IHO-SGP Innovation and Technology Laboratory

4th Governing Board Meeting, VTC

7 October 2022, 09:00 ~ 11:00 am (UTC+2, CEST)

List of Decisions and Actions from the 4th Governing Board Meeting: *Final*

Doc No.	Title	Remarks
GBM04-01	**Confirmation of Minutes of last Meeting**	
Decision4/1	**The Meeting approved** the final draft decision and actions of the 3rd GB Meeting posted on the IHO Lab GBM3 webpage.	
GBM04-01	**Review and Update actions of last Meeting**	
	The Meeting reviewed the actions from the 3rd GBM and confirmed that all items had been completed.	
GBM04-2	**Update on Approved IHO Lab Projects**	
GBM04-2.a	- **S-57 to S-101 Conversion**	
	Thomas Mellor(TM) as a leader of the conversion project, presented an update on the progress of the project implementation since the last Governing Board Meeting and elaborated that the work item would involve testing the content of S-57 to S-101 Conversion Guidance Document and feedback to the ENCWG. He also shared that one of the main objectives of the project would be to automate the process of S-57 to S-101 conversion as much as possible. **GBM** noted that the conversion project team meeting with IHO-SGP Lab for the implementation plan is scheduled for November 2022 during the ENCWG7 meeting in New Zealand.	
Action 4/01	**General Manager (GM) to share** the implementation plan of the conversion project team with the Governing Board (GB) and **GB to confirm** the plan or provide comments if further amendment required	
GBM04-2.b	- **Marine Harbor Infrastructure Database Project (S-131)**	
	GBM noted that Ms Sarah Rahr from the Canadian Coast Guard had taken over as Chair of the Project Team from Ms Charline Giffard who is on long leave. Mr Eric Foo, member of the S-131 Project Team provided an update on the project. He highlighted the good progress in the API and GUI development work as follows: API Development: [Completed] Cloud infrastructure and domain name on Amazon Web Services (AWS) The usage of APIs will be moderated with authorisation keys APIs will be rolled out within the next couple of weeks Output for the Web Graphic User Interface (GUI) will be in JSON/GeoJSON Outputs for end-users can also be downloaded accordingly Meeting with IHO-Singapore Lab for redeployment by 27/11/2022 GUI Development: Port information are populated into the Web Portal for test A Github has already been created to store the test datasets and API specifications Only open source software is being used for the portal development	

	Each country will have their own web service and the base map can be switched accordingly Finalising configuration of the cloud infrastructure for the web portal	
Action 4/02	**IHO Secretary to add** the Project Github link in the S-131 project on the IHO-SGP Lab webpage accordingly. **GBM noted** that that the project is on schedule.	
GBM04-3	**Presentation of Part 2 Project Proposal submitted by Singapore / 7Cs**	
GBM04-3.a	- Creation and test-bedding of ECDIS capable of displaying S-102 Bathymetric	
	Mr Dave Chow and Mr Friedhelm Moggert- Kägeler presented Part 2 of the proposal. The **GB emphasized** the need to do a dedicated assessments of S-98 interoperability rules, for instance S-98 algorithms for S-102 on-the-fly contour generation fit for purpose. It was also suggested that the project should contact the Finnish HO, since they have used advanced generalization algorithms for depth contour generation. Most of these algorithms are published as open source. In addition, the **Project Team should identify gaps** in the latest edition 2.1.0 of S-102 and contribute to the ongoing IHO activities towards the operational version of Edition 3.0 of S-102. **GBM noted** that currently there are no validation for S-102. A result of the project activities should also be to make proposals for S-102 validation and contribute to the standardization process.	
Action 4/03	**GM/Project Team update** the project plan with the recommendation from the GBM3 and **submit** it to the GB for final approval.	
Action 4/04	**GM/Project Team present** its progress and activities at the next GB meeting.	
GBM04-4	**International Cooperation activity with IALA for S-125 sea-trial demonstration**	
	Dr Sewoong Oh presented the proposal, proof of concept for the Sea Demonstration on S-124/S-125 updating over S-101. **GBM noted** that the sea trial would be different from that conducted in Busan in the following areas: • Products tested in Busan were S-101, S-102, S-104, S-12X of IHO vs S-124; whereas the products to be tested in Singapore are S-124/S-125 relating to the AtoN domain of IALA. • Busan tests did not consider using the network service (All products were already installed before testing). In Singapore, the tests will focus on wireless service using 4/5G network. This takes into consideration IALA's service specification in terms of IMO Maritime Service (e-Navigation), which IALA is responsible for the development of technical service specification.	

