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

**5th March 2024 – VTC, Worldwide**

Annex A: List of Action items

Annex B: HSSC 15 Action items

Annex C: Agenda

Annex D: List of Attendees

Annex E: Time Schedule

1. **Welcome**

* Chair opened the NIPWG VTC by welcoming new and returning members.

**6. New IHO Portal to be experimented for NIPWG-11 (registration, documents, …)**

* NIPWG noted the update.
* The presentation containing the instructions on how to use the new IHO portal can be found on the NIPWG Basic WG Documents page: [Link](https://iho.int/en/basic-wg-documents-3)
* EM: Question: When is the system up and running?
* YB/YG: The new IHO portal is still in the experimentation phase with NIPWG and other project teams. NIPWG is to start testing the portal and the whole process for NIPWG11. For NIPWG VTC02/24 the existing registration method will be used.
* JSC/CJ: Question: Will the agenda and meeting documents be publicly available, or will they sit behind the login?
* YB: Some of the documents will still be available through the IHO website, however most of the working and meeting documents will be on the IHO portal. You will need to login to access the documents.
* EM: This is identical to how IMO and IALA works.
* RM: Question: Can you access documents of meetings of groups of which you are not a member of as long as you have registered?
* YB: All documents are accessible if you have an account.

1. **Review of Action Items**

**2.1 Review of NIPWG Action Items**

* See Annex A.
* NIPWG10 Action Item 3: Plan no change to the current method and frequencies of meetings, 3 VTCs per year and 1 in person meeting. Input to HSSC to recommend that NIPWG is permitted to continue with this meeting schedule.

**2.2** **Review of Draft NIPWG Work Plan 2024-2025**

* EM: Submission of the work plan to HSSC16 is due by the 8th of April.

**Action Item 1:** NIPWG to review andprovide comments on the proposed Work Plan 2024-2025. All. 31st March 2024

* 1. **S-101PT Update**
* TR: S-101PT is working towards the delivery of S-101 2.0.0. The last project team meeting was at the end of February, due to the number of papers and proposals the meeting is reconvening end of 1st week in March to close off the last few papers. It has been recognized that closer liaison with NIPWG needs to be reestablished. At the S-101PT meeting the focus was on the changes to the S-101 data model to be able to move forward and meet the HSSC timeframes.
* Summary of papers relevant to NIPWG:
* **S-101PT12-06.3: Catalogue Versioning and Distribution**: This wasn’t discussed but continues to be an issue that requires clarity.
* **S-101PT12-06.5 Multiple Languages in S-101**: The intent is to support more languages from feedback from Canada and Finland.

EM: NIPWGs comments if understood correctly is that the solution works fine the way it is, the view of NIPWG is not to limited languages but that the proposal that has been submitted is more complicated than it needs to be.

TR: Possibly this needs to be put up to the S-100 working group so that there is a common model that all product specifications can follow for consistency.

JP: This can be discussed at TSM under the S-98 Annex C items.

* **S-101PT12-06.6 Use and Modelling of the Update information:**  Still ongoing.
* **S-101PT12-06.9 & 9A Structures Over Navigable Water.** The PT supported the proposal of the paper given that it was already in line with S-4.

RM: S-131PT will decide amongst themselves if they would like to comment on this item.

* **S-101PT12-06.10 & 10A Association Roles in S-101:** Further work is required. SevenCs have developed a spreadsheet with comments. Plan is to share this with NIPWG for awareness.

RM: If S-101PT want to change roles it should be run past NIWPG and to allow time for NIPWG to think about it.

* **S-101PT12-06.18 Attribute Suppression in S-101:** This was about system attributes used in S-101 to simplify portrayal and provides a list of attributes that should be suppressed because they have no value in the pick report.
* **S-101PT12-06.19 Attribute Values for dayOfTheWeek:** There was a proposal, but the PT didn’t agree not to change the actual order of the days but to make some slight refinements to the definitions.

RM: To make the definitions neutral to which is first or not. Still opposed to changing definitions. There are certain languages where the named day of the week reflects an ordinary number. If you make the changes in this paper, then the definitions could get messy because one day could be the 4th day in one language and the 3rd day in another. Issue has been posted in the S-101 repository.

TR: In summary, continued liaison between S-101PT and NIPWG and reinstate the active liaison. Next S-101PT meeting is in Sweden in June where the final version of Edition 2.0.0 comments will be adjudicated. If NIPWG has any comments, they need to be supplied before this meeting otherwise they may have to wait to the version after 2.0.0.

**Action Item 2:** S-131PT to review paper S-101PT12-06.9 & 9A Structures Over Navigable Water and provide comment if required. S-131PT. 31st March 2024.

**Action Item 3:** S-101PT to share comments on Association Roles from SevenCs to NIPWG for review. TR. 31st March 2024.

**9.5 S-128 – Catalogue of Nautical Products**

**9.5.1 S-128 Test Bed update**

* NIPWG noted the update.
* EM: Comments should be sent to Elena so that they can be catalogued and then passed onto the PT.
* RM: Question: The Registry takes 60 days for new items; how does that affect the timeline for HSSC submission?
* EM: The plan is to submit a version to HSSC, and then refine between submission and the actual meeting.
* YG: INToGIS III does not yet exist yet. Plan currently under development with the IHO Secretariat and KOAA. Target is October for the commissioning of INToGIS III.
* JP: Feature catalogue supplied in the Edition 1.2.0 package appears corrupt, it doesn’t confirm to the schema and contains several issues within it that makes it difficult to test. As a result, it is hard to go from 1.2.0 to 2.0.0 without something in the interim.
* HS: Same comments received from Stefan. PT have fixed these issues; revised version is currently with Stefan to test before it is shared with NIPWG.
* CG: Is there any plans to use S-128 as an in-force list for S-124?
* EM: Details to be discussed and worked out within S-124.

