**8th Nautical Information Provision Working Group (NIPWG) Meeting**

**23 – 25 March 2021 – VTC, Worldwide**

Annex A: List of Action items

Annex B: Agenda

Annex C: List of Attendees

Annex D: Updated NIPWG Work Plan

**1. Opening and administrative arrangements**

**1.1 Opening remarks**

Jens SCHRÖDER-FÜRSTENBERG opened NIPWG8 and by welcoming new and returning members.

Logistics were also been discussed.

**2. Adoption of NIPWG8 Agenda**

NIPWG agreed and adopted the NIPWG8 Agenda with slight modifications as circulated.

**3. Adoption NIPWG7 Minutes**

The meeting approved the Final Minutes of NIPWG7 with no modifications as circulated.

**3.1 Corrections**

None noted.

**3.2 Review of Action Items from NIPWG7**

|  |
| --- |
| **Planned tasks for this Reporting Period**  |
| Action Item | Actor | Task Description | Start Date | Target End Date | Percent Complete | Task Status |
| 7/001 | EA | Continue collecting feedback on both product specifications |  | Permanent |  | Ex 5/08, 6/23, see also 7/12 |
| 7/002 | VZ | Re-evaluate potential interoperability and encoding concerns relative to S-122 and S-121 | 02/2019 | Permanent  |  | Ex 6/32 |
| 7/003 | KHOA | Submit change proposal to the S-100WG to add curved functions in S-100 based SVG | 02/2019 | September 2020 | On going | Ex 6/03Be investigating to produce SVG symbols without the curved functions in S-100. Report to the NIPWG8 |
| 7/004 | KHOA | Develop and test S-126 symbols in night and dusk ECDIS modes | 02/2019 | September 2020 | On going | Ex 6/04KHOA is developing general guidance for colours and symbols for S-100 PSs. Once it’s completed, S-12X portrayal will be updated accordingly. Report to the NIPWG8 |
| 7/005 | KHOA | Investigate the usefulness of the provision of S-126 symbols in ECDIS side menu and the viability of highlighting selected items by colour patterned areas on the chart that are presented on the screen. That includes keeping a list of use cases showing and testing inter alia complementary data sets | 02/2019 | September 2020 | On going | Ex 6/06Refer to the action 6/04 comments (see above)  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 7/01 | BvS | Send completed IHMA standards to Jens |  | December 2019 | 100 |  |
| 7/02 | JS-F | Send completed standards (see action item 7/01) to the WG as a NIPWG letter |  | December 2019 | 100 |  |
| 7/03 | JS-F | Send the report and recommendation to initiate the S-126 and Marine Harbour Infrastructure Product Specification parallel development process and to request a number for S-12X (Marine Harbour Infrastructure) to HSSC |  | March2020 | 100 |  |
| 7/04 | JS-F | Draft a NIPWG letter to address contributions of the Marine Harbour Infrastructure Product Specification data model to different NIPWG members |  | June 2020 | 100 |  |
| 7/05 | WdT | Provide a paper on the approach to encode S-122 data in HPD ver 3.1 |  | September 2020 | 100 |  |
| 7/06 | JS-F | Provide a paper on the approach to encode S-122 data in HPD ver 4.X. |  | September 2020 | 100 |  |
| 7/07 | all | Report on testing of the NIPWG Prod. Spec. data set production in their current production environment and to provide a short report on their activities to NIPWG 8. |  | September 2020 | 100 |  |
| 7/08 | YG | Provide the WEND WG with the German paper on the creation of the S-123 dataset for their consideration on the WENS principles. |  | January 2020 | 100 |  |
