<u>Meeting Notes –TSCOM/SCRUM</u>

Chair SCRUM (Vicki Ferrini) and vice-Chair TSCOM (Caitlyn Raines) welcomed all the participants and provided a scene setting introduction brief for the joint meetings.

Vice-Chair TSCOM provided a brief on the ToRs and additional applications which had been created to improve the way the Sub-Committee worked and interacted. She explained the proposed changes to the membership and communication within the Sub-Committees.

IHO provided a Secretariat perspective and update on activities to support the GEBCO project, the CSB initiative and the Seabed 2030 project. This generated numerous questions and comments. Chair suggested SCRUM should develop the communication messages to facilitate increasing the support of coastal states to provide and release data from within their waters of national jurisdiction. **Action 1 – SCRUM**

The Director DCDB provided a presentation on the recent developments within the DBDC and technical initiatives to support CSB. She provided details on future initiatives and developments. This generate numerous questions and comments.

The Chair SCRUM provided a brief presentation on the activities of SCRUM over the past year. She provided a comprehensive brief on Seabed 2030 structure and the Regional Data Centers. She highlighted the meetings and conferences attended, including the IHO and IOC regional meetings.

Vice-Chair GGC provided a presentation on the development of the Arctic App. He noted that it would be further discussed at the Arctic Regional Meeting.

The Chair SCRUM noted that the Arctic Region Data Center area mirrored the Arctic Hydrographic Commission area, however many of the Regional Data Center areas crossed over a number of Regional Hydrographic Commission (RHC) areas, which made coordination more challenging. She demonstrated the MACHC Discovery App, which had been developed to assist the commission to gain a better knowledge of data available within the HC area. She hoped that it could be developed for use by other RHCs. It was noted that the IHO Council at its 3rd meeting had endorsed the proposal that each RHC should report annually the percentage coverage within their region to the Inter-Regional Coordination Committee (IRCC) and indicate progress being made. The Chair SCRUM noted that this would require significant coordination between the RHCs and the Seabed 2030 Regional Data Centers. **Action 2 – Seabed 2030 Global and Regional Centers.**

She highlighted a number of discussion topics:

> How can we accelerate regional engagement and data contribution?
> What other regional meetings would be important to attend?
> What material/messaging is needed to broaden regional participation?
> What are the stakeholder needs?
> Volunteers for upcoming Regional Meeting?
> Other available data?
> Other suggestions/ideas?

This generated numerous comments and questions. It was suggested that a chapter for inclusion in the B-11 – *GEBCO Cookbook* – could be generated on the development, population and use of the Apps. **Action 3 – SCRUM** It was suggested that a list of tools and on-line resources could be developed, BODC noted that a space in the GEBCO website had been created, although it needed to be populated.

Vice-Chair TSCOM provided a brief on TSCOM activities and engagements with external organizations.

Head, Seabed 2030 Global Center, Helen Snaith, provided a brief on the GEBCO 2019 Grid generation, including details of the data included. She highlighted the lesson learned from the process. She explained the intended process for the creation of the 2020 Grid, including the timeline.

Chair SCRUM provided a brief on the reviewing App.

Head, Seabed 2030 Global Center, Helen Snaith, provided a presentation on Seabed 2030 data migration and acquisition. She highlighted that the Regional Centers had no archiving remit. She explained the data flow process. She suggested improvements could be:

> Making it easy
> Service and tools for upload
> Acknowledgement of contributors
> Provide tailored services for partners

It was suggested that the reasons for embargoing data sets should be articulated to the IHO Secretariat for further dialogue. **Action 4 – Seabed 2030 Regional and Global Centers** It was highlighted there was a difference between data discovering and data availability. It was suggested that a value discussion should be had with potential providers to highlight what actions to take to gain different levels of value when contributing data and the impact of restrictions will have on the final value and usefulness of the date.

Head, Seabed 2030 Global Center, Helen Snaith, demonstrated the new download App for obtaining data sets from the GEBCO Grid from BODC.

Director DCDB provided a brief on the Seabed 2030 funded CSB Pilot Programme. She provided details of the Great Barrier Reef (GBR) project, which is being used as the example to replicate in other regions. She described the initial work with UKHO and Hydro SAN. She provided details of the CCOM-JHC/UNH investigation and testing of various loggers, she highlighted the loggers identified as meeting the requirements. She noted that the TeamSurv and Sea-ID loggers were also recommended. She highlighted the liability form used by the GBR project, which could be used for this programme. It was noted that the UKHO was involved in the programme, whilst the UK were not on the positive list.

The lead of the Metadata Working Group, Frederica Foglini, provided an update brief on developments and activities. She described the review undertaken of the metadata standards, tools and catalogues. Vice-Chair TSCOM suggested the Metadata WG should create and collate mandatory metadata fields across metadata standards. **Action 5 – Metadata WG** The lead of the Metadata Working Group demonstrated the various metadata services. She then provided a short brief on the GEBCO metadata and Type Identifier Grid (TID) codes.