**Action Item 4:** Revised version of the feature catalogue to be shared with NIPWG once testing has been completed.S-128PT. 13th March 2024

* 1. **Update on IMO Expert Group on Data Harmonization (EGDH)**
* SE: No meetings since the last VTC. Next meeting is in April in London. Stefan will be in attendance.

**9.6.2 Guidelines for Harmonized Communication and Electronic Exchange of Nautical Data for Port Calls**

* NIPWG noted the update.
* EM: VTC is required to review further items within the guide and to come to a harmonized way forward to have the same definitions across different domains. Call for volunteers to participate in this work. The goal is to have a fully harmonized set of definitions between this guide and the GI registry.
* SE: When looking into the definitions before, the Registry cannot be the only source to be relied on, the individual product specifications and other sources may have different definitions which will need to be looked at. E.g., S-131.

**Action Item 5:** VTC to discuss outstanding items within IHMA Guide for Nautical Data. BvS, SR, DL, JP, MK, JSC, SJ, RM, RB, MJ, JS, DZ, SE. 31st March 2024

**4. Dual Fuel Concept for S-100 ECDIS Review**

* EM: This is speaking about what happens when moving from an S-57 only ECDIS to an S-57 & S-100 ECDIS and the implications of this. S-100WG issued a letter earlier this year to the membership to reminder us all to review and comment. This is a call to undertake this review.
* YG: On the NIPWG VTC 2024 web page the reference documents can be found in word and pdf format.

**Action Item 6:** NIPWG to review the S-100WG paper and supply comments as per the S-100WG letter 1/2024. All. 15th March 2024.

**5. HSSC Actions**

**5.1 15/86 – IMO Electronic Navigational Publication guideline comments**

* EM: Chair team met and drafted the paper to be shared to the IHO secretariat as an input into their preparations for NCSR11 taking place in June 2024.
* CG: The NSCR paper is mainly talking about hardware requirements for the viewing of electronic nautical publications and isn’t necessarily talking about the data provided by the producers. The WEND comments and principles should be kept as two separate discussions rather than attached to data producer and hardware requirements.
* EM: This is a comment to HSSC for IHO’s delegation to NCSR. This paper is not intended unless IHO secretariate choses to, to go directly to NCSR.

The WEND principle needs to be considered by the IHO, if a user has UKHO and Canadian data and there’s different requirements from a hardware perspective, what does that mean for that end user.

Comments to be provided if further discussion is required and if necessary, depending on the comments a VTC may be arranged to further discuss.

**Action Item 7:** NIPWG to review comments drafted by the Chair team and to provide comments. All. 15th March 2024.

**5.2 Preparation of HSSC-16: Recommendations, Decisions, Risk Assessment with regard to Ed.2.0.0 of Phase I Products and ENDS, Work Plan 2024-25, Inputs for the revision of the Strategic Plan (see Doc HSSC16-04.2A)**

* EM: If there are no inputs, suggestions, and comments from the membership then it becomes the Chair Teams view within the report. To also be included in the HSSC report are a couple action items from previous VTCs; the work done and future use of the IHMA guide and the work undertaken by BSH on S-127.

Within an annex of the S-100 implementation plan there are timelines for each of the product specifications. These timelines are the chairs best guess based on what has been seen to indicate to HSSC what the progression is and the timelines that NIPWG is targeting for each of the product specifications NIPWG is responsible for. At the last HSSC it was highlighted that Strategic Performance Indicators on each product specification are required so that manufacturers and implementors know where things are without having to be involved in every task group. Each task group has an action to provide a self-assessment on the key components of their product specification they are responsible for. Only S-123TG has provided this self-assessment to date. Encourage that the remaining task groups undertake this work.

This helps implementation because it helps the implementors, not only within government organisations but also private industry who need to have a certain level of insight to plan their own implementation.

Only when private industry is on board to create the tools to also producers to do the work, can the work begin. As seen with the difficulty in creating test data due to the tool sets not being quiet ready. Part of the issue is a lack of understanding from the tool manufacturer on where each product specification is in development.

* SJ: Support Eivind’s comments, experience of trying to design and plan the tests that Furuno will perform has been hard as they do not know.
* YG: WENDWG14 recently held. To get a full picture, recommend members read the IHO bulletin report and the decisions and actions paper ([Link](https://iho.int/en/wendwg14-2024)) to see how different member states and organisations are progressing in this implementation phase while noting that the product specifications are not at an operational level yet.

A short workshop of the HSSC chair group was held in early February, recommended members read the document **HSSC16-04.2A** on the HSSC16 page ([Link](https://iho.int/en/hssc16-2024)).

**Action Item 8:** Task Groups to review S-123’s ‘Key performance indicators’, HSSC16-04.2A and the WEND bulletin report and provide input to Chair Team. All Task Groups. As Soon As Possible.

**9.5.2 S-128 impact Study update**

* NIPWG noted the update.
* EM: Thanks to Jens and Denmark for undertaking this work. It was agreed to forward this impact report to the S-128TG for a last review at the next S-128 dedicated VTC to then become part of the S-128 submission when ready to HSSC. This report has been put together by Jens on NIPWGs behalf, if there are comments or disagreement from members regarding the report now is the time to provide comments.
* YG: Question: Was the framework of the impact studies which is provided in the IHO resolutions of 2007 used?
* JSC: Everything was looked at that could be found and tried to put it into the report.
* EM: This is the best that can be done with the instructions been given.

