

23rd Conference of the Mediterranean and Black Seas Hydrographic Commission (MBSHC), hybrid event Ljubljana, Slovenia + VTC, 29 March – 1 April 2022

The 23rd Conference of the Mediterranean and Black Seas Hydrographic Commission (MBSHC) was held in Ljubljana, Slovenia, from 29 March to 1 April, as a hybrid event. The Conference was chaired by Captain José Daniel Gonzalez-Aller Lacalle, Director of the Instituto Hidrográfico de la Marina (IHM), the Spanish Hydrographic Office. A total of 75 registered participants from 17 Member States of the MBSHC (Algeria, Bulgaria, Croatia, Cyprus, Egypt, France, Georgia, Greece, Italy, Lebanon, Malta, Morocco, Romania, Slovenia, Spain, Tunisia, Turkey), and three Associate Members (Israel, United Kingdom and United States of America) attended the Conference, together with five Observers (Albania, the two Regional ENC Coordinating Centres (RENC) IC-ENC and PRIMAR, the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA), the Mediterranean Scientific Commission (CIESM)), and stakeholders from industry (Fugro, GeoAcoustics, iXblue, Kongsberg Maritime, and SevenCs). The IHO Secretariat was represented by Director Luigi Sinapi and Assistant Director Yves Guillam.

1. Opening and Administrative Arrangements

1.1 Opening Address (Chair, IHO Director, Host authority)

The CHAIR welcomed all the participants and expressed appreciation for their continued efforts on improving the safety of navigation in the Region, particularly in these times of war, conflicts and pandemic. The CHAIR expressed his deep gratitude to the Host for organizing the Conference.

The IHO Director congratulated the Host for the outstanding arrangements for the Conference, offering many opportunities for the delegates physically present to exchange views directly. He greeted all the participants, those present in person and those attending via VTC. He also thanked SPAIN as Chair for allowing the regular continuation of the MBSHC work.

The IHO Director, noting the ongoing situation in the Black and Azov Seas, invited the MBSHC to carefully monitor the situation in eastern part of the Region in order to contribute to the safety of navigation and safeguard the protection of the environment. The IHO Director outlined the most important topics to be addressed during the Conference, and emphasized major challenges in view of the upcoming 3rd Session of the IHO Assembly planned for April 2023: to update the MBSHC Statutes and the Terms of Reference and Rules of Procedure of the Region F Cartographic Coordination WG, and consider the appointment of the Regional Cartographic Coordinator for the S-100 together with that of the Region F Coordinator.

The Conference was opened, on behalf of the Host, by Mr Srečko Janša, Director General of Navigation and Maritime Transport of Slovenia, who welcomed all attendees, and stressed the importance of cooperation between hydrographic offices in the Region and broader. He congratulated Slovenian, Croatian and Spanish hydrographic offices on their important anniversaries in 2022 (25 years of the Slovenian HO and 20 years of its full IHO membership, 30 years of the Croatian HO, 225 years of the Spanish HO). He also took the opportunity to summarize achievements of the Slovenian Hydrographic Office so far.

1.2 Administrative Arrangements

*Docs: MBSHC23-01.2A
MBSHC23-01.2B*

*List of Documents (Chair)
List of Participants (Chair)*

The CHAIR introduced a presentation on administrative arrangements.
All participants introduced themselves at the request of the CHAIR.

1.3 Confirmation of Vice-Chair and Arrangements for Secretariat of 23rd Conference

Doc: MBSHC23-01.3 MBSHC CL 08/21

Following the decisions of the MBSHC22, SPAIN continued as Chair of the MBSHC. As regards the position of Vice-Chair, in September 2021 Ms Vinka Kolić, Director of the Hydrographic Institute of the Republic of Croatia, informed the IHO Secretariat and the MBSHC Chair that CROATIA could take over the role of Vice-Chair if there was no other candidate, and by MBSHC CL 7/21 the process to present candidatures was opened. Subsequently, as no other candidate came forward, CROATIA was appointed to the post of Vice-Chair. The CHAIR thanked CROATIA and acknowledged this position. As per the current MBSHC Statutes, CROATIA will become Chair at the end of this Conference, and SPAIN will prepare decisions and actions taken during this Conference. CROATIA will mail a copy of the minutes to the Members for comments. The CHAIR recalled that by the end of the meeting one Member State had to present its candidature for the post of Vice-Chair, while designation of the host would be put forward for consideration. The two roles could be possibly joined.

