

HSSC WORK PLAN 2024-25

Version 30 July 2024

Notes:

a/ This consolidated work plan (WP) has been compiled from the reports submitted to HSSC-16 and following exchanges with HSSC WGs Chairs.

b/ The IHO Task numbers in every WG Work Plan refer to the IHO Work Programme 2 for 2024. They have not been checked against the IHO Work Programme 2025 as it has not been approved by C-8 yet.

c/ Quick links:

| | | |
|--|--|---|
| §3. S-100WG Work Plan | §4. NIPWG Work Plan | §5. ENCWG Work Plan |
| §6. HSWG Work Plan¹ | §7. TWCWG Work Plan | §8. NCWG Work Plan |
| §9. DQWG Work Plan | §10. HDCG Work Plan | §11. ABLOS Work Plan |
| §12. COORD Work Plan | §13. MASS PT Work Plan | §14. S-130 PT Work Plan |
| §15. S-100 ICE PT Work Plan | §16. S-100 SS PT Work Plan | |

Objective:

This work plan aims at ensuring efficient project resource management and alignment, progress monitoring and to provide a communication utility with internal and external parties.

Procedure:

The HSSC work plan covers a rolling two year period and is revised annually. Each subordinate body proposes in its report to the annual meeting of HSSC a revised work plan for the next biennium. Completed work items should be removed from work plans after they have been reported at a subsequent HSSC meeting. The Chairs of the subordinate bodies, along with the HSSC Chair, will meet prior to each HSSC meeting to review progress, and to harmonize the proposed work plans. The proposed work plans for the next biennium will be considered by the plenary with the report of each subordinate body. The draft consolidated HSSC work plan for the next biennium will be reviewed on the last day of the HSSC meeting, incorporating the agreed changes discussed during that meeting. A revised consolidated HSSC work plan incorporating all approved additional work items will be circulated to participants of the meeting for final comment at the same time as the draft minutes of the meeting. HSSC Chair could seek committee members' interim approval for emerging issues between meetings.

Communications:

The HSSC Work Plan will be posted on the IHO website, and a progress summary will be provided at IHO Assemblies.

Monitoring:

In accordance with Decision No. 1 of the 1st Session of the IHO Assembly, the Council evaluates by correspondence the accomplishment of the preceding year's work programme and report to MS through the IHO Annual Report.

Project Numbering:

Each task will be given a sequential number independent of related subordinate body. The related IHO Work Programme Element number and the specific HSSC meeting that approved the inclusion of the task will be identified in the HSSC Work Plan summary. Each sub task will be numbered using an alphanumeric sequence, "An, Bn, Cn.."

Priorities:

Three Levels of Priorities (H, M, and L) will be assigned by HSSC using the "Guidelines for the Evaluation of Proposed New Work Items for HSSC and its Subordinate Bodies" (see section 1 hereafter).

¹ Including MHPT and SDBPT.

1. GUIDELINES FOR THE EVALUATION OF PROPOSED NEW WORK ITEMS FOR HSSC AND ITS SUBSIDIARY BODIES

Introduction

- 1.1 In order to best use the limited resources available to HSSC and its subordinate bodies, it is necessary to evaluate and prioritise proposed new work items. These guidelines are based on the principles originally agreed at CHRIS/13 and CHRIS/15 and revised and enhanced at CHRIS/18. They are intended to provide a uniform basis for evaluation and prioritisation.
- 1.2 Evaluation should be done as a two-stage process:
- a. general consideration leading to acceptance or rejection; and if accepted,
 - b. establishment of priorities.

General acceptance

- 1.3 Before deciding to include a new item in the work plan of HSSC and its subordinate bodies, the following factors should be taken into account:
- a. is the subject addressed by a proposal considered to be within:
 - (1) the scope of IHO objectives?
 - (2) the current IHO work programme?
 - b. has a need for the measure proposed been identified (for example, client demand, internal improvements)?
 - c. do adequate industry standards or solutions exist or are they being developed thereby reducing the need for action through HSSC and its subordinate bodies?
 - d. is the objective achievable in the existing HSSC and its subordinate bodies' work plan taking into account a realistic estimates of resources needed and available?
 - e. what are the envisaged deliverables?

Establishment of priorities

- 1.4 Priorities for accepted work items should normally be assigned based on consideration of the following factors:
- a. measures aimed at substantially preventing maritime casualties, marine pollution incidents or enhancing maritime security
 - b. measures to overcome identified deficiencies in existing IHO standards and technical resolutions;
 - c. measures needed to align IHO standards and resolutions with those of other relevant international standards and recommendations;
 - d. measures required to take into account the introduction of new technologies and methods in maritime operations;
 - e. measures required to take into account new techniques in data acquisition, processing and management, and production techniques in hydrography;
 - f. measures leading to increased Hydrographic Office efficiency.
- 1.5 Follow up actions in response to specific requests from the International Hydrographic Conference/Assembly or other international and intergovernmental organisations should be evaluated in light of paragraph 1.4 above unless specifically identified as urgent matters.

General remarks

- 1.6 When setting priorities, certain flexibility should be provided to allow for initiatives that could not be foreseen.
- 1.7 Once a decision has been made on the basis of the above for a new work item to be included in the work plan of HSSC and its subordinate bodies, an appropriate target completion date should be established, taking into

account the urgency of the matter concerned.

- 1.8 In general, proposals for new work items as well as the revised work plans presented by Chairs of subordinate bodies as part of their annual reports should include a proposed priority for each work item, based on the guidelines above.
- 1.9 Wherever possible, proposed priorities for work items will be considered ahead of a meeting by a “Chair Group” comprising Chair, Vice-Chair, Secretary and all available Chairs of subordinate bodies. Final endorsement of work item priorities will rest with HSSC and be considered at the respective meeting.

2. HSSC RELEVANT ELEMENTS OF IHO WORK PROGRAMME 2024-2025

See Programme 2 in the [IHO Work Programme 2024](#) and IHO Proposed [IHO Work Programme 2025](#).

3. S-100WG WORK PLAN 2024-2025

Tasks

| | |
|---|---|
| A | Maintain and extend S-100 "IHO Universal Hydrographic Data Model" (IHO Task 2.3.2) |
| B | Maintain and extend S-99 "Operational Procedures for the Organization and Management of the S-100 Geospatial Information Registry" (IHO Task 2.3.3) |
| C | Maintain and extend the S-100 GI Registry (IHO Task 2.3.1) |
| D | Supervise/Advise and support the development and maintenance of S-100-based product specifications (IHO Task 2.3.5) |
| E | Monitor the development of other related international standards (IHO Task 2.1) |
| F | Provide outreach and technical assistance regarding the implementation of S-100 (IHO Task 2.3.5) |
| G | Maintain the S-100 section of the IHO website (IHO Task 2.3) |
| H | Conduct the 2024 and 2025 meetings of the S-100WG and its sub-group(s) and project team(s) (IHO Task 2.1) |

Work items

| Work item | Title | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed S-Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|--|---|----------------|------------|-----------|---|---|-------------------------|--|
| A.1 | Maintain and Extend S-100 | H | | 2010 | Permanent | O | Julia Powell (NOAA) | S-100 | Edition 5.2.0 submitted in 2024. Will need to consider what to do about any extensions post 2026. |
| A.2 | Develop and Extend of S-98 Interoperability Specification | H | | 2015 | Permanent | O | Julia Powell (NOAA) | | Target HSSC17 for Edition 2.0.0 in 2025 |
| A.3 | Develop and Monitor the protection scheme (S-63 equivalent component, S-100 Part 15) of S-100 based-products | M | | 2016 | Permanent | O | Jonathan Pritchard (IIC) Robert Sandvik (Primar) | | |
| A.4 | Develop and Extend S-97 Guidebook for developing S-100 Product Specifications | M | | 2018 | Permanent | O | Julia Powell | | Target a new edition for 2024 |
| A.5 | Develop and Maintain S-164 Test Data Sets for S-100 and ECDIS Type Approval | H | HSSC14 | 2020 | Permanent | P | Julia Powell (NOAA) | S-100/S-1xx | Edition 1.0.0 submitted for HSSC15 (2023). Targeting HSSC17 2025 for edition 2.0.0 |
| A.6 | Develop the S-158 Validation Rules | H | | 2021 | Permanent | O | Elizabeth Hahessy (DK) | | Target HSSC17 for Edition 1.0.0 |

| Work item | Title | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed S-Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|--|---|----------------|------------|-----------|---|--|-------------------------|--|
| B.2 | Establish and maintain expert group for the hydro domain: - | M | | 2016 | Permanent | P | Julia Powell (US) | | Action HSSC8/14 (membership and TORs) |
| C.1 | Maintain and Extend the S-100 GI Register in alignment with S-100 (includes Portrayal) | H | | 2015 | Permanent | O | Yong Baek (IHO Sec.) Martin Park (KHOA) | | Improvement to be aligned with S-100 Ed.5.2.0 Edition 5.2.0 does not have extensions, however there is one revision that requires an update |
| C.2 | Develop and Maintain the S-100 Feature Catalogue Builder | H | | 2015 | Permanent | O | Yong Baek (IHO Sec.) Martin Park (KHOA) | | Improvement to be aligned with S-100 Ed.5.2.0 Edition 5.2.0 does not have extensions, however there is one revision that requires an update |
| C.3 | Develop and Maintain the S-100 Portrayal Catalogue Builder | H | | 2015 | Permanent | O | Yong Baek (IHO Sec.) Martin Park (KHOA) | | Improvement to be aligned with S-100 Ed.5.2.0 Edition 5.2.0 does not have extensions |
| C.4 | Develop and Maintain the S-100 Open Online Platform | | | 2022 | Permanent | O | Martin Park (KHOA) | | |