**Action Item 9:** Impact study to be passed to the S-128 TG for final review. All. 15th March 2024

**7. ENDS diagram Update**

* NIPWG noted the update by MK.
* RM: Support of the concept of a diagram that does not appear to present the services in a hierarchy.
* CG: Question: What is the reason for the duplication of some things in different services, such as Navigational Warnings appears in MS5 and MS12?
* EM: MS12 includes S-124 because that’s about discoverability of S-124 not the content of S-124.
* NIPWG noted the update by SC.
* YG: Question: On slide 7, what is the rationale of S-124 not being part of ENDS?
* SE: It is how you read the ENDS definition with a lot of emphasis on nautical publications. S-124 is Operational Navigational Warnings that is not traditionally nautical publication data, it is the operational data that is received by NAVTEX or VHF and used on ECDIS. This is a question that should be resolved, and a statement should be created that states this is what IHO thinks is included or left out of ENDS.
* EM: This diagram is saying what ENDS is/can contain. S-124 was intended to be included within the definition of ENDS however if you are very dogmatic on the wording of the definition there is some ambiguity, the diagram that hopefully emerges from this discussion should close this ambiguity and create clarity for the IHO.
* SS: The first tree diagram captures the SOLAS regulations within the different Maritime Services, this is not captured in the other tree diagram.
* SJ: This is because the second tree diagram is based on the statement within the ENDS definition and can be found by the producer related responsibilities within SOLAS regulations V/9.
* EM: Feedback suggests that the ideal tree could be the second tree diagram but with references to the SOLAS regulations.
* EM: There are 3 diagram proposals. All 3 diagrams could be presented to HSSC with a recommendation of one of the diagrams.

**Action Item 10:** ENDS TG to provide NIPWG two options and a recommendation for HSSC. ENDS TG. April 8th 2024

**8. Data Quality Expectations (NIPWG Agenda Item: VTC3/23-01)**

* RM: Currently only had feedback from the S-123 TG, reminder to the other Task Groups to respond to the email on the status and plans for adding data quality material to the product specification as soon as possible.

**Action Item 11:** Task Group leads to provide RM status and plans for adding data quality material to each product specification. Task Group Leads. 8th March 2024

**9.1 S-122 – Marine Protected Areas**

**9.1.1 Task Group update**

* JP: Recent meeting of the task group was at the end of February. The main components of the model have been agreed, the outstanding action is to harmonize the modelling between S-101 restricted areas and feature names and languages.

Next meeting end of March/beginning of April.

Thank you to Bridget and S-123 for KPI milestone examples.

* SO: The IHO secretariat asked for support on the development of S-122, and the Korean company BLUEMAP currently in charge of updating the S-101 feature catalogue and supporting the development of the product specification has a contract to support the development of operational version S-122. The contract includes the updating of the model, metadata and gml encoding to fit with S-100 Edition 5.2 and updating the feature catalogue and portrayal considering interoperability with S-101 portrayal catalogue, multilingual requirements and continuously support the DCEG of S-122 TG. Detailed timeline of the development of S-122 to be discussed at TSM.

**9.3 S-125 – Marine Aids to Navigation**

**9.3.1 Development update**

* EM: IALA has not yet held its ARM meeting, therefore there is no update for this meeting.

**9.4 S-127 – Marine Traffic Management**

**9.4.1 Task Group update**

* EK: Work is progressing, with the aim to deliver a revised product specification by the end of the year.

**9.2 S-123 – Marine Radio Services**

**9.2.1 Task Group update**

* NIPWG noted the update.
* BG: S-123TG formally has submitted the proposed changes to S-123. Members can find these proposed changes on the NIPWG Product Specifications page ([Link](https://iho.int/en/nipwg-product-specifications)) and are asked to review and provide feedback.
* EM: Noting that the eagerness of Bureau Veritas to look at and test data as part of their MASS trials and initiatives shows there is an interest for the S-123 product specification to develop to edition 2.0.0. However, need to be realistic that 2024 is focused on the Phase 1 product specifications and many of the limited resources available are engaged with Phase 1.

**Action Item 12:** NIPWG invited to review proposed changes to S-123 PS and to provide feedback to S-123TG. All. 26th April 2024.

**9.6 S-131 – Marine Harbour Infrastructure**

**9.6.1 Project update**

* NIPWG noted the update.

**10. Next meetings**

* 1. **NIPWG 11: Gdynia, Poland - 24th to 27th September 2024.**
* PP: Preparations are on going and the chair team is being kept updated.
  1. **NIPWG VTC 02/24 will be on the 20th of June.**
  2. **Next Dedicated S-128 VTC: 13th March 2024.**
  3. **2nd IALA-IHO S-100 Workshop, 9 – 13 September 2024, Annapolis, USA.**
* DL: Planning is underway, registration expected to be open sometime in the next couple months. IHO will be informed when it is open. The event will be limited to 100 people as it was at the 1st Workshop.

**Table of names & initials:**

|  |  |
| --- | --- |
| EM | Eivind Mong |
| YB | Yong Baek |
| YG | Yves Guillam |
| JSC | Jens Søe Christiansen |
| CJ | Caroline Johansson |
| TR | Tom Richardson |
| RM | Raphael Malyankar |
| JP | Jonathan Pritchard |
| HS | HyunSoo Choi |
| BvS | Ben van Scherpenzeel |
| SR | Sarah Rahr |
| SE | Stefan Engström |
| DL | Dave Lewald |
| MK | Mike Kushla |
| SJ | Shwu-Jing Chang |
| RB | Rodéric Bera |
| MJ | Minsu Jeon |
| JS | Jason Strom |
| DZ | Daniel Zühr |
| CG | Christopher Gill |
| SS | Svein Skjaeveland |
| SO | Dr Sewoong OH |
| EK | Ed Kuwalek |
| BG | Bridget Gagné |
| PP | Piotr Pasztelan |