1.4 Approval of the Agenda

Docs: MBSHC23-01.4 Agenda and Timetable

The CHAIR summarized the Agenda, which was subsequently approved by the Conference.

2. MBSHC Administration

2.1 Chair's report

Docs: MBSHC23-02.1 Chair's report

The CHAIR presented a report on MBSHC activities since its 22nd VTC Conference in 2021, focused on membership, corporate affairs, HSSC, and Inter-Regional Coordination and Support. Highlights of the Chair's perspective were promoting coordination between Member States, concentrating efforts to solve issues of regional ENC coverage and maintenance, and promoting Capacity Building initiatives. Finally, the CHAIR provided a general review of main subjects, covering issues that were not resolved during the last VTC meeting: Chair continuity, solutions for MBSHC relevant posts vacancies, approval of Statutes and Terms of Reference of the ICCWG. IHO stressed the importance of what was discussed during the last WENDWG 12, about possible nomination within the regions of S-100 Coordinator, in view of implementation of the S-100 Roadmap, and underlined the importance of having a new figure within the region as ICCWG Coordinator.

2.2 Matters arising from Minutes of the 22nd MBSHC Meeting

Docs: MBSHC23-02.2A Minutes of MBSHC22
MBSHC23-02.2B Status Report on the MBSHC22 Action List

The CHAIR presented the Minutes of MBSHC22, outlining the background, highlights, and revision of MBSHC22 actions. Highlights of MBSHC22 were welcoming Lebanon as new MS, vacancies on MBSHC, and matters related to ICCWG. The CHAIR reviewed the Action List from MBSHC22, divided into three sections: permanent actions (39), list of completed (9) and ongoing (12) actions, and decisions (11). No comments were raised.

2.3 Review of MBSHC Statutes

Docs: MBSHC23-02.3

The CHAIR presented a review of the MBSHC Statutes. He reported that the Working Group was created for this matter according to Decision MBSHC22/10. The Working Group prepared the draft of the proposed revision of the Statutes to consider the application of the revised IHO Resolution 2/1997. The draft was circulated to members, showing alternate texts to Article 4 (Voting), as proposed by TURKEY, and Article 7 (Conduct of MBSHC Conference), as proposed by GREECE. GREECE clarified their point of view regarding Article 7 and disagreed on alternate text proposed by TURKEY for Article 4. TURKEY commented on Article 7 and disagreed on alternate text proposed by GREECE. No more comments were raised. The draft text of the Statutes was put to the vote. As there was no disagreement, the new Statutes of the MBSHC as proposed by the Working Group was accepted, to enter into force at the end of the meeting. FRANCE offered its support to the IHO Secretariat to translate the newly approved version of the Statutes into French.

2.4 Review of Region F ICCWG ToRs & RoPs

Docs: MBSHC23-02.4

The CHAIR reported that the second priority of the same Working Group was the revision of Terms of Reference and Rules of Procedure of the Region F ICCWG. The proposal was to amend the ToRs & RoPs currently in force to conform to the format established in the IHO publication S-11. The CHAIR put forward for discussion two proposals regarding continuation of the task of revision of the ToR: to pass this task to the ICCWG or to create a new WG in accordance with the IHO S-100 Implementation Strategy. GREECE commented that the current ToRs were a good starting point, and supported the action to pass this task to the ICCWG. FRANCE concurred. IHO supported the idea of tasking the ICCWG with the revision of ToRs, but suggested to provide some guidance in order to manage a heavy workload on this WG (INT charts, ENCs, development of the coordination of capacities under the S-100 framework) and instruct the ICCWG whether to include within their scope the S-100 Roadmap or these tasks could be separated.

FRANCE suggested to decide first whether to start from the existing ToRs or from the S-11 template. GREECE agreed. TURKEY supported the idea of starting from the draft version of S-11, and suggested to include the duties of the S-100 Roadmap. The proposal to start from the current version of ToRs was put to the vote. As there was no disagreement, the proposal was accepted. Then the proposal to pass this task to the ICCWG was put to the vote. As there was no disagreement, this proposal was also accepted.

US requested clarification on whether there was a recommendation to include S-100 within the scope of ICCWG. The CHAIR proposed that the issue of guidance be addressed later, before the end of the meeting.

