 web services, methodologies and applications in accordance with TSCOM ToRs	H	Conduct regular reviews and participate in technical meetings	2019	2030	O	Chair TSCOM			

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
L1	Develop template for seafloor mapping route optimization application	H	Conduct requirements survey Prototype and document web app	2019	2022	C O	Chair TSCOM		10,000	10,000

1.2 TSCOM Meetings (IHO Task 3.6.1refers)

Date	Location	Activity
1-4 October 2012	IHB, Monaco	XXVIII th Meeting
7&9October 2013	Venice, Italy	XXIX th Meeting
11-13December 2014	Mountain View, California,USA	XXX th Meeting
5-7 October 2015	Kuala Lumpur, Malaysia	XXXII th Meeting
10-12 October 2016	Viña del Mar, Chile	XXXIII th Meeting
13-14 November 2017	Busan, Korea	XXXIV th Meeting
5-6 November 2018	Canberra, Australia	XXXV th Meeting
4-5 November 2019	Portsmouth, NH, USA	XXXVI th Meeting
11-15 January 2021	Remote VTC	XXXVII th Meeting
October/November 2021	tbc	XXXVIII th 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 2021-2022

1.1 SCRUM Tasks

B	Ensure conduct of SCRUM meeting in 2021(IHO Task3.6.1)
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 IHO/IOC Regional Meetings
E	Maintain IHO bathymetric publications (IHO Task 3.6.6) including: B-4, B-9, B-10 and B-11
H	Ensure IHO-IOC GEBCO Web site is kept current and updated regularly (IHO Task 3.6.8)
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	Report of SCRUM meeting to GGC	2021	2022	P	Chair SCRUM			
D1	Encourage the contribution of bathymetric data to the IHO DCDB	H		Continuous		O	All members of GEBCO GC through the Chair			
D2	Identify priority areas for regional mapping and support the organization of regional mapping projects.	H		Continuous		O	Chair SCRUM			
D3	Promote data contribution through GEBCO participation in RHCs and IOC regional meetings	H	Identify GEBCO colleagues who are able to attend meetings in 2021 – 2022	Continuous		O	All members of GEBCO GC through the Chair		10,000	10,000
D4	Promote data contribution by supporting participation at Regional Mapping Meetings	H		Continuous		O	Chair SCRUM			

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
D5	Develop and make publicly available materials to highlight and foster regional activities and initiatives including up to date GEBCO slide deck virtual engagement materials such as videos of presentations.	H		Continuous		P	Chair SCRUM in coordination with Chair SCOPE and with input from Seabed 2030 Project Team		6,000	6,000
D6	Develop and refine messaging for IHO & IOC to facilitate increasing the support of coastal states to provide and release data from within their waters of national jurisdiction. Gather input from regarding stakeholder needs via regional engagement	H		Continuous Continuous		O O	All members of GGC through the Chair* All members of GGC through the Chair*			
D7	Work with Seabed 2030 GDACC to update metrics of completeness for RHCs and put on SCRUM web pages	H		2019	2022	P	GDACC through the Chair*			
D8	Work with Seabed 2030 RDACCs and GDACC to ensure that reasons for embargo and/or no public access are captured and articulated to IHO/IOC	H		2019	2022	P	RDACCs and GDACC through Chair*			
D9	Gather input about IBC status and plans	H		2019	2022	P	SCRUM through Chair			
D10	Develop interactive map that highlights groups pursuing workflow enhancements for data processing and integration to foster collaboration	H		2021	2022	P				
D11	Convene SCRUM-focused sessions of a webinar series in conjunction with Seabed 2030 and Map the Gaps	H		2021	2022	P	Chairs of Sub-Committees, Seabed 2030 Project, and Map the Gaps			

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
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			
		H	Update GEBCO World Map to included updated versions of GEBCO grid and adopted undersea feature names from SCUFN.	2016	2022	O	Chair SCRUM			
		M		2017	2022	O	Chairs SCRUM/SCUFN	B-4 - Information concerning recent bathymetric data		
		L						B-9 - GEBCO digital atlas		
		M						B-6 – Standardization of undersea feature names B-8 - Gazetteer B-9 - GEBCO digital atlas		
		M		Continuous	Continuous	O		B-10 - The history of GEBCO B-11 - GEBCO Cookbook		

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
H	Review and Update IHO-IOC GEBCO and Seabed 2030 Websites	M	Update website with meeting documents and information pertaining to SCRUM activities Validate members and contact information for SCRUM, TSCOM, and SCOPE Review and maintain all working links	Continuous Continuous Continuous		P P P	BODC Chairs SCRUM, TSCOM, SCOPE Chair SCRUM, BODC			
K	Support SB2030 RDACCs	H	Provide scientific expertise, regional connections and outreach support	2018	2030	P	Chairs of TSCOM, SCRUM SCUFN, Outreach WG			

