## **IHO-SGP Innovation and Technology Laboratory**

7th Governing Board Meeting (GBM), In-person and VTC

31 May 2024, 14:30 ~ 16:30 (UTC+9, JST)

List of Decisions and Actions from the 7th Governing Board Meeting: Final

Doc No.	Title	Remarks
GBM07	Opening Remarks	
	<b>Chair and GM</b> commented that based on the meetings and sideline discussions some Member States (MSs) and Working Group Chairs expressed interests in relevant IHO-SGP Lab projects, e.g. ENCWG requested to be looped in on them.	
GBM07-01a	Confirmation of Minutes of last Meeting	
Decision 7/1	<b>Meeting</b> approved the decision and actions of the 6th GBM posted on the IHO Lab GBM6 webpage.	
GBM07-01b	Review and Update actions of last Meeting	
	<b>Meeting</b> reviewed and updated the actions from the 6th GBM and concluded that all action items had been completed.	
GBM07-2	Update on Approved IHO Lab Projects	
GBM07-2a	S-57 to S-101 Conversion	
	<b>GM</b> shared that the recommendations arising from the project was presented during HSSC-16, together with the "S-57 to S-101 PT" Lead Jonathan (IIC).	
	Overall, there were good feedback from participants and the initiative was appreciated by attendees at HSSC-16. For example, a representative from Poland requested such workshops could be conducted more frequently.	
	<b>GM</b> shared that the project main aim was to review S-65 Annex B for improvements. The training workshop was organised to meet that aim.	
	<b>IHO Secretariat</b> added that the IHO-SG Lab would not be the most appropriate body for capacity building purposes, but acknowledged that it was encouraging and that other actions have transpired from this initiative. <b>GM</b> agreed and shared that IC-ENC have already conducted a few editions of such workshops based of this format.	
Decision 7/2	The project results report was submitted in May 2024. The meeting concluded that the project has been successfully completed.	
GBM07-2b	Marine Harbor Infrastructure Database Project (S-131)	
	<b>GM</b> updated that the <b>Lab S-131 Project Team (PT)</b> is currently deploying the API / GUI on the cloud infrastructure. Thereafter, <b>Lab S-131 PT</b> would be engaging relevant stakeholders for testing and making improvements to the API / GUI design, for next 12 months.	
Action 7/1	IHO Secretariat suggested setting up an IHO Marine Geospatial Information (MGI) portal, which is under consideration to set up, within the MSDI Working Group to connect between two systems, where the MGI portal would display the data from the S-131 database. <b>GM</b> would share this information with the <b>Lab S-131 PT</b> for their consideration and report the update at the next GB meeting.	
	<b>GM</b> sought the <b>Meeting's</b> guidance on addressing the <b>Lab S-131 PT's</b> proposal on how to publicize the project in order to garner interest in the project and attract more ports to participate. <b>Chair</b> commended involving the IHO communications team for this purpose, while the <b>HSSC Chair</b> suggested that the International Harbour Masters' Association (IHMA) that would be meeting in Rotterdam later this	

	year could serve as a good starting point. <b>HSSC Chair</b> suggested creating a brief pitch, including the current number of ports. <b>GM</b> mentioned ports currently include Canada, Norway, and Singapore. <b>GM</b> proposed that this effort be coordinated through the IHO Secretariat.	
Action 7/2	<b>Chair/HSSC Chair</b> to introduce the Lab S-131Project at the upcoming IHMA meeting in Rotterdam this year. Additionally, they report on this activity at next GB meeting.	
Action 7/3	<b>GM</b> shared that the <b>Lab S-131 PT Lead Sarah (CHC)</b> would collate findings/results and submit a result report to the Governing Board Members for approval. Upon approval, the project would be concluded. However, the server housing the S-131 information would continue to be maintained by the IHO-SG Lab for a period of 3 years.	
GBM07-2c	Portrayal of S-102 with S-101 on an S-100 compatible ECDIS	
	<b>GM</b> updated that an analysis on the impact of bathymetric data obtained at various frequencies for S-102 product had been completed. The observed disparities were found to be minimal and unlikely to affect navigational efficiency or safety for depths up to 30 metres at the appropriate chart scales.	
	<b>Lab S-102 PT</b> had also created S-102 dataset from .BAG file using the S-100py script, for the next phase of testing. <b>GM</b> shared KRISO workload this year had been tight, and this could cause delay in the project.	
	<b>IHO Secretariat</b> commended the testing of certain resolution at certain areas and ports. <b>HSSC Chair</b> shared that the Baltic region has been conducting testing on S-101 and S-102 for the harmonization of these standards. This involves determining the most suitable resolution for different areas, such as 2m resolution for ports, 4/8m for approaches/fairways, and 16/32m for further out areas.	
Action 7/4	<b>IRCC Chair</b> mentioned that the BSH (Izzy KIM) is a coordinator for this Baltic project. <b>GM</b> would contact her to share the work carried out so far in order not to duplicate efforts.	
Decision 7/3	Meeting approved this phase of the project and confirm to proceed accordingly.	
GBM07-2d	Demonstrate availability of Dual Fuel ENCs (S-101/S-57) in S-100 ECDIS along major shipping routes	
	<b>GM</b> shared that since GBM06, software OEMS such as CARIS, Esri and 7Cs had been supporting MSS-ENC WG for Phase 1.	
	The First Harmonisation Workshop for MSS-ENC WG, 11 June to 13 June 2024 would be held in Singapore. The key objectives of the Harmonisation Workshop are to review both the S-57 and the converted S-101 datasets, and to discuss issues and findings from the conversion efforts and validation tests. The proposed Workshop will be held in-person as it involves technical works to harmonise the adjoining ENCs produced by Indonesia, Malaysia and Singapore.	
	A Second Harmonisation Workshop to be hosted by <b>Japan Hydrographic Association</b> ( <b>JHA</b> ), 30 July to 1 August 2024 in Tokyo, Japan. 2 sea demonstrations in the Straits of Malacca and Singapore (SOMS) have been planned for August and end-September. The objective is to test the dual fuel ENCs, but details of the schedules are still being finalised.	
Action 7/5	For Phase 2, <b>GM</b> shared that the project had gathered support during HSSC-16 from many MSs, such as AHO, UKHO, US NOAA, Japan, India, Indonesia and Malaysia to provide their dual fuel ENCs. <b>GM</b> added that even if there were no S-101 ENCs available, the S-100 ECDIS reading S-57 ENCs would still be valuable.	
Action 7/6	<b>Chair</b> suggested the use of social media for the publicity efforts and for the <b>GM</b> to propose a few publicity methods to the GBM.	