| Work item | Title | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed S-Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|---|---|----------------|------------|-----------|---|------------------------------------|-------------------------|--|
| D.3 | Develop Edition 2.0.0 of S-101 | H | | 2015 | 2024 | O | Tom Richardson (IC-ENC) | | Operational Edition of S-101 will be at 2.0.0 |
| D.4 | Monitor the implementation of the S-101 ENC product specification (post Edition 2.0.0) | H | | 2015 | Permanent | P | Julia Powell (NOAA) | | |
| D.5 | Develop and Maintain an S-100/S-101 Test Strategy and Test Bed | H | | 2013 | Permanent | O | Julia Powell (NOAA) | | |
| D.6 | Develop and Maintain S-102 Bathymetric Content Specification. | H | | 2014 | 2026 | P | Lawrence Haselmaier (NGA) | | Edition 3.0.0 will be the operational Edition, Targeted for late 2024. |
| D.7 | Develop and maintain S-129 Product Specification for Underkeel Clearance Management (UKCM) Information. | M | | 2016 | 2024 | P | Jason Rhee (OMC) | | Decision HSSC8/17 Edition 2.0.0 will be the operational edition |
| D.8 | Develop S-121 Product Specification for Maritime Limits and Boundaries | M | | 2016 | 2026 | O | Mark Alcock (Geoscience Australia) | | Edition 1.0.0 published in October 2019. Currently in the testing phase. Need to align to S-100 Edition 5.2.0 |

| Work item | Title | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed S-Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|--|---|----------------|------------|-----------|---|-----------------------|-------------------------|--|
| D.9 | Develop Dual Fuel concept of S-100 ECDIS | H | | 2020 | Ongoing | O | Julia Powell(NOAA) | | |
| E.1 | Monitor the development of other related international standards and other S-100 based products out of the IHO remit | M | | | Permanent | O | Julia Powell (NOAA) | | |
| E.2 | Monitor and coordinate interactions with OGC and IOGP, to ensure proper harmonization in the development of standards. | M | | 2016 | Permanent | P | | | Standards such as IOGP SSDM SeabedML (Action HSSC6/37) |
| E.3 | Monitor the development of the IMO guidance on maritime cyber security and advice on possible future actions | L | | 2016 | Permanent | O | Hannu Peipponen (IEC) | | |
| F.1 | Liaise with IHO subsidiary bodies and subordinate organs, e.g. WWNWS-SC, NIPWG, ENCWG, SCUFN, etc. | H | | | Permanent | O | Julia Powell (NOAA) | | Establish joint project teams as required |

| Work item | Title | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed S-Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|---|---|----------------|------------|-----------|---|----------------------|-------------------------|--|
| F.2 | Liaise with non-IHO constituents, e.g. IALA E-nav Committee, IEHC, JCOMM Expert Teams, DGIWG, ISO, ICPC, marine navigation and GIS industry, etc. | H | | 2004 | Permanent | O | Julia Powell (NOAA) | | Clarification of the relations between IALA and IHO product specifications (e.g. sector lights modelling, encoding and portrayal in S-101 and S-201) Actions HSSC8/58, HSSC8/66 |
| G.1 | Maintain the S-100 section of the IHO website | H | | 2003 | Permanent | O | Yong Baek (IHO Sec.) | | |

Meetings (Task H)

| Date | Location | Activity |
|---------------|--------------|----------|
| November 2023 | Singapore | S-100WG8 |
| March 2024 | Monaco | TSM10 |
| November 2024 | Genoa, Italy | S-100WG9 |
| March 2025 | Monaco | TSM11 |

Chair: Julia Powell, US (NOAA)
Vice Chairs: Elizabeth Hahessy (Denmark), Benjamin Hell (SE)
Secretary: Yong Baek, IHO Secretariat

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4. NIPWG WORK PLAN 2024-25

Tasks

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|---|--|
| D | Maintain Publication S-12 “Standardization of List of Lights and Fog Signals” (IHO Task 2.8.1) |
| | <i>Left intentionally blank</i> |
| F | Establish and monitor, in liaison with the S-100WG, the project teams required to specify and develop nautical information layers for use in ECDIS (IHO Task 2.3) |
| G | Develop high level specifications for a maritime services as defined by IMO in the context of e-navigation covering the provision of hydrographic services to mariners in accordance with the IMO e-navigation strategy implementation plan (IHO Task 2.5.2) |
| H | Develop a test and implementation plan for the development of the maritime services as defined by IMO (IHO Task 2.5.2) |
| I | Maintain IHO Resolutions in M-3 relating to Nautical Publications as required (IHO Task 2.1) |
| J | Liaise with other HSSC WGs and other IHO and international bodies (IHO Task 2.1.8) |
| K | Conduct the 2024 and 2025 meetings of the NIPWG and its sub-group(s) and project team(s) (IHO Task 2.1) |

Work items

| Work item | Title | Priority H-high M-medium L-low | Next Milestone | Start Date | End Date | Status P – Planned O – Ongoing C – Completed S – Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|---|---|----------------|------------|-----------|---|-------------------|-------------------------|---------------------------------------|
| D.1 | Monitor and assess proposals for amending S- 12 | M | Next meeting | 2014 | Permanent | O | Chair Team | S-12 | In close liaison with IALA; see J.5.1 |

| Work item | Title | Priority H-high M-medium L-low | Next Milestone | Start Date | End Date | Status P – Planned O – Ongoing C – Completed S – Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|---|---|----------------|------------|-----------|---|--------------------------------|-------------------------|--|
| F.1 | Assess the progress and perspectives of developing S-100 product specifications for NP data and propose the way forward for consideration by HSSC | H | Next meeting | 2015 | Permanent | O | Chair Team | | To be considered in the context of the IMO e-navigation strategy implementation. NIPWG to consider establishing one or more project team(s) in liaison with S-100WG as required (see J.3), in particular to continue the development of Product Specifications currently assigned to the NIPWG. |
| F.2 | Investigate the interaction between S-100 based Nautical Publication products and ENC in ECDIS | H | Next meeting | 2015 | Permanent | O | Chair Team | | In close liaison with the S-100 WG Encourage national testbeds. |
| F.3 | Model the NP data where required. | H | Next meeting | 2004 | Permanent | O | Chair Team | | S-100 related. To be included in Hydro domain of the FCD Register. |
| F.4 | Review of objects and attributes. | H | Next meeting | 2004 | Permanent | O | Raphael Malyankar / Chair Team | | S-100 related. Incorporate in GI Registry if |

| Work item | Title | Priority H-high M-medium L-low | Next Milestone | Start Date | End Date | Status P – Planned O – Ongoing C – Completed S – Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|--|---|----------------|------------|----------|---|--------------------|-------------------------|---|
| F.8.1 | Develop S-1xx Nautical Information Product Specification | | | | | | | | |
| F.8.1.3 | For Marine Aids to Navigation (AtoN) | L | Next meeting | 2013 | 2024 | O | Sewoong Oh | S-125 | Edition 1.0.0 In progress. IALA developing draft, see J.5.1 |
| F.8.1.4 | For Marine Physical Environment | L | | | | S | Chair Team | S-126 | Suspended with approval from HSSC-15 |
| F.8.2 | Draft Data Classification and Encoding Guides | | | | | | | | Document for NPs similar to: Use of the Object Catalogue. |
| F.8.2.3 | For Marine Aids to Navigation (AtoN) | L | Next meeting | 2013 | 2024 | O | Sewoong Oh | S-125 | Edition 1.0.0 In progress. IALA developing draft, see J.5.1 |
| F.8.2.4 | For Marine Physical Environment | L | | | | S | Chair Team | S-126 | Suspended with approval from HSSC-15 |
| F.8.3 | Monitor and Maintain NIPWG Product Specifications | | | | | | | | |
| F.8.3.1 | For Marine Protected Areas | M | Next meeting | 2023 | 2025 | O | Jonathan Pritchard | S-122 | In progress. Edition 2.0 in development. |
| F.8.3.2 | For Marine Radio Services | M | Next meeting | 2022 | 2025 | O | Bridget Gagné | S-123 | In progress. Edition 2.0 in development. |

| Work item | Title | Priority H-high M-medium L-low | Next Milestone | Start Date | End Date | Status P – Planned O – Ongoing C – Completed S – Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|---|---|----------------|------------|----------|---|-------------------|-------------------------|---|
| F.8.3.5 | For Marine Traffic Management | M | Next Meeting | 2022 | 2025 | O | Ed Kuwalek | S-127 | In progress. Edition 2.0 in development. |
| F.8.3.6 | For Digital Catalogue of Nautical Product | H | Next meeting | 2016 | 2024 | O | Martin Park | S-128 | In progress. Edition 2.0 in development. |
| F.8.3.7 | For Marine Harbour Infrastructure | H | Next meeting | 2020 | 2026 | O | Sarah Rahr | S-131 | In progress. Edition 2.0 in development. |
| G.1 | Monitor the requirements for, and provision of, nautical information in e-navigation testbeds. Produce NP1 sample data sets. | M | | | | O | Mike Kushla | | According to the tasks assigned by HSSC4. Collection of information to be modelled. |
| G.3 | Rules and guidelines for displaying nautical information in ECDIS and in maritime services as defined by IMO | | | | | | | | |
| G.3.1 | Develop basic display principles for NP data intended for use in ECDIS (NP3) | M | | 2008 | | O | Chair Team | | Close co-operation with NCWG and S-100WG required. Interoperability Spec to be considered. |

| Work item | Title | Priority H-high M-medium L-low | Next Milestone | Start Date | End Date | Status P – Planned O – Ongoing C – Completed S – Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|---|---|----------------|------------|-----------|---|-------------------|-------------------------|---|
| G.3.2 | Monitor and contribute to the development of IMO guidelines showing how navigation information received by communications equipment can be displayed in a harmonized way and what equipment functionality is necessary. | M | | 2015 | Permanent | O | Stefan Engström | | NIPWG has a permanent rep with the EGDH. e-nav IMO Strategy Implementation Plan, Task T13 (HSSC6-07.1A refers) Interim guidelines released by IMO. Continue to monitor development. |
| I.1 | Maintain and extend resolutions in M-3 relating to Nautical Publications. | M | Next meeting | 2012 | Permanent | O | Chair Team | M-3 | A review is required due for the harmonization of M-3 information and potential Prod Specs content. |
| J.3 | Liaise with other HSSC WG | M | | 2004 | Permanent | O | Chair Team | | |
| J.3.1 | Liaise with the NCWG | M | | | Permanent | O | Chair Team | | Establish joint project teams as required and endorsed by HSSC. |
| J.3.2 | Liaise with the ENCWG | L | | | Permanent | O | Chair Team | | |
| J.3.3 | Liaise with the S-100WG | H | | | Permanent | O | Chair Team | | Establish joint project teams as required and endorsed by HSSC. |
| J.4 | Liaise with IRCC | | | | | | | | |
| J.4.1 | Liaise with WWNWS Sub-Committee | | | | | | | S-124 | Monitor developments of S-124 Project Team. |

| Work item | Title | Priority H-high M-medium L-low | Next Milestone | Start Date | End Date | Status P – Planned O – Ongoing C – Completed S – Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|---|---|----------------|------------|-----------|---|-------------------|-------------------------|-------------------------------|
| J.5 | Liaise with other international bodies which contribute to nautical information | H | | 2015 | Permanent | O | Chair Team | | |
| J.5.1 | Liaise with IALA | H | | 2013 | Permanent | O | Chair Team | | IALA ARM and DTEC Committees. |
| J.5.2 | Liaise with International Harbor Masters' Association (IHMA) | M | | 2015 | Permanent | O | Chair Team | | |
| J.5.3 | Liaise with International Cable Protection Committee (ICPC) | L | | 2016 | Permanent | O | Chair/Sec NIPWG | | |

