

AusSeabed Steering Committee

Meeting no.14: 30th March 2023, 09:00-14:00, Fremantle WA

Notes prepared by Kimberlee Baldry

Attendees: Nigel Townsend (Chair, Australian Hydrographic Office), Kim Picard (Director, Geoscience Australia), Mary Young (Deakin University), Ralph Talbot-Smith (WA Department of Transport), Iain Parnum (Curtin University), Richard Cullen (Australian Hydrographic Office), Paul Kennedy (Industry Proxy, Guardian Geomatics), Martin Tunwell (Ocean Infinity), David Crossman (ICC Technologies), Tim Ingleton (NSW DPIE), Kevin Mackay (NIWA), Stuart Edwards (CSIRO), David Logan (Parks Australia), Mark Doubell (SARDI), Mardi McNeil (ECOP, Geoscience Australia), Kim Baldry (Secretariat, Geoscience Australia), Pip Bricher (Observer, Australian Hydrographic Office), David Parker (Observer, UK Hydrographic Office) CMDE Stuart Dunne (Observer, Australian Hydrographic Office), Shereen Sharma (Observer, Australian Hydrographic Office), Mark Case (Observer, AIMS), Jenny Bothma (Observer, WA Department of Transport), Mick Hawkins (Observer, Fugro), Scott Lytton (Observer, AHO)

Apologies: None

Meeting Overview

Actions list

Table 1. Action list with updates on continuing actions from the previous SC meetings (SC.13).

	Action	Responsible Party	Date for Completion	Comments/Status
SC14.1	Those who have not completed the SC Skills Matrix to complete this week and send to Kim Picard.	All SC	March	
SC14.2	Those in the manuscript working group to send Mary some info on which sections of the manuscript they might like to develop.	All SC	April	Please action
SC14.3	Assist with inviting participants to the AusSeabed Workshop in June	All SC	May	Underway
SC14.4	Leads of each breakout group compile a scoping summary to deliver to the Director.		April	Completed
SC14.5	The Director to go through the reports from the breakouts and lead a prioritisation process to create a work plan.	KP	May	Underway

SC14.6	The Steering Committee complete the survey that will be sent after the meeting	All SC	April	
SC14.7	Mardi McNeil to review the election flyer	MM	April	Completed
SC14.8	The SC to disseminate the SC briefing pack and encourage nominations from a range of organisations.	All SC	May	Completed
SC13.1	Mick O'Leary to discuss with the C+E team on the Australian Geoscience Education Network conference	Mick O'Leary	March	Completed
SC13.2	C+E team to discuss how to follow up on the Academic Survey respondents	Tim Ingleton	March	Underway

Table 2. Decision list with updates on continuing actions from the meeting.

	Decision
D14.1	The SC endorsed the development of the June workshop to target a technical audience, developing a National Seabed Mapping Plan and a Quality Assessment Framework to generate coverage reports.

Meeting notes

Meeting opened 0900

1 Introduction

1.1 Welcome

- The meeting opened with an introduction of the director of the WA DoT and the Australian Hydrographer.
- The AusSeabed SC (SC) endorsed the agenda.
- No items added to Other Business.

1.2 Minutes & Actions

- Minutes from SC Meeting #13 were endorsed out of session and will be available on the AusSeabed website.
- Outstanding actions were followed up with the group and an updated list is provided above [Table 1].
- Kimberlee Baldry provided an update on the progress of the Actions list since SC Meeting # 13.
 - Updates were provided against actions. All actions except SC13.1 and 13.2 were closed.
- SC endorse the progress of the action list.

Action SC.14.1: Those who have not completed the SC Skills Matrix to complete this week and send to Kim Picard.

2 Australian Hydrographer presentation

The Australian Hydrographer address the Steering Committee and provided an update on the successful extension of the HIPP program. The second phase is going to focus on continuing strong acquisition efforts, upskilling the community, forming stronger first nations partnerships and working closer with AusSeabed. The workforce and building capacity has particularly been identified as a big challenge going forward. HIPP will be turning to innovation and new technology to provide solutions to this problem. CMDE Stuart Dunne extended his thanks to the AusSeabed Steering Committee on all of their hard work and progress made in coordinating and advancing Australian seabed mapping.

3 2022/23 Progress Report

Kim Picard (Director) provided a summary of the current progress against the 2022/23 work plan and identified outputs at risk of being delayed or not delivered as per the [Quarterly Report](#). Highlights include the continued development of QAX, the success of the 3D seismic work with UWA and the new Data Register. The update was taken as read so that discussion could be had on the AusSeabed manuscript and June workshop.

