

**3<sup>rd</sup> SESSION OF THE IHO ASSEMBLY****Monaco, 2–5 May 2023****REPORT OF THE MEDITERRANEAN AND BLACK SEAS HYDROGRAPHIC  
COMMISSION (MBSHC)**

1. **Chair:** Vinka KOLIĆ, Croatia, from April 2022

**Vice-Chair:** Capt. Nicolae VATU, Romania, from September 2022

2. **Membership:**

**Members:** Albania, Algeria, Bulgaria, Croatia, Cyprus, Egypt, France, Georgia, Greece, Italy, Lebanon, Malta, Monaco, Montenegro, Morocco, Romania, Russian Federation, Serbia (suspended), Slovenia, Spain, Syria (suspended), Tunisia, Turkey, Ukraine.

**Associate Member(s):** Israel, Palestinian Authority, United Kingdom, United States of America.

**Observers:** CIESM, Germany, IALA, IC-ENC, IOC, PRIMAR.

3. **Meetings:**

- 22<sup>nd</sup> MBSHC conference – VTC event, 27–28 May 2021
- 23<sup>rd</sup> extraordinary MBSHC conference – Ljubljana, Slovenia, 30 March–1 April 2022

Due to the Covid-19 pandemic, MBSHC22 was organized as a VTC event and MBSHC23 was organised as hybrid event according to MBSHC CL 03/2022.

4. **Agenda Items:**

**International Charting Coordination WG for the charting region F (F-ICCWG)**

Position of the Region F Coordinator was vacant after MBSHC22 (May 2021) when Italy resigned as Region F ICCWG Coordinator. In the meantime, two CL were issued calling for nominations for the position of the Mediterranean and Black Seas (Region F) International Charting Coordinator (ICC) – CL 03/2021, 06/2021. Spain in the meantime performed as acting Coordinator for urgent and relevant actions related to cartography coordination in the region.

During the 23<sup>rd</sup> Conference of the Mediterranean and Black Seas Hydrographic Commission, Greece and Turkey offered their candidatures for the Region F ICCWG Coordinator. It was agreed that Greece would be designated as Region F ICCWG Coordinator and Turkey as Vice-Coordinator on a rotating basis for a period of four years, two years each (MBSHC 23/07).

Member States were asked for proposals about the future role that regional cartographic coordination might have in the coming years with the implementation of S-100 products and services regarding INT charts.

**Black and Azov Seas WG (BASWG)**

The main objectives of the WG shall be: 1) to coordinate the hydrographic, cartographic, navigational, and maritime safety information needs (MSI) and requirements of the States in the Black and Azov Seas, 2) to coordinate the actions & resolutions in the region in accordance with the outcomes of the

MBSHC meetings. Since A2 (11/2020), two VTC meetings were held (11.05.2021 BASWG15 and 01.03.2022 BASWG16). Turkey is the Chair of the Black and Azov Seas Working Group. The escalated tension due to the ongoing military confrontation in the region currently undermines the coordination between the Member States, especially 'ENC Overlap' issues have remained unresolved.

### **Cooperation with Member States**

The enlargement of the MBSHC membership is beneficial. The most significant achievement is that Lebanon became a new MS of the MBSHC from February 2021. Lebanon is a good example of improving capacities and its capabilities in Hydrography and Cartography, with the support of the Member States and IHO CB programmes. Lebanon also became MBSHC GEBCO/Seabed 2030/CSB ambassador.

Also, one of the significant issues was the incorporation of Albania as new 98th Member State of the International Hydrographic Organization. The IHO Secretariat was informed by the Ministry of the Foreign Affairs and Cooperation of the Government of Monaco that the Government of the Republic of Albania deposited its Instruments of Accession to the Convention on the IHO on 3 May 2022. During the MBSHC23, IHO invited Albania to sign the MBSHC Statutes at the end of the meeting to become Full Member of the MBSHC region. Albania is in the process of signing the MBSHC Statutes. Two Member States (Israel, Libya) are still non-members of the IHO and two Member States were suspended (Serbia and Syria).

Related to IRCC Recommendation 10, to apply Resolution 1/2005 in case of disasters occurred to support the affected States in their Regions, MBSHC created Disaster Response Framework and it was approved at the MBSHC23 (March 2022).

### **Maritime Safety Information (MSI)**

The NAVAREA III Coordinator for this region is Spain. The NAVAREA III Region covers the Mediterranean Sea from the meridian 005° 45' W, and the Black Sea, including the Azov Sea. Since May 2020, the NAVAREA III navigational warnings have been broadcast on SafetyNET II. Since last March, this NAVAREA III Coordinator centre has been broadcasting in training mode through the IRIDIUM service, using the SAFETYCAST platform. The coverage of NAVTEX stations in this region is satisfactory, and the coordination between contacts is effective. The MBSHC Member States are encouraged to establish closer engagement between their National Maritime Safety Information Coordinators and the NAVAREA Coordinator.