| 7/09 | PRIMARCCGFURUNO | PRIMAR and the Canadian Coast Guard, in cooperation with FURUNO, to draft a paper to be provided to the IHO Secretariat to raise awareness of management issues for the following:1. Maintaining currentness of products in the Catalogue.2. Use of S-128 with respect to the S-100 Implementation Plan.3. Possible impact on carriage requirements of S-100 based products to the WEND WG. |  | January 2020 | 100 |  |
| 7/10 | JS-F | Draft a NIPWG letter to inform the WG on the availability of the S-128 ver. 0.7.5 Prod. Spec. on the NIPWG website and require feedback to the Chair |  | December 2019 | 100 |  |
| 7/11 | all | Review the S-128 Prod. Spec. ver. 0.7.5 as provided to NIPWG 7 |  | February 2020 | 100 |  |
| 7/12 | EA | Compile comments and provide the consolidated list to KHOA. The list will include additional items as described in the document, NIPWG 7-10.2. |  | March 2020 | 100 |  |
| 7/13 | WC | Provide the next version of S-128 for NIPWG endorsement through correspondence or by NIPWG 8 |  | June 2020 | 100 |  |
| 7/14 | all | Check S-128 against their catalog of products |  | September 2020 | Overtakenby event |  |
| 7/15 | EM | Report back the outcome of the S-124 portrayal investigations |  | September 2020 | ongoing |  |
| 7/16 | DL | Provide an update on the progress within the U.S. to discontinue paper chart production and provide an input paper to describe the dissemination of Marine Safety Information using the Waterway Concept |  | September 2020 | Oventaken by event |  |
| 7/17 | all | Provide feedback to Jens on the DQWG presentation |  | December 2019 | 100 |  |
| 7/18 | JS-F | Provide consolidated feedback on the DQWG presentation |  | January 2020 | 100 |  |
| 7/19 | EM | Update NIPWG on progress and status of the MRN usage guideline |  | September 2020 | ongoing |  |
| 7/20 | DL | Inform NIPWG 8 on the development of IALA’s MRN domain management guideline (Ver 2.0) |  | September 2020 | ongoing, delayed |  |
| 7/21 | SE | Initiate the continuation of the XML-based NtM generation |  | January 2020 | 100 |  |
| 7/22 | JS-F | Update the “Architectural display of S-100 related products” diagram and contribute to the NIPWG review |  | February 2020 | 100 |  |
| 7/23 | all | Provide input on how they expect NIPWG Prod. Spec. data to be used within their national waters |  | September 2020 | ongoing |  |
| 7/24 | all | Prepare for a 1 day workshop (based on 7/23 use case information) during NIPWG 8. |  | September 2020 | Postponed to NIPWG9 |  |
| 7/25 | HPEM | Provide KHOA with feedback on display requirements related to the provision of S-100 based products on future ECDIS |  | January 2020 | Moved to another discussion forum |  |
| 7/26 | JS-F | Insert amendments aiming to harmonise S-101 and S-127 data model elements to the register.  |  | January 2020 | 100 |  |
| 7/27 | MK | Provide the consolidated red-line version of amended S-49 to Jens |  | January 2020 | 100 |  |
| 7/28 | JS-F | Provide the red-line version of amended S-49 to HSSC 12 for endorsement |  | March 2020 | 100 |  |
| 7/29 | JS-F | Consider if it is appropriate to comment on the proposal submitted by the council to the Assembly on resolution 1/2005 |  | January 2020 | 100 |  |
| 7/30 | JS-F | Inform HSSC that a survey on S-122/S-123 data production is premature |  | March 2020 | 100 |  |