**Table of Acronyms:**

|  |  |
| --- | --- |
| EGDH | Expert Group on Data Harmonization |
| DQWG | Data Quality Working Group |
| TSM | Test Strategy Meeting |
| MRN | Maritime Resource Names |
| HSSC | Hydrographic Services and Standards Committee |
| RENC | Regional ENC Coordinating Centre |
| NP | Nautical Publication |
| DCEG | Data Classification and Encoding Guide |
| ENDS | Electronic Navigational Data Service |
| PS | Product Specification |
| IEC | International Electrotechnical Commission |
| IEHG | Inland ENC Harmonization Group |
| MASS | Maritime Autonomous Surface Ships |

**Annex A: Action Items**

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| --- | --- | --- | --- | --- |
| **#** | **Action Item** | **Agenda Item** | **Assigned** | **Status** |
| **NIPWG 9, 2022 – Hybrid Meeting** | | | |  |
| 05 | NGA is encouraged to ensure the interface for WPI is developed so that it guarantees harmonization with S-1xx products, specifically S-131 (to reduce/remove any possibility of duplicate efforts from users/providers). | 13.1 | JS/MK | ~~NIPWG10 VTC03-23 (Dec-23)~~  On Going |
| 06 | NGA will update NIPWG when public facing website of the World Port Index is live. | 13.1 | JS | ~~NIPWG10~~ In Progress |
| 19 | S-128 task group to review the link between task specific products and the model in S-128. And add ‘B’ work items, such as to ‘investigate potential impacts on the data model when considering automatic creation of S-128 product from existing S-1xx and S-57 products. i.e., is there sufficient simplicity in the model so that you can take the coverage of one model and make it part of S-128 (look into automation tasks)’. | 11.1 | S-128 Working Group | ~~VTC-03~~  ~~(Dec-22)~~  ~~VTC03-23~~  ~~(Dec-23)~~  In Progress |
| 23 | Request that SO (Dr. Oh) and his role as IALA/ARM…S-125 task group lead, and his involvement with the S-128 task group, to please review the introduction of S-125 and S-128 and try to replace the NPIO term with a better description of the product specifications intended use. | 5.1 | SO | ~~NIPWG10~~ In Progress |
| 24 | Invite all task groups to consider the updated descriptions in S-125 and S-128 when conducting their next product specifications review. | 5.1 | ALL | ~~NIPWG10~~ In Progress |
| 28 | NIPWG members to make use of the NIWPG wiki in the dialogue on improving the DCEG on all S-12x products. | 10.3 | ALL | ~~NIPWG10~~ In Progress |
| **NIPWG VTC-01 (2023)** | | | | |
| 4 | Review List of action items from DQWG last meeting (held in Feb 7-9, 2023) when released. Chair Team, All S-12x Task Group Leads. | 3 | Chair Team, S-12x Task Group Leads | VTC-02  (Jun 2023)  In Progress |
| 6 | Task Group leads to continue to discuss the topic of GML within their teams (who are working on GML products), for further refinement, and send ongoing input to RM. | 4 | All Task Groups | VTC-02  (Jun 2023)  On Going |
| 8 | All to review NIPWG-VTC01-06.0A and provide ideas for best practice on how S-12x information should be presented in production and for end user. | 6 | All NIPWG | VTC-02  (Jun 2023)  On Going |
| 12 | NIPWG to prepare spreadsheet or table for discussion with IHO GI Registry Meeting. Chair Team. | 7.6.2 | Chair Team | ~~VTC-02~~  ~~(Jun 2023)~~  ~~NIPWG10~~ In Progress |
| **NIPWG VTC-02 (2023)** | | | | |
| 1 | Task Group leads to prepare plans on how to implement Data Quality based on the recommended template of the Data Quality chapter of ‘S-1XX Data Product Specifications’ developed by DQWG. | 3.2 | All Task Groups Leads | ~~NIPWG10~~ ~~VTC-03/23~~  ~~(Dec-23)~~  On Going |
| 7 | Current guidance on data capture from S-131 to be posted on Wiki in a common page for members to refer to. | 9 | RM | NIPWG-10 On Going |
| **NIPWG10, 2023 – Face to Face Meeting** | | | | |
| 1 | HSSC15/05 Decision A3/07. NIPWG to review current resolutions in M3 section 2.4 Nautical publications are still current and up to date. | 4.1 | Chair Team | VTC03-23  (Dec-23)  On Going |
| 2 | HSSC15/05 Decision A3/08e. NIPWG to prepare first draft input into the next IHO strategic plan 2027-2032 to be considered at HSSC16 | 4.1 | Chair Team | VTC01-24 In Progress |
| 3 | HSSC15/05 Decision A3/21, NIPWG to review method and frequency of meetings and to provide input to HSSC16 | 4.1 | Chair Team | VTC01-24 COMPLETED |
| 4 | HSSC15/08. NIPWG to provide the HSSC chair updates on SPI. | 4.1 | Chair Team | VTC01-24  COMPLETED |
| 6 | HSSC15/86, NIPWG to prepare comment paper for HSSC/IHO Secretariat on the proposal submitted by ROK MOF (Ministry of Oceans and  Fisheries) on the use of electronic nautical publications at NSCR-11. | 4.1 | Chair Team | NSCR-12 (June 24) Deadline Feb 2024  In Progress |
| 7 | Task Groups to develop key performance indicators for each of the product specifications to also feed into Action item 44. | 5.1 | Task Group Leads | VTC03-23  (Dec-23)  On Going |
| 8 | Task Groups to provide point of contact for S-64 and S-98. | 5.1 | Task Groups | VTC03-23  (Dec-23)  In Progress |
| 9 | Task groups to provide test data sets to aid S-164 development. | 5.3 | Task Group Leads | When available |
| 10 | Task group leads to read through and check the current draft of S-98 Annex C and comment/prepare input paper to be defined and published in S-98. | 5.3 | Task Group Leads | As soon as possible. |
| 17 | ENDS diagram: Updating names, shape etc and to link with SOLAS regulations. | 4.2.1 | CJ(Lead), SR, SE, MK, CG EM, JS | VTC01-24 COMPLETED |
| 19 | Operational Interaction diagram on S-100 world architecture to be expanded to include the other nautical publications and charting tasks, their relationship and how it ends up at the ship | 4.2.1 | IALA ARM | ~~VTC01-24~~ VTC02-24 |
| 20 | Agenda item at VTC01-24 to review S-100 world architecture completed by IALA ARM (Action item 16) | 4.2.1 | Chair Team | ~~VTC01-24~~ VTC02-24 |
| 21 | Canadian Coast Guard to provide input paper to the S-127TG on use cases of speed restrictions within the St Lawrence River. | 11.4.1 | RJ | VTC03-23  (Dec-23)  COMPLETED |