Tim Ingleton (outreach, education and training) and Nigel Townsend (tools, guidelines and standards) provided significant updates taken as read in the provided papers.

Outcome Sought: The SC endorse progress made in Q2 and discuss potential upcoming risks. The SC also discuss the June AusSeabed workshop agenda and AusSeabed manuscript outline.

Result:

- The SC endorsed the progress report.
- RTS suggested discussing data management and resourcing (skills) at a national scale
 - RC has identified there is a gap in state organisations, and a requirement for one resourced coordinating state department and smaller sub-departments are struggling to gain resources.
 - RTS, how do we upskill or develop technology (like the AusSeabed modernisation strategy) to help with data management.
 - NTS consolidates that we need to resolve this and include advisement in the National Seabed Mapping Plan
 - IP suggests bringing in a case study around technology and potential for upscaling acquisition and/or data management
 - A scoping project is need to address gaps in the data management and skills/resourcing.
- Some concerns were raised around the split between two audiences between the sessions before and after lunch.

- An agreement was reached that this would be a technical workshop, and an end-user workshop (at AMSA or virtual) at another time.
- Iain Parnum suggested making portable activities that can be run at various conferences/events around states rather than just targeting AMSA.
- A working group was formed with Mary Young, Mardi McNeil, Iain Parnum, Tim Ingleton, Kim Baldry, Kevin Mackay (international perspective), David Logan (protected places case study)

Action SC.14.2: Those in the working group to send Mary some info on which sections of the manuscript they might like to develop.

Action SC.14.3: Assist with inviting participants to the AusSeabed Workshop in June

Decision 14.1: The SC endorsed the development of the June workshop to target a technical audience, developing a National Seabed Mapping Plan and a Quality Assessment Framework to generate coverage reports.

4 2023/24 Work Planning

The SC held a two-hours session to discuss and prioritise work to be included in the 2023/24 work plan. Six breakout groups were formed to work on scoping six proposals to be prioritised for the work plan. The breakout groups reported their findings back to the steering committee then prioritised activities from this.

Outcome Sought: The Steering Committee scope, prioritise and endorse the proposals to be included in the 2023/24 work plan.

Result:

Data Modernisation

- Is it a good idea – unanimously agreed it should be progressed, particularly the TileDB approach
- Risks: Timeline to develop the architecture will be long, issues around data formatting and translation, issues surrounding differences in getting datasets to a L2 point cloud product (i.e. heavy point cleaning conducted in a traditional approach vs small amount of point cleaning using a statistical CUBE approach which preserves more variation in the point cloud) leads to variations in noise/uncertainty, governance processes for the data (where does the data collectors responsibility start and end for point-cloud data), commercial risks around using a single provider (using AWS and/or TileDB) and ability to move data out of systems.

Bathymetric Product Series

- Recognise that prioritising products/grids and prioritising surveys should be interlinked
- Risk: Resourcing and timeline as there is a backlog for processing surveys which may delay product generation
- Agreement that Overlapping Areas of Interest is not nuanced enough as heavy traffic/populous areas are heavily weighted
- How do you include offshore areas – agreed that a weighted matrix of considerations needs to be developed based on prioritisation needs
- There is general agreement to pick off the lowest hanging fruit – to start where there is the correct resolution and coverage to produce those 100 m grids
- There is a suggestion to use an areas of interest grid scheme to bring focus to data submissions (and a deadline)

International Engagement

- The discussion was focused on the Pacific, working with multiple group
- Suggest taking a case study (e.g. Fiji) and engage with representatives of the region to gauge usefulness and interest
- Agreement on lower hanging group – Ocean Community Wiki – and continue those partnerships

National Seabed Mapping Plan

- Broad agreement that a plan is needed, beginning to build in June
- In June the workshop should be a discussion around what activity is being done (presentations from all) and a “buy-in” document/story-map to the development of a plan (signed). Deliver a Treaty top-level strategy or agreement in support
- Agreed the workshop should consider crowd-sourced bathymetry (citizen science)
- Aware of the Areas of Interest and there is a lot of information not yet used – discuss how we capture that information and use it better across organisations and within the Plan
- Risks.... in terms of surveying not happening.
- A feedback loop should be built in via the National Plan to ensure AusSeabed is serving the Plan – does it make sense, are we engaging with the right people etc.
 - Ralph Talbot-Smith notes that some education will be needed in higher government levels. Nigel notes the Plan will ensure organisations are using the same voice
- Progress on the Plan needs to be regularly reported