Meetings (Task K)

| Date | Location | Activity |
|---|----------------|----------|
| Sept 2024 | Gdynia, Poland | NIPWG11 |
| Sept 2025 | TBC | NIPWG12 |
| Note: Additional VTC meetings held 3 times per year. | | |

Chair: Eivind Mong, Canadian Coast Guard, CA

Email Eivind.Mong@dfo-mpo.gc.ca

Vice Chair: Stefan Engström, Traficom, FI

Email: Stefan.engstrom@traficom.fi

Secretary: James Weston, UKHO, UK

Email: james.weston@ukho.gov.uk

Top three work items:

- Develop S-128 (Catalogue of Nautical Products) product specification
- Continue to develop all S-1xx nautical information product specifications
- Coordinate the IHO contributions to the definition and harmonisation of maritime services as defined by IMO within the remit of IHO

5. ENCWG WORK PLAN 2024-25

Tasks

| | |
|---|--|
| A | Maintain S-52 “Specifications for Chart Content and Display Aspects of ECDIS” and its associated “Presentation Library” (IHO Task 2.4.1) |
| B | Maintain S-57 “IHO Transfer Standard for Digital Hydrographic Data”, including ENC Product Specification (IHO Task 2.4.2) |
| C | Maintain S-58 “Recommended ENC validation checks” (IHO Task 2.4.3) |
| D | Maintain S-61 “Product Specification for Raster Navigational Charts” (IHO Task 2.4.4) |
| E | Maintain S-64 “IHO Test Data Sets for ECDIS” (IHO Task 2.4.6) |
| F | Maintain S-65 “ENC Production, Maintenance and Distribution Guidance” (IHO Task 2.4.7) |
| G | Assess the impact of other IHO standards on S-52 display specifications (IHO Task 2.4.1) |
| H | Liaise with the NIPWG and the NCWG (IHO Task 2.1) |
| I | Maintain the ENC production and portrayal sections of the IHO website (IHO Task 2.4) |
| J | Conduct the 2024 and 2025 meetings of ENCWG and its sub-group(s) and project team(s) (IHO Task 2.1) |
| K | Maintain S-66 “Facts about electronic charts and carriage requirements – (IHO Task 2.4.8) |
| L | Consider the development of high density contour lines related to ENCs (IHO Task 2.4) |
| M | Maintain and monitor the existing S-63 standard (IHO Task 2.4.5) |

Work items

| Work item | Title | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed S-Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|---|---|----------------|------------|-----------|---|-------------------|-------------------------|---|
| A.1 | Maintain S-52 - Specifications for Chart Content and Display Aspects of ECDIS | H | Next meeting | | Permanent | O | Chair/Sec ENCWG | S-57 | |
| A.2 | Resolve any problems or errors identified in the current editions of S-52 Presentation Library and S-64 ENC Test Datasets | H | | | Permanent | O | Chair/Sec ENCWG | S-57, S-64 | Generally OEMs going through type approval with ECDIS will identify areas for clarification or correction |
| A.3 | Develop method for S-100 ECDIS to take into account accuracy information of relevant hydrographic information | H | | 09/23 | | O | Chair ENCWG | S-52/S-101 | |
| B.1 | Maintain S-57 "IHO Transfer Standard for Digital Hydrographic Data, including ENC Product Specification" | H | | | Permanent | O | Chair/Sec ENCWG | S-52, S-58 | |
| B.2 | Resolve any problems or errors identified in the current edition of S-57 | H | | | Permanent | O | Chair ENCWG | S-57 | |

| Work item | Title | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed S-Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|--|---|----------------|------------|-----------|---|--|-------------------------|--|
| B.4 | Maintain the ENC portrayal sections of the IHO website. | M | | | Permanent | O | Chair/Sec ENCWG | | |
| B.5 | S-57 to S-101 Conversion. Improving encoding rules with additional attribution to support automated conversion tools | H | | Oct 2020 | | O | Christian Mouden Jonathan Pritchard | S-57 UOC | Edition 1.2 added to S-65 as Annex B |
| C.1 | Resolve any problems or errors identified in the current edition of S-58 | H | | | Permanent | O | Richard Fowle | | Edition 8.0 issues to HSSC for approval |
| C.2 | Monitor the implementation of the new edition of S-58 and keep the recommended checks up to date | H | | Oct-2024 | | P | Richard Fowle | S-57 | |
| E.1 | Resolve any problems or errors identified in the current edition of S-64 | H | | | Permanent | O | Chair/Sec ENCWG | | |
| E.2 | Develop a new Edition of S-64 | H | | May 2022 | 2024 | O | | S-64 | Objective to include additional tests for skin of the earth features |
| F.1 | Monitor and assess proposals for amending S-65 | L | | | Permanent | O | Chair/Sec ENCWG | | |

| Work item | Title | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed S-Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|--|---|----------------|------------|-----------|---|-------------------------------------|-------------------------|---|
| G.1 | Liaise with IEC TC80 to ensure that future editions of IEC 61174 are compatible with standards maintained by ENCWG | M | | | Permanent | O | Chair/Sec ENCWG | S-52, IEC 61174 | |
| H.1 | Liaise with the NIPWG and the NCWG | H | | | Permanent | O | | | |
| I.1 | Maintain the ENC production and portrayal sections of the IHO website, and support FAQ and Encoding Bulletins | H | | | Permanent | O | Chair / IHO Sec | | |
| K.1 | Maintain S-66 Publication | M | | | Permanent | O | Chair / IHO Sec | | NE 2.0 created by consolidating S-66, S-67 and information papers |
| M.1 | Maintain and monitor the existing S-63 Data Protection Scheme | H | | 2016 | Permanent | O | Chair, RENCs, Industry and IHO Sec. | S-63 | As part of the IHO S-100 Security Scheme PT work S-63 OEM and Data server agreements under legal review |

Meetings (Task J)

| Date | Location | Activity |
|--|-------------------|----------|
| 8 th -10 th October 2024 | Aalborg, Denmark | ENCWG-9 |
| TBD 2025 | Republic of Korea | ENCWG-10 |
| TBD 2026 | Canada | ENCWG-11 |

Chair: Thomas Mellor, UK

Vice Chair: Richard Fowle, DK

Secretary: Yong Baek, IHO Sec.

Email: tom.mellor@ukho.gov.uk

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6. HYDROGRAPHIC SURVEYS WORKING GROUP WORK PLAN 2024-25

| | |
|---|--|
| A | Conduct at least annual meetings of HSWG and its sub-group(s) and project team(s) (IHO Tasks 2.1.2.9). |
| B | Maintain and promote IHO publication S-44 – <i>Standards for Hydrographic Surveys</i> – preparing and proposing revisions and amendments to reflect changes in the demands of hydrographic data users, particularly those pertaining to data quality and standards. |
| C | Update, maintain, and promote IHO publication C-13 – <i>IHO Manual on Hydrography</i> – to reflect current techniques, methodologies and survey systems, in particular to ensure harmonization with the standards articulated in S-44. |
| D | Develop and promote Satellite Derived Bathymetry (SDB) best practice and identify future development priorities. |
| E | Maintain close liaison with other HSSC and IRCC working groups, in particular the work of the Data Quality Working Group (DQWG) to meet the presentation/visualization requirements of nautical data to the maritime customer, and the CBSC to support the educational and best practice elements. |
| F | Identify new systems, technologies and methodologies and exchange experiences, best practice and challenges amongst member states in line with the IHO objectives. |
| G | Act as a focal point for hydrographic surveys industry engagement with the IHO. |
| H | Liaise with other relevant IHO Working Groups to promote harmonization across IHO standards. |

Work items

| Work item | Title | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed S-superseded | Contact Person(s) | Related Pubs /Standard | Remarks |
|-----------|------------------------------------|---|---|------------|-----------|---|-------------------|------------------------|---|
| A-1 | Organise and conduct HSWG7 meeting | H | Agree location / date / send invitation | Jan 2024 | Oct 2024 | O | Chair HSWGSec | | One offer to host received from Germany |
| B-1 | Review S-44 Edition 6.2.0 | M | Prepare list of proposed updates | June 2024 | Sept 2025 | O | All | | |

| | | | | | | | | | |
|-----|---|---|--|------------|------------|---|----------------------|--|---|
| B-2 | Prepare next S-44 edition v 6.3 or 6.2.1 | M | Implement updates | Sept 2025 | March 2026 | O | S-44 editorial board | | |
| B-3 | Develop S-44 v6.2 promotional material | M | Consolidate and share material | April 2022 | On going | O | Vice Chair HSWG | | |
| B-4 | Develop S-44 education material | M | Consolidate and share material | April 2022 | On going | O | Vice Chair HSWG | | |
| B-5 | Identify translation opportunities for S-44 | L | Supply translated material to IHO | April 2022 | On going | O | Vice Chair HSWG | | Dependency: Member states to supply translated documents |
| B-6 | Monitor S-44 uptake worldwide | H | IHO Secretariat accept action to set up IHO download monitoring system | May 2022 | On going | O | IHO | | IHO Strategic Plan 2021-2026 (Goal2 – Target 2.2.2 – page 7) Dependencies: -IHO website metrics available -New edition of S-44 available |
| C-1 | Review C-13 Edition 1.0.0 | H | Initial meeting of project team (MHPT) | Oct 2022 | Sept 2023 | C | Chair MHPT | | |
| C-2 | Prepare next C-13 edition | H | Compile updates and change recommendations | March 2024 | April 2025 | P | Chair MHPT | | Complete by MHPT-8 Release C-13 Dec 2025 |
| C-3 | Develop C-13 promotional material | L | Consolidate and share material | Aug 2025 | On going | P | Chair MHPT | | |

