**HSSC WORK PLAN 2023-24**

*Version 30 August 2023*

*Notes:*

*a/ This consolidated work plan (WP) has been compiled from the reports submitted to HSSC-15 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 2023. They have not been checked against the IHO Work Programme 2024 as it has not been approved by C-7 yet.*

*c/ Quick links:*

|  |  |  |
| --- | --- | --- |
| *§3.* [*S-100WG Work Plan*](#_3.__S-100WG) | *§4.* [*NIPWG Work Plan*](#_4._NIPWG_WORK) | *§5.* [*ENCWG Work Plan*](#_5._ENCWG_WORK) |
| *§6*[*. HSWG Work Plan*](#HSWG) | *§7.* [*TWCWG Work Plan*](#_7._TWCWG_WORK) | *§8.* [*NCWG Work Plan*](#NCWG) |
| *§9.* [*DQWG Work Plan*](#DQWG) | *§10.* [*HDWG/HDCG Work Plan*](#HDWG) | *§11.* [*ABLOS Work Plan*](#ABLOS) |
| *§12.* [*COORD Work Plan*](#HSSCCOORD) | *§13.* [*MASS PT Work Plan*](https://iho.int/uploads/user/Services%20and%20Standards/HSSC/HSSC14/HSSC14_2022_05.9A_EN_MASS%20PT%20Update.pdf) | *§14.* [*S-130 PT Work Plan*](#_14.__S-130) |
| *§15.* [*S-100 ICE PT Work Plan*](#S100ICEPT) | *§16.* [*S-100 SS PT Work Plan*](#S100SSPT) |  |

**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, “A*n*, B*n*, C*n*..”

**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. 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 2020-2021

See Programme 2 in the [IHO Work Programme 2023](https://iho.int/uploads/user/About%20IHO/Council/council6/IHO%20Work%20Programme%20for%202023.pdf) and IHO Proposed [IHO Work Programme 2024](https://iho.int/uploads/user/About%20IHO/Council/council7/C7_2023_05.2A_EN_Proposed_Work_Programme_for_2024_v1.pdf).

## 3. S-100WG WORK PLAN 2023-2024

**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 2023 and 2024 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 5.1.0 submitted in 2023.  Will proceed with corrections and clarifications until 2026. |
| A.2 | Develop and Extend of S-98 Interoperability Specification | H |  | 2015 | Permanent | O | Julia Powell (NOAA) |  | Target for Edition 2.0.0 in 2024 |
| 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 |  |  |
| 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 late 2024 for edition 2.0.0 |
| A.6 | Develop the S-100 Validation Rules | H |  | 2021 | Permanent | O | Julia Powell (US) |  |  |
| 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.)  Iji Kim (KHOA) |  | Improvement to be aligned with S-100 Ed.5.0.0  Edition 5.1.0 does not have extensions |
| C.2 | Develop and Maintain the S-100 Feature Catalogue Builder | H |  | 2015 | Permanent | O | Yong Baek (IHO Sec.)  Iji Kim (KHOA) |  | Improvement to be aligned with S-100 Ed.5.0.0  Edition 5.1.0 does not have extensions |
| C.3 | Develop and Maintain the S-100 Portrayal Catalogue Builder | H |  | 2015 | Permanent | O | Yong Baek (IHO Sec.)  Iji Kim (KHOA) |  | Improvement to be aligned with S-100 Ed.5.0.0  Edition 5.1.0 does not have extensions |
| C.4 | Develop and Maintain the S-100 Open Online Platform |  |  | 2022 | Permanent | O | Iji Kim (KHOA) |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| D.3 | Develop Edition 2.0.0 of S-101 | H |  | 2015 | 2023/2024 | 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) |  | Post 2.0.0 this work item moves to ENCWG |
| 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.  Further development on hold due to resources for primary S-100 based product specifications. |
| 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 |
| 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** |
| January 2022 | Monaco | S-100WG-6 |
| December 2022 | Monaco | S-100WG-7 |
| March 2023 | Seoul, Republic of Korea | S-100 TSM-9 |
| November 2023 | Singapore | S-100WG-8 |
|  |  |  |