1.2 SCRUM Meetings (IHO Task 3.6.1refers)

Date	Location	Activity
7&9October 2013	Venice, Italy	1 st Meeting
11-13December 2014	Mountain View, California, USA	2 nd Meeting
5-7 October 2015	Kuala Lumpur, Malaysia	3 rd Meeting
10-12 October 2016	Viña del Mar, Chile	4 th Meeting
13-14 November 2017	Busan, Korea	5 th Meeting
5-6 November 2018	Canberra, Australia	6 th Meeting
4-5 November 2019	Portsmouth, NH, USA	7 th Meeting
11-15 January 2021	Remote VTC	8 th Meeting
October/November 2021	tbc	9 th Meeting

Chair: Vicki Ferrini
Vice-Chair: Aileen Bohan
Secretary: David Wyatt

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IHO-IOC GEBCO SCOPE Work Plan 2021-2022

1.1 SCOPE Tasks

B	Ensure conduct of SCOPE meeting in 2021(IHO Task 3.6.1)
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
B	Ensure conduct of annual SCOPE meeting	H	Report of SCOPE meeting to GGC	2021	-	O	Chair of SCOPE			
G1	Development of SCOPE webpage	H		2018	2025	O	Chair of SCOPE		(5,000)	5,000
	Migration to Drupal web cloud or systematic management	H		2022	2025	P	Chair & Co- vice chairs			
	Content design and development	H		2018	2021	O	David Millar, Karen Marks *Eunmi Chang Hyo Hyun Sung Jennifer Jenks		3,000	
	Web page design	H		2018	2025	O	Eunmi Chang			
	Web page coding	H		2018	2025	O	Eunmi Chang			
	Developing & integrating the contents to the main page of GEBCO	H		2018	2025	O	Eunmi Chang Pauline Weatherall		2,000	
	Communication Strategies	H		2019	2025	O	Chair of SCOPE		(4,000)	4,000
G2	Development of promotional materials based on communication strategy	H		2020	2024	O	1,000 for each of 4 target groups respectively each year		4,000	

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 (€)	GGC Decision
	GEBCO World Map content analysis and development of guidelines for portrayal method	H		2021	-	P	Eunmi Chang	2012 GGC report ANNEX 4 (need to be updated)		
G3	PPT materials with proper content and PR activities	H		2019	2025	O	Chair of SCOPE		(1,000)	1,000
	Development of online characters to produce posters for kids	M		2019	2023	O	Eunmi Chang			
	Production of derived products : thematic maps	H		2020	2025	P	Chair and Vice chair of SCOPE	2012 GGC report ANNEX 4 (need to be updated)	1,000	
	Paper Puzzle & GEBCO signboard	M		2018	2023	P	Vicki Ferrini			
G4	Update GEBCO Publication B10 for GEBCO 120th year celebration	H		2021	2023	P	Hyo Sung		(2,000)	2,000
G5	External Relations and Communications	H	Draft and update strategy plan	2019	2025	P	Eunmi Chang		(8,000)	8,000
	Development of GEBCO master slide	H		2020	2022	O	Eunmi Chang			
	SNS analysis and expansion & management direction	H		2020	2025	O	Sara Saeans Jaya Roperez, Eunmi Chang		2,000	
	Attending scientific conferences	M		2019	-	O	Chair and Vice Chair			
	Support organization and running Map the Gaps symposium	H		2020	-	O	Map the Gaps symposium convener		6,000	

1.2 GGC Meetings (IHO Task 3.6.1 refers)

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

5-6 November 2018	Canberra, Australia	6 th Meeting
4-5 November 2019	Portsmouth, NH, USA	1 st Meeting
11-15 January 2021	Remote VTC	2 nd Meeting
October/November 2021	tbc	3 rd Meeting

Chair: Hyo Hyun Sung	Email: hhsung@ewha.ac.kr
Co-Vice-Chair: Eunmi Chang	Email: emchang21@gmail.com
Co-Vice-Chair: Timothy Kearns	Email: tim@glos.org
Secretary: David Wyatt	Email: adso@iho.int

1.1. IHO-IOC GEBCO Guiding Committee (GGC) Work Plan 2021-2022

1.1 GGC Tasks

- A Organise and conduct GGC XXXVIII meeting in 2022 (IHO Task 3.6.1)
- B Ensure conduct of TSCOM, SCRUM, SCOPE and SCUFN meetings in 2021 (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 IHO/IOC Regional 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 3.6.6)
- 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)
- L Provide support and advice to developing and validating emerging technologies for compiling and disseminating bathymetry