MHPT Work Plan

| Work Plan # | Title | Lead | Priority H-High M-Medium L-Low | Next Milestone | Start Date | End Date | Status | | Remarks |
|-------------|---|------------|---|--|---------------|---------------|-----------|-----------|---|
| | | | | | | | P-Planned | O-Ongoing | |
| C-1 | Review C-13 requirements via Questionnaire | | H | Identify sub-group & Potential timeline | Feb 21 | Feb 23 | C | | Questionnaire to be reviewed as part of MHPT-3 |
| C-1a | <i>Review the existing C-13 edition to provide additional points to be addressed in the questionnaire</i> | <i>ID</i> | <i>H</i> | <i>Update and Finalise Questionnaire</i> | <i>Nov 20</i> | <i>Oct 22</i> | <i>C</i> | | <i>Add additional requirements at MHPT-3 Questionnaire ready to be launched.</i> |
| C-1b | <i>Draft Questionnaire</i> | <i>All</i> | <i>H</i> | <i>Update and finalise Questionnaire</i> | <i>Oct 22</i> | <i>Oct 22</i> | <i>C</i> | | <i>Complete review and amends to draft questionnaire at MHPT-3 for approval by HSWG</i> |
| C-1c | <i>Issue Questionnaire to Member States HO's, Academia and Industry and wider public</i> | <i>All</i> | <i>H</i> | <i>Questionnaire published</i> | <i>Dec 22</i> | <i>Jun 23</i> | <i>C</i> | | <i>Identify suitable online survey site and identify costs and funding options. Propose Questionnaire left open for 6 months to allow tie in with HSWG-4 allowing preliminary results to be discussed. Undertake second publicity campaign in targeted sectors to encourage more feedback</i> |

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|---------------------|---|-------|---|---|--------|--------|---|---|
| C-2 | Review current C-13 | | H | Compile updates and change recommendations | Oct 22 | Jun 23 | O | Prepare draft to next meeting: MHPT-5 |
| C-2a | MHPT Members undertake preliminary review of current C-13, provide feedback | | H | Co-ordinate documentation to support recording review | Oct 22 | Oct 23 | C | <p>Revise Review Spreadsheet to allow Chapter Leads to provide summaries of reviews by section.</p> <p>Create a check off list against original ToC to ensure all sections are checked.</p> <p>Gap Analysis of S5B</p> <p>Review of IHO Publications and existing references</p> <p>Review of other references and publications</p> <p>Review of stakeholder feedback</p> <p>Develop scope of work for changes required</p> |
| C-2 ^{a-i} | Chapter 1 - Principles of Hydrographic Surveying | ID/JC | H | Review of Content | Oct 22 | Oct 23 | C | <p>Review at HSWG 4</p> <p>Review Requirements to be included in C-13 Review Template</p> <p>Findings to be presented at HSWG 05</p> |
| C-2 ^{a-ii} | Chapter 2 - Positioning | CC | H | Review of Content | Oct 22 | Oct 23 | C | <p>Review at HSWG 4</p> <p>Review Requirements to be included in C-13 Review Template</p> <p>Findings to be presented at HSWG 05</p> |

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|------------------------|---|----------------|---|-------------------|--------|--------|---|---|
| C-2 ^a -iii | Chapter 3 - Depth Determination | KJ | H | Review of Content | Oct 22 | Oct 23 | C | Review at HSWG 4 Review Requirements to be included in C-13 Review Template Findings to be presented at HSWG 05 |
| C-2 ^a -iv | Chapter 4 - Seabed Classification and Feature Detection | SC/KJ | H | Review of Content | Oct 22 | Oct 23 | C | Review at HSWG 4 Review Requirements to be included in C-13 Review Template Findings to be presented at HSWG 05 |
| C-2 ^a -v | Chapter 5 - Water Levels and Flow | DR | H | Review of Content | Oct 22 | Oct 23 | C | Review at HSWG 4 Review Requirements to be included in C-13 Review Template Findings to be presented at HSWG 05 |
| C-2 ^a -vi | Chapter 6 - Topographic Surveying | CC(1) HP(2) | H | Review of Content | Oct 22 | Oct 23 | C | Review at HSWG 4 Review Requirements to be included in C-13 Review Template Findings to be presented at HSWG 05 |
| C-2 ^a -vii | Chapter 7 – Hydrographic Practise | JAA | H | Review of Content | Oct 22 | Oct 23 | C | Review at HSWG 4 Review Requirements to be included in MHPT-3 Minutes |
| C-2 ^a -viii | Appendices | | M | | May 23 | Jul 24 | P | To be reviewed once Chapter Changes are collated |

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|-----------------------|--|----|---|---|--------|--------|---|--|
| C-2b | Consolidation of questionnaire results | | | | Jun 23 | Oct 23 | C | Intersessional Meetings to analyse results and update C-13 Review Template |
| C-2c | Define scope of final document | | M | | Jun 23 | Feb 24 | C | Based on chapter reviews and questionnaire Intersessional Meeting to confirm final scope |
| C3 | Editing of C13 to incorporate revisions/amendments | | | | Mar 24 | Apr 25 | P | Review of Progress at MHPT-6 Complete by MHPT-8 |
| C-3a | MHPT incorporate changes and amendments | | | | Mar 24 | Apr 25 | P | Amendments and New Insertions incorporated by Chapter and reviewed externally at C4. Timeline to be determined at later meetings. |
| C-3 ^a -i | Chapter 1 _ Geodesy and Coordinate Systems | CC | M | Undertake Amendments Identified in Review | May 24 | Jun 24 | P | Provision of Graphics to be determined to provide uniformity External support for new insertions to be requested via Questionnaire |
| C-3 ^a -ii | Chapter 2 - Positioning | | M | Undertake Amendments Identified in Review | Jul 24 | Aug 24 | P | Provision of Graphics to be determined to provide uniformity |
| C-3 ^a -iii | Chapter 3 – Tides, Water Levels and Flow | | M | Undertake Amendments Identified in Review | Sep 24 | Oct 24 | P | External support for new insertions to be requested via Questionnaire External support for new insertions to be requested via Questionnaire |

| | | | | | | | | |
|------------------------|---|----|---|---|--------|--------|---|--|
| C-3 ^a -iv | Chapter 4 – Depth Determination | NR | L | Undertake Amendments Identified in Review | Nov 24 | Dec 24 | P | Provision of Graphics to be determined to provide uniformity External support for new insertions to be requested via Questionnaire |
| C-3 ^a -v | Chapter 5 – Seafloor Classification | SC | L | Undertake Amendments Identified in Review | Jan 25 | Feb 25 | P | External support for new insertions to be requested via Questionnaire External support for new insertions to be requested via Questionnaire |
| C-3 ^a -vi | Chapter 6 – Feature Detection | | L | Undertake Amendments Identified in Review | Mar 25 | Apr 25 | P | Provision of Graphics to be determined to provide uniformity External support for new insertions to be requested via Questionnaire |
| C-3 ^a -vii | Chapter 7 – Hydrographic Practise | NR | H | Undertake Amendments Identified in Review | Mar 24 | Apr 24 | P | External support for new insertions to be requested via Questionnaire External support for new insertions to be requested via Questionnaire |
| C-3 ^a -viii | Chapter 8 – Topographic and Imagery Surveying | | L | Undertake Amendments Identified in Review | Apr 25 | May 25 | P | Provision of Graphics to be determined to provide uniformity External support for new insertions to be requested via Questionnaire |
| C-3 ^a -ix | Annexes and Appendices | ID | M | Undertake Amendments Identified in Review | Mar 24 | Apr 25 | P | Provision of Graphics to be determined to provide uniformity |

| | | | | | | | | |
|------------------------|--|------|----------|-------------------------------|---------------|---------------|---|---|
| | | | | | | | | <i>External support for new insertions to be requested via Questionnaire</i> |
| C-4 | HSWG Review of Draft C-13 Document | | | | <i>May 24</i> | <i>Apr 25</i> | P | Alos External Reviewers identified by initial Questionnaire |
| C-4a | <i>Final Edited Chapters formatted into proposed document format</i> | HSWG | | | <i>Feb 25</i> | <i>Apr 25</i> | | <i>Final Format of Document to be confirmed along with how this will be completed (IHO or External Party)</i> |
| C-4 ^a -i | <i>Chapter 1 _ Geodesy and Coordinate Systems</i> | HSWG | <i>M</i> | <i>Review Amended Content</i> | <i>Jul 24</i> | <i>Jul 24</i> | | 2 |
| C-4 ^a -ii | <i>Chapter 2 - Positioning</i> | HSWG | <i>M</i> | <i>Review Amended Content</i> | <i>Sep 24</i> | <i>Sep 24</i> | | 3 |
| C-4 ^a -iii | <i>Chapter 3 – Tides, Water Levels and Flow</i> | HSWG | <i>M</i> | <i>Review Amended Content</i> | <i>Nov 24</i> | <i>Nov 24</i> | | 4 |
| C-4 ^a -iv | <i>Chapter 4 – Depth Determination</i> | HSWG | <i>M</i> | <i>Review Amended Content</i> | <i>Jan 25</i> | <i>Jan 25</i> | | 5 |
| C-4 ^a -v | <i>Chapter 5 – Seafloor Classification</i> | HSWG | <i>L</i> | <i>Review Amended Content</i> | <i>Mar 25</i> | <i>Mar 25</i> | | 7 |
| C-4 ^a -vi | <i>Chapter 6 – Feature Detection</i> | HSWG | <i>L</i> | <i>Review Amended Content</i> | <i>Apr 25</i> | <i>Apr 25</i> | | 6 |
| C-4 ^a -vii | <i>Chapter 7 – Hydrographic Practise</i> | HSWG | <i>H</i> | <i>Review Amended Content</i> | <i>May 24</i> | <i>May 24</i> | P | 1 |
| C-4 ^a -viii | <i>Chapter 8 – Topographic and Imagery Surveying</i> | HSWG | <i>L</i> | <i>Review Amended Content</i> | <i>Apr 25</i> | <i>Apr 25</i> | | 8 |
| C-4 ^a -ix | <i>Annexes and Appendices</i> | HSWG | <i>L</i> | <i>Review Amended Content</i> | <i>Mar 24</i> | <i>Apr 25</i> | | 9 |