Chair: Julia Powell, US (NOAA) Email: julia.powell@noaa.gov

Vice Chair: Elizabeth Hahessy (Denmark), Iji Kim (ROK) Email: elihh@gst.dk, izzykim@korea.kr

Secretary: Yong Baek, IHO Secretariat Email: yong.baek@iho.int

## 4. NIPWG WORK PLAN 2023-24

**Tasks**

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| --- | --- |
| D | Maintain Publication S-12 “Standardization of List of Lights and Fog Signals” (IHO Task 2.8.1) |
|  | *Left intentionally blank* |
| 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 2023 and 2024 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 |
| 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.  Propose amendments to HYDRO domain of the GI Registry. | H | Next meeting | 2004 | Permanent | O | Raphael Malyankar / Chair Team |  | S-100 related.  Incorporate in GI Registry if appropriate. |
| F.8.1 | Develop S-1xx Nautical Information Product Specification |  |  |  |  |  |  |  |  |
| F.8.1.3 | For Marine Aids to Navigation (AtoN) | L | Next meeting | 2013 | 2023 | O | Sewoong Oh | S-125 | In progress. IALA developing draft, see J.5.1 |
| F.8.1.4 | For Marine Physical Environment | L |  |  |  | S | Chair Team | S-126 | No task group lead identified |
| F.8.1.6 | For Catalogue of nautical products | H | Next meeting | 2016 | 2024 | O | Izzy Kim | S-128 | In progress.  Development continued by KHOA. |
| F.8.1.7 | For Marine Harbour Infrastructure | H | Next meeting | 2020 | 2023 | O | Sarah Rahr | S-131 | Seeking approval to release edition 1.0.0 at HSSC 15.  Ongoing development in relation to S-131 database project. |
| 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 | 2023 | O | Sewoong Oh | S-125 | In progress. IALA developing draft, see J.5.1 |
| F.8.2.4 | For Marine Physical Environment | L |  |  |  | S | Chair Team | S-126 | No task group lead identified |
| F.8.2.6 | For Catalogue of nautical products | H | Next meeting | 2016 | 2024 | O | Izzy Kim | S-128 | In progress.  Development continued by KHOA. |
| F.8.2.7 | For Marine Harbour Infrastructure | H | Next meeting | 2020 | 2023 | O | Sarah Rahr | S-131 | Seeking approval to release edition 1.0.0 at HSSC 15.  Ongoing development in relation to S-131 database project. |
| F.8.3 | Monitor and Maintain NIPWG Product Specifications |  |  |  |  |  |  |  |  |
| F.8.3.1 | For Marine Protected Areas | M | Next meeting | 2023 | 2024 | O | Jonathan Pritchard | S-122 | In progress.  Edition 2.0 in development. |
| F.8.3.2 | For Marine Radio Services | M | Next meeting | 2022 | 2024 | O | Bridget Gagné | S-123 | In progress.  Edition 2.0 in development. |
| F.8.3.5 | For Marine Traffic Management | M | Next Meeting | 2022 | 2024 | O | Ed Kuwalek | S-127 | 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. |
| 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. |
| 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 ENAV 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 2023 | Monaco | NIPWG10 |
| Sept 2024 | Poland (tbc) | NIPWG11 |
| Sept 2025 |  | NIPWG12 |

Chair: Eivind Mong, Canadian Coast Guard, CA Email Eivind.Mong@dfo-mpo.gc.ca  
Vice Chair: Stefan Engström, Traficom, FI Email: Stefan.englstrom@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 2022-23

**Tasks**

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| --- | --- |
| 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 2022 and 2023 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) |
| N | Develop IHO Cyber Security Guideline |