Editor of B-11, Karen Marks, provided a brief on the B-11 – *GEBCO Cookbook* – and its current update status. It was suggested that the publication could be converted to an e-publication format. It was proposed the Vice-Chair TSCOM make a proposal to the GGC for an application to IRCC12 and IOC for conversion to an e-publication format. **Action 6 – Vice-Chair TSCOM** Director DCDB asked on the strategy for updating the existing chapters, Vice-Chair TSCOM suggested a process of reviewing and updating existing chapters, she requested volunteers contact the Editor, vice-Chair TSCOM or GEBCO Secretary to identify which chapters they would be able to review and update. **Action 11 – All**

Chair SCOPE, Hyo Hyun Sung, provided a comprehensive overview presentation on the activities and development of the communications and outreach strategies. She then provided details of the SCOPE website development with a demonstration of some aspects.

Eunmi Chang provided a presentation brief on the SCOPE Communication Strategy, she detailed the various aspects which had been considered and supporting details.

These presentations generated a number of questions and comments. The Chair SCRUM highlighted that the membership of SCOPE included the Director Seabed 2030 and the Chairs of TSCOM and SCRUM in recognition of the cross-cutting necessity. Fugro, David Millar, noted that coordination between all elements was vital to avoid duplication or confusion of messages and waste of resources. Chair SCOPE noted that currently Seabed 2030 was the major focus, however after Seabed 2030 a new strategy would need to be developed.

Head, Seabed 2030 Global Center, Helen Snaith, provided a brief on the development and improvement of the Seabed 2030 website. The generated numerous comments on various aspects of both the GEBCO and Seabed 2030 websites. It was suggested that the use of the new IHO logo could be improved to include small secondary tiles, it was agreed that BODC would investigate. **Action 12 – BODC**

The Digital Atlas Manager, Pauline Weatherall, provided a short brief on the development of a new edition of the GEBCO World map. It was proposed that a new version should be produced once the 2020 Grid had been released, it was agreed that the BODC and vice-Chair GGC would investigate. **Action 13 – BODC/Vice-Chair GGC**

Symposium convener, Tim Kearns, provided a brief on the forthcoming GEBCO Mapp the Gaps symposium. He provided details on the growth of interest and registrations for the symposium. He highlight a need to increase participation from developing coastal states, particularly Africa and the Indian Ocean region. He proposed some considerations for future events, which could be presented to the GGC in the SCOPE report. **Action 14 – Chair SCOPE**

Director NF-UNH Ocean Mapping Programme, Rochelle Wigley, provided a brief on recent activities, including a background brief on the programme. She particularly highlighted the alumni involvement in the successful XPrize competition.

Tamp Deep Sea Xplorers, Edward Larson, provided a short presentation on their involvement in the XPrize competition. He suggested that Seabed 2030 and XPrize could be developed into a board game, of which he provided explanation and example as an outreach tool.

Vice-Chair TSCOM briefed on the objectives and intended outcomes on the breakout sessions. She noted that one of the key outputs was a review and update of the individual Work Plans and funding bids.

The Vice-Chair TSCOM provided a summary of the TSCOM breakout discussions and review of the Work Plan.

The Chair of SCRUM provided a summary of the SCRUM breakout discussions. She highlighted the key points for future activities.

The Chair of SCOPE provided a summary of the SCOPE breakout discussions. She highlighted the main foci of proposed activities. The Chair of SCRUM noted she was stepping down as vice-Chair of SCOPE and therefore there was a vacancy which needed to

be filled. If no volunteer was identified prior to the GGC meeting, it agreed the necessary administration would be completed by correspondence.

Action	Agenda	Target	Action	Lead
1	IHO Secretariat perspective	GEBCO 2020	Develop the communication messages to facilitate increasing the support of coastal states to provide and release data from within their waters of national jurisdiction	SCRUM
2	SCRUM update	On going	Engage with RHCs to provide annual percentage coverage details	Global and Regional Centers
3	SCRUM update	GEBCO 2020	Generate chapter for inclusion in the B-11 on the development, population and use of the Apps	SCRUM
4	GEBCO 2019 Grid	On going	Reasons for embargoing data sets should be articulated to the IHO Secretariat for further dialogue	Regional and Global Centers
5	Metadata Framework	GEBCO 2020	Create and collate mandatory metadata fields across metadata standards	Metadata WG
6	B-11	IRCC12	Proposal to the GGC for an application to IRCC12 and IOC for conversion to an e-publication format	Vice-Chair TSCOM
7	B-11	GEBCO 2020	Develop chapter on MB system	BAS
8	B-11	GEBCO 2020	Develop chapter on Metadata	Metadata WG
9	B-11	GEBCO 2020	Develop chapter on machine learning	CARIS
10	B-11	GEBCO 2020	Develop chapter on messaging for increasing regional engagement	Chair SCRUM
11	B-11	On going	Identify chapters prepared to volunteer to review and update	All
12	SCOPE	GEBCO 2020	Investigate use of new IHO logo	BODC
13	Digital Atlas Manager	GEBCO 2020	Investigate the production of a revised printed World map based on the 2020 Grid	BODC/Vice-Chair GGC
14	Symposium	GGC36	Propose changes to structure, format and timing of the TSCOM/SCRUM/SCOPE and Symposium in relation to the GGC meeting	Chair SCOPE