| 22 | Create and distribute a detailed timeline (Nov 23-Aug 24) of roadmap to PS 2.0 creation, including when tool is ready to be used for testing. | 11.5.1 | S-128 PT / Chair Team | VTC03-23  (Dec-23)  On Going |
| 23 | Product Type attribute; check PS 1.1.0 for the inclusion of traditional paper products (List of Light, SDs etc.) and other different use cases. | 11.5.1 | S-128 PT | ~~Mid-October 2023~~  On Going |
| 24 | DCEG guidance for the different uses to be reviewed in preparation of PS 1.1.0 | 11.5.1 | S-128 PT | ~~Mid-October 2023~~  On Going |
| 27 | Dedicated S-128 VTC to be held monthly. Strict focus on finalising PS development. | 11.5.2 | All | ~~Starting 3~~~~rd~~ ~~week October~~  On Going |
| 28 | Dedicated S-128 VTC on discussion on distribution and use cases. | 11.5.2 | All | VTC03-23  (Dec-23)  On Going |
| 29 | Denmark to conduct Impact Study on S-128 and report back to NIPWG | 11.5.2 | JSC | VTC01-24 COMPLETED |
| 31 | Investigation to be conducted in the usability and feasibility of S-128 providing association to Maritime Services. | 11.5.3 | EM, CJ, SE | End Sept 2023  On Going |
| 32 | Review S-128 and find any gaps between Data model and registry. | 11.5.4 | JSC & SJH | VTC03-23  (Dec-23)  On Going |
| 34 | Input paper to be submitted to S-100WG recommending with the support of NIPWG a statement that overlapping radio coverage areas is possible and a statement be added to S-98 Annex C | 11.2.1 | HP | October 15 (S-100WG8)  On Going |
| 39 | SHOM to lead a Task group identifying gaps in French SDs and future S-12X products. | 9.0 | RB, S-12X Task Group Leads + All | VTC03-23  (Dec-23)  On Going |
| 41 | Review of the NIPWG workplan 2024-25 for submission to HSSC16 | 16.1 | Chair Team | VTC01/24 COMPLETED |
| 42 | Create list of each task group membership, roles within NIPWG and to include on NIPWG page. | 16.1 | JWE/Task Group Leads | VTC03-23  (Dec-23)  On Going |
| 44 | NIPWG to draft their own working group level milestones. | 16.1 | Chair Team/Task Group Leads | VTC03-23  (Dec-23)  On Going |
| **NIPWG VTC-03 (2023)** | | | | |
| 1 | Agenda Item at VTC01-24 on the expectations of Action Item 1 of VTC02-23 | 2 | Chair Team | VTC01/24 COMPLETED |
| 2 | Key Performance Indicators (NIPWG10 Action Item 7) Chair Team to follow up with TG Leads for HSSC submission. | 2 | Chair Team & Task Group Leads | VTC01/24 COMPLETED |
| 3 | NIPWG to provide guidance to IHO on how to use Maritime Resource Names (MRN) in product specifications. | 3.1 | JP | ~~VTC01/24~~  On Going |
| 4 | Task groups to provide use cases for Complex Pick Reports to RM & Chair Team | 3.1 | Task Group Leads | ~~VTC01/24~~  On Going |
| 5 | NIPWG invited to review the new S-128 data model. | 9.5.1 | All | ~~End of Dec 2023~~ On Going |
| 6 | NIPWG invited to create S-128 data using local S-10X data through INToGIS and provide feedback to S-128 PT. | 9.5.1 | All | ~~VTC01/24~~ On Going |
| 7 | JSC to draft answers to the impact study ‘on behalf’ of each stake holder within the impact study. | 9.5.2 | JSC | End of Dec 2024 COMPLETED |
| 8 | NIPWG to review the draft answers of the impact study once available. | 9.5.2 | All | End of Jan 2024. In Progress  COMPLETED/ SUPERSEED by action Item 9 of VTC 01/24 |
| 9 | Agenda Item on DCWG at the 3rd dedicated monthly S-128 VTC. | 9.5.2 | JW/HC | 3rd S-128 VTC 19th Dec 2024 |
| 10 | Include IHMA guide within the HSSC report and raise the question to IMO rep on how to make this document operational. | 6 | EM | HSSC16  May 2024 COMPLETED |
| 11 | S-131PT to work with JSC to start testing the API and GUI. | 9.6.1 | S-131PT & JSC | ~~VTC01/24~~ VTC02/24 |
| 12 | S-131PT to contact BvS for API testing. | 9.6.1 | S-131PT & BvS | ~~VTC01/24~~ VTC02/24 |
| 13 | Meeting with IEHG to be scheduled to discuss harmonization between S-131 and S-401. | 9.6.2 | SR, EM, JMK | Jan 2024  COMPLETED |
| 14 | Agenda Item USCG S-100 System Architecture update. | 8 | JW/AA | VTC01/24 COMPLETED |
| 15 | BSH work to be included in NIPWG report to HSSC. | 9.4.2 | Chair Team & PS | HSSC16  May 2024 In Progress |
| 16 | Agenda item onS-100WG8 Complex Portrayals Paper update at next VTC. | 7 | EM | VTC01/24 COMPLETED |
| 17 | Chair Team to email working group asking for volunteers to attend the IEC WG17 Joint IHO IEC meeting. | 5 | Chair Team | End of Dec 2024 COMPLETED |
| **NIPWG VTC-01 (2024)** | | | | |
| 1 | NIPWG to review andprovide comments on the proposed Work Plan 2024-2025. | 2.2 | All | 31st March 2024 |
| 2 | S-131PT to review paper S-101PT12-06.9 & 9A Structures Over Navigable Water and provide comment if required. | 3.1 | S-131PT | 31st March 2024 |
| 3 | S-101PT to share comments on Association Roles from SevenCs to NIPWG for review. | 3.1 | TR | 31st March 2024 |
| 4 | Revised version of the feature catalogue to be shared with NIPWG once testing has been completed. | 9.5.1 | S-128PT | 13th March 2024 |
| 5 | VTC to discuss outstanding items within IHMA Guide for Nautical Data. | 9.6.2 | BvS, SR, DL, JP, MK, JSC, SJ, RM, RB, MJ, JS, DZ, SE | 31st March 2024 |
| 6 | NIPWG to review the S-100WG paper and supply comments as per the S-100WG letter 1/2024. | 4 | All | 15th March 2024 |
| 7 | NIPWG to review comments drafted by the Chair team and to provide comments. | 5.1 | All | 15th March 2024 |
| 8 | Task Groups to review S-123’s ‘Key performance indicators’, HSSC16-04.2A and the WEND bulletin report and provide input to Chair Team | 5.2 | All | As Soon As Possible |
| 9 | Impact study to be passed to the S-128 TG for final review | 9.5.2 | All | 15th March 2024 |
| 10 | ENDS TG to provide NIPWG two options and a recommendation for HSSC. | 7 | ENDS TG | April 8th 2024 |
| 11 | Task Group leads to provide RM status and plans for adding data quality material to each product specification. | 8 | Task Group Leads | 8th March 2024 |
| 12 | NIPWG invited to review proposed changes to S-123 PS and to provide feedback to S-123TG. | 9.2.1 | All | 26th April 2024. |