**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 |
| 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 |  |
| 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 |  | C | Christian Mouden  Jonathan Pritchard | S-57 UOC | Edition 1.0 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 |  |  |
| C.2 | Monitor the implementation of the new edition of S-58 and keep the recommended checks up to date | H |  | Oct-2020 |  | C | Richard Fowle | S-57 | New work item, HSSC 12 approved NE of S-58  Edition 7.0.0 ready for publication |
| 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 | 2023 | 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 |  |  |
| 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 |  |  |  | Permanent | O | Chair / IHO Sec |  |  |
| M.1 | Maintain and monitor the existing S-63 Data Protection Scheme | M |  | 2016 | Permanent | O | Chair, RENCs, Industry and IHO Sec. | S-63 |  |
| ~~M.2~~ | ~~Assessment of S-63 impact study and potential production of a new edition of S-63.~~ | ~~H~~ |  | ~~2019~~ | ~~2021~~ | ~~C~~ | ~~Chair, RENCs, Industry and IHO Sec.~~ | ~~S-63~~ | ~~Closed HSSC 13 agreed to draft new Cyber security guideline~~  HSSC13/31 refers |
| N.1 | Develop IHO Cyber Security Guideline | M |  | 2021 | 2023 |  | Chair, OEMs | S-63 | Proposed inclusion in S-67 |

**Meetings** (Task J)

|  |  |  |
| --- | --- | --- |
| **Date** | **Location** | **Activity** |
| 15 - 16 July 2020 | VTC | ENCWG-5 |
| 15-17 June 2021 | VTC | ENCWG-6 |
| 21-25 November 2022 | Wellington, New Zealand | ENCWG-7 |
|  |  |  |

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Secretary: Yong Baek, IHO Sec. Email: yong.baek@iho.int

## 6. HYDROGRAPHIC SURVEYS WORKING GROUP WORK PLAN 2023-24

|  |  |
| --- | --- |
| 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 – *Standards for Hydrographic Surveys* – 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 – *IHO Manual on Hydrography* – 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 HSWG5 meeting | H | Agree location / date / send invitation | Jan 2023 | Oct 2023 | O | Chair HSWG Sec |  | One offer to host received from Indonesia. Suggested date WC 2nd – 5th Oct 2023 |
| B-1 | Review S-44 Edition 6.1.0 | M | Prepare list of proposed updates | Jan 2022 | Sept 2023 | C | All |  | Chair team to develop proposal for WG to review |
| B-2 | Prepare next S-44 edition v 6.2 or 6.1.1 | M | Implement updates | Sept 2023 | March 2024 | C | S-44 editorial board |  |  |
| B-3 | Develop S-44 v6.1 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 (Goal](https://iho.int/uploads/user/About%20IHO/Strategic%20Plan/IHOSP2021_2026_final.pdf) [2 – Target 2.2.2 – page 7)](https://iho.int/uploads/user/About%20IHO/Strategic%20Plan/IHOSP2021_2026_final.pdf)  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 | O | Chair MHPT |  | Prepare draft to next meeting: MHPT-5 |
| C-2 | Prepare next C-13 edition | H | Compile updates and change  recommendations | Oct  2023 | Feb 2025 | P | Chair MHPT |  | Dependency: Format to be agreed by entire HSWG and IHO.  Review of Progress at MHPT-6  Complete by MHPT-8 |
| C-3 | Develop C-13 promotional material | L | Consolidate and share material | Aug  2025 | On going | P | Chair MHPT |  |  |
| C-4 | Develop C-13 education material | L | Consolidate and share material | Aug  2025 | On going | P | Chair MHPT |  |  |
| C-5 | Identify translation opportunities for C- 13 | L | Supply translated material to IHO | 2026 | On going | P | Chair MHPT |  |  |
| D-1 | Develop SDB best practice guidelines | M | SDBPT to draft best practice guidelines | July 2021 | March 2023 | O | Chair SDBPT |  |  |
| D-2 | Identify future development priorities | L | Prioritization of technological aspects which shall be addressed by SDBBWG | July 2021 | October 2022 | P | Chair SDBPT |  |  |
| E | Maintain liaison with HSSC and IRCC subordinate bodies – DQWG, HDWG, TWCWG, S100WG | H | Initial meetings with WGs. | July 2021 | On going | O | Chair group to facilitate |  | Liaison for each WG established at HSWG1 |
| F-1 | Attend relevant industry events | M | Share event dates | 2021 | On going | O | All |  | Send IHO event dates |
| F-2 | Develop new system/technology presentation material and supporting  documents | M | Provide briefings to HSWG | 2021 | On going | O | All |  |  |
| G | Attend and represent HSWG at relevant industry fora | M | Provide briefings to HSWG | 2021 | On going | O | All |  |  |
| H | Identify areas of overlap and potential conflicts across standards | H | Provide a list of potential standards conflicts | July 2021 | On going | O | Chair group |  | Approach S-100 and DQWG on best method to collaborate to address potential conflicts |