IHO stressed the importance of the Commission providing guidance about the role of S-100 Coordinator in the future, deciding between two options, whether as expansion of the current role of international chart coordinators (ICC) or creation of a new function. LEBANON disagreed on the idea to expand the role of ICC, due to its complexity, and suggested that other solution should be found. IHO agreed that expanding of the scope of ICC would be quite challenging and suggested that some guidance be provided. TURKEY suggested that the role of ICC be expanded just for S-101 charts and that a different Coordinator be designated for the S-100 based products. FRANCE proposed to provide guidance to the MBSHC on how to deal with S-100 implementation in the Region, including the proposal on revising the governance of the ICCWG to consider S-101 coordination. The CHAIR proposed that recommendations on the issue of guidance be emailed during the meeting and sent to the MBSHC Members.

2.5 Black and Azov Seas Working Group – BASWG

Docs: MBSHC23-02.5 Report of BASWG

TURKEY as Chair of the Black and Azov Seas Working Group presented a short report of the BASWG, providing highlights of the recent BASWG16.

3. IHO Work Programme 1 – “Corporate Affairs”

3.1 IHO Secretariat Report

Docs: MBSHC23-03.1 IHO Secretariat’s Report

IHO presented the report prepared by the IHO Secretariat on activities that may impact the work of MBSHC, focused on the status of IHO Membership and Regional Applications for the IHO Membership, the 5th IHO Council Activities, INT Chart and ENC production coordination in Region F, Capacity Building Programme, Maritime Safety Information Services, Crowdsourced Bathymetry, GEBCO Support through Seabed 2030, IHO GIS and Databases, and IHO Outreach. GREECE objected to the decision of the Secretariat to keep the Aegean Sea “blanked” in S-11 Part B until a global and mutual agreement be reached by interested parties, which had not been approved by the MBSHC. GREECE recalled that they delivered a reservation by letter dated 22 December 2021 and a letter dated 18 March 2022, and invited the Secretariat to restore the status as it was before 14 February 2022. IHO replied that the issue was taken into consideration and that the situation in the region was affected by reasons other than technical ones, and expressed readiness to implement the situation as soon as the two parties agreed.

3.2 Cooperation with European Union (EU)

Docs: MBSHC23-03.2 IHO-EU Network WG Report (IENWG)

GREECE presented a report on the IHO-EU Network Working Group (IENWG) activities during the reporting period, highlighting the main projects and initiatives: Coastal Mapping, European Ocean Observation System (EOOS), European Marine Observation and Data Network (EMODNet), Maritime Spatial Planning (MSP), EU Directive on Public Sector Information. As for this last point, GREECE raised concerns about the list of High Value Datasets, still pending adoption, and expressed hope that ENCs and nautical charts would be excluded from High Value Datasets. The CHAIR referred a question from IC-ENC to the IENWG Coordinator asking about the timeline for the decision on whether or not the ENCs would

be included in the European list of High Value Datasets, and how long European HOs should implement these in their national processes. GREECE replied that no information was available, and emphasized the position of the Working Group that ENC's were not data but products containing intellectual rights. FRANCE commented on the Maritime Spatial Planning, highlighting the Mediterranean area as the leader for this task. FRANCE also drew attention to the importance of the 10th anniversary of the IHO-EC MoU in Brussels. IHO confirmed that the IHO Secretariat would be present at this important celebration and invited all the European Member States to attend.

3.3 Cooperation with the Mediterranean Science Commission (CIESM)

Docs: MBSHC23-03.3 CIESM Activities that may affect MBSHC

CIESM presented the joint IHO/CIESM initiative Mapping Marine Geological Risks in the Mediterranean Region. IHO reminded that in March 2021 the MoU was renewed to be updated with current global initiatives for the oceans, and that the IHO worked closely with the CIESM. IHO invited all the Member States of the Commission to participate in this development. FRANCE stressed the importance of tide-gauge reporting in real time for the tsunami warning, and took this opportunity to identify the problem of lacking the tide-gauge reporting in real time on the north coasts of Africa. TURKEY stressed the importance of managing disaster hazards in the region, and underlined the need for circulations models based on high-resolution bathymetric data, and announced the workshop on disaster response to take place in 2023.