**Annex B: NIPWG List of Decisions & Action Items Arising from HSSC-15**

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| --- | --- | --- | --- | --- | --- |
| **5.3** **Nautical Information Provision (NIPWG)** | | | | | |
| 5.3A | S-100 System Architecture, IMO’s Maritime Services | HSSC15/36  (former HSSC14/44, HSSC13/35) | Noting different expectations, **HSSC** welcomed the offer made by **NIPWG** in liaison with **S-100WG** to complement the S-100 System Architecture by a submission paper addressing the what/how/when the S-100 based products should work together in a future S-100 ECDIS environment. | **HSSC-16** | In progress with Canadian Coast Guard and other agencies |
| 5.3A | Maritime Services, e-navigation | HSSC14/45 (former HSSC13/37, HSSC12/32, HSSC11/36) | **HSSC** tasked the responsible **HSSC WGs** [and will invite also the **IRCC/WWNWS-SC**] to review the initial descriptions of “*Maritime Services in context of e-navigation*” under their remit and to provide them to **NIPWG** for further action if appropriate.  **NIPWG** to send reminders as appropriate. | **Permanent**  **Deadline to be confirmed by NIPWG** | Closed |
| 5.3A | Maritime Services, e-navigation | HSSC15/37  (former HSSC 14/46, HSSC13/38) | **HSSC** tasked **NIPWG** to act as the responsible IHO WG to monitor and contribute to the IMO Expert Group on Data Harmonization (EGDH). | **Permanent** | In progress (engaged with IMO EGDH) |
| 5.3A | Scale Dependent (SD)/Scale Independent (SI) | HSSC15/38  (former HSSC 14/47, HSSC13/40) | After having considered an IALA outline paper describing how S-201, S-124, S-125 may work together, **HSSC** tasked **NIPWG** to provide a paper discussing SD/SI data handling aspects. | **HSSC-16** | In progress |
| 5.3A | S-100 Whole Picture | HSSC15/39  (former HSSC14/49, HSSC13/41) | **HSSC** welcomed the offer by **NIPWG** to develop an outline paper, in liaison with **S-100WG**, describing the whole S100 picture in close cooperation with stakeholders, inside and outside the IHO community and with IMO in particular. | **HSSC-16** | In progress |
| 5.3A | S-12x (S-122, S-123, …) | HSSC15/40 (former HSSC14/50) | **HSSC** noted the status report on the development of the new Edition of these Product Specifications to be aligned with S-100 Ed. 5.1.0 and the remaining challenges (Portrayal, etc.). | **HSSC-15** | All products in the process of being aligned with S-100 Ed. 5.1.0 except S-131 |
| 5.3B | S-128 | HSSC14/52 | **HSSC** advised **NIPWG** to liaise with **S-100WG** on issues identified regarding responsibility of stakeholders in producing and distributing S-128 and for **NIPWG** to provide an input paper to WENDWG13. | **WENDWG-13/HSSC-15** | Noted in agenda of WENDWG13, discussed at S-100WG7. Complete. |
| 5.3A | S-12x | HSSC15/41 | **HSSC** noted the possible S-128 scenarios (fig. 2 in Doc. HSSC15-05.3A) and the progress made on other S-12x products in NIPWG portfolio (work on track for S-122, S-123, S-125, S-127). |  |  |
| 5.3A | S-126 | HSSC15/42 | Noting the lack of resources available and other high priority products, **HSSC** agreed to put on hold the development of S-126 until further notice and/or recommendation from NIPWG. |  | Decision |
| 5.3B | S-131 | HSSC15/43 | **HSSC** commended **NIPWG** and **partners** for the work done on S-131 and approved Ed. 1.0.0 of S-131 for initial implementation, testing and evaluation.  Alignment with S-100 Ed. 5.1.0 to be considered. | **HSSC-16** | Decision |
| 5.3A, 7.1B | S-124 | HSSC15/44 | Noting the endorsement from the S-100WG, **HSSC** commended the WWNWSC and S-124PT for their work and approved Ed. 1.0.0 of S-124 – *Navigational Warnings* - for initial implementation, testing and evaluation.  **HSSC Chair** to report to IRCC (since the WWNW-SC is under its remit). | **IRCC-15** | Decision |
| 5.3 | S-125 | HSSC15/45 | **HSSC** invited **NIPWG** to deliver at the next S-100WG meeting, a presentation on the concept and various options for the operational implementation of S-125 in the future, as well as on interoperability issues with S-101 and S-124. | **S-100WG8**  **HSSC-16** |  |