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|------|--|--|---|---------------------|--------|----------|---|--|
| C-5 | IHO Review of revised C-13 | | | | May 25 | Dec 25 | P | |
| C-5a | HSWG Review and Approval | | | | May 25 | May 25 | | Intersessional Review |
| C-5b | HSSC Review | | | | Jun 25 | Jul 25 | | Incorporate observations prior to next stage |
| C-5c | Review by Member States | | | | Aug 25 | Oct 25 | | Incorporate Member state observations |
| C-5d | Develop C-13 promotional material | | | | Aug 25 | Oct 25 | | |
| C-6 | Release of C13 | | | | Nov 25 | Dec 25 | | |
| C-7 | Identify translation opportunities for C13 | | L | Identify volunteers | 2026 | On going | P | |

SDBPT Workplan

Key Tasks

| | |
|----------|---|
| A | Conducting regular meetings of SDB-PT |
| B | Maintaining an SDB Best Practice Guideline, preparing and proposing revisions and amendments to reflect changes in the demands of hydrographic and other SDB data users, particularly those pertaining to data quality and standards; |
| C | Supporting IHO's Hydrographic Surveys Working Group (HSWG) and project teams pertaining to all relevant aspects of SDB |
| D | Supporting Capacity Building and promoting benefits/opportunities on SDB |
| E | Identifying new concepts, technologies, and methodologies on SDB and fostering the exchange of experience, best practice and challenges amongst the Members. |

| Work item | Title | Priority H-high M-medium L-low | Next mile-stones | Start Date | End Date | Status P-planned O-ongoing C-completed S-Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|-------|---|------------------|------------|----------|---|-------------------|-------------------------|---------|
|-----------|-------|---|------------------|------------|----------|---|-------------------|-------------------------|---------|

| | | | | | | | | | |
|-----|--|---|--|------------|------------|---|----------------------|--|--|
| A-1 | B-13 final release as official IHO publication | H | Publication of 1 st Version | 31.09.2022 | 30.03.2024 | O | Chair | | |
| A-2 | Maintain SDB-PT and submission of updated versions for HSWG review | H | Establishment of an inter-meeting team for maintaining B-13 | | 15.02.2025 | P | Chair and Vice Chair | | |
| A-3 | Maintain SDB-PT and submission of updated versions for HSWG review | H | - | | 15.02.2026 | P | Chair and Vice Chair | | |
| A-8 | Review of other related materials/documents | M | consolidate existing material which can support on structure or content, such as IHO B-12, C-13 and Gebco CookBook | 01.06.2021 | ongoing | O | Chair | | |
| B-1 | Present and participate at HSWG meetings | H | Invite HSWG members to participate at SDB-PT, collect HSWG demand on SDB | 2021-06-29 | ongoing | O | Chair and Vice Chair | | |
| B-2 | Engage with C-13 project team | M | Identify synergise and required input to interact with C-13 project team at the HSWG meetings | 2021-06-29 | ongoing | O | Chair and Vice Chair | | |
| B-3 | Outreach, engagement | M | Engage with other organisation which are/might be stakeholders of SDB and SDBPT | 2024-04-01 | ongoing | P | Chair | | |
| B-4 | Outreach, publication | M | Joint abstracts, articles or similar promoting SDB and SDBPT | 2024-04-01 | ongoing | P | Chair | | |
| D-1 | Maintaining SDB-PT TOR and Work Plan and member lists | H | TOR, Work Plan and member list available at IHO webpage | 2021-06-23 | ongoing | O | Chair | | |
| E-1 | Contribution to regional IHO meetings | M | Engage with regional IHO chairs to check interest | Ongoing | ongoing | P | Chair and Vice Chair | | |
| F-1 | Identification of actions for SDB technology/innovation exercises | L | Prioritization of technological aspects which shall be addressed by SDBBWG | Q3 2023 | ongoing | P | Chair and Vice Chair | | |

Meetings

| Date | Location | Activity |
|--------------------------|-----------------|----------|
| 26 Feb. – 1 March 2024 | Dublin, Ireland | HSWG6 |
| 3à Sep. – 4 October 2024 | Frascati, Italy | HSWG7 |
| | | |

HSWG Chair: David Parker
 HSWG Vice-Chair: Megan Greenaway
 HSWG Secretary: Carlos Videira Marques

Email: David.Parker@ukho.gov.uk
 Email: Megan.Greenaway@noaa.gov
 Email: Videira.Marques@hidrografico.pt

7. TWCWG WORK PLAN 2024-25

Objective

- a) To monitor developments related to tidal and water level observation, analysis and prediction and other related information including vertical and horizontal datums;
- b) To develop and maintain the relevant IHO standards, specifications and publications for which it is responsible in liaison with the relevant IHO bodies and non-IHO entities;
- c) To develop standards for the delivery and presentation of navigationally relevant current information; and
- d) To provide technical advice and coordination on matters related to tides, water levels, currents and vertical datum.

Tasks

| | |
|---|---|
| A | Maintain the list of standard tidal constituents (IHO Task 2.8.4). |
| B | Compare the tidal predictions generated as a result of analysis of a common data set using different analysis software. |
| D | Develop, maintain and extend a Product Specification for Surface Currents in ECDIS (S-111) (IHO Task 2.3.4). |
| E | Develop, maintain and extend a Product specification for Water Level Information and Water Level Adjustment, WLA in ECDIS (S-104) (IHO Task 2.3.4). |
| E | Develop, maintain and extend a Product specification for Water Level Information (non-Water Level Adjustment, WLA) (S-10x) (IHO Task 2.3.4). |
| F | Liaise with S-100WG on water levels and currents themes relevant to ECDIS applications (IHO Task 2.3.5). |
| G | Liaise with industry experts on the development of Product Specifications for water levels and currents (IHO Task 2.5.1). |
| H | Prepare and maintain an inventory of water level gauges and current meters used by Member States and publish it on the IHO/TWCWG web site (IHO Task 2.8.5). |
| I | Review and maintain the Actual Tides and Currents On-Line links as published on the IHO TWCWG website (IHO Task 2.8.5). |
| J | Maintain and extend the relevant IHO standards, specifications and publications as required (IHO Tasks 2.8.4 and 2.1.8). |
| K | Conduct at least annual meetings of TWCWG and its sub-group(s) and project team(s) (IHO Tasks 2.1.2.7). |
| L | Develop and maintain material for course on Tides, Water Levels and Currents (IHO Task 3.3.9). |
| M | Review and maintain the List of Chart Datums (CD) in use by Member States (IHO Task 2.8.8). |

Work items

| Work item | Title | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed S-Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|--|---|------------------------------------|------------|-----------|---|--|-------------------------|--|
| | | | | | | | | | |
| A.1 | Maintain the list of standard tidal constituents. | M | | - | Permanent | O | -Chris Jones* -All | | Review current list of published tidal constituents. |
| B.1 | Compare the tidal and tidal current predictions generated as a result of analysis of a common data set using different analysis software. | M | | - | Permanent | O | -Hilde Sande Borck* -All | | Select Common data set. Analyse using different software. Compute common set of predictions. Compare results. |
| B.2 | Support and Contribute to the International Association for the Physical Sciences of the Oceans (IAPSO) Best Practice Study group on Tidal Analysis. | M | As directed by IAPSO/TWCWG contact | 2023 | tbc | P O | -Hilde Sande Borck* -Andreas Boesch -Zarina Jayaswal -Phil MacAulay -Peter Stone | | Engage with the Best Practice Study Group, co-ordinating tasks on behalf of TWCWG. Report back to, and enlist support from, TWCWG. |

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|-----|---|---|---|--------------|------------------------------|-----|---|---|---|
| | | | | | | | -Andrew Matthews (IAPSO/TWCWG Contact) | | |
| D.1 | Develop and maintain a product specification for surface currents information in ECDIS (S-111). | H | Issue Edition 1.0.0 | 2013 | 2017 2018 2019 | Θ C | See report TWCWG4: List of involved and active members: | S-100 S-98 M-3 IHO Resolutions | Joint project team is established as required. Liaise with S-100WG (see F.1). Liaise with industry experts (see G.1). Edition 1.2.0 (S-111) is aligned with S-100 Edition 5.0.0. Edition 2.0.0 (S-111) is aligned with S-100 Edition 5.2.0. |
| | | H | Issue Edition 1.2.0 | 2021 | 2023 | C | -Greg Seroka* -Thomas Hammarklint | | |
| | | H | Issue Edition 2.0.0 | 2023 2024 | 2024 2025 | P | -Phil MacAuley (Gilles - Mercier & Maxime Carre) -Raphael Malyankar -Kwang nam HAN -Ronald Kuilman | | |
| E.1 | Develop and maintain a product specification for water levels information in ECDIS (S-104). | H | Develop draft Product Specifications (S-104) for water level information for surface navigation in S-100 | 2009 | 2017 2018 2019 2020 | C | See report TWCWG4: List of involved and active members: -Zarina Jayaswal* | S-100 S-98 M-3 IHO Resolutions | Joint project team is established as required. Liaise with S-100WG (see F.1) |