Due to crisis between the Russian Federation and Ukraine, an intense coordination activity NAVAREA is carried out in the Black and Azov Seas area. For the last two years, the number of NAVAREA III warnings continues to decrease. Most of the warnings, about 75 % of the messages, are from the Aegean Sea, the Eastern Mediterranean and Black Seas.

### **Maritime Spatial Data Infrastructure (MSDI)**

The MBSHC ambassador on the MSDIWG is Italy. Since the last A2, the MBSHC ambassador attended one VTC meeting MSDIWG12 (17–18 March 2021) and one hybrid meeting MSDIWG13 which was held in Singapore (9–13 May 2022) and which was incorporated with the annual meeting of the OGC Marine Domain Working Group, the third expert meeting of the UN-GGIM WGMGI, the International Seminar on United Nations Global Geospatial Information Management, with the theme “Effective and Integrated Marine Geospatial Information”.

Regular updates between MBSHC and MSDIWG have been exchanged through the ambassador. In November 2022, a workshop on MSDI funded by IHO CB programme was held in Turkey. Participants received a great benefit to develop their MSDI. MSDI is becoming more and more relevant due to marine spatial data integration and new standard S-100.

There is a constant need to cooperate with MS, to encourage training, awareness of the importance of the integrated geospatial information framework and involvement of the MS in the MSDI initiatives and challenges in the region.

### **Capacity Building**

The Capacity Building (CB) Coordinator role of the MBSHC has been carried out by Turkey. Capacity-Building activities, which are based on assessing the development and capacities of each coastal state

within the region, play a key role in providing and maintaining a fundamental level of understanding and capability in related fields. This base makes it possible for the coastal states to cooperate, exchange information and experience.

Another essential objective of these activities is to help the Member States fulfilling their obligations with respect to the SOLAS Convention. Turkey, as the MBSHC CB Coordinator represents the Commission at the CB Sub-Committee and is responsible for updating the MBSHC three-year CB plan, which is mostly shaped by the feedbacks of the Member States. A three-year CB plan was approved during MBSHC23.

Since the last A2 (11/2020), all the remote Capacity Building activities that were planned for 2021 and funded by CBSC were carried out successfully:

- Webinar on Transition to S-100 (22.11.2021)
- Webinar on Airborne Lidar Bathymetry (theory and practice) (17.11.2021)
- Webinar on Artificial Intelligence in Modern Hydrography (01.11.2021)
- Webinar on Satellite-derived Bathymetry (30.06.2021 & 28.09.2021). These two webinars which were organized by the MBSHC and sponsored by industry leaders, reached more than 500 attendees, globally. In addition to above-said trainings, Understanding ENC's, Introduction to S-57 and Compiling for Navigational Safety were provided by the UKHO free of charge.

Two workshops funded by the CBSC were carried out successfully in December 2022, in Istanbul. 15 trainees from 10 different countries joined the workshops under the supervision of two trainers from the USA.

- Workshop on Cartographic Data Management (05.–07.12.2022)
- Workshop on MSDI development & implementation (07.–09.12.2022)

The challenge faced in terms of the CB activities is mainly related with the limited funds available each year. This situation has the potential of causing more severe repercussions as we are in the verge of the S-100 era.

This problem can be overcome by following one or many of the options below:

- Raising the CB Funds
- Providing CB Funds to the regions proportional to their contribution to the IHO Budget
- Centralizing S-100 focused activities.

## 5. **Difficulties encountered and challenges yet to be addressed:**

### **Difficulties**

- The main difficulties faced by the MBSHC are in the coordination of the INT chart schemes and ENC coverage. Discrepancies between new ENC's and existing INT charts are raising new difficulties regarding consistency of the nautical information provided by different producers. Sometimes, the only way forward is to conduct bilateral discussions for the solution of ENC overlapping issues.
- The escalated tension due to the ongoing military confrontation in the region (Black and Azov Seas) currently undermines the coordination between the Member States, especially 'ENC Overlap' issues have remained unresolved.
- One of the major difficulties in the last period was the lack of interest for the position of Chair and Vice-Chair of the MBSHC region and the position of Vice-Chair was vacant from 06/2019 to 09/2021. Also, the position of Region F Coordinator was vacant from 05/2021 to 04/2022, where Spain as the MBSHC Chair performed only urgent tasks in the F region. That was quite worrying situation also because the MBSHC region is the largest commission in the IHO and there is a constant need for coordination of the activities and need to make improvement. After MBSHC22, Croatia became a Vice-Chair (09/2021, MBSHC CL No 07/21), and afterwards took position of the Chair at the MBSHC23. The MBSHC23 approved the designation of Greece as Region F IRCC Coordinator and Turkey as Vice-Coordinator until MBSHC24 included. The MBSHC also agreed on the rotation on these positions after MBSHC24 and until MBSHC25, with Turkey becoming Region F Coordinator and Greece Vice-Coordinator (MBSHC 23/07). Since the MBSHC23 significant progress have been made. MBSHC Member States selected Romania for the position of

MBSHC Vice-Chair (MBSHC CL 08/2022). With this progress we have enabled continuity and stability in performing the tasks in the MBSHC region and that is crucial to ensure safety of navigation in the area.