**Meetings**

|  |  |  |
| --- | --- | --- |
| **Date** | **Location** | **Activity** |
| 29 Feb – 2 March 2023 | virtual | HSWG4 |
| 2 – 5 October 2023 | Lombok, Indonesia | HSWG5 |
|  |  |  |

HSWG Chair: David Parker Email: David.Parker@ukho.gov.uk   
HSWG Vice-Chair: Megan Greenaway Email: Megan.Greenaway@noaa.gov   
HSWG Secretary: Carlos Videira Marques Email: [Videira.Marques@hidrografico.pt](mailto:Videira.Marques@hidrografico.pt)

## 7. TWCWG WORK PLAN 2023-24

**Objective**

1. To monitor developments related to tidal and water level observation, analysis and prediction and other related information including vertical and horizontal datums;
2. 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;
3. To develop standards for the delivery and presentation of navigationally relevant current information; and
4. 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 in ECDIS (S-104) (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 (propose a new 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 | Hilde Sande Borck\*  Andreas Boesch  Zarina Jayaswal  Phil MacAulay  Peter Stone  Andrew Matthews (IAPSO/TWCWG Contact) |  | Engage with the Best Practice Study Group, co-ordinating tasks on behalf of TWCWG.  Report back to, and enlist support from, TWCWG. |
| 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 | ~~O~~ C | See report TWCWG4: List of involved and active members:  Greg Seroka\*  Thomas Hammarklint  Gwenaële Jan,  Phil MacAuley (Gilles Mercier & Maxime Carre)  Raphael Malyankar  Kwang nam HAN,  Ronald Kuilman | 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. |
| H | Issue  Edition 1.2.0 | 2021 | 2023 | C |
| H | Issue Edition 2.0.0 | 2023 | 2024 | P |
| 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\*  Andreas Boesch  Thomas Hammarklint  Phil MacAuley  Gilles Mercier Maxime Carre  Raphael Malyankar  Kwang nam HAN,  Greg Seroka | 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 1.1.0 (S-104) is aligned with S-100 Edition 5.0.0. |
| H | Issue Edition 1.0.0 | 2019 | 2021 | C |
| H | Issue Edition 1.1.0 | 2021 | 2023 | C |
| H | Issue Edition 2.0.0 | 2023 | 2024 | P |
| 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 |  |
| 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 |
| L.1 | Develop and maintain material for CB course on Tides and Tide gauges | H |  | - | Permanent | O | Ruth Farre\*  Peter Stone Zarina Jayaswal Gwenaële Jan 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\*  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** |
| 5-7 April 2022 | Remote VTC | TWCWG-6 |
| 28 February – 2 March 2023 | Remote VTC | TWCWG-7 |
| 20-23 February 2024 (tbc) | Monaco, IHO | TWCWG-8 |
| 19-22 November 2024 (tbc) | tbc | TWCWG-9 |

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## 8. NCWG WORK PLAN 2022-23