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|-----|---|---|---|--------------|--------------|---|---|--|--|
| | | H | Issue Edition 1.0.0 | 2019 | 2021 | C | -Andreas Boesch | | |
| | | H | Issue Edition 1.1.0 | 2021 | 2023 | C | -Thomas Hammarklint | | Liaise with industry experts (see G.1) |
| | | H | Issue Edition 2.0.0 | 2023 2024 | 2024 2025 | P | -Phil MacAuley (Gilles Mercier Maxime Carre) -Raphael Malyankar -Kwang nam HAN, -Greg Seroka | | Edition 1.1.0 (S-104) is aligned with S-100 Edition 5.0.0. Edition 2.0.0 (S-104) is aligned with S-100 Edition 5.2.0. |
| E.2 | Create, develop and maintain S-10x Product Specification (water levels information in ECDIS; extended scope). | M | Develop draft Product Specification (S-10x) for water level information for surface navigation; extended scope. | 2024 | 2025 | P | -Phil MacAuley -Felipe Rodrigues Santana -Greg Seroka -Peter Stone -Chris Jones (Tom Cropper) -Raphael Malyankar -Fernando Oreiro -Zarina Jayaswal -Anni Jokiniemi -Hilde Sande Borck -Nicki Andreasen -Silvia Costa | | 'New' Water level product specification to 're-insert' the information removed from initial S-104. |

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|-----|--|---|--|---|-----------|---|--|--------------------------------|---|
| F.1 | Liaise with S-100WG on water level and current matters relevant to ECDIS applications | H | | - | Permanent | O | -Chris Jones -Zarina Jayaswal -Raphael Malyankar -Greg Seroka | | Joint project team is established as required. |
| G.1 | Liaise with industry experts on the development of product specifications for water levels and currents | H | | - | Permanent | O | -All | | |
| H.1 | Maintain an inventory of water level gauges and current meters used by Member States and publish it on the IHO/TWCWG web site. | H | | - | Permanent | O | -All | | Initial inventory from TWCWG members available on IHO web site. |
| I.1 | Review and maintain the Actual Tides and Currents On-Line links as published on the IHO/TWCWG Website. | L | | - | Permanent | O | -All | | |
| J.1 | Maintain and extend the relevant IHO standards, specifications and publications. | M | | - | Permanent | O | -Chris Jones* -Ruth Farre -All | S-44 C-13 S-104 S-111 | |

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|-----|---|---|---------------|----------|--------------|---|---|--------------------------------|--|
| J.2 | Maintain IHO resolutions & Charting Specifications. | H | | - | Permanent | O | -Ruth Farre* -All | IHO Resolutions in M-3 | Review the relevant Resolutions and Charting Specifications annually |
| J.3 | Liaise and collaborate with HSWG to review and amend relevant sections of S-44. | L | Edition 6.3.0 | May 2024 | October 2025 | P | -Fernando Oreiro -Zarina Jayaswal) -Felipe Rodrigues Santana -Phil MacAulay -Jyrki Moronen -Chris Jones -Carl Kamerer -Hilde Sande Borck | S-44 C-13 S-104 S-111 | Propose amendments to improve water level and surface currents observation uncertainty standards within the relevant sections of S-44. Review S-44 in accordance with maintenance and publication schedule. |
| L.1 | Develop and maintain material for CB course on Tides and Tide gauges | H | | - | Permanent | O | -Ruth Farre* -Peter Stone -Zarina Jayaswal -Cesar Borba | | Adapt currently available course material to create a course suitable for delivery in support of CBSC requests |
| M.1 | Review and maintain the List of Chart Datums (CD) in use by Member States | L | | - | Permanent | O | -Chris Jones* -Peter Stone -Sam Harper -All | | Maintain a reference list of vertical Chart Datums in use globally by Hydrographic Offices relating to their national charting / tidal & water level products and services. |

Meetings (Task N)

| Date | Location | Activity |
|----------------------------|-------------|----------|
| 28 February – 2 March 2023 | Remote VTC | TWCWG-7 |
| 20 -22 February 2024 | Remote VTC | TWCWG-8 |
| 19-22 November 2024 (tbc) | Monaco, IHO | TWCWG-9 |

Chair: Chris Jones (UK)

Vice Chair: Ruth Farre (South Africa)

Secretary: Sam Harper (IHO Sec.)

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8. NCWG WORK PLAN 2024-25

Tasks

| | |
|---|--|
| A | Maintain and extend Publication S-4 'Chart Specifications of the IHO & Regulations of the IHO for INT Charts' (IHO Task 2.2.1) |
| B | Maintain and extend Publication S-11 Part A 'Guidance for the Preparation and Maintenance of INT Chart schemes' (IHO Task 2.2.2) |
| D | Development of new (and revised) symbology (IHO Task 2.2.1) |
| E | Maintenance of S-4 supplementary publications INT 1, 2 & 3 (IHO Task 2.2.1) |
| G | Conduct meetings of NCWG (IHO Task 2.1) |
| H | Provide technical assistance to other IHO working groups and support regarding the implementation of S-100 (IHO Task 2.3) |

Work items

* Allowing for approval via HSSC (in accordance with Resolution 2/2007) before MS and publication.

| No | Work item | Priority H-high M-medium L-low | Next Milestone | Start Date | End Date | Status P-Planned O-Ongoing C-Completed | Contact Person(s) | Affected Pubs/Standard | Remarks |
|-----|---|---|--|---------------|-------------|---|--|---------------------------|--|
| B5 | Update S-11 Part A Section 200 to cover S-101 | H | NCWG10 HSSC17 | 2023 | 2025 | O | FI (J Helminen) | S-11 Part A | |
| E1 | Maintain official INT 1s | | | | | O | UK: Sam Lerigo FR: S Guillou ES: J. Bustamante | INT 1 | UK INT 1 edition 8 published November 2020 ES INT 1 edition 7 published April 2022 FR INT 1 edition 7 published in 2019 |
| E9 | Develop new section V for INT1 for 'data quality' | M | Draft under consideration by INT1 subWG | 2014 | | O | Chair NCWG INT1 subWG | INT1 | CSPCWG10 Action 35 NCWG3 Agenda 11.2: Transferred to UK NCWG4 – Action 4/18 ongoing Feedback UK implementation pending |
| E10 | Symbol library | L | UK to confirm freedom to use UK's symbol set | 2016 | | O | BSPT Lead | S-4, INT1 | NCWG Actions 45, 46 NCWG3 Agenda 3: Not required to progress at this time. Progressed as part of the baseline symbology task (E11) |

| | | | | | | | | | |
|-----|--|---|--------------------------------------|------|--|---|-----------|-----------|---|
| E11 | Develop baseline symbology to support automated chart production | H | NCWG6 – discuss and agree work tasks | 2020 | | O | BSPT Lead | INT1, S-4 | New proposal by NCWG at HSSC12 Baseline Symbology PT established |
|-----|--|---|--------------------------------------|------|--|---|-----------|-----------|---|

Meetings (Task G)

| Date | Location | Activity |
|-----------------------------------|-------------------------|----------|
| 15-18 November 2022 | Wollongong, Australia | NCWG8 |
| 27 November - 01 December 2023 | Taunton, UK | NCWG9 |
| 12 - 15 November 2024 | IHO Secretariat, Monaco | NCWG10 |

Chairman: Mikko Hovi (FI) Email: mikko.hovi@traficom.fi
Vice Chairman: Nick Rodwell (UK) Email: Nick.Rodwell@UKHO.gov.uk
Secretary: Patricia Sheatsley (Esri) Email: PSheatsley@esri.com

9. DQWG WORK PLAN 2024-25

Tasks

- A. Develop and maintain a data quality checklist for product specification developers (IHO Task 2.8)
- B. Periodically review S-100 based product specifications to ensure the data quality aspects have been taken into consideration and provide input papers for WGs and PTs consideration if deemed necessary (IHO Task 2.3)
- C. Monitor periodically developments of ISO and other international standards regarding quality information, and advise accordingly (IHO Task 2.8)
- D. Provide guidance on data quality aspects to hydrographic offices, in particular to ensure harmonized implementation (IHO Task 2.1 and 2.5.1)
- E. Provide data quality educational material for the use of mariners (IHO Task 2.4.9)
- F. Review appropriate methodology for the display of quality information to product specification developers (IHO Task 2.1)
- G. Propose new data quality topics for consideration by HSSC (IHO Task 2.8)

Work Items

| Task | Work Item | Priority H=High M= Medium L=Low | Next Milestones | Start Date | End Date | Status P=planned O=Ongoing C=Completed | Contact Person | Affected Pubs/ Standards | Remarks |
|------|---|--|---------------------|------------|----------|---|----------------|-----------------------------|------------------|
| A.1 | Review S-100Part 4C. | M | S-100 Ed 6.0.0 | 2022 | 2025 | O | Chair | S-100 | DQWG15-04.4B |
| A.2 | Review S-97Part 4C. | M | S-97 Ed 2.0.0 | 2023 | 2025 | O | Chair | S-97 | DQWG19-06.2A |
| B.1 | Review S-1xx based PS (Ed.1.0.0 or higher) | H | DQWG20 | 2021 | 2025 | O | Chair | S-1xx | DQWG 19-03.1A |
| B.2 | Review S-1xx Feature Catalogues | M | S-101 Ed.2.0.0 | 2021 | 2025 | O | Chair | S-1xx | DQWG19-05.1A |
| B.4 | Develop Guidance and Recommendations on the data quality evaluation of S-100 products | M | DQWG20 | 2024 | 2025 | P | Chair | S-1xx | DQWG19-07.1A |
| C.1 | Review S-100Part 4a. | M | S-100WG9 | 2024 | 2024 | O | Chair | S-100 | DQWG19-05.6A |
| D.1 | Provide guidance documentation how to populate CATZOC values. | H | S-68 Ed 1.1.0 | 2021 | 2025 | O | Chair | S-68 | DQWG19-05.3A |
| D.2 | Developing a CATZOC allocation scheme for CSB data by collaborating with CSBWG and HSWG | H | DQWG20 | 2024 | 2025 | O | Chair | S-68, B-12, S-44 | DQWG19-05.4A |
| E.1 | Merging S-66 and S-67 into a single IHO publication | M | New Edition of S-66 | 2023 | C | O | Chair | S-66, S-67 | Action HSSC14/40 |
| G.1 | Monitor development of autonomous shipping by the industry | M | DQWG20 | 2020 | 2025 | O | Chair | S-1XX | None |

Meetings

| Date | Location | Activity |
|--------------------|----------------|----------|
| 8-11 February 2022 | VTC | DQWG17 |
| 7-9 February 2023 | Hybrid, Monaco | DQWG18 |
| 25-26 March 2024 | VTC | DQWG19 |
| 11-13 March 2025 | China (tbc) | DQWG20 |