**4 NIPWG status of work (overview)**

The Meeting took note of the presentation on the status of the NIPWG work. This overview was initiated to familiarise new members and to refresh experienced members with the main objectives of the group and the current work status.

Discussion: A member suggested that Ports are not ready to endorse IHO S-100 work on Ports. The Berth to Berth planning paper was only a suggestion or informational paper. Several members agreed with the suggestion, The group is just looking for harmonization and consideration the geospatial aspects of the standard.

**7 S-100 related information**

**7.1 Presentation of the outcome of the recent TSM meeting**

The Meeting took note of the oral presentation for the results of the Test Strategy Meeting.

Discussion: No discussion.

**9 S-131 (Marine Harbour Infrastructure) discussions**

UNH and IIC introduced the status of the scoping work. NO provided an update on the experiences made with ports during the information collection process.

Discussion: The Meeting discussed the way forward, taking into account that the prod spec development was outsourced and tentative delivery date is spring 2022.

The meeting decided to contact HSSC to develop an IHO operated database to collect harbour information.

Discussion: Norway crosschecked data mode elements with S-131 and amended their database accordingly. NO is expecting that ports request the provision of additional data elements. These requests should be considered during the S-131 development process.

**Action Item 8/01 (NIPWG Chair) – Incorporate the intention to operate an IHO based database for collecting, storing and provision of marine harbour infrastructure information in the HSSC13 report. April 2021.**

**Action Item 8/02 (All) – Develop S-131 data model elements definitions to support prod spec production. August 2021**

**Action Item 8/03 (Matilde Skår) – Provide NO ports request on additional S-131 data elements to Jonathan and Briana. August 2021**

**11 IALA S-125 paper discussion. Scale dependent/scale independent S-100 idea**

The Meeting took note and discussed the response paper to IALA on their outline paper on S-201 and S-125 interaction. The meeting discussed further the proposed submission to HSSC.

**15 Acknowledgement in IHO standards**

The meeting took note of the report and confirmed the appropriateness of the solution found.

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**20 Maritime Connectivity Platform**

The meeting took note and discussed the presentations.

Discussion: The appropriate provision of Maritime Services in context of e-Navigation under the remit of IHO is essential. In particular, the description of the associated technical services need updates in the near future.

IHO and IALA should use the same guidelines for the description of associated technical services as part of the description of Maritime Services in context of e-navigation. IALA recently developed G1128 providing a template for these descriptions and G1157 for web-based S-100 data exchange (references IEC 63173-2 SECOM).

MCPs can exist in many instances. Block chain technology can help to detect what service is available where. The MCP consortium is working on solutions to communicate this to the end user. One option is that the MCP consortium maintains the block chain.

**Action Item 8/04 (NIPWG Chair) – Add in the HSSC13 report a) that Maritime Service descriptions maintenance is a permanent working item of the responsible IHO working groups, and b) that the S-100 implementation roadmap should incorporate the Maritime Service description. (April 2021).**

**22 S-127 Test Data Set expansion**

The meeting took note and discussed the papers provided.

Discussion: The meeting concluded after extensive discussions and careful consideration of pros and cons, that HOs should check the appropriateness of the extension. Crosscheck with S-131 shows that locks are used in both prod specs. It was underlined that date models can be comprehensive and that specific prod specs may need only a subset of such comprehensive data models.

**Action Item 8/05 (Jason Strom & Briana Sullivan) – Crosscheck of the S-127 expansion and consideration of what could be relevant for other prod specs. (June 2021)**

**Action Item 8/06 (Johanna Marks and Murdo McDonald) – Check appropriateness of S-127 data model extension against UKHO SDs and ALRS. (August 2021)**

**Action Item 8/07 (NIPWG Chair) – Depending on possible S-127 data model expansion, inform HSSC14 if current version of S-127 requires update which should be contracted. (March 2022)**

**25 NGA World Port Index improvements**

The meeting noted the presentation and paper provided.

Discussion: The WPI experienced significant improvement, as it is a web-based tool now. For the WPI, it is a major layer of the IHO database and it provides a user-friendly interface. It is also a major layer for WEND work. The WPI is a trusted source of information for the IHO. Port updates are provided by the maritime authority and by NGA pub compilers.

The comparison of the WPI and S-131 identified certain discrepancies. Some of them are relevant for other prod specs.

**Action Item 8/08 (JS & BS) – Jason to provide Briana a list of detected discrepancies for cross-check against S-131 scope. Briana to get back to Jason with the result. (June 2021)**

**Action Item 8/09 (JS) – Jason to provide Elena Armani a comment paper containing the additions and their placement in the S-131 prod spec. (July 2021)**

**Action Item 8/10 (JS) – Jason to send NIPWG an e-mail when the new WPI application is available for use on NGAs MSI website. (August 2022)**

**Action Item 8/11 (NIPWG Chair) – Address the description of an online platform hosted by IHO to collect harbour infrastructure information of ports not being able to provide the information to HOs by national platforms at HSSC13. (April 2021)**

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**30 Catalogue of Nautical Products (S-128)**

The meeting took note of the papers provided.

Discussion: KHOA provided Edition 1.0.0 just ahead of NIPWG8. NIPWG provided more than 200 corrections to the previous version. An appropriate check by the WG was not possible. The meeting discussed the best way forward to seek HSSC endorsement. The meeting took note and discussed completeness of data issues, taking into account the “FULL” or “PARTIAL” definition and that this applies to all S-100 compliant products used in ECDIS. Furthermore, possible scope expansions to fulfil INToGIS III requests were discussed.

The meeting decided that a) VTCs will be set up to initiate discussion with KHOA developers and NIPWG correction providers,

and b) the completeness and INToGIS aspects should be reflected in Edition 2 of S-128. Intermediate test versions are needed to check if the development is on track.