3.4 Cooperation with International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA)

Docs: MBSHC23-03.4 IALA Activities that may affect MBSHC (IALA)

IALA gave a presentation on goals, standards, committees, and obligations of IALA, as well as on the role and tasks of the IALA World-Wide Academy. The Academy specifically addresses capacity building and sharing of expertise with the whole world. It aims to ensure that all coastal states can fulfil obligations related to marine aids to navigation placed upon them in SOLAS. The IALA World-Wide Academy conducts training programmes, technical missions, and risk management training. IALA also reported on the renewed IMO VTS Guidelines, and encouraged all Member States to ratify the IALA Convention aiming to transform IALA from a non-governmental association to an inter-governmental organization. IHO underlined the importance of cooperation between the two organizations.

3.5 Cooperation with Intergovernmental Oceanographic Commission (IOC)

Docs: MBSHC23-03.5 IOC general activities that may affect MBSHC (IOC)

No report from IOC was received.

4. IHO Work Programme 2 – “Hydrographic Services and Standards”

4.1 HSSC Activities that may affect MBSHC and S-100 Roadmap

The MSBHC Chair will provide a short overview of HSSC activities.

Docs: MBSHC23-04.2

The CHAIR provided a presentation on HSSC activities, announcing the forthcoming HSSC 14 Meeting in May in Bali (Indonesia) together with the main points to highlight. Then the CHAIR introduced a comprehensive presentation on the S-100 Roadmap (2020–2030). This task comprises a transition plan aiming to the regular and harmonized production and dissemination of S-100 based products, and includes the engagement with the IMO to regularly update on the status of S-100 framework and potential future impact on IMO instruments. IHO emphasized the importance of issues to be discussed at the HSSC 14 Meeting, as very important standards will move to another edition level, and encouraged Member States to participate. IHO strongly recommended reading the documents and presentations available on the HSSC 14 web page.

5. IHO Work Programme 3 – “Inter-Regional Coordination and Support”

5.1 Inter-Regional Coordination Committee (IRCC)

The MBSHC Chair will provide a short overview of IRCC activities and report on the outcomes of the IRCC13 meeting.

Docs: MBSHC23-05.1

The CHAIR provided a short review of IRCC activities and reported on the outcomes of IRCC13 meeting, including recommendations for the MBSHC. The CHAIR also provided an overview of IRCC 2021 Workshop on IHO Strategic Plan, and informed of the forthcoming IRCC meetings. No comments were raised.

5.2 Cooperation with Member States

5.2.1 IHO Membership

The IHO Secretariat will provide an overview on the status of IHO Membership within the region.

IHO provided an overview of the IHO membership within the region. Three Member States (Albania, Israel, Libya) are still non-members of the IHO. As admission of Albania has been approved by the Albanian Parliament, after depositing the documents Albania will become the 98th Member State of the IHO. Two Member States were suspended (Serbia and Syria). As links with Syria restarted in 2021, IHO expressed confidence to have Syria again among the IHO membership. IHO invited Albania to sign the MBSHC Statutes at the end of the meeting in order to become Full Member. ALBANIA expressed readiness to fulfil all membership-related obligations after consultations with the head of Albanian HO.

5.2.2 Lebanon National Report

Docs: MBSHC23-05.2.2

LEBANON reported on achievements of the LNHS in the field of maritime safety, hydrographic surveys and cartography, highlighting accomplishment of the Cartographic Plan in co-production with IIM (Italy), establishment of the National Hydrographic Coordination Committee, the IALA Technical Visit in August 2021 providing opportunity for Lebanon to activate its membership in IALA as well as to cooperate with maritime stakeholders. LEBANON also acknowledged assistance provided by the Turkish and US hydrographic services, and by the IIM, which offered their hydrographic ships to survey unsurveyed

Lebanese waters. LEBANON noted that LNHS planned to become the primary chart authority for its waters following a transition phase with SHOM to be developed, and also expressed willingness to cooperate with UKHO either in IC-ENC matters or chart reproduction.