	Chair mentioned that the Italian Navy would be open to invite observers onboard "AMERIGO VESPUCCI", where convenient.  GM mentioned that the latest project proposal had been submitted to the Governing	
Decision 7/4	Board, with the latest route and schedule of the "AMERIGO VESPUCCI". <b>Meeting</b> approved this phase of the project and confirm to proceed accordingly.	
GBM07-3	Potential project / proposal	
GBM06-3a	Explore how to integrate sea and land datum for monitoring of possible rise/fall of sea level	
	<b>GM</b> mentioned that the project would be aligned to the proposal to develop a Guidance Document on Used Cases under the UN-GGIM Expert Meeting of the Working Group on Marine Geospatial Information (WG-MGI) and Integrated Geospatial Information Framework (IGIF).	
	<b>GM</b> added that the outcome from this project would be part of a WG-MGI "Guidance Document" of use cases, such as Baltic, Pacific Islands, Singapore, etc.	
	<b>HSSC Chair</b> shared that <b>S-100 WG Chair</b> discussed the inclusion of references to the ellipsoid in the future S-100 Edition 6.0.0 reference system. This pertains to the internationally accepted vertical framework, which has a universally agreed common interpretation.	
	Chair and GM mentioned that GeoScience Nick Brown would be attending the next UN-GGIM meeting in August, and would seek his inputs.	
Action 7/7	GM would update on submission of Proposal, Part 2.	
GBM07-4	Any other business	
	<b>Chair</b> asked if there had been any interests from the IRCC. <b>IRCC Chair</b> mentioned a discussion would be held with the subordinate bodies, but no request had been made from the regions as of yet.	
Decision 7/5	<b>GM</b> updated that there were no further interests arising from the eRacon project <b>Meeting</b> agreed to close this item.	
Decision 7/6	<b>GM</b> updated that there would be benefits to continue conversations on the wider use of S-100 products with other working groups. <b>Meeting</b> agreed to leave this item open and will review it again at the next GB meeting.	
	<b>GM</b> shared that IHO-SG Lab intends to participate at the Second IHO/IALA Workshop in September 2024, including a planned visit to National Oceanic and Atmospheric Administration (NOAA) to explore possible joint projects.	
GBM07-5	Next meeting (Venue and Date)	
Decision 7/7	<b>Meeting</b> discussed possibilities to hold the 8th Meeting of GB (VTC): whether after IHO 8 <sup>th</sup> Council Meeting in Monaco (15 to 17 October 2024), or after S100WG9 in Genoa, Italy (4 to 8 November 2024). Date/time/venue to be confirmed at a later date and circulated.	

## **List of Participants**

- John Nyberg (@iho.int) : Chair [in-person]
- Thomas Dehling (thomas.dehling@bsh.de): IRCC Chair [VTC]
- Parry Oei (parry\_oei@mpa.gov.sg) : **General Manager** [in-person]
- Yong Baek (yong.baek@iho.int) **Secretariat** [in-person]
- Magnus Wallhagen (magnus.wallhagen@sjofartsverket.se) : **HSSC Chair** [in-person]
- Thomas TING (thomas\_ting@mpa.gov.sg) : **Governing Board Member** [VTC]
- Nathalie Leidinger (nathalie.leidinger@shom.fr): HSSC Vice-chair, Observer [in-person]
- Lee Weng Choy (lee\_weng\_choy@mpa.gov.sg) : Observer [in-person]
- Victor Sim (victor\_sim@mpa.gov.sg) : Observer [VTC]
- Kok Liling (liling\_kok@mpa.gov.sg) : **Observer** [in-person]