First Nations Working Group

- What is the role of AusSeabed? To engage, to provide tools and facilities to assist fieldworkers to engage. To assist in managing fatigue within First Nations Groups.
- Two activities: 1) Outreach products based on data (videos/data products) to speak to the view First Nations have of the world + to support the development of fly-throughs to communicate the seabed data to first nations peoples 2) Develop a contacts registry for first points of contact and for groups who are doing First Nations work

Backscatter Products

- Easy win: perform engagement to get uptake of backscatter working group survey
- Evaluate processing algorithms – requires a dedicated technical workshop to build consensus to produce something now
- There is some scope to use QAX for a first run on QA assessment for backscatter processing
- There are existing guidelines for acquisition – the problem is there is no universal method for processing. This requires international collaboration

Action SC.14.4: Leads of each breakout group compile a scoping summary to deliver to the Director.

Action SC 14.5: The Director to go through the reports from the breakouts and lead a prioritisation process to create a work plan.

5 Impact stories for AusSeabed

The Steering Committee ran out of time, so this will be addressed over email. The Steering Committee will be sent a 3 question survey to do a stock-take on the impact the AusSeabed program has had. This will help communicate the value of our program to the community and potential funders to build the sustainability of the program.

Action SC.14.6: The Steering Committee complete the survey that will be sent after the meeting.

6 Steering Committee Elections

The Steering Committee elections will begin on May 10th. The discussion was short due to time constraints and the Chair asked members to follow up with suggestions and engagement upon the delivery of a briefing pack.

Outcome Sought: The SC endorse the 2022/23 work plan for publication.

Result:

- Nigel Townsend – ensure that the Introduction to the Work Plan reflects the Strategy. Kim Picard agrees, perhaps we need to work in the tangible outcomes.

Action SC.14.7: Mardi McNeil to review the election flyer.

Action SC.14.8: The SC to disseminate the SC briefing pack and encourage nominations from a range of organisations.

7 UK Centre for Seabed Mapping

David Parker presented on the current state of the UK Hydrographic Office's Centre for Seabed Mapping to promote discussion and potential international collaborations and learnings.

Result:

- David Parker asked how AusSeabed made the transition from an idea/proposal to a functioning program at initiation.
 - This will be addressed in a follow up meeting
- David Parker noted that they are laying the foundations for the Centre to build critical national infrastructure
- David Parker asked if anything was missing from their current vision and mission
 - The Steering Committee shared the AusSeabed's mission and highlighted key pillars of collaboration and coordination as important to capture.
- NT asked what the funding model is and if they will have a portal?
 - The UKHO have a data archive centre – Marine Environmental Data Information Network. The new portal will only be about planning.
 - The centre will not rely on funding, only coordinate current efforts

Action SC.14.9: Kim Picard and Nigel Townsend to catch up with the UKHO after Easter and continue moving, including having the UKHO participate in a webinar.

8 Next Meeting & Other Business

- None

Meeting closed 1400

Appendix 1: Agenda

Date: 30th March 2023

Venue: 5 Newman Court, Fremantle WA 6160

Time: 09:00 – 14:00 AWST

Coordinators: Nigel Townsend, Kim Picard, Kimberlee Baldry

Agenda

Time	Item	Action	Lead	Duration	Paper
09:00	Introduction and Welcome		RTS	15 mins	No
	1. Action List and progress	Update	KB		No
09:15	2. Australian Hydrographer presentation		NT	15 mins	No
09:30	3. 2022/23 Progress Report - 22 June Workshop (KP/NT) - Manuscript outline (Mary Y)	Update + Discuss	KP	40 mins	Yes
10:10	Break (10 min)				
10:20	4. 2023/24 Work Planning	Discuss	KP	115 mins	Yes
12:15	Break (30 mins)				
12:45	5. Impact stories for AusSeabed	Discuss	NT	15 mins	No
13:00	6. SC Elections	Discuss	NT	20 mins	Yes
13:20	7. UK Centre for Seabed Mapping, David Parker, UKHO		NT	40 mins	No
14:00 End of meeting					
14:00 Transit to Curtin University - 15:00 AHS event -17:00 AHS Networking event https://ahs.wildapricot.org/event-5174268					