**Action Item 8/12 (All) – Review S-128 as provided on the NIPWG Prod Spec website and provide feedback to KHOA (31 May 2021)**

**Action Item 8/13 (KHOA) – Review comments and provide S-128 revised version to NIPWG for final check, set up VTC if considered necessary (30 June 2021)**

**Action Item 8/14 (All) – Review final S-128 version and provide feedback to KHOA (31 July 2021)**

**Action Item 8/15 (KHOA) – Review comments, set up a VTC is considered appropriate, and forward Edition 1.0.0 to NIPWG Chair for further processing (31 August 2021)**

**Action item 8/16 (NIPWG Chair) – Provide Edition 1.0.0 to HSSC for endorsement by email (September 2021)**

**36 Architectural display of S-100 related products**

The meeting took note and discussed the papers.

Discussion: It was confirmed that the diagram is a living document, which can only reflect the latest status of the S-100 based product specification composition in ECDIS. The placement of S-128, with a different colour, in the route monitoring section is needed. S-125 should be separated as this covers information provided in S-101 and may be used in future SD/SI data provision. It should be reflected that NPUB Information compliment chart information.

**Action item 8/17 (NIPWG Chair) – Update the display to reflect NIPWG8 discussion on Architectural Display (August 2021)**

**49 Revisions of resolutions and standards under the remit of NIPWG**

The meeting took note and discussed the papers.

Discussion: Tests show that the S-123 product specification needs revision and that principle GML specification definitions needed in S-100 Edition 5. Therefore, the work items should reflect these two aspects. be either

**Action Item 8/18 (Wang Chao) – Wang to provide an S-123 model extension to Elena by using the comment form. (May 2021).**

**Action Item 8/19 (Eivind Mong) – Eivind to provide S-123 DCEG and model extensions to Elena by using the comment form. (May 2021).**

**Action Item 8/20 (Shwu-Jing Chang) – Shwu-Jing to provide a comment paper to S-100WG on detected GML issues. (May 2021)**

**50 Work plan for the NIPWG**

The Meeting reviewed and completed the NIPWG work plan.

**52 ToR review**

The Meeting reviewed and discussed the current ToR.

Discussion: The group agreed that no amendments are needed.

**57 Any other business**

**57.1 Harmonisation of NtM XML Structure**

The meeting discussed the status and confirmed that the structure need more exchange tests. Conducting the HSSC endorsed follow-up workshop depends on test result and will be scheduled if considered necessary.

**Action Item 8/21 (Germany) – GE rep to update the XML NtM section on the NIPWG Miscellaneous NTM site. (Dec 2021).**

**57.2 Development of an outline paper on S-100 use**

The meeting took note and discussed the proposal to approach HSSC regarding the drafting of an outline paper describing the whole S-100 world picture.

**57.1 Nomination and election of the Chair and Vice Chair**

Discussion: The group elected

Eivind Mong (CA) to be the Chair of the NIPWG

Stefan Engström (FI) to be Vice Chair of the NIPWG.

**58 Review of draft minutes**

The Meeting reviewed and adopted the draft Minutes of NIPWG8. The final Minutes will be prepared by the Secretary servicing this Meeting in close co-operation with all participants.

The meeting renewed the request to deliver the meeting papers at least 3 weeks before the meeting. Papers submitted after that deadline will be handled as Information (INF) papers. The meeting agreed that submitters of INF papers could not expect that the submitted topic will be discussed during that meeting. Exceptions due to papers discussing urgent matters are on Chair group’s decision.

**59 Date and place of next meeting**

NIPWG will conduct a VTC meeting 14-16 September 2021, further short preparation and information exchange VTC meetings are possible in August 2021