- Insufficient funds for capacity building programs.
- Difficult and slow adaption of most of the MS in the MBSHC region to the process of digitalization in the whole maritime sector which starts with S-100 as a base line data model for IMO's e-navigation programme.
- Collaborative ecosystem to develop and apply S-100 based products – interoperability and reliability of the data of different kind of stakeholders.

### **Challenges**

- A major challenge is the implementation of S-100 products in the region because it is demanding in organizational, technical-technological, and financial sense. The most important strategic issue will be related to dual standards regarding the transition from S-57 to S-101 ENC's, or even triple mode because most of the MS in the MBSHC region will have paper chart production, S-57 and S-101.
- Key role of the RHC for harmonized production and distribution of future S-100.
- Awareness raising among MS – it is necessary to create an environment where many stakeholders such as maritime administrations, industry and other professional organizations can be involved and cooperate to facilitate widest possible implementation of S-100.
- Main challenge will be the establishment of the national S-100 Committee in each country. The National S-100 Committees should be composed of various national stakeholders that are involved in the development of S-100 standards especially significant end users such as Maritime administrations, Pilot services, Navy, Vessel Traffic Service, research institutes and industry in the fields of nautical publications, aids to navigation, e-Navigation and marine weather to allow varied participation.
- Improving cartographic coordination in the region is an ongoing task and permanent challenge.
- Improve capacity building programs. MBSHC region needs to develop e-learning capabilities which in turn will enable capacity building activities to reach a wider audience in a more cost-effective way. The main activities in the CB programme should be focused at S-100 Universal hydrographic model and MSDI.
- In order to enhance better results and ensure continuity of the work and implementation of the assigned tasks to the MS in the region, IHO/MS need to find a better way to motivate MS for the positions of Chair and Vice-Chair of the MBSHC (other RHC) – funds/sponsorship on a yearly basis for the chairmanship.

## **6. Achievements/outputs/conclusions:**

### **Achievements/outputs**

- The new MBSHC Statutes was adopted during the MBSHC23, and in force as from 1 April 2022.
- Following decision MBSHC23/08, a working group MBSHC S-1xx dedicated to the S-100 roadmap implementation within the MBSHC region has been established. A call for membership to the MBSHC S-1xx Working Group was issued by MBSHC circular letter No. 04/2022 in May. Ten applications were received (Croatia, France, Greece, Italy, Romania, Slovenia, Spain, Turkey, United Kingdom, United States of America) and MBSHC circular letter No. 06/2022 rev1, dated 13 July, provided the list of members and points of contact, and announced the selection of France (SHOM, Capt. Ronan Pronost) as chairman of the working group. The terms of reference and rules of procedures of the MBSHC S-1xx WG were drafted by the chair in November 2022 and circulated among its members before being submitted to MBSHC for approval. A VTC meeting is planned in the beginning of 2023.
- MBSHC MS are active in participating to the IHO-EU network working group (IENWG) and that is shown through the participation in the implementation of the EU funded projects European Marine Observation and Data Network (EMODNet), MBSHC Coastal Mapping, European Ocean Observation System (EOOS), etc. Also, there is a quite active participation from the MS of the EU initiatives – Maritime Spatial Planning (MSP) and EU Directive on Public Sector Information.
- Since the A2 11/2020, progress has been made in the Region F concerning the solution of

some ENC overlaps. Effective tools for detecting these overlaps put in place by the RENCs and the implementation of the IHO resolution 1/2018 helped to raise awareness among ENC producers about these overlaps and MS in solving them.

### Conclusions

- The cooperation within the MBSHC was good but, due to the restrictions imposed by the Covid-19 pandemic and because we had to learn to work virtually, communication and activities slowed down compared to the pre-pandemic period.
- All efforts to maintain communication and active participation of Member States through VTC meetings were not as effective and productive as they should have been, especially because MBSHC is a RHC covering a small geographic area but with the largest number of countries and different kind of issues. It became clear that we are most productive to address strategic issues when we are working together and in person.
- Capacity building activities play a key role in the Region, CB funds should be raised.
- New Member States and the enlargement of the MBSHC membership is beneficial.
- Bilateral discussion is the only way for the solution of ENC overlapping issues and the only way for the step forward.
- The coordination role of the IENWG is a great example of the cooperation between European HOs in large EU funded projects, especially in the MBSHC region.
- The main challenge in the MBSHC region is the implementation of the S-1xx framework services, and for that reason additional effort, capacity building activities, education, trainings, and cooperation among Member States in the region are required. MBSHC S-1XX Working Group should coordinate activities related to S-100 roadmap implementation within the MBSHC region.
- MSDI is becoming more and more relevant due to marine spatial data integration and new standard S-100. There is a constant need to cooperate with MS, to encourage training, awareness of the importance of the integrated geospatial information framework and involvement of the MS in the MSDI initiatives and challenges in the region.

#### 7. Actions required of the Assembly:

- a) **Note** the report of the Mediterranean and Black Seas Hydrographic Commission (MBSHC)
- b) **Take** any other action considered appropriate.