	GM informed that if approved, the sea demonstration will be carried out during the Singapore Maritime Week in April/May 2023, where prominent guests from the maritime community would be present. It would also showcase the close collaboration between the IHO and IALA.	
GBM04-5	**Assessment of new proposals**	
Decision4/2	**[S-102 Project Part2] GBM approved** the S-102 Project to be implemented and recommends to focus on the S-98 interoperability, in particular in the contour generating algorithm, and identifying improvements to Edition 2.1.0 of S-102.	
Decision4/3	**[S-124/S-125 Sea Demonstration Proposal] GBM agreed in principle** that the proposal would be a good opportunity to publicize the close collaboration between IHO and IALA, and invited them to submit a formal proposal Part 1 and 2 of the procedure at the next GM meeting. Participation from IHO NIPWG should be obtained.	
GBM04-6	**Any Other Business**	
	None	
GBM04-7	**Next meeting (Venue and Date)**	
Decision4/04	**GB agreed to** hold the next GB Meeting in the first quarter of 2023 and GM to inform the GB at the earliest opportunity at least 3 months before the meeting.	

List of Participants
- Abri Kampfer (abri.kampfer@iho.int) : **Chair**
- Magnus Wallhagen (Magnus.Wallhagen@Sjofartsverket.se)
- Thomas Dehling (Thomas.Dehling@bsh.de)
- Parry OEI (Parry_OEI@mpa.gov.sg) : **General Manager**
- Thomas Ting (Thomas.TING@mpa.gov.sg) : *Absence*
- Yong BAEK (yong.baek@iho.int)

Observers

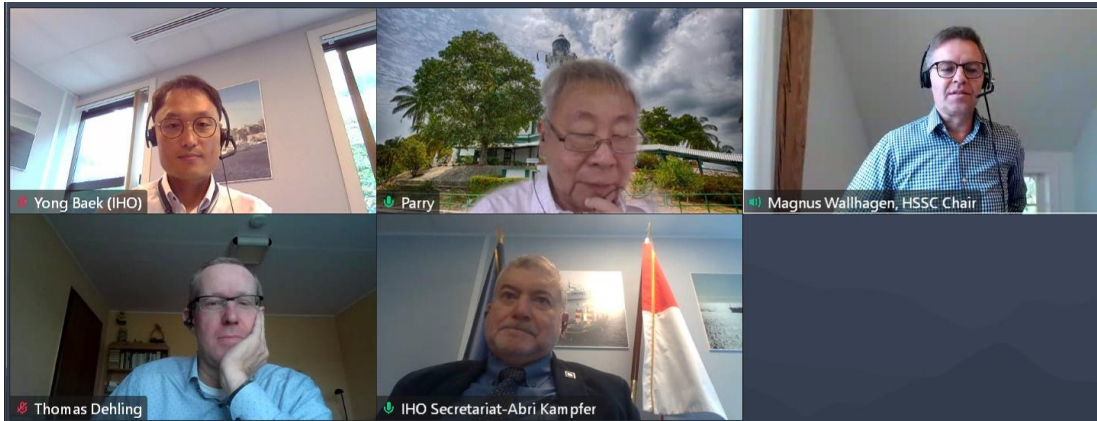| Lab Project Team		
Pro. #	**Title**	**Members**
2021-01	S-131 MHID	Eric Foo (Eric_FOO@mpa.gov.sg)
2021-02	S-57 to S-101 conversion	Thomas Mellor (Thomas.Mellor@UKHO.gov.uk) Jonathan Pritchard (jonathan.pritchard@iictechnologies.com)
2022-03	Displaying S-102 with S-101	Oliver Schwarz (oliver.schwarz@chartworld.com) Ralf Lehnert (ralf.lehnert@chartworld.com) Friedhelm Moggert-Kägeler (mo@sevencs.com) Dave Chow(dave.chow@sevencs.com)
Proposal (Concept)		
-	S-124/S-125 Proof of Concept	Sewoong OH (osw@kriso.re.kr) Lee Weng Choy (LEE_Weng_Choy@mpa.gov.sg) Eric Foo (Eric_FOO@mpa.gov.sg) Pearlyn Pang (Pearlyn_PANG@mpa.gov.sg)

Figure 1_Session of the GB meeting4