NIPWG9 will be held in Niteroi (Brazil), September 2022

**Annex A: List of Action Items**

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| --- |
| **Planned tasks for this Reporting Period**  |
| Action Item | Actor | Task Description | Start Date | Target End Date | Percent Complete | Task Status |
| 8/001 | EA | Continue collecting feedback on both product specifications |  | Permanent |  | Ex 5/08, 6/23, see also 7/12 |
| 8/002 | VZ | Re-evaluate potential interoperability and encoding concerns relative to S-122 and S-121 | 02/2019 | Permanent  |  | Ex 6/32 |
| 8/003 | KHOA | Submit change proposal to the S-100WG to add curved functions in S-100 based SVG | 02/2019 | September 2020 | On going | Ex 6/03Be investigating to produce SVG symbols without the curved functions in S-100. Report to the NIPWG9 |
| 8/004 | KHOA | Develop and test S-126 symbols in night and dusk ECDIS modes | 02/2019 | September 2020 | On going | Ex 6/04KHOA is developing general guidance for colours and symbols for S-100 PSs. Once it’s completed, S-12X portrayal will be updated accordingly. Report to the NIPWG9 |
| 8/005 | KHOA | Investigate the usefulness of the provision of S-126 symbols in ECDIS side menu and the viability of highlighting selected items by colour patterned areas on the chart that are presented on the screen. That includes keeping a list of use cases showing and testing inter alia complementary data sets | 02/2019 | September 2020 | On going | Ex 6/06Refer to the action 6/04 comments (see above)  |
| 8/006 | EM | Report back the outcome of the S-124 portrayal investigations |  | September 2020 | ongoing | Ex 7/15 |
| 8/007 | EM | Update NIPWG on progress and status of the MRN usage guideline |  | September 2020 | ongoing | Ex 7/19 |
| 8/008 | DL | Inform NIPWG 8 on the development of IALA’s MRN domain management guideline (Ver 2.0) |  | September 2020 | ongoing, delayed | Ex 7/20 |
| 8/009 | all | Provide input on how they expect NIPWG Prod. Spec. data to be used within their national waters |  | September 2020 | ongoing | Ex 7/23 |
| 8/010 | all | Prepare for a 1 day workshop (based on 7/23 use case information) during NIPWG 8. |  | September 2020 | Postponed to NIPWG9 | Ex 7/24 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 8/01 | NIPWG Chair | Incorporate the intention to operate an IHO based database for collecting, storing and provision of marine harbour infrastructure information in the HSSC13 report | 04/2021 |  |  |  |
| 8/02 | All | Develop S-131 data model elements definitions to support prod spec production. | 08/2021 |  |  |  |
| 8/03 | MS | Provide NO ports request on additional S-131 data elements to Jonathan and Briana. | 08/2021 |  |  |  |
| 8/04 | NIPWG Chair | Add in the HSSC13 report a) that Maritime Service descriptions maintenance is a permanent working item of the responsible IHO working groups, and b) that the S-100 implementation roadmap should incorporate the Maritime Service description. | 04/2021 |  |  |  |
| 8/05 | JS & BS | Crosscheck of the S-127 expansion and consideration of what could be relevant for other prod specs | 06/2021 |  |  |  |
| 8/06 | JM & MMC | Check appropriateness of S-127 data model extension against UKHO SDs and ALRS | 08/2021 |  |  |  |
| 8/07 | NIPWG Chair | Depending on possible S-127 data model expansion, inform HSSC14 if current version of S-127 requires update which should be contracted. | 03/2022 |  |  |  |
| 8/08 | JS & BS | Jason to provide Briana a list of detected discrepancies for cross-check against S-131 scope. Briana to get back to Jason with the result. | 06/2021 |  |  |  |
| 8/09 | JS | Provide Elena Armani a comment paper containing the additions and their placement in the S-131 prod spec | 07/2021 |  |  |  |
| 8/10 | JS | Send NIPWG an email when the new WPI application is available for use on NGAs MSI website | 08/2021 |  |  |  |
| 8/11 | NIPWG Chair | Address the description of an online platform hosted by IHO to collect harbour infrastructure information of ports not being able to provide the information to HOs by national platforms at HSSC13.  | 04/2021 |  |  |  |
| 8/12 | All  | Review S-128 as provided on the NIPWG Prod Spec website and provide feedback to KHOA | 31 May 2021 |  |  |  |
| 8/13 | KHOA | Review comments and provide S-128 revised version to NIPWG for final check, set up VTC if considered necessary | 30 June 2021 |  |  |  |
| 8/14 | All | Review final S-128 version and provide feedback to KHOA | 31 July 2021 |  |  |  |
| 8/15 | KHOA | Review comments, set up a VTC is considered appropriate, and forward Edition 1.0.0 to NIPWG Chair for further processing | 31 August 2021 |  |  |  |
| 8/16 | NIPWG Chair | Provide Edition 1.0.0 to HSSC for endorsement by email | Sep 2021 |  |  |  |
| 8/17 | NIPWG Chair | Update the display to reflect NIPWG8 discussion on Architectural Display | August 2021 |  |  |  |
| 8/18 | WC | Provide an S-123 model extension to Elena by using the comment form.  | May 2021 |  |  |  |
| 8/19 | EM | Provide S-123 DCEG and model extensions to Elena by using the comment form.  | May 2021 |  |  |  |
| 8/20 | SJC | Provide a comment paper to S-100WG on detected GML issues. | May 2021 |  |  |  |
| 8/21 | Germany | Update the XML NtM section on the NIPWG Miscellaneous NTM site. | December 2021 |  |  |  |