5.3 Activities of WENDWG

WENDWG12 Outcome, and Actions and Decisions that may affect MBSHC

Docs: MBSHC23-05.2

SPAIN provided a presentation on the outcome of the 12th WENDWG meeting in February 2022, and actions and decisions that may affect MBSHC, focused on overlap in ENC coverage, dual standards regarding the transition from S-57 to S-101 ENCs, and key role of the RHC for harmonized production and distribution of future S-100. SPAIN also reported on the modernized World Port Index (WPI) Database. IHO reported on the new version of additional layers in INTogIS in Catalogue S-11 providing a worldwide coverage of global marine traffic density services, and thanked US (NGA) for their support, particularly in WEND. As the most important action, IHO highlighted the S-100 Implementation Roadmap, and stressed crucial role of RHCs in this development. IHO together with WENDWG is preparing a matrix to help RHCs in developing a pathway for the production and distribution of S-1XX products. The WENDWG Chair commended the MBSHC for their commitments and supported the comments provided by IHO. FRANCE, referring to the question on how to ensure an adequate worldwide coverage of at least the most important S-1XX products for route monitoring in the near future, stated that their point of view was to separate the issue of shifting from S-57 to S-101 from the rescheming issue (if decided). IHO provided clarification emphasizing the value of S-100 Framework for all uses and purposes, which required collective efforts at national, regional and IHO levels. US commented on the issue of rescheming and Global Common Grid System, to stress the importance of setting a goal for the future that would then allow all nations and all commissions to strive for a common ENC state.

5.4 Regional ENC Coordination Centre (RENCs) Operations

5.4.1 IC-ENC presentation

IC-ENC will provide presentation of their activities since MBSHC22, and of the evolution of their strategies, if any.

Docs: MBSHC23-05.4.1

IC-ENC provided a presentation on their services and activities and reported on new developments, highlighting the new ENC service “success measures” and evolution of IC-ENC services for the S-100 era.

5.4.2 PRIMAR presentation

PRIMAR will provide presentation of their activities since MBSHC22, and of the evolution of their strategies, if any.

Docs: MBSHC23-05.4.2

PRIMAR provided a presentation on their services and activities and reported on their Training Portal.

The CHAIR then introduced industry presentations by Fugro on the Digital Technologies for High Speed Hydrography and by Kongsberg Maritime on the Seafloor Information System.

5.4.3. Urgent Region F ICCWG decisions

Doc: MBSHC23-5.4

SPAIN as ICCWG Coordinator per interim and for most urgent and relevant matters provided a presentation on Region F ICCWG7 Decisions, underlying as the most urgent matters: Greek proposal for 8 INT charts and application for Regional Cartographic Coordinator (RCC) of Region F. SPAIN also reported on the status of ENCs coverage and Region F overlap assessment, and referred to the issues addressed in ICCWG Region F Circular Letter 01/2022. The CHAIR opened the discussion on FICCWG7 Decisions, Action required of the MBSHC, points b) and c). GREECE, concerning the “blank” area in the Aegean Sea, reiterated its previous statement and invited the IHO Secretariat to restore the status before 14 February 2022. As for the Greek proposal for 8 INT charts, GREECE made a comment on Aegean Sea being not a disputed area and invited everyone to endorse and approve the Greek proposal because there was no technical argument against these charts. TURKEY commented on the issue of “blank” area, and reminded that any proposal brought to the MBSHC without full consensus among the ICCWG was invalid. TURKEY also stated that this issue should not be brought up for discussion before the MBSHC but should be solved bilaterally. TURKEY opposed to the Greek proposal for 8 INT charts, reiterating their point of view as expressed in their official letter. The CHAIR invited GREECE and TURKEY to reconsider this issue during the ongoing meeting and come up before the MBSHC with an agreed position. In support of this suggestion, IHO confirmed that the “blank” area in the Aegean Sea would be restored to the scheme as per 14 February 2022. FRANCE commended SPAIN for covering the role of ICCWG Chair, and called upon ICCWG members to take into account purely technical approach when making decisions. The CHAIR noted that the list of approved changes and chart proposals will be annexed to this report.

5.5. Election of Region F ICCWG Coordinator

The CHAIR gave a short presentation on Election of Region F ICCWG Coordinator. As at the moment there was no candidate for this post, the CHAIR suggested to consider different options and present them on the last day of the meeting to be put to the vote. TURKEY suggested to present the options forthwith and proceed with voting if there were candidates. In compliance with the discussions during agenda item 2.4, FRANCE presented two decisions and associated actions which were proposed to ease the difficult task of the Region F ICCWG, following up on the WENDWG recommendations and in view of the S-100 Implementation Roadmap. TURKEY supported the proposal. GREECE also supported and offered participation. SPAIN proposed to create a team as Coordinator rather than assign this task to one person. The CHAIR noted that different options and candidates will be presented under agenda point 8.3 and put to the vote. GREECE and TURKEY, being two candidates for the post during the meeting, agreed on assuming the role for a two-year period following one another, starting with GREECE.