**Annex C: Agenda**

|  |  |  |  |
| --- | --- | --- | --- |
| **Agenda Item** | **Topic** | **Presenter** | **Item Time** |
| **1.0** | **Welcome** | Chair | 00:05 |
| **2.0** | **Review of Action Items** |  |  |
| **2.1** | **Review of NIPWG Action Items** | James Weston | 00:15 |
| **2.2** | **Review of Draft NIPWG Work Plan 2024-2025** | James Weston | 00:10 |
| **3.0** | **Review of other Working Group reports** |  |  |
| **3.1** | **S-101PT Update** | Tom Richardson | 00:10 |
| **3.2** | **Update on IMO Expert Group on Data Harmonization (EGDH)** | Stefan Engström | 00:05 |
| **4.0** | **Dual Fuel Concept for S-100 ECDIS Review** | Eivind Mong | 00:05 |
| **5.0** | **HSSC Actions** |  |  |
| **5.1** | **15/86 – IMO Electronic Navigational Publication guideline comments** | Eivind Mong | 00:05 |
| **5.2** | **Preparation of HSSC-16:** Recommendations, Decisions, Risk Assessment with regard to Ed.2.0.0 of Phase I Products and ENDS, Work Plan 2024-25, Inputs for the revision of the Strategic Plan (see Doc HSSC16-04.2A) | Eivind Mong | 00:10 |
| **6.0** | **New IHO Portal to be experimented for NIPWG-11 (registration, documents, …)** | Yong Baek | 00:10 |
| **7.0** | **ENDS diagram Update** | Caroline Johansson | 00:20 |
| **8.0** | **Data Quality Expectations (NIPWG Agenda Item: VTC3/23-01)** | Raphael Malyankar | 00:05 |
| **9.0** | **Product Specification updates** |  |  |
| **9.1** | **S-122 – Marine Protected Areas** |  |  |
| 9.1.1 | Task Group update | Jonathan Pritchard | 00:05 |
| **9.2** | **S-123 – Marine Radio Services** |  |  |
| 9.2.1 | Task Group update | Bridget Gagné | 00:05 |
| **9.3** | **S-125 – Marine Aids to Navigation** |  |  |
| 9.3.1 | Development update | Dr Sewoong Oh | 00:05 |
| **9.4** | **S-127 – Marine Traffic Management** |  |  |
| 9.4.1 | Task Group update | Ed Kuwalek | 00:05 |
| **9.5** | **S-128 – Catalogue of Nautical Products** |  |  |
| 9.5.1 | S-128 Test Bed update | Son Ji Hyun/  HyunSoo Choi | 00:15 |
| 9.5.2 | S-128 impact Study update | Jens Søe Christiansen | 00:10 |
| **9.6** | **S-131 – Marine Harbour Infrastructure** |  |  |
| 9.6.1 | Project update | Sarah Rahr | 00:10 |
| 9.6.2 | Guidelines for Harmonized Communication and Electronic Exchange of Nautical Data for Port Calls | Ben van Scherpenzeel | 00:10 |
| **10.0** | **Next meetings** | Chair | 00:05 |
| **10.1** | NIPWG 11: 24th to 27th September 2024 |  |  |
| **10.2** | Next VTC: XX June 2024 |  |  |
| **10.3** | Next Dedicated S-128 VTC: 13th March 2024 |  |  |
| **10.4** | Preparation of the 2nd IALA-IHO S-100 Workshop, 9 – 13 September 2024, Annapolis, USA |  |  |