**Variance Details:**

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| Xxxxx |

**Corrective Actions:**

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**Annex B: Agenda**

**Agenda (as conducted)**

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| **8th Meeting of the Nautical Information Provision Working Group (NIPWG)****23 – 23 March 2021, worldwide, VTC** |

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|  | **Tuesday, 23 March** |  |  |
| 1 | Opening and administrative arrangements | JS-F |  |
| 2 | Agenda |  |  |
| 2.1 | Adoption of the Agenda | JS-F | 8-2.1 |
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| 3 | Minutes of NIPWG 7 | JS |  |
| 3.1 | Amendments to the minutes | JS | 8-3.1 |
| 3.2 | Review of Action Items from NIPWG7 | JS |  |
| 3.3 | Information on HSSC-12/A-2/C-4/HSSC Chair Group of 9 Dec /DQWG-16 of the decisions/actions that may affect NIPWG. | YG | 8-3.3 |
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| 4 | NIPWG status of work (overview)  | JS-F | 8-4 |
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| 7 | S-100 related information |  |  |
| 7.1 | Outcome of the S-100WG TSM meetings | HP | >TSM Website |
|  |  |  |  |
| 9 | S-131 update and prod spec development status |  |  |
| 9.1 | Development status | JPBS | 8-9.1 |
| 9.2 | NO experience in contacting ports to complete the data base entries  | MSSW | 8-9.2 |
|  |  |  |  |
| 11 | IALA S-125 paper discussion. Scale dependent/scale independent S-100 idea |  |  |
| 11.1 | Proposed submission to HSSC | JS-F | 8-11.1 |
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| 15 | Acknowledgement in IHO standards |  |  |
| 15.1 | Proposed submission to HSSC | MK | 8-15.1 |
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|  | Minutes of Day1 |  |  |
|  | *END OF DAY 1*  |  |  |

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|  | **Wednesday, 24 March** |  |  |
| 20 | Maritime Connectivity Platform (update) |  |  |
| 20.1 | Presentation of current development status | TC | 8-20.1 |
| 20.2 | Discussion of the presentation and effects on the Description of Maritime Services in context fo e-Navigation under the remit of IHO | JS-F |  |
|  |  |  |  |
| 22 | S-127 Test Data Set expansion |  |  |
| 22.1 | Scope extension | MK | 8-22.1Annex A&B |
| 22.2 | Discussion of the extension | JSF |  |
|  |  |  |  |
| 25 | NGA World Port Index improvements |  |  |
| 25.1 | Presentation on the development | MK | 8-25.1 |
| 25.2 | Comparison of S-131 content with World Port Index content | JS | 8-25.2 |
|  | Discussion and possible work items Form to provide S-131 information for ports not being able to provide the information digitally |  |  |
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|  | Minutes of Day2 |  |  |
|  | *END OF DAY 2* |  |  |