5.7 GEBCO Seabed 2030 Project / Crowd-Source Bathymetry Activities

GEBCO/Seabed 2030 Project/Crowd-Source Bathymetry Activities

Doc: MBSHC23-5.7

LEBANON as the GEBCO Seabed 2030 / CBS Ambassador provided a presentation on the latest developments of the Nippon Foundation – GEBCO Seabed 2030 Project and on the IHO Crowdsourced Bathymetry Initiative. LEBANON noted the activities of the IHO CSB Working Group and the involvement of national hydrographic offices. The CHAIR informed that Spain started collaboration on the GEBCO Seabed 2030 Project by contributing data from their research vessels engaged in Antarctica. LEBANON encouraged all countries in the Region to contribute CSB data. IHO reminded of the new draft of IHO B-12 prepared at the last CSB12 Working Group to be presented to IRCC14 for endorsement and circulated to IHO Member States for approval.

5.8 Maritime Safety Information (MSI)

Report of NAVAREA III

Docs: MBSHC23-05.8

SPAIN as the NAVAREA III Coordinator reported on MSI activities and developments within the MBSHC region, and finally presented the current MSI situation in the Black and Azov Seas.

5.9 Maritime Spatial Data Infrastructure (MSDI)

Report of MSDI WG

Docs: MBSHC23-05.9

ITALY as the MSDI Ambassador reported on the role and tasks of the MSDI Ambassador and on the activities of MSDI Working Group. The report highlighted the UN initiative IGIF (Integrated Geospatial Information Framework), strongly related with MSDI activities, the application of IGIF to marine geospatial information, and the creation of a matrix between C-17 and IGIF principles. IHO encouraged the IRCC to support MSDI initiatives not only for the MBSHC but for all regional hydrographic commissions.

5.10 Capacity Building (CB)

Docs: MBSHC23-05.10.1 CB Report

MBSHC23-05.10.2 3-year MBSHC CB Plan

TURKEY as the Regional CB Coordinator gave a presentation on Capacity Building activities that took place in 2021 and reported on the outcomes of the MBSH CB Plan 2021. TURKEY noted that due to COVID-19 restrictions the workshop on Cartographic Data Management was carried over to 2022. TURKEY acknowledged that UK provided support by offering three online courses. TURKEY also presented the three-year CB Work Plan (2022–2024). For 2024, TURKEY suggested technical visits to Lebanon and Albania, and encouraged Member States to provide feedback on their needs. IHO reminded that the new CB Work Plan 2022 with a new set of priorities, to be definitely approved during the next CBSC20 Meeting in Bali, is available on the web page. The activities highlighted in green refer to the MBSHC region. UK invited Member States to consider nominating candidates for the GEOMAC course advertised in CL 08/2022 and closing on 15 April 2022. IHO referred to what was indicated in CL 08/2022, and acknowledged UK for their efforts to provide suitable facilities and courses. The Chair commended the work conducted by the Regional CB Coordinator and UK for all courses and activities conducted this year.

6. Other issues

6.1 SPI

Docs: MBSHC23-06.1

The CHAIR reported on the Procedure to Measure the Strategic Performance Indicators (SPI) allocated to RHCs. The Strategic Performance Indicators are envisaged as simple figures to measure the progress towards the targets identified under three IHO Strategic Plan goals. The CHAIR encouraged all Member States to attend the second IRCC Workshop on the IHO Strategic Plan (via VTC in April 2022) to deal with SPI and to think about simple figures for SPI of the Region. FRANCE suggested that the concept of each SPI allocated to IRCC should be clarified first in order to avoid ambiguity. IHO commented that the Secretariat, trying to approach the problem of measuring SPI, after internal brain storming process, prepared a set of proposals for each SPI, to be presented at the next IRCC Workshop. The approach is based on simplicity and use of existing digital tools available at the Secretariat. The proposals will be open for discussion, and the decision will be communicated to Member States. IHO expanded on some technical constraints the Secretariat encountered in preparing these proposals. IHO informed about experimenting on some potential metric solutions in cooperation with RENCs and benefitting from the actions carried out by the Data Quality Working Group. IHO noted that the set of proposals would include some preconditions as to authorizations given by Member States for using CATZOC values. The IHO Secretariat encouraged Member States to participate in the upcoming IRCC workshop. ITALY as the MSDI Ambassador underlined the importance of discussion in dealing with strategic considerations. ITALY also confirmed their attendance at the next IRCC Workshop.