**Annex D: List of Attendees**

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| --- | --- | --- | --- |
| **Registered Attendees** | | | |
| **Name** | **Country** | **Organization / Company** | **Y/N** |
| **IHO MEMBER STATES** | | | |
| Alper CELEBI | Australia | Australian Hydrographic Office | Y |
| Jamie MURPHY | Australia | Australian Hydrographic Office | Y |
| Bridget GAGNÉ | Canada | Canadian Coast Guard | Y |
| Robin JEFFERIES | Canada | Canadian Coast Guard | Y |
| Eivind MONG | Canada | Canadian Coast Guard - Chair | Y |
| Sarah RAHR | Canada | Canadian Hydrographic Service (CHS) | Y |
| Liwen LIU | China | MARITIME SAFETY ADMINISTRATION (MSA) | Y |
| YUE JIANG | China | MARITIME SAFETY ADMINISTRATION (MSA) | Y |
| YUXIAO LYU | China | MARITIME SAFETY ADMINISTRATION (MSA) | Y |
| Daniel ZÜHR | Germany | Bundesamt für Seeschifffaahrt & Hydrographie (BSH) | Y |
| Stelios CONTARINIS | Greece | National Technical University of Athens (NTUA) | Y |
| Bente BERGGRAF | Norway | Norwegian Hydrographic Service | Y |
| John Morten KLINGSHEIM | Norway | Norwegian Coastal Administration | Y |
| Piotr PASZTELAN | Poland | Hydrographic Office of the Polish Navy | Y |
| Christopher GILL | UK | UK Hydrographic Office | Y |
| Tom RICHARDSON | UK | UK Hydrographic Office | Y |
| James WESTON | UK | UK Hydrographic Office (UKHO) - Secretary | Y |
| Marcy KLIMEK | UK | UK Hydrographic Office (UKHO) | Y |
| Michael KUSHLA | USA | National Geospatial-Intelligence Agency (NGA) | Y |
| Jason STROM | USA | National Geospatial-Intelligence Agency (NGA) | Y |
| **INDUSTRY & TECHNICAL EXPERTS** | | | |
| Minsu JEON |  | IALA | Y |
| Michael BERGMANN |  | Bergmann Marine | N |
| Raphael MALYANKAR |  | Portolan Sciences | Y |
| Svein SKJAEVELAND |  | PRIMAR | Y |
| Hugh ASTLE |  | Teledyne Geospatial | Y |
| Carlo Alberto GALLI |  | GARMIN | N |
| Thomas GKIOULIS |  | HARTIS Integrated Nautical Services Ltd | Y |
| Yves GUILLAM |  | International Hydrographic Office (IHO) | Y |
| HyunSoo CHOI |  | Korea Research Institute of Ships & Ocean Engineering (KRISO) | Y |
| Shwu-Jing CHANG |  | National Taiwan Ocean University (NTOU) | Y |
|  |  |  |  |
| **Non Registered Attendees** | | | |
| **Name** | **Country** | **Organization / Company** | **Y/N** |
| **IHO MEMBER STATES** | | | |
| VITOR ROMANO | Brazil | CHM - Centro de Hidrografia da Marinha | Y |
| Jen Søe CHRISTIANSEN | Denmark | Danish Geodata Agency/Geodatastyrelsen (GST) | Y |
| Stefan ENGSTRÖM | Finland | Finnish Transport Agency Hydrographic Office | Y |
| Roderick BERA | France | Service Hydrographique et Oceanographique de la Marine (SHOM) | Y |
| Elena ARMANINO | Italy | Istituto Idrografico Della Marina | Y |
| Tetsuichiro YABUKI | Japan | Japan Coast Guard (JCG) | Y |
| Herman Schouten van der Velden | Netherlands | Hydrographic Service - Royal Netherlands Navy (NLHO) | Y |
| Matilde Skæveland SKÅR | Norway | Norwegian Hydrographic Service | Y |
| Caroline JOHANSSON | Sweden | SJOFARTSVERKET (SWEDISH MARITIME ADMINISTRATION) | Y |
| David LEWALD | USA | US Coast Guard | Y |
| **INDUSTRY & TECHNICAL EXPERTS** | | | |
| Yong Baek |  | International Hydrographic Office (IHO) | Y |
| Ed KUWALEK |  | IIC Technologies | Y |
| Jonathan PRITCHARD |  | IIC Technologies | Y |
| Ben VAN SCHERPENZEEL |  | International Harbour Masters Association (IHMA) | Y |
| Seewong OH |  | Korea Research Institute of Ships & Ocean Engineering (KRISO) | Y |

**Annex E: Time Schedule**

|  |  |  |  |
| --- | --- | --- | --- |
| **Agenda Item** | **Topic** | **Presenter** | **Item Time** |
| **1.0** | **Welcome** | Chair | 00:05 |
| **6.0** | **New IHO Portal to be experimented for NIPWG-11 (registration, documents, …)** | Yong Baek | 00:10 |
| **2.0** | **Review of Action Items** |  |  |
| **2.1** | **Review of NIPWG Action Items** | James Weston | 00:15 |
| **2.2** | **Review of Draft NIPWG Work Plan 2024-2025** | James Weston | 00:10 |
| **3.1** | **S-101PT Update** | Tom Richardson | 00:10 |
| **9.5.1** | **S-128 Test Bed update** | Son Ji Hyun  /HyunSoo Choi | 00:15 |
|  |  |  |  |
| **3.2** | **Update on IMO Expert Group on Data Harmonization (EGDH)** | Stefan Engström | 00:05 |
| 9.6.2 | **Guidelines for Harmonized Communication and Electronic Exchange of Nautical Data for Port Calls** | Ben van Scherpenzeel | 00:10 |
| **4.0** | **Dual Fuel Concept for S-100 ECDIS Review** | Eivind Mong | 00:05 |
| **5.0** | **HSSC Actions** |  |  |
| **5.1** | **15/86 – IMO Electronic Navigational Publication guideline comments** | Eivind Mong | 00:05 |
| **BREAK** | | | |
| **5.2** | **Preparation of HSSC-16:** Recommendations, Decisions, Risk Assessment with regard to Ed.2.0.0 of Phase I Products and ENDS, Work Plan 2024-25, Inputs for the revision of the Strategic Plan (see Doc HSSC16-04.2A) | Eivind Mong | 00:10 |
| **9.5** | **S-128 – Catalogue of Nautical Products** |  |  |
| 9.5.2 | S-128 impact Study update | Jens Søe Christiansen | 00:10 |
| **7.0** | **ENDS diagram Update** | Caroline Johansson/ Mike Kushla | 00:20 |
|  |  |  |  |
| **8.0** | **Data Quality Expectations (NIPWG Agenda Item: VTC3/23-01)** | Raphael Malyankar | 00:05 |
| **9.1** | **S-122 – Marine Protected Areas** |  |  |
| 9.1.1 | Task Group update | Jonathan Pritchard | 00:05 |
| **9.3** | **S-125 – Marine Aids to Navigation** |  |  |
| 9.3.1 | Development update | Dr Sewoong Oh | 00:05 |
| **9.4** | **S-127 – Marine Traffic Management** |  |  |
| 9.4.1 | Task Group update | Ed Kuwalek | 00:05 |
| **9.