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|  | **Thursday, 25 November** |  |  |
| 30 | (S-128) Catalogue of Nautical Products  |  |  |
| 30.1 | Presentation of the work status | IK(KHOA) | 8-30.1ProdSpec draft 1.0.0 |
| 30.3 | Scope discussions and INToGIS III effects | IK | 8-30.3 |
| 30.2 | Completeness etc. of data sets possibly be provided by S-128 | HP | 8-30.2 |
| 30.5 | Discussion on the paper | JS-F |  |
|  |  |  |  |
| 36 | Architectural display of S-100 related products |  |  |
| 36.1 | Presentation of the current layout | JS-F | 8-36.1 |
| 36.2 | Discussion of the paper | JS-F |  |
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| 49 | Revisions of resolutions and standards under the remit of NIPWG |  |  |
| 49.1 | S-49, S-12, M-3 sections relevant for NIPWG | JS-F | 8-49.1 |
| 49.2 | Tests on S-123 NPUB ProdSpecs (CA) | EM | 8-49.2 |
| 49.3 | Tests on S-1xx compliant NPUB ProdSpecs (NTOU) | S-JC | 8-49.3 |
| 49.4 | Data model extension S-123 (CN) | WC | 8-49.4 |
|  |  |  |  |
| 50 | Work Plan review | JS-F | See NIPWG website |
| 52 | ToR review  | MK;JS-F | See NIPWG website |
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| 57 | Any other business |  |  |
| 57.1 | XML workshop | JS-F |  |
| 57.2 | Development of an Outline paper on S-100 use  | JS-F | 8-57.2 |
| 57.3 | Nomination and election of the Chair and Vice Chair | YG | 8-57.3 |
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| 58 | Review of Minutes | JS-F |  |
|  |  |  |  |
| 59 | Dates and places of next meeting(s) | JS-F |  |
|  | NIPWG Sept VTC 14-16 September 2021 |  |  |
|  | NIPWG9 Niteroi, Brazil Sept 2022 |  |  |
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|  | Minutes of Day3 |  |  |
|  | *END OF DAY 3* |  |  |

Table of names

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|  |  |
| BS | Briana Sullivan Ms. (U.S./ UNH) |
| BvS | Ben van Scherpenzeel (NL/ IHMA) |
| DL | Dave Lewald (U.S./ Coast Guard) |
| EM | Eivind Mong (CA/ Coast Guard) |
| HC | HyunSoo Choi (ROK/KRISO) |
| IM | Ms Iji (Izzy) Kim (ROK/ KHOA) |
| JS | Jason Strom (U.S./ NGA) |
| JS-F | Jens Schröder-Fürstenberg (GE) |
| MK | Mike Kushla (U.S./ NGA) |
| MS | Matilde Skjaevelard Skår (NO/ NHO) |
| RM | Raphael Malyankar (U.S./ Portolan Sciences) |
| SE | Stefan Engström (FI) |
| S-JC | Shwu-Jing Chang Ms.(Taiwan/ NTOU) |
| SW | Sigbjorn Wik (NO/ NHS) |
| TC | Thomas Christensen (MCP Consortium) |
| TL | Thomas Loeper (U.S./ NOAA) |
| WC | Wang Chao (CN/ MSA) |
| WdT | Wilfred den Toom (NL) |
| YG | Yves Guillam (IHO Secretariat) |

Table of Acronyms

|  |  |
| --- | --- |
| EAHC | East Asia Hydrographic Commission |
| HSSC | Hydrographic Services and Standards Committee |
| M-3 | Resolutions of the International Hydrographic Organization |
| S-49 | Standardization of Mariners’ Routeing Guides |
| S-12 | Standardization of List of Lights and Fog Signals. |
| TSM | Test Strategy Working Group Meeting |

**Work sessions:**

|  |  |  |
| --- | --- | --- |
| Tuesday | Wednesday | Thursday |
| 1300–1500\* | 1300–1500\* | 1300–1500\* |

\* CET (Paris, Rome, Berlin)

**Annex C: List of Attendees see IHO Registration site**

Annex D: **Updated NIPWG Work Plan**

# NIPWG WORK PLAN 2021-22 *(approved by HSSC12 and revised at NIPWG8)*

**Tasks**

|  |  |
| --- | --- |
| 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 2021 and 2022 meetings of the NIPWG and its sub-group(s) and project team(s) (IHO Task 2.1) |