6.2 Disaster Response Framework update

Docs: MBSHC23-06.2

The CHAIR provided a short presentation on the Disaster Action Plan for MBSHC. The consolidated Draft Disaster Action Plan was put forward for approval by the MBSHC. As there was no disagreement, the text of the Disaster Response Framework was approved. The CHAIR took note of the possible need of revision, and also noted the action to put the Disaster Response Framework on the web.

Industry Presentation

The CHAIR introduced industry presentation by SevenCs on the S-100 Validation.

Industry presentations by iXblue and GeoAcoustics were switched to the last day of the Meeting. iXblue gave a presentation on the Remote Hydrography Concept. IHO thanked iXblue for their outstanding support during the celebration of 100 years of the IHO which was held in Monaco in 2021. iXblue also announced the Hydrographic Conference HYDRO22, organized by the Francophone Hydrographic Society under the patronage of the IFHS, to take place in Monaco in December 2022, and encouraged everyone to attend.

GeoAcoustics gave a presentation on the Potential of Artificial Intelligence in Phase-Measuring Bathymetric Sonar Data Processing.

7. Any other business

US addressed the issue of the future of paper charts, and informed of the new process implemented at the NGA in order to re-envision the entire infrastructure for the product and the update to make it simplified and automated without impact on the production inside the Office. US gave a presentation on the NGA developing Chart on Demand Capability and the new product called CPENC (Certified Printed ENC). IHO commented on other such initiatives, and informed Members of the paper submitted by the NOAA, for consideration by the HSSC, to provide guidelines for ENC derived paper charts.

US highlighted the position of NGA on this issue, which was to follow the advice of the Nautical Cartography Working Group and not create a new standard for ENC derived paper charts.

8. Closure

8.1 Date and Venue of the Next Meeting

The date of the next Meeting needs to be considered taking account of the IHO Calendar, and proposed in CL. Everyone agreed that face-to-face meetings should be given priority, while intermediate VTC meetings could be arranged only if necessary. As there were no candidates for hosting the next meeting, it was agreed that the MBSHC Chair would ask for candidatures by CL.

8.2 Review of Actions, Decisions and Recommendations

The CHAIR presented a provisional list of Decisions, Actions, and Recommendations, to be circulated for comments and amendment. GREECE objected to the wording of Action MBSHC23/17 and asked for clarification. The CHAIR also presented the updated list of Permanent Actions.

8.3 Designation of MBSHC Representatives

Both GREECE and TURKEY offered their candidatures for the Region F ICCWG Coordinator. Following the proposal by FRANCE, it was agreed that one should be designated as Region F ICCWG Coordinator and the other as Vice-Coordinator on a rotating basis for a period of four years, two years each. After a short discussion between GREECE and TURKEY it was agreed that GREECE would go first as Coordinator and TURKEY as vice-coordinator and then the other way around in two years.

MALTA raised some concerns due to the absence of policies, precise terms of reference, and clarity of objectives and timelines for the S-100 issue and its coordination with the current tasks of Region F ICCWG. This is particularly relevant for those hydrographic offices that are weakly staffed. FRANCE provided a clarification on the necessity to create a new S-1XX working group and proposed common meetings for the two working groups to make it easier for those hydrographic offices that were weakly staffed. The MBSHC agreed to create a S-1XX WG, and the CHAIR noted the action to issue a CL describing the main objectives of this WG and calling for applications for membership and chairpersonship.

Furthermore, as there were no candidates for the position of MBSHC Vice-Chair, it was agreed that the designation process would be opened by CL.

8.4 Transfer of Chairmanship

The CHAIR handed over the MBSHC chairmanship to CROATIA to preside over the Commission until MBSHC24 inclusive. CROATIA as the new Chair congratulated SPAIN for their great work as the Chair of the MBSHC since the end of Conference MBSHC21 (2019).

8.5 Closing remarks (End of Conference)

The CHAIR provided the closing remarks of the Conference, congratulating the Host for excellent organization of the Conference and thanking all attendants for their participation. IHO expressed appreciation for the successful hybrid event and thanked all participants, especially Spain for allowing the work of the Commission to continue.

The Conference was closed by Ms Vinka Kolić, Director of the Hydrographic Institute of the Republic of Croatia, as the new Chair of the MBSHC.