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 XXXVIII meeting	H		2021	2022	P	Chair GGC Sec		0	0
B1	Ensure conduct of TSCOM, SCRUM, SCOPE and SCUFN meetings	H		2021	2021	P	Chair GGC, Chair, TSCOM, Chair SCRUM, Chair SCOPE 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
	Document data flow processes	H	B-11 instructional chapter	Continuous		O	Chair TSCOM, Director DCDB, Director Seabed 2030			
D2	Identify priority areas for regional mapping and support the organization of regional mapping projects.	H		Continuous		O	Chair SCRUM		0	0
	Conduct DCDB Industry Day and Data Contribution Workshop	H	Conduct Workshop	2020	2021	P	Chair TSCOM, Director DCDB		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 2021 – 2022	Continuous		O	All members of GEBCO GC through the Chair		10,000	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	0
	Promote data contribution by supporting participation at Regional Mapping Meetings	H	Provide partial support, as necessary, for individuals to participate in regional mapping meetings	Continuous		P	Chair SCRUM		0	0
D5	Develop material to highlight activities and initiatives including up to date GEBCO slide deck	H		Continuous		P	Chair SCRUM in coordination with Chair SCOPE and with input from Seabed 2030		6,000	6,000

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 (€)
E1	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	2017 2021	O	Chair SCRUM	B-9 - GEBCO digital atlas	0	0
		M	Update GEBCO World Map to included updated versions of GEBCO grid and adopted undersea feature names from SCUFN.	2017	2018 2021	O	Chairs SCRUM/SCUFN	B-6 – Standardization of undersea feature names	0	0
								B-8 - Gazetteer	0	0
								B-9 - GEBCO digital atlas	0	0
L						B-10 - The history of GEBCO	0	0		
H	Update B-10	2021	2023	P	Jaya Roperez	B-10 – History of GEBCO	2,000	2,000		

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 (€)
E2	Add and update instructive chapters in IHO-IOC GEBCO Cook Book	H	Maintain B-11 2019 B-11 update Add section related to Seabed 2030 Investigate e-Publication format for B-11 Seek instructive chapters on contributing data, metadata requirements, platforms for viewing gaps and coverage, CSB, etc.	Continuous 2018 2019 2019 2019	 2021 2021 2021 2021	O C O P O	Chair TSCOM Chair, Cookbook Working Group	B-11 GEBCO Cookbook	 2,000	 2,000
F	Develop and review the on-line function of B-4	M	Conduct review	2015	On going		Director DCDB		0	0
G1	Development of SCOPE webpage	H		2018	2025	O	Chair of SCOPE		(5,000)	5,000
G2	Communication Strategies	H		2019	2025	O	Chair of SCOPE		(4,000)	4,000
G3	PPT materials with proper content and PR activities	H		2019	2025	O	Chair of SCOPE		(1,000)	1,000

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 (€)
G4	Update GEBCO Publication B10 for GEBCO 120 th year celebration	H		2021	2023	P	Hyo Sung		(2,000)	2,000
G5	External Relations and Communications	H	Draft and update strategy plan	2019	2025	P	Eunmi Chang		(8,000)	8,000
H1	Ensuring IHO-IOC GEBCO and Seabed 2030 Web sites are kept current and updated regularly	M	Complete individual tasks	Continuous		O	BODC, Chairs TSCOM/SCRUM/SCOPE		5,000	5,000
H3	Review and Update IHO-IOC GEBCO and Seabed 20230 Websites	M	Update website with meeting documents	2019	2021	P	BODC		10,000	10,000
			Validate members and contact information for SCRUM, TSCOM, and SCOPE	2019	2021	P	Chairs TSCOM, SCRUM, SCOPE			
			Review and maintain all working links	2019	2021	P	Chair TSCOM, BODC			
			Provide technical and content review of both websites	2019	2021	P	Chairs TSCOM, SCRUM, SCOPE			

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 (€)
I	Develop short course and supporting material on compiling digital bathymetric models	H		2019	2021	P	All members of GEBCO GC through the Chair SCOPE		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. SCUFN32-07.1B). Funding for correcting and basic maintenance agreed by US. Need to keep it maintained.	
J3	Develop and make available public and management on-line interfaces to the Gazetteer	M		2014	2018 2022	O	Chair SCUFN KHOA	B-8 - Gazetteer Management Plan	0	0
J4	Develop a S-100-based product specification for Undersea Feature Names	M / L		2015	2021	O	Chair Project Team (Anna Hendi)	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
K1	Support Seabed2030	H	Provide scientific expertise, regional connections and outreach	2018	2030	P	Chairs TSCOM, SCRUM, SCOPE, SCUFN	See TSCOM and SCRUM WPs 2019-2020	0	0
K2	Travel to assist gathering technical needs from RDACCs and GDACC	H	Attend RMCs for RDACCs	2021	2022	O	Chair TSCOM		0	0
K3	Provide oversight and review of Seabed 2030 web services, methodologies and applications in accordance with TSCOM ToRs	H	Conduct regular reviews and participate in technical meetings	2019	2021	P	Chair TSCOM			
K4	Develop and implement a Seabed 2030 Fundraising Strategic Plan	M	Provision for professional consultancy services as required	2020	2022	O	Chair FRWG		20,000	20,000
L1	Develop template for seafloor mapping route optimization application	H	Conduct requirements survey Prototype and document web app	2019	2021	P	Chair TSCOM		10,000	10,000