| **Work item** | **Title** | **Priority**H-high M-mediumL-low | **Next Milestone** | **Start Date** | **End Date** | **Status**P-PlannedO-OngoingC-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 |  | 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 |  | 2015 | Permanent | O |  |  | 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.2), in particular to continue the development of Product Specifications currently assigned to the NIPWG. |
| F.2 | Investigate the interaction between Marine Protected Area Product and ENC in ECDIS | H | Next meeting  | 2015 | Permanent | O | Chair/Sec |  | In close liaison with the S-100 WG |
| F.3 | Model the NP data where required. | H | Next meeting | 2004 | Permanent | O | Chair/Sec |  | S-100 related. To be included in Hydro domain of the FCD Register. |
| F.4 | Review of objects and attributesPropose amendments to HYDRO domain of the FCD Register | H | Next meeting | 2004 | Permanent | O | Chair/Sec |  | S-100 related.Incorporate in FCD Register if appropriate. |
| F.8.1 | Develop S-1xx Nautical Information Product Specification |  |  |  |  |  |  |  |  |
| F.8.1.2 | For Marine Navigational Services | L | next meeting | 2013 |  | O | Chair/Sec | S-125 | In progressIALA offers to develop draft, NIPWG, see J.5.1 |
| F.8.1.4 | For Marine Physical Environment | L | next meeting | 2013 | 2026 | O | Chair/Sec | S-126 |  |
| F.8.1.5 | Catalog of nautical products | H | next meeting | 2016 | 2023 | O | Chair/Sec | S-128 | Development continued by KHOA, in progress |
| F.8.1.6 | Marine Harbour Infrastructure | H | next meeting | 2020 | 2022 | O | Chair/Sec | S-131 | Contracted, delivery date Q2/2022 dependent on S-100 Ed 5 progress |
| F.8.2 | Draft Data Classification and Encoding Guides |  |  |  |  |  |  |  | Document for NPs similar to Use of the Object Catalog |
| F.8.2.1 | For Marine Navigational Services | M |  | - |  | O | Chair/Sec | S-125 | In close liaison with IALA, see J.5.1 |
| F.8.2.2 | For Physical Environment | M | Next meeting | - | - | P | Chair/Sec | S-126 |  |
| F.8.2.3 | For Digital Catalogue of Nautical Product | H | Next meeting | 2016 | 2023 | O | Chair/Sec | S-128 | In progress |
| F.8.2.4 | For Marine Harbour Infrastructure | H | Next meeting | 2020 | 2022 | O | Chair/Sec | S-131 |  |
| F.8.3 | Monitor and Maintain NIPWG Product Specification | H | Next meeting  | 2019 |  | O  | Chair/Sec |  | S-122, S-123 and S-127 under 2 year revision cycle  |
| G.1 | Monitor the requirements for, and provision of, nautical information in e-navigation test-bedsProduce NP1 sample data sets |  |  |  |  | O |  |  | 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/Sec |  | 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 | ~~2019~~ | O |  |  | e-nav IMO Strategy Implementation Plan, Task T13 (HSSC6-07.1A refers)Output number 5.2.6.2 of NCSR biennial agenda 2016-17Completion date is unknown and dependent on the maturity of interoperability and portrayal frameworksFor HSSC consideration |
| I.1 | Maintain and extend resolutions in M-3 relating to Nautical Publications | M | Next meeting | 2012 | Permanent | O | Chair/Sec NIPWG | M-3 | A review is required due for the harmonization of M-3 information and potential ProdSpecs content |
| J.3 | Liaise with other HSSC WG  | M |  | 2004 | Permanent | O | Chair/Sec NIPWG |  |  |
| J.3.1 | Liaise with the NCWG | M |  |  | Permanent | O | Chair/Sec NIPWG |  | Establish joint project teams as required and endorsed by HSSC. |
| J.3.2 | Liaise with the ENCWG | M |  |  | Permanent | O | Chair/Sec NIPWG |  |  |
| J.3.3 | Liaise with the S-100WG | H |  |  | Permanent | O | Chair/Sec NIPWG |  | 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 Correspondence Group |
| J.5 | Liaise with other international bodies which contribute to nautical information | H |  | 2015 | Permanent | O | Chair/Sec NIPWG |  |  |
| J.5.1 | Liaise with IALA | H |  | 2013 | Permanent | O | Chair/Sec NIPWG |  |  |
| J.5.2 | Liaise with International Harbor Masters’ Association (IHMA) | L |  | 2015 | Permanent | O | Chair/Sec NIPWG |  |  |
| J.5.3 | Liaise with International Cable Protection Committee (ICPC) | L |  | 2016 | Permanent | O | Chair/Sec NIPWG |  |  |

**Meetings** (Task K)

|  |  |  |
| --- | --- | --- |
| **Date** | **Location** | **Activity** |
| Sept 2021 | Virtually | NIPWG |
| Sept 2022 | Niteroi, Brazil (invitation confirmed) | NIPWG9 |
| Sept 2023 | Monaco | NIPWG10 |
|  |  |  |

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: Thomas Loeper, NOAA, USA Email: Thomas.Loeper@noaa.gov

Top three work items:

* Initiate prototype implementation of existing S-12x products in an S-100 based environment to explore governance architecture and service delivery mechanism
* Develop S-12x 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