

## Paper for Consideration by BSHC30

### Explanatory note update of HELCOM Recommendation 34E/2

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|---------------------------|-----------------------------|
| <b>Submitted by:</b>      | BSHC30 Chair (Latvia)       |
| <b>Executive Summary:</b> | HELCOM Recommendation 34E/2 |
| <b>Related Documents:</b> |                             |
| <b>Related Projects:</b>  |                             |

#### Introduction/Background

EUSBSR PA Safe chaired Task Force (to update HELCOM Recommendation 34E/2) has prepared updated version of the recommendation. BSHC Chair Mr. Jānis Krastiņš represented BSHC in the Task Force. Special interim BSHC WG was created among the members of BSHC in order to revise, update and comment the initial version of the recommendation. Most of the comments and suggestions were accepted by Task Force and the present version of the recommendation was supported by BSHC WG. Document has not been changed since the last approval.

#### Analyses/Discussion

BSHC interim WG was created on very short notice and was composed by Rainer Mustaniemi (Finland), Sophie Hohwu-Christensen (Denmark), Hendrik Justus Stang (Denmark), Olavi Heinlo (Estonia), Iji Kim (Germany), Janis Krastins (Latvia), Piotr Kozlowski (Poland), Caroline Johansson (Sweden). WG was chaired by Rainer Mustaniemi.

The input from BSHC was very well received and the document was updated accordingly.

The Task Force has now completed its work and plans to send the revised recommendation 34E/2 to IC MARITIME 4-2025 for approval. The finalized revision is included as Annex 1. Chair of Task Force has invited BSHC30 to provide formal support to the document in order to present it to HELCOM.

#### Action required of BSHC30:

The BSHC30 is invited to:

- 1) BSHC is invited to support HELCOM Recommendation 34E/2
- 2) Chair to inform Task Force



## Baltic Marine Environment Protection Commission

### Revised HELCOM Recommendation 34E/2

Adopted 3 October 2013, amended 5 March 2018 and **xx October 2025**, having regard to Article 20, Paragraph 1 b) of the Helsinki Convention

### **HARMONIZING THE IMPLEMENTATION OF E-NAVIGATION AND SUPPORTING SERVICES TO ENHANCE SAFETY OF NAVIGATION AND PROTECTION OF THE MARINE ENVIRONMENT IN THE BALTIC SEA REGION**

#### **THE COMMISSION,**

**RECALLING** the adopted recommendation 34E/2 as of 3 October 2013 and the amendment dated 5 March 2018,

**RECALLING** the relevant HELCOM Recommendations, including

- 23/3 on Enhancing the use of pilots in route T and the Sound by notification to departing ships and establishment of an early warning system,
- 25/7 on Safety of winter navigation in the Baltic Sea area,
- 28E/11 on Further measures to improve the safety of navigation in ice conditions in the Baltic Sea, including advancing high quality training programmes in navigation in ice conditions,
- 28E/13 on Introducing economic incentives as a complement to existing regulations to reduce emissions from ships, and
- 33/1 on Unified interpretation in relation to access to and use of HELCOM AIS,

**RECALLING** the International Maritime Organisation (IMO) Initial Descriptions of Maritime Services in the context of e-navigation, MSC.1/Circ 1610/Rev 1,

**RECALLING** the IMO guidance on the definition and harmonization of the format and structure of Maritime Services in the context of e-navigation, MSC.467(101), stating that technical services, where appropriate, should be based on the International Hydrographic Organisation (IHO) S-100 framework with associated S-100 based product specifications,

**RECALLING** the IHO S-100 Framework including the evolving IHO S-100 Universal Hydrographic Data Model established and maintained by the IHO, and intended for the development and maintenance of digital standards and guidelines for navigational use in maritime shipping and to support the IMO e-navigation strategy,

**RECALLING** that the International Organization for Marine Aids to Navigation (IALA) and IHO are exploring in specifying technical services for the exchange of S-100 data, considering the use of the International Electrotechnical Commission (IEC) standard 63173-2 (SECOM, Secure communication between ship and shore), which may involve the Maritime Connectivity Platform (MCP) for authentication and service discoverability,

**RECALLING FURTHER** the IMO Maritime Safety Committee (MSC) adoption of resolution MSC.530(106)/Rev.1 on Performance Standards for Electronic Chart Display and Information Systems (ECDIS), as a result of which S-100 based navigational products, specifically Electronic Navigational Charts

(ENC) and route exchange will become mandatory for new systems from 1 January 2029,

**RECOGNISING** the IMO e-navigation Strategy as a harmonized collection, integration, exchange, presentation and analysis of marine information on board and ashore by electronic means, to enhance berth-to-berth navigation and related services for safety and security at sea and protection of the marine environment,

**RECOGNISING** the potential of e-navigation in helping to protect the Baltic Sea marine environment from shipborne pollution stemming from collisions and groundings by bringing improvements to navigation safety through the reduction of risk,

**RECOGNISING** the potential of e-navigation in helping to reduce carbon, sulphur and nitrogen emissions from ships in the Baltic Sea through more efficient vessel handling, and as a monitoring tool helping in introducing economic incentives as a complement to existing regulations to reduce emissions from ships,

**RECOGNISING** the Baltic Sea Hydrographic Commission (BSHC) and its working groups as a key forum for cooperation in planning and harmonising e-navigation services in the Baltic Sea Region,

**RECOGNISING** the potential of interoperability between data sets from different sources and domains (e.g., IHO, the World Meteorological Organization, WMO, IALA, IEC) enabled by the IHO S-100 framework,

**RECOGNISING** the potential benefits of voyage plans exchange in the Baltic Sea for enhancing safety of navigation and improving environmental performance, and increasing competitiveness of environmentally friendly maritime transport, all while adhering to international regulations,

**RECOGNISING FURTHER** the importance of reliable and accurate electronic position, navigation and timing information and accurate electronic navigational chart information as a prerequisite for the use of e-navigation services, and

**WITHOUT PREJUDICE** to international agreements and legislation of the Contracting Parties,

**RECOMMENDS** the Governments of the Baltic Sea countries to

- further develop, test and validate e-navigation and supporting services, the IMO Maritime Services in the context of e-navigation being an important part, in the Baltic Sea region,
- implement Maritime Services in the context of e-navigation in a regionally coordinated manner, advancing to the operational stage and supporting the evolution of both ship-based and shore-based systems,
- take necessary actions to support the technical developments, including the implementation of the relevant international performance and technical standards and data models, as well as contribute to the development of the regulatory framework in IMO, and at the regional and national levels,
- develop standardised technology for cyber secure and unhampered information flow among all relevant stakeholders, in collaboration with the maritime industry and within international organisations (e.g. IMO, International Telecommunication Union, ITU),
- support the Baltic Sea Hydrographic Commission, BSHC, overseeing the coordination of Baltic Sea charting and S-100 implementation, which is largely derived from the IHO's Roadmap for the S-100 Implementation (currently in version **4.0**, October 2024),
- cooperate closely within IMO, IHO, WMO and IALA in order to inform and involve the organizations about the results and outputs from any projects within the Baltic Sea region that may enhance safety and security at sea and protection of the marine environment. This may include further perspective research in the field of e-navigation,
- harmonize and coordinate the provision of position, navigation and timing services,
- support the provision of Electronic Navigational Chart and other SOLAS-mandated Maritime Services,

and further, even though they are not included in the Maritime Services defined by IMO, Global Navigation Satellite Systems (GNSS) augmentation and Positioning, Navigation, and Timing (PNT) backup are crucial enablers for them, to

- maintain DGPS service in the Baltic Area until the European Geostationary Navigation Overlay Service (EGNOS) Safety of Life assisted Service for Maritime users (ESMAS) is declared operational and certified maritime Satellite-Based Augmentation System (SBAS) receivers are available and mandated,
- plan and coordinate the possible shutdown of the Differential Global Positioning Systems (DGPS) service together with other Baltic Sea countries,
- provide R-Mode services as part of the international coordination group for Baltic Sea R-mode.

**RECOMMENDS** the Governments of the Baltic Sea and other relevant parties to

- take the necessary steps to provide relevant services using voyage plans and to encourage ships navigating in the Baltic Sea to share their voyage plans ship to shore using IMO approved solutions enhancing safety and efficiency,
- take an active role in piloting and implementing e-navigation and supporting services, conducting trials to accelerate development,
- highlight the Baltic Sea region e-navigation developments in IMO and other relevant forums to enable further global progress.

**RECOMMENDS** that the appropriate HELCOM Groups analyse tests and concrete solutions developed and, if appropriate, prepare draft texts for joint input by the Baltic Sea countries to IMO and other forums.