Chair: Lingzhi Wu (China)

Email: 3511431@qq.com

Vice-Chair: Vacant

Email:

Secretary: Scott Youngblut

Email: scott.youngblut@dfo-mpo.gc.ca

10. HDCG WORK PLAN 2024-25

Tasks

| | |
|---|--|
| A | Maintain and extend the definitions in the IHO S-32 Hydrographic Dictionary (IHO Task 2.8.2) |
| B | Liaise with other IHO bodies preparing publications containing glossaries (IHO Task 2.8.2) |
| C | Liaise with other organizations developing dictionaries and/or glossaries (IHO Task 2.8.2) |
| D | Change HDWG to HDCG (IHO Task 2.1.2.10) |
| E | Modernize the IHO S-32 Hydrographic Dictionary (IHO Task 2.8.2) |

Work items

| Task | Work item | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed | Contact Person(s) * indicates leader | Related Pubs / Standard | Remarks |
|------|---|---|----------------|------------|-----------|---|---|-------------------------|--|
| A.1 | Endorse the Ed. 6.0.0 of S-32 "IHO Hydrographic Dictionary" and submit to HSSC16. | H | | 2023 | 2024 | O | Chair | S-32 | New terms have been added by the Shom Delegate, which were previously absent in the English version but were included in the French version. |
| A.2 | Maintain and distribute the IHO S-32 Hydrographic Dictionary | H | | 2023 | Permanent | O | Chair | S-32 | Through the Concept Registry |
| C.1 | Liaise with Member States who have developed a national HD | M | | 2023 | 2024 | O | Chair | | China, Indonesia, Spain |
| C.2 | Update the list of countries who wish to develop their own national HD | M | | 2023 | 2024 | C | Chair HDCG | | Oman, Japan |

| Task | Work item | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed | Contact Person(s) * indicates leader | Related Pubs / Standard | Remarks |
|------|---|---|--|------------|----------|---|---|-------------------------|---|
| A.3 | Update the HD French national version | L | | 2023 | ? | P | SHOM Delegate | | Only if confirmed by Shom |
| D | Harmonize the S-32 IHO Hydrographic Dictionary database with the IHO GI Registry through the Concept Registry Domain Control Body | L | | 2020 | 2024 | C | Chair HDCG | S-32 | The concept API service has been tested and can be called. To achieve the updating of HD database via a terminology API is a better approach. |
| D | Prepare the necessary steps to move the HDWG to HDCG | H | The workshop on the IHO HD and GI Registry | 2023 | 2024 | O | Chair HDCG | S-32 | Completion of HDCG ToRs Draft and Submission to HSSC16 |
| E.1 | Introduce a methodological approach to update the HD from a terminological perspective. | H | The workshop on the IHO HD and GI Registry | 2024 | 2025 | P | BSH (Lars Schiller) | S-32 | |
| E.2 | Modernize the IHO S-32 Hydrographic Dictionary | H | The workshop on the IHO HD and GI Registry | 2024 | 2025 | P | IHO Sec (Jeff Wootton) | S-32 | |
| E.3 | Further advance the establishment of a concept-centered terminology database | M | | 2024 | 2026 | P | HDCG | | |

Meetings (IHO WP task 3.1.8)

| Date | Location | Activity |
|---------------------|-------------------------|----------|
| 27-28 November 2018 | IHO, Monaco | HDWG2 |
| 3 February 2022 | HD/GI Registry Workshop | VTC |

| | | |
|--|----------------------------|--|
| 26 April 2022 | Discussion on Hydrospatial | VTC |
| Late 2024 (potential mid October ahead of the IHO Council), TBC. | IHO, Monaco | Workshop on the IHO HD and GI Registry |

Chair: Lyu Yu Xiao, China

Vice-Chair: Vacant

Secretary: Samuel Harper, IHO Sec.

Email: 38893531@qq.com

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11. ABLOS WORK PLAN 2024-25

Tasks

| | |
|---|--|
| A | Organise the ABLOS Seminar 2024 and 12 th ABLOS Conference in 2025 (IHO Task 2.7.1) |
| B | Maintain IHO Publication C-51 “Technical Aspects of the Law of the Sea (TALOS) Manual” (IHO Task 2.7.2) |
| C | Deliver a standard training program on the hydrographic aspects of maritime delimitation (IHO Task 3.3.11) |
| D | Provide advice and guidance on the technical aspect of the Law of the Sea to relevant organizations, bodies and Member States (IHO Task 2.7.2) |
| E | Organize and prepare ABLOS business meetings in 2024 and 2025 (IHO Task 2.1.2.8) |

Work items

| Task | Work item | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed | Contact Person(s) * indicates leader | Related Pubs / Standard | Remarks |
|------|--|---|---|------------------------------|------------------------------|---|--|-------------------------|---------|
| A1 | Organise ABLOS Seminar (Brazil) 2024 | H | Date Venue Program | 2023 | 2024 | O | Izabel King J. All members of ABLOS through Committee | N/A | |
| A2 | Organise 12 th ABLOS Conference | H | Begin advertising Identify and invite key note speaker Confirm conference title Attract presentation abstracts | 2023 2023 2023 2023 | 2024 2024 2024 2025 | P P O O | All members of ABLOS through Committee | | |

| Task | Work item | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed | Contact Person(s) * indicates leader | Related Pubs / Standard | Remarks |
|------|--|---|---|------------|----------|---|---|-------------------------|---------|
| A3 | Conference support and outreach | H | Develop and maintain ABLOS website | 2019 | On going | P | Niels Andersen | | |
| B1 | Prepare draft 6 th Edition of C-51 (TALOS Manual) for adoption by Member States | H | Review initial Spanish translation and propose amendments | 2018 | 2023 | C | Juan Carlos Báez Soto* | IHO Publication C-51 | |

| | | | | | | | | |
|----|----------------------------------|---|---|------|------|---|------------------------------|----------------------------|
| B2 | Commence 7 th Edition | H | Confirm Format and Content | 2019 | 2024 | O | Editorial Board John Ells | IHO Publication C-51 |
| | | H | Study the conversion to digital format and create an executive summary to non-specialists use | 2021 | 2024 | O | Editorial Board John Ells | |
| | | M | Review contents of chapters and identify areas requiring revision | 2021 | 2025 | O | Editorial Board | |
| | | M | Develop draft revised chapters and seek ABLOS consensus | 2023 | 2025 | P | Editorial Board | |
| | | M | Submit to HSSC for endorsement and circulation to IHO MS and AIG EC for approval and adoption | 2023 | 2025 | P | ABLOS Chair | |
| | | | Progress French and Spanish translations | | | | | |

| Task | Work item | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed | Contact Person(s) * indicates leader | Related Pubs / Standard | Remarks |
|------|---|---|---|--------------|--------------|---|---|-----------------------------|--|
| | | M | | 2023 | 2025 | P | Marie-Françoise Lequentrec-Lalancette*/ Juan Carlos Báez Soto* | IHO Res. 2/2007, as amended | |
| C1 | Deliver standard training programmes for the CBSC | H | Develop and maintain core training material | 2011 | Continuous | O | Izabel King Jeck Fiona Bloor Juan Carlos Báez Soto | IHO Publication C-51 | Training Needs Analysis needed to be undertaken. |
| D1 | Provide advice and guidance on the technical aspect of the Law of the Sea | H | | Continuous | | O | All members of ABLOS through the Chair | | |
| E1 | Confirmation of place | H H | Confirmation of Brazil Confirmation of Qatar/Ecuador/Chile | 2023 2023 | 2024 2024 | O O | Izabel King Jeck Chair/all Members | | |

Meetings (Tasks A & E)

| Date | Location | Activity |
|----------------------|------------------------------------|--|
| 3 - 6 October 2022 | IHO, Monaco | ABLOS 29 |
| 10 – 13 October 2023 | IHO, Monaco | ABLOS 30 and 11th ABLOS Conference |
| 7 – 10 October 2024 | Rio de Janeiro, Brazil | ABLOS 31 and ABLOS Seminar |
| ?? - ?? October 2025 | Qatar?, Ecuador, Chile, Monaco? | ABLOS 32 and 12 th ABLOS Conference |

Chair: Dr Juan-Carlos Báez

Email: jcbaez@csn.uchile.cl

Vice-Chair: Fiona Bloor

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Secretary: Loenel Manteigas

Email: adcc@iho.int

12. COORDINATION WORK PLAN 2024-25

Tasks

| | |
|---|---|
| A | As required, establish Working Groups to fulfil the Committee Work Plan, monitor their work and review annually the continuing need for each Working Group previously established by the Committee (HSSC TOR) |
| B | Support the IHO Secretariat to implement the planning mechanism annually and at the end of each 3-year cycle (including preparation of next session of the IHO Assembly) |
| D | Conduct the 2024 and 2025 meetings of HSSC (IHO Task 2.1.1) |
| E | Participate in the governance activities of the IHO - Singapore Innovation and Technology Laboratory |

Work items

| Work item | Task | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed S-Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|--|---|----------------|------------|-----------|---|-------------------|-------------------------|--|
| A5 | Monitor work of WGs, and PTs under HSSC | H | HSSC-17 | | | O | | | HSSC WGs, HDCG, MASSPT, S-130PT, ICEPT |
| B2 | Contribute to the development of the S-100 Implementation Strategy | H | C-8 | 2018 | 2025 | O | | | Amendments and draft proposal to Annex 2 of S-100 Roadmap. |
| B3 | Implement the Strategic 2021-2026 and contribute to the proposed IHO SP 2027-2032 | M | C-9 | 2020 | 2025 | O | | | |
| B4 | Consider the need to update the lists in Appendices 1 and 2 of IHO Resolution 2/2007 | L | HSSC-17 | 2022 | Permanent | P | | M-3 | Action HSSC14/101 refers |
| E1 | Contribute to the activities of the Governing Board | M | A-3 | 2021 | Permanent | O | DTech/ADDT | | |

Meetings (Task D)

| Date | Location | Activity |
|------------|----------|------------------------|
| 9 Dec 2020 | VTC | Outcome of A-2 and C-4 |
| | | |

HSSC Chair: Magnus Wallhagen, Sweden

HSSC Vice Chair: Nathalie Leidinger, France

HSSC Secretary: John Nyberg, IHO Sec.