**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** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A28 | Future of S-4 | H | NCWG6 – discuss future of S-4 and agree work tasks | 2020 | 2022 | O | Chair NCWG | S-4 | NCWG3 Agenda 7.4: waiting on progress with A16  NCWG 6 identified no need to restructure S-4, but welcomed any proposals to improve automation and machine readability |
| 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 6 published April 2018  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 | 2021 | O | Chair NCWG  INT1 subWG | INT1 | CSPCWG10 Action 35  NCWG3 Agenda 11.2: Transferred to UK  NCWG4 – Action 4/18 ongoing |
| E10 | Symbol library | L | UK to confirm freedom to use UK's symbol set | 2016 |  | O | UK (N Rodwell)  US (C Harmon) | S-4, INT1 | NCWG Actions 45, 46  NCWG3 Agenda 3: Not required to progress at this time. |
| E11 | Develop baseline symbology to support automated chart production | H | NCWG6 – discus and agree work tasks | 2020 |  | O |  | INT1, S-4 | New proposal by NCWG at HSSC12  Baseline Symbology PT established |

**Meetings** (Task G)

|  |  |  |
| --- | --- | --- |
| **Date** | **Location** | **Activity** |
| 3-4 November 2020 | VTC | NCWG6 |
| 9-12 November 2021 | VTC | NCWG7 |
| 15-18 November 2022 | Wollogong, Australia | NCWG8 |
|  |  |  |

Chairman: Mikko Hovi (FI) Email: mikko.hovi@traficom.fi  
Vice Chairman: Nick Rodwell (UK) Email: Nick.Rodwell@UKHO.gov.uk  
Secretary: Vacant Email:

## 9. DQWG WORK PLAN 2023-24

**Tasks**

1. Develop and maintain a data quality checklist for product specification developers (IHO Task 2.8)
2. 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)
3. Monitor periodically developments of ISO and other international standards regarding quality information, and advise accordingly (IHO Task 2.8)
4. Provide guidance on data quality aspects to hydrographic offices, in particular to ensure harmonized implementation (IHO Task 2.1 and 2.5.1)
5. Provide data quality educational material for the use of mariners (IHO Task 2.4.9)
6. Review appropriate methodology for the display of quality information to product specification developers (IHO Task 2.1)
7. 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 | **Milestones** | **Start Date** | **End Date** | **Status**  P-planned  O-ongoing  C-Completed | **Contact Person** | **Affected Pubs/Standard** | **Remarks** |
| A.1 | Development of the DQ validation checks | H | DQWG19 | 2023 | 2024 | O | Chair | S-100 | DQWG18-08.1A |
| B.1 | Development of a minimum standard for Data Validation in S-1xx based products. | H | S-101 Ed.2.0.0 | 2018 | 2024 | O | Chair | S-1xx | None |
| B.2 | Review S-1xx based PS (Ed.1.0.0 or higher) | H | DQWG19 | 2021 | 2024 | O | Chair | S-1xx | DQWG 18-03.1A |
| B.3 | Review S-1xx Feature Catalogues | M | S-101 Ed.2.0.0 | 2021 | 2024 | O | Chair | S-1xx | DQWG18-05.1A |
| C.1 | Review S-100 Part 4C. | H | Next Edition of S-100 | 2022 | 2024 | O | Chair | S-100 | DQWG15-04.4B |
| C.2 | Review S-97 Part C. | H | DQWG19 | 2023 | 2024 | O | Chair | S-97 | DQWG18-06.2A |
| D.1 | Provide guidance documentation how to populate CATZOC values. | H | DQWG19 | 2021 | 2024 | O | Chair | S-101 DCEG | DQWG18-05.3A |
| E.1 | merging S-66 and S-67 into a single IHO publication | H | DQWG19 | 2023 | 2023 | O | chair | S-66, S-67 | HSSC 14/40 |
| G.1 | Monitor development of autonomous shipping by the industry | M | DQWG19 | 2020 | 2024 | O | Chair | S-101, S-102, S-104 | None |

**Meetings**

|  |  |  |
| --- | --- | --- |
| **Date** | **Location** | **Activity** |
| 8-11 February 2022 | VTC | DQWG17 |
| 7–9 February 2023 | Hybrid, Monaco | DQWG18 |
| 6-8 February 2024 | China (dates and venue tbc) | DQWG19 |
|  |  |  |

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Vice-Chair: Vacant Email:   
Secretary: Scott Youngblut\* Email: scott.youngblut@dfo-mpo.gc.ca

\*Until DQWG-19 included.