1.2 GGC Meetings (IHO Task 3.8.1.1 refers)

Date	Location	Activity
1-4 October 2012	IHB, Monaco	XXIX th Meeting
7-11 October 2013	Venice, Italy	XXX th Meeting
13-15 June 2014	IHB, Monaco	XXXI th Meeting
5-9 October 2015	Kuala Lumpur, Malaysia	XXXII th Meeting
10-14 October 2016	Valparaíso, Chile	XXXIII th Meeting
13-17 November 2017	Busan, Korea	XXXIV th Meeting
5-9 November 2017	Canberra, Australia	XXXV th Meeting
7-8 November 2019	Portsmouth, NH, USA	XXXVI th Meeting
18-20 January 2021	Virtual meeting	XXXVII th Meeting
January/February 2022	IHO, Monaco	XXXVIII th Meeting

Chair: Evert Flier
 Vice-Chair: Marzia Rovere
 Secretary: David Wyatt

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Requester	Task	Proposer Priority	Status	Deliverable/activity	Amount (euros)	Note	Consensus Allocation	GGC Allocated in 2020	Expenditure in 2020
SCUFN	J1	H	O	Update B8 - Gazetteer	15,000	Direct from IHO Contract Support funds	0	15,000	7,590
SCUFN	J2	H	O	Web Service for Gazetteer	43,000	total	0	0	0
SCUFN sub-total					58,000		0	15,000	7,590
TSCOM	E2	H	P	Investigate e-Publication format for B-11	2,000		2,000		
TSCOM	L	H	O	Develop template for seafloor mapping route optimization app	10,000		10,000	10,000	0
TSCOM	H1	M	O	Maintaining GEBCO website	15,000		15,000	5,000	15,000
TSCOM sub-total					27,000		27,000	15,000	15,000
SCRUM	D3	H	O	Attendance at RHCs and IOC regional meetings	10,000	To include GEBCO representation at meetings	10,000	10,000	0.00
SCRUM	D4	H	P	Participation in Seabed 2030 regional mapping meetings			0	30,000	0.00
SCRUM	D5	H	O	Develop material to highlight activities and initiatives	6,000		6,000	10,000	1239.01
SCRUM sub-total					16,000		16,000	50,000	1,239
SCOPE	G1	H	O	Web page development	5,000		5,000		
SCOPE	G2	M	P	Developing a communication strategy and resources	4,000		4,000	0	0
SCOPE	G3	H	P	Development of outreach material	1,000		1,000	0	0
SCOPE	G4	H	P	Review and revise B-10	2,000		2,000		
SCOPE	G5	H	P	External Relations and Communications activities	2,000	To include representation at meetings	2,000		
SCOPE		H	O	Support organization and running Map the Gaps symposium	6000		6,000	20,000	2,000
SCOPE sub-total					20,000		20,000	20,000	2,000
GGC	B2	H	O	Oversee subordinate body work.	0		0	0	0
GGC	E	M	O	Maintain IHO Publications	0		0	0	0
GGC		M		Fundraising consultant - carryover from 2020 (in progress)	22,000	Reallocated from SCRUM 2020 allocation per sub-paragraph 5e of 3rd Remote GGC VTC Meeting (26 Oct 2020), not included in 2021 allocation total	0		0
GGC	K4	M	P	Fundraising consultant - new placeholder for 2021	20,000	Allocation requested by FRWG at GGC37	20,000		
GGC sub-total					42,000		0	0	0
TOTAL				Total subordinate body bids for 2021	120,000	TOTAL GGC allocated for 2021	63,000	100,000	25,829

Balance 31 December 2020	80,351
Projected 2021 income	26,500
IOC biennial allocation for Outreach and Communications activities	20,000
Maximum to allocate	126,851

**GENERAL BATHYMETRIC CHART OF THE OCEAN (GEBCO) PROJECT –
TERMS OF REFERENCE AND RULES OF PROCEDURE FOR
THE JOINT IHO-IOC GEBCO GUIDING COMMITTEE**

(Adopted by the IOC on 4 July 2019 and the IHO on 5 June 2019)

PREAMBLE

GEBCO was proposed in 1899 and became a reality in April 1903 when HSH Prince Albert I of Monaco offered to organize and finance the production of a new chart series designated: “The General Bathymetric Chart of the Oceans” (GEBCO), under the Prince’s Scientific Cabinet. In 1922 the responsibility for GEBCO was passed to the Director of the Oceanographic Museum of Monaco and in 1929 was transferred to the International Hydrographic Bureau (today the IHO). Since 1973, GEBCO has been a joint Project of the International Hydrographic Organization (IHO) and the Intergovernmental Oceanographic Commission (IOC) of UNESCO.

The goals of the IHO-IOC GEBCO Project are to:

1. Develop and constantly improve the portrayal of global ocean depths;
2. Act as the designated international authority for undersea feature names;
3. Advance the development and application of sea floor mapping technology;
4. Encourage and facilitate ocean mapping cooperation leading to the exchange and preservation of bathymetric data and associated metadata;
5. Foster collaboration among individuals and organizations with established and developing expertise so as to assist local and regional mapping efforts to attain a global standard of quality;
6. Identify oceanic areas that are insufficiently mapped and recommend to appropriate ocean-going organizations and institutions that such areas are surveyed;
7. Promote education and training in ocean mapping through high level courses in Ocean Bathymetry acknowledged by the IHO and IOC;
8. Bring together the ocean mapping community and users of bathymetry thereby leading to products that are more widely used.

GEBCO is an IHO and IOC Project that is open to all those interested in mapping the ocean floor. It relies largely on the voluntary efforts of an international collaborating community of scientists and hydrographers with the support of the IHO and the IOC.

GEBCO is led by the Joint IHO-IOC GEBCO Guiding Committee.

Terms of Reference

The GEBCO Guiding Committee shall:

- 1.1 Guide the IHO-IOC GEBCO Project, under the general governance of IHO and IOC while recognising and following IHO and IOC policies.
- 1.2 Prepare and disseminate maps, grids, data files and other appropriate depictions of the ocean floor.
- 1.3 Identify the needs of the various user communities of the bathymetry of the world’s oceans; study the ways and means whereby these needs can be met.
- 1.4 Identify the necessary resources, both human and financial, for its undertakings and make appropriate recommendations to its parent organizations.
- 1.5 Stimulate the flow of data relevant to the GEBCO Project by actively identifying sources of new data and encouraging and promoting the release of data to appropriate data banks, with the objective of ensuring that maximum available data are provided to the IHO Data Centre for Digital Bathymetry (DCDB).

- 1.6 Supervise the development, maintenance and routine updating of GEBCO products. Activities are to include but are not restricted to:
- (1) Study and set out procedures for new compilations of bathymetry.
 - (2) Develop standards and methodologies for the production of bathymetric maps and grids and recommend their adoption to the IHO and IOC and to the seafloor mapping community.
 - (3) Supervise the development, production and updating of a worldwide grid of digital bathymetric data.
 - (4) Supervise the preparation and maintenance, in association with national and international bodies, of an authoritative IHO/IOC GEBCO Gazetteer of Undersea Feature Names.
 - (5) Study and implement the best distribution mechanism for the effective use of GEBCO products by all users.
- 1.7 Investigate and develop appropriate logistical and financial arrangements necessary for the furtherance of the GEBCO Project, recognising and taking into account the relevant IHO and IOC policies, and seeking the assistance of the Secretariats of the IHO and IOC as appropriate.
- 1.8 Integrate into its products the geographical names of undersea features that appear in the IHO-IOC GEBCO Gazetteer of Undersea Feature Names.
- 1.9 As required, establish subordinate bodies (sub-committees and working groups) to fulfil the Committee Work Programme and approve the Terms of Reference and Rules of Procedure of those bodies, reviewing annually the continuing need for each subordinate body. The GEBCO Guiding Committee will report annually and intersessionally if necessary, to the IHO and IOC for endorsement on the status of subordinate bodies and encompass their comments before establishing, reviewing, modifying, and/or terminating subordinate bodies; actions which must be included as GGC agenda items to allow sufficient prior consideration by the IHO and IOC secretariats and member states.
- 1.10 Direct and monitor the work of its subordinate bodies.
- 1.11 Engage with regional mapping projects to encourage their compatibility with, and eventual inclusion in, GEBCO products.
- 1.12 Build capacity by encouraging and enabling the training and scientific education of new generations of ocean mapping operational experts worldwide.
- 1.13 Pursue, in dialogue with the IHO and IOC, policies that facilitate the suitability of GEBCO products not only for scientific users but also, where appropriate, for educational and socio-economic purposes in the broadest sense.
- 1.14 Take all practical opportunities to advocate the scientific and societal benefits of mapping the seafloor.
- 1.15 Report annually to the IHO and to the IOC, through their respective governing bodies and should also propose activities to be considered in the IHO's and IOC's work programmes, identifying and requesting, where necessary, the required funding support.
- 1.16 Prepare an annual GEBCO Work Plan and budget and propose it to each meeting of the IHO and IOC, through their respective governing bodies. The Guiding Committee should consider and submit to the IHO and IOC governing bodies proposals for new work items under the GEBCO Work Plan, taking into account the financial, administrative and wider stakeholder consequences.
- 1.17 Monitor the execution of the GEBCO Work Plan and receive reports from its Subordinate Bodies, including an evaluation of performance and progress achieved against agreed objectives.

Rules of Procedure

1. Membership

- 1.1 The Committee shall consist of five Members appointed by the IHO, and five Members appointed by the IOC. The Secretariats of the IHO and IOC, in close consultation with the Committee Chair, will

seek to strive that all appointed Members are, as far as possible, from different regions so as to achieve a balanced and diverse representation.

- 1.2 Appointed Members shall serve for a term of five years, renewable by a majority recommendation of the Committee for one additional five-year term and with the approval of the corresponding parent organization. The Chair shall inform the relevant parent organization of any foreseeable vacancy in a timely manner.
- 1.3 The Chairs of GEBCO Sub-Committees established under Article 9 of the Terms of Reference and the Director of the IHO Data Centre for Digital Bathymetry (DCDB), shall also be voting Members of the Committee. If a Member of the Committee mentioned under paragraphs 1.1 and 1.2 above is also the Chair of a subordinate body, that Member shall have only one vote on the Committee.
- 1.4 Representatives of the Secretariats of the IHO and IOC shall be permanent Observers in the Committee. The Secretariats of the IHO and IOC will also be recognised as permanent Observers in all subordinate bodies established by the Committee.
- 1.5 The Committee may invite other suitably qualified individuals to take part in specific meetings as Expert Contributors.
- 1.6 Members of the Guiding Committee serve as experts¹ in their personal capacity rather than as representatives of their organization and/or country.
- 1.7 Members are expected to attend every meeting of the Committee. Members who are absent for two consecutive meetings will normally be considered to have resigned and new nominations shall be sought. No substitution shall be allowed at meetings.
- 1.8 Business may be conducted between meetings by appropriate communication systems.
- 1.9 All documents related to meetings and decisions of the Committee and Sub-Committees and other relevant documents will be posted on the GEBCO web site linked to the IHO and IOC web sites.

2. Office Bearers

- 2.1 The Chair and Vice-Chair shall be elected by the Committee from the voting Members of the Committee and normally should be from different parent organizations. The Chair and Vice-Chair are each elected for a three-year term, but not exceeding their current membership of the Committee. They can be re-elected for one additional term by the Committee. The Chair shall conduct the business of the Committee. If the Chair is unable to carry out the duties of the office, the Vice-Chair shall assume the Chair with the same powers and duties.
- 2.2 The Committee shall appoint a Secretary for a five-year term which can be renewed by the Committee. If resources permit and at the Committee's request, a secretary may be provided by either the Secretariat of the IHO or the IOC. The function of the Secretary shall be defined by the Guiding Committee.

3. Meetings

- 3.1 Representatives from Member States of IHO and IOC may participate as observers in Committee meetings.
- 3.2 Meetings shall be held at least every two years. The venue and date of the next meeting will normally be decided at the previous meeting, in order to facilitate participants' travel arrangements.
- 3.3 The quorum to hold a meeting shall be two more than half of the voting Members of the Committee.
- 3.4 An extraordinary meeting can be called by the Chair or any Committee Member, with the agreement of the simple majority of all voting members of the Committee.
- 3.5 The working language of the Committee shall be English.

¹ So far as IOC is concerned, the Guiding Committee is classed as a Joint Group of Experts under the IOC guidelines for subsidiary bodies.

3.6 The Committee shall strive to make decisions by consensus. If consensus cannot be reached, decisions shall be taken by simple majority vote of the Members entitled to vote. The Chair shall have the casting vote if there is a tie.

4. Amendment and Revision

4.1 These Terms of Reference and Rules of Procedure shall be endorsed and approved by the IHO and IOC according to their current procedures. The Committee may propose to IHO and IOC changes to these Terms of Reference and Rules of Procedure with the approval of two thirds of the Committee. Any changes shall enter in force after being endorsed and approved by both IHO and IOC.

Seabed 2030 Year 3 Work Plan

WP 1: Data	TASK ID	TASK	Deliverable ID	Deliverable/outcome	Deliverable Lead
WP 1: Data	TASK 1.1	Publish Data Product – GEBCO 2020	D1.1.1	GEBCO 2020 is published by 31 st March 2020	Helen Snaith
WP 1: Data	TASK 1.2	Publish Data Product – IBCAO 2019	D1.2.1	IBCAO 2019 is published IBCAO 2019 is published by 31 st August 2019	Martin Jakobsson
WP 1: Data	TASK 1.3	Publish Data Products – IBCSO v2 2019	D1.3.1	IBCSO v2 2019 is published by 30 th September 2019	Boris Dorschel
WP 1: Data	TASK 1.4	Secure data contributions from different communities	D1.4.1	Increased data contributions from non-research sources	Director
WP2: Systems and tools	TASK ID	TASK	Deliverable ID	Deliverable/outcome	Deliverable Lead
WP 2: System and Tools	TASK 2.1	Define the standards for data and metadata contributions	D2.1.1	Version 1 of protocols for contributing data are published and used	Vicki Ferrini
WP 2: System and Tools	TASK 2.2	Implement agreed process and formats for data contributions	D2.2.1	Publish a Data Submission Process for external use	Geoffroy Lamarche*
WP 2: System and Tools	TASK 2.3	Implement agreed process and formats for data exchange between Seabed 2030 Centers	D2.3.1	Seabed 2030 Centers are exchanging data to agreed process and formats	Geoffroy Lamarche*
WP 2: System and Tools	TASK 2.4	Develop the concept of the next generation GEBCO product	D2.4.1	Prototype of next gen GEBCO product developed for evaluation by end of Year 3	Helen Snaith
WP 2: System and Tools	TASK 2.5	Enhanced data access and visualization tools	D2.5.1	Website provides user tools	Helen Snaith
WP 2: System and Tools	TASK 2.6	Publish map of gaps and data coverage	D2.6.1	Website contains interactive map of gaps	Helen Snaith
WP 3: Technology innovation	TASK ID	TASK	Deliverable ID	Deliverable/outcome	Deliverable Lead
WP 3: Technology innovation	TASK 3.1	Establish a Seabed 2030 Technology Innovation Strategy	D3.1.1	A published Seabed 2030 Technology Innovation strategy document	Director
WP 3: Technology innovation	TASK 3.2	Technology innovation projects in support of Vision to Action 3 initiatives	D3.2.1	Catalogue of data contributions through Map the Remote Gaps initiative	Director
WP 4: Mapping the gaps	TASK ID	TASK	Deliverable ID	Deliverable/outcome	Deliverable Lead
WP 4: Mapping the gaps	TASK 4.1	Implement the Seabed 2030 Funding Strategy	D4.1.1	Implement the Seabed 2030 Funding Strategy - increase in Seabed 2030 funding income	Director
WP 4: Mapping the gaps	TASK 4.2	Progress Mapping the Remote Gaps	D4.2.1	Extending the Mapping of Ocean Frontiers initiative: Catalogue of data contributions through Ryder Expedition – Proof of Concept	Martin Jakobsson
WP 4: Mapping the gaps	TASK 4.3	Progress crowdsourcing approach	D4.3.1	Significant increase in crowd sourced data submissions	Jennifer Jencks
WP 4: Mapping the gaps	TASK 4.4	Crowdsourcing projects in support of Vision to Action 3 initiatives	D4.4.1	Catalogue of data contributions through Map the Remote Gaps initiative	Director
WP 4: Mapping the gaps	TASK 4.5	Mapping Ocean Frontiers projects in support of Vision to Action 3 initiatives	D4.5.1	Catalogue of data contributions through Map the Remote Gaps initiative	Director
WP 5: Management	TASK ID	TASK	Deliverable ID	Deliverable/outcome	Deliverable Lead
5.1 Operational management	TASK 5.1.1	Secure Year 4 funding	D5.1.1	Year 4 Work Plan and budget approved	Director
5.1 Operational management	TASK 5.1.2	Year 3 Financial Management	D5.1.2	Year 3 finance ledger is accurate & Project run to budget	Director
5.1 Operational management	TASK 5.1.3	Annual Project Reporting to GGC	D5.1.3	Year 3 Annual Report submitted to GGC	Director
5.1 Operational management	TASK 5.1.4	Quarterly Project Reporting to GGC	D5.1.4	Status reports submitted to GGC	Director
5.1 Operational management	TASK 5.1.5	Project Reporting to Sponsors	D5.1.5	Sponsors meetings held as required	Director
5.1 Operational management	TASK 5.1.6	Engage with the GEBCO community	D5.1.6	Diary of Year 3 engagement demonstrating GEBCO contribution to Seabed 2030	Vicki Ferrini
5.1 Operational management	TASK 5.1.7	Administrative support to Project Director	D5.1.7	Recruit a Project Administrator	Director
5.1 Operational management	TASK 5.1.8	Strategic support to Project Director	D5.1.8	Convene the Seabed 2030 Strategic Advisory Group	Director
5.1 Operational management	TASK 5.1.9	Robust review mechanisms	D5.1.9	Convene the Seabed 2030 Review Panel	Director
5.1 Operational management	TASK 5.1.10	Handover of Director role December 2019	D5.1.10	Handover of Director role from Graham Allen to Jamie McMichael-Phillips	Director
5.2 Strategic direction	TASK 5.2.1	Engage with users of GEBCO products	D5.2.1	GEBCO product users are active in Seabed 2030	Director
5.2 Strategic direction	TASK 5.2.2	Solicit external strategy input	D5.2.2	Strategy of Seabed 2030 is improved by input of external advice	Director
5.2 Strategic direction	TASK 5.2.3	Position Seabed 2030 globally	D5.2.3	Seabed 2030 is acknowledged as a key global initiative	Director
5.3 Strategic direction	TASK 5.2.4	Build strong partnerships	D5.2.4	Partners make significant contribution to Seabed 2030 success	Director

5.3 Communication	TASK 5.3.0	Publish Seabed 2030 Brand Guidelines	D5.3.0	Establish colors and fonts and logos to be used in all Seabed 2030 material	Vicki Ferrini
5.3 Communication	TASK 5.3.1	Publish media content (news articles, press releases)	D5.3.1	Catalogue of content	Director
5.3 Communication	TASK 5.3.2	Promote Seabed 2030 at external events and meetings	D5.3.2	Catalogue of events and meetings attended	Vicki Ferrini
5.3 Communication	TASK 5.3.3	Promote Seabed 2030 through the website and social media	D5.3.3	New content published on website	Helen Snaith
5.3 Communication	TASK 5.3.4	Acknowledge partner contributions	D5.3.4	Seabed 2030 website	Helen Snaith
5.3 Communication	TASK 5.3.5	Hold Seabed 2030 meetings	D5.3.5	Royal Society event is a success	Director
5.4 Capacity development	TASK 5.4.1	Develop how to involve GEBCO-NF Alumni in Seabed 2030	D5.4.1	Document: A strategy for GEBCO-NF alumni contribution to Seabed 2030	Director

- replaced by Kevin Mackay in Dec 19

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

List of GGC members – 20 January 2021

- | 1. IHO Appointed Members: | Term Period: |
|--|---------------------|
| Mr Shin Tani (Japan) | (2018-2023) |
| Mr David Millar (USA) | (2018-2023) |
| Mr Evert Flier (Norway) (<i>Chair</i>) | (2019-2024) |
| Captain Rodrigo de Souza Obino (Brazil) | (2019-2024) |
| Mr Samuel Harper (UK) | (2020-2025) |
|
 | |
| 2. IOC Appointed Members: | |
| Dr Marzia Rovere (Italy)* (<i>Vice-chair</i>) | (2019-2024) |
| Dr Martin Jakobsson (Sweden) | (2018-2023) |
| Lieutenant Dr Karolina Zwolak (Poland) | (2018-2023) |
| Vacant | |
| Vacant | |
|
 | |
| 3. Ex-officio Members: | |
| Dr Vicki Ferrini (USA) (<i>Chair of SCRUM</i>) | |
| Mr Thierry Schmitt (France) (<i>Chair of TSCOM</i>) | |
| Mr Hyun-Chul Han (Republic of Korea) (<i>Chair of SCUFN</i>) | |
| Dr Hyo Hyun Sung (Republic of Korea) (<i>Chair of SCOPE</i>) | |
| Ms Jennifer Jencks (USA) (<i>Director of IHO-DCDB</i>) | |
|
 | |
| * Members serving a second 5-year term. | |
|
 | |
| 4. Secretary: | |
| Mr David Wyatt (IHO) | (2020-2025) |

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



Thirty Eighth Meeting of the GEBCO Guiding Committee (GGC38)

IHO, Monaco

?? – ?? January/February 2022

Agenda

1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS – 30 minutes

- .1 Opening Remarks and Introductions – **Chair**
- .2 Welcoming Remarks by Host – **IHO**
- .3 Opening remarks by parent bodies – **IHO and IOC Secretariats**
- .4 Working Arrangements – **Secretary/IHO**
- .5 Administrative Arrangements – **Secretary/IHO**
- .6 Adoption of the Agenda and approval of report from GGC37 – **Chair**
- .7 Review of Action Items from GGC37 – **Secretary**
- .8 Report from IRCC13 and IOC A-30 – **Chair**

2 REPORTS FROM PARENTAL AND SUBORDINATE BODIES – 180 minutes

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

- .1 IHO update – **Sinapi**
- .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 SCOPE – **Chair SCOPE**
- .10 NF related activities and programmes – **Chair NFPMC/Course Manager**

3 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, to include annual check of GGC ToRs and approval of any proposed amendments to subordinate body ToRs – **Chair/Secretary**

4 **SEABED 2030 – 240 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 2021-2022:

- .1 Present Year 3 report and budget for GGC approval, highlighting main deliverables and communications – **Project Director**
 .2 Funding strategy update – **Millar**
 .3 Presentation of draft Year 4 Work plan and proposed funding bid – **Project Director**

5 **GEBCO COMMUNICATIONS AND OUTREACH STRATEGY – 60 minutes**

- .1 Review of GEBCO Communications, Education and Outreach activities – **Chair SCOPE**
 .2 Development of future strategy and activities – **Chair SCOPE**

6 **GEBCO WORK PLANS AND FUNDING**

.1 **GGC Subordinate bodies' Work Plans 2022-2023 – 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 SCOPE – **Chair SCOPE**

.2 **GGC Work Plan 2022-2023 – 60 minutes**

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

7 SECRETARY RESPONSIBILITIES – 15 minutes

- .1 Confirm responsibilities – **Chair**

8 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 1 vacancy – **Chair/Secretary**

9 NEXT MEETING – 15 minutes

- .1 Dates and venue for GGC39 – **Secretary**
- .2 Draft Agenda for GGC39 – **Secretary**

10 ANY OTHER BUSINESS – Chair/Secretary – 30 minutes

11 Review of Action Items from GGC38 – Secretary – 30 minutes

12 CLOSURE OF THE MEETING – Chair – 15 minutes

DRAFT