HSSC Assistant Secretary: Eric Langlois, IHO Sec.

Email: Magnus.Wallhagen@Sjofartsverket.se

Email: nathalie.leidinger@shom.fr

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Email: adcs@iho.int

13. MASS PROJECT TEAM (or MASSWG) WORK PLAN 2024-25

To be completed

Tasks

| | |
|---|--|
| A | Identify and prioritize MASS navigation requirements (MASS PT TOR) |
| B | Analyse their impacts on current hydrographic standards and services |
| C | Develop a set of recommendations/issues to be addressed by existing working groups |
| D | Conduct the 2024 and 2025 meetings of MASS PT (or MASS WG if approved at C-8) |

Work items

Pending C-8 decision, to be filled using the table below and Annex B of MASSPT Report to HSSC-16 (Doc. [HSSC16-05.9A](#)).

| Work item | Task | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed S-Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|------|---|----------------|------------|----------|---|-------------------|-------------------------|---------|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Meetings (Task D)

| Date | Location | Activity |
|--------------|----------|----------|
| 17 July 2024 | VTC | MASS PT7 |

MASS PT Chair: Paul Burton, UK
 MASS PT Vice-Chair: IM Namkyun, ROK
 MASS PT Secretary: Annie Biron, Canada

Email: paul.burton@ukho.gov.uk
 Email: tbc
 Email: Annie.biron@dfo-mpo.gc.ca

14. S-130 PROJECT TEAM WORK PLAN 2024-25

Tasks

| | |
|---|--|
| A | Develop and maintain S-130 “Polygonal Demarcations of Global Sea Areas Product Specification” (IHO Task 2.3.4) |
| B | Produce and distribute S-130 dataset (IHO Task 2.3) |
| C | Maintain maintenance procedure and user/information manual (IHO Task 2.3) |
| D | Conduct the 2024-2025 meetings of S-130PT (IHO Task 2.1) |

Work items

| Task | Work Item | Priority | Milestones | Start Date | End Date | Status | Contact Person | Affected Pubs/Standard | Remarks |
|------|---|-----------------------------|------------|------------|-----------|---------------------------------------|-------------------------|------------------------|---------|
| | | H-high M-medium L-low | | | | P-planned O-ongoing C-Completed | | | |
| A.3 | Develop S-130 Product Specification Edition 2.0.0 | H | HSSC 17 | 2023 | 2024 | P | Britt Lonneville (VLIZ) | | |
| B.1 | Develop S-130 sample dataset | H | | 2023 | 2023/2024 | O | Britt Lonneville (VLIZ) | | |
| B.2 | Initial test of S-130 sample dataset | M | | 2023 | 2023/2024 | O | Britt Lonneville (VLIZ) | | |
| B.3 | Develop S-130 dataset | M | HSSC 17 | 2023/2024 | 2025 | P | Britt Lonneville (VLIZ) | | |
| D.1 | Meetings S-130PT | M | | 2022 | Ongoing | O | Britt Lonneville (VLIZ) | | |

Meetings (Task D)

| Date | Location | Activity |
|------|----------|----------|
| TBD | VTC | S-130PT9 |

S-130PT Chair: Britt Lonneville, Belgium

Email: britt.lonneville@vliz.be

S-130PT Vice Chair: Wu Lingzhi , China

Email: 3511431@qq.com

S-130PT Secretary: Yong Baek, IHO Secretariat

Email: yong.baek@iho.int

15. S-100 INFRASTRUCTURE CENTRE ESTABLISHMENT (S-100 ICE) PROJECT TEAM WORK PLAN 2024-25

Tasks

To develop the management documents and operating plan for the proposed S-100 Infrastructure Center in particular:

| | |
|---|--|
| A | Propose role, scope, function and governance of the S-100 Infrastructure Centre |
| B | Propose composition, identify financial considerations, and suggest working procedures |
| C | Propose location |
| D | Propose the timeline for the establishment of the Infrastructure Centre |
| E | Support the HSSC with the creation of documents required to submit the proposal to the IHO Council |
| F | Conduct the 2024 and 2025 meetings of the S-100 ICE PT |

Work items

| Task | Work Item | Priority H-high M-medium L-low | Milestones | Start Date | End Date | Status P-planned O-ongoing C-Completed | Contact Person | Affected Pubs/Standard | Remarks |
|------|------------------------|---|------------|------------|----------|---|----------------|------------------------|---------|
| A1 | Agree upon role | H | | Jun-2023 | Mar-2024 | Ⓒ | Chair | | |
| A2 | Agree upon scope | H | | Jun-2023 | Mar-2024 | Ⓒ | Chair | | |
| A3 | Agree upon function | H | | Jun-2023 | Mar-2024 | Ⓒ | Chair | | |
| A4 | Agree upon governance | H | | Jun-2023 | Mar-2024 | C | Chair | | |
| B1 | Agree upon composition | H | | Jun-2023 | Mar-2024 | C | Chair | | |

| | | | | | | | | | |
|----|---|---|--|----------|----------|---|-------|--|--|
| B2 | Identify financial considerations | H | | Mar 2024 | 2025 | O | Chair | | |
| B2 | Suggest working procedures | M | | 2024 | 2025 | O | Chair | | |
| C1 | Agree upon location | H | | 2024 | 2025 | O | Chair | | |
| D1 | Agree upon establishment timeline | H | | | | C | Chair | | |
| E1 | Draft initial work plan for IHO Infrastructure Centre | M | | | | P | Chair | | |
| F1 | Support HSSC with C-8 proposal | H | | Jun 2024 | Oct 2024 | O | Chair | | |
| G1 | Conduct ICE PT meetings (VTC and/or physical) | M | | 2024 | 2025 | O | Chair | | |

Meetings (Task F)

| Date | Location | Activity |
|------|----------|----------|
| | | |
| | | |

S-100 ICE PT Chair: Benjamin Hell (SE)

Email: benjamin.hell@sjofartsverket.se

S-100 ICE PT Vice Chair: Vacant

Email:

S-100 ICE PT Secretary: Kevin Dickens (USA, NGA)

Email: Kevin.S.Dickens@nga.mil

16. S-100 SECURITY SCHEME (S-100 SS) PROJECT TEAM WORK PLAN 2024-25

Tasks

| | |
|---|--|
| A | Develop the S-100 appointment and termination process for data servers, OEMs and ENDS service providers |
| B | Analyse the current IHO agreements to ensure they are legally binding and provide the IHO with guidance on termination if participants are deemed to have breached |
| C | Propose new agreements for the management of participants within the S-100 security scheme |
| D | Propose to HSSC a method to monitor agreements for breaches possibly through an annual inspection regime for participants within the S-100 and security scheme and creation of S-128 catalogue files by ENDS service providers |
| E | Conduct the 2024 and 2025 meetings of the S-100 SS PT |

Work items

| Task | Work Item | Priority | Milestones | Start Date | End Date | Status | Contact Person | Affected Pubs/Standard | Remarks |
|------|-----------|-----------------------------|------------|------------|----------|---------------------------------------|----------------|------------------------|---------|
| | | H-high M-medium L-low | | | | P-planned O-ongoing C-Completed | | | |
| | | | | | | | | | |

| | | | | | | | | | |
|------------|---|----------|--|-----------------|----------------|----------|--|---------------------------|---|
| A.1 | Develop application process for all S-100 scheme participants Data Servers, OEMs | H | | 30/10/23 | | O | T. Mellor | S-63/S-100 part 15 | Application questions/form drafted for discussion. Important to estimate resources / support needed by IHO to operate the new procedures |
| A.2 | Develop process to record and monitor duplicate UPN registration | M | | 30/10/23 | | O | M. Andrew | S-100 Part 15 | Operation of duplicate UPN to be defined in the IHO agreement |
| B.1 | Review current operational procedures for data servers e.g. (M_ID M_Key spreadsheet) | H | | 30/10/23 | | O | | S-63 | Reviewing handling of the scheme sensitive information. Approach needs to be more 'cyber secure'. |
| B.2 | All new applications for OEM and Data server status run for limited time frames. Update current agreements to reflect changes | H | | 30/10/23 | 31/3/24 | C | T.Mellor J.Nyberg | | |
| B.3 | Review current legal agreements for S-63 | H | | 30/3/23 | | O | T.Mellor | | Burgess Salmon Solicitors advising, funded by IC-ENC |
| C.1 | Application to IC-ENC to fund legal investigation | H | | 17/1/24 | | C | M.Andrew | | IC-ENC approved funding |
| C.2 | Develop new agreements to reflect charges | H | | 30/10/23 | | O | T.Mellor J.Nyberg M. Andrew | | Burgess Salmon Solicitors advising, funded by IC-ENC |

| | | | | | | | | | |
|-----|---|---|--|----------|--|---|-----------|--|---|
| D.1 | Develop management process for poor performance and minor issues in addition to termination process | H | | 30/10/23 | | O | | | Supports agreement implementation and monitoring |
| D.2 | Develop charging mechanism | M | | 30/10/23 | | O | | | Security Scheme administration fee upon application |
| D.3 | Develop annual reporting / inspection routine | M | | | | O | | | Will be defined in the new IHO agreements |
| D.4 | Root certification duration and revocation of data server certificates | M | | | | O | R.Sandvik | | Required to more effectively manage the security of the M_ID |
| E.1 | Provide IHO WGs with recommendations on technical developments necessary to support the IHO security schemes | M | | | | P | | | |
| E.2 | Collaborate with ICE PT on technical infrastructure required for handling security scheme application, audits and archiving | H | | | | | | | |
| F.1 | Development of specific guidance on the implementation of S-100 part 15 (TBD) | H | | | | P | | | Work with S-100 WG to define requirements |

Meetings (Task E)

| Date | Location | Activity |
|----------------|----------|-------------|
| 25 June 2024 | VTC | S-100 SSPT8 |
| 29 August 2024 | VTC | S-100 SSPT9 |

S-100 SS PT Chair: Tom Mellor (UK)

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S-100 SS PT Vice Chair: Michael Andrew (AU)

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S-100 PT Secretary: Yong Baek (IHO Sec.)

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