## 10. HDWG/HDCG WORK PLAN 2023-2024

**Tasks**

|  |  |
| --- | --- |
| A | Maintain and extend the definitions in the IHO S-32 Hydrographic Dictionary Registry (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 | Develop a digital structure and database application to support the IHO S-32 Hydrographic Dictionary Registry on-line version(IHO Task 2.8.2) |
| E | Establish ToRs and RoPS of HDCG (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 | HDWG Chair | S-32 |  |
| A.2 | Maintain and distribute the IHO S-32 Hydrographic Dictionary | H |  | 2023 | Permanent | O | HDWG Chair | S-32 |  |
| C.1 | Liaise with Member States who have developed a national HD | H |  | 2023 | 2024 | P | HDWG Chair |  | China, Indonesia, Spain |
| C.2 | Update the list of countries who wish to develop their own national HD | M |  | 2023 | 2024 |  |  |  | Oman, Japan |
| A.2 | Update the HD French national version | L |  | 2023 | ? | P | Jean Laporte | S-32 | 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 | H |  | 2020 | 2024 | O | HDWG Chair | S-32 | In progress, in liaison with Jeff Wooton, the S-100 GI Registry Manager and Yong Baek |
| E | Prepare the necessary steps to move the HDWG to HDCG | H |  | 2023 | 2024 | P | HDWG Chair | S-32 |  |

**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 |
| Before May 2024, TBC. | Europe, TBC. | HDWG in conjunction with the GI Registry Team Meeting |

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Vice-Chair: Vacant Email:

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## 11. ABLOS WORK PLAN 2023-24

**Tasks**

|  |  |
| --- | --- |
| A | Organise the 11th ABLOS Conference in 2023 (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 2023 and 2024 (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 11th ABLOS Conference | H | Begin advertising  Identify and invite key note speaker  Attract presentation abstracts | 2022  2022  2022 | 2023  2023  2023 | O  O  O | All members of ABLOS through Committee | | N/A |  |
| A2 | Conference support and outreach | H | Develop and maintain ABLOS website | 2019 | On going | O | Niels Andersen | |  |  |
| B1 | Prepare draft 7th Edition of C-51 (TALOS Manual) for adoption by Member States | H  H  H  M  M | Review contents of chapters and identify areas requiring revision  Update by individual chapter  Develop draft revised chapters and seek ABLOS consensus  Submit to HSSC15 for endorsement and circulation to IHO MS and AIG EC for approval and adoption  Progress French and Spanish translations | 2021  2021  2021  2024  2024 | 2023  2023  2023  2024  2025 | O  O  P  P | John Ells\*  Editorial Board | | IHO Publication C-51  IHO Res. 2/2007, as amended |  |
| C1 | Deliver standard training programmes for the CBSC | H | Develop and maintain core training material | 2011 | Continuous | O | Fiona Bloor\*  Juan Carlos Báez Soto | | IHO Publication C-51 | No workshops planned in 2023 in the CBSC Work Plan. |
| 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 | |  |  |

**Meetings** (Tasks A & E)

|  |  |  |
| --- | --- | --- |
| **Date** | **Location** | **Activity** |
| 4 - 6 October 2021 | VTC | ABLOS 28 and Webinar |
| 4 - 6 October 2022 | Hybrid, Monaco | ABLOS 29 |
| 10 – 13 October 2023 | IHO Monaco | ABLOS 30 and 11th ABLOS Conference |
|  |  |  |

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Vice-Chair: Fiona Bloor Email: fiona.bloor@ukho.gov.uk  
Secretary: Samuel Harper Email: Samuel.harper@iho.int

## 12. COORDINATION WORK PLAN 2023-24

**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) |
| C | Organize, prepare and report meetings of HSSC working groups (IHO Task 2.1.2) |
| D | Conduct the 2022 and 2023 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** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A3 | Establish the MASS Project Team | M | HSSC-14 |  | HSSC-15 | O |  |  | IHO CL 23/2021 refers |
| A4 | Establish the S-130 Project Team | M | HSSC-14 |  |  | O |  |  | IHO CL 19/2021 and CL 33/2021 refer |
| B2 | Contribute to the development of the S-100 Implementation Strategy | H | C-5 | 2018 | 2024 | O |  |  | Amendments and draft proposal to an Annex B is submitted to C-5. |
| B3 | Implement the Revised Strategic Plan | M | C-5 | 2020 | 2026 | O |  |  | Allocation of SPIs to WGs and 2026 targets estimate. Proposed metrics to measure these SPIs is submitted to C-5. |
| B4 | Consider the need to update the lists in Appendices 1 and 2 of IHO Resolution 2/2007 | L | HSSC-15 | 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 Email: Magnus.Wallhagen@Sjofartsverket.se

HSCC Vice Chair: Nathalie Leidinger, France Email: nathalie.leidinger@shom.fr

HSSC Secretary: John Nyberg, IHO Sec. Email: [dtech@iho.int](mailto:dtech@iho.int)

HSSC Assistant Secretary: Yves Guillam, IHO Sec. Email: [adcs@iho.int](mailto:adcs@iho.int)

## 13. MASS PROJECT TEAM WORK PLAN 2022-23

*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 2022 and 2023 meetings of MASS PT |

**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** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
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**Meetings** (Task D)

|  |  |  |
| --- | --- | --- |
| **Date** | **Location** | **Activity** |
| 10 Dec 2021 | VTC | MASS PT1 |
| 25 February 2022 | VTC | MASS PT2 |
| 9 March 2022 | VTC | MASS PT3 |
|  |  |  |

MASS PT Chair: Mark Casey, UK Email: Mark.casey@ukho.gov.uk

MASS PT Vice-Chair: Sun Dongli, China Email: sundongli@shmsa.gov.cn

MASS PT Secretary: Annie Biron, Canada Email: [yong.baek@iho.int](mailto:yong.baek@iho.int)

## 14. S-130 PROJECT TEAM WORK PLAN 2023-24

**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 2023-2025 meetings of S-130PT (IHO Task 2.1) |

**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** |
| A.1 | Develop S-130 Product Specification Edition 1.0.0 | H | HSSC 15 | 2022 | 2023 | C | Britt Lonneville (VLIZ) |  |  |
| A.2 | Initial implementation S-130 Edition 1.0.0 | M |  | 2023 | 2023/2024 | P | Britt Lonneville (VLIZ) |  |  |
| A.3 | Develop S-130 Product Specification Edition 2.0.0 | H | HSSC 16 | 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 | P | 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** |
| 13 June 2022 | VTC | S-130PT3 |
| TBD | VTC | S-130PT6 |

S-130PT Chair:  Britt Lonneville, Belgium Email: [britt.lonneville@vliz.be](mailto:britt.lonneville@vliz.be)  
S-130PT Vice Chair: Wu Lingzhi , China Email: [3511431@qq.com](mailto:3511431@qq.com)  
S-130PT Secretary: Yong Baek, IHO Secretariat Email: [yong.baek@iho.int](mailto:yong.baek@iho.int)

## 15. S-100 INFRASTRUCTURE CENTRE ESTABLISHMENT (S-100 ICE) PROJECT TEAM WORK PLAN 2023-24

**Tasks**

**T**o 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 2023 and 2024 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** |
| A.1 |  |  |  |  |  |  |  |  |  |
| A.2 |  |  |  |  |  |  |  |  |  |

**Meetings** (Task F)

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

S-100 ICE PT Chair:   Email:   
S-100 ICE PT Vice Chair: Email:   
S-100 ICE PT Secretary: Email:

## 16. S-100 SECURITY SCHEME (S-100 SS) PROJECT TEAM WORK PLAN 2023-24

**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 2023 and 2024 meetings of the S-100 SS 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** |
| A.1 |  |  |  |  |  |  |  |  |  |
| A.2 |  |  |  |  |  |  |  |  |  |

**Meetings** (Task E)

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

S-100 SS PT Chair:   Email:   
S-100 SS PT Vice Chair: Email:   
S-100 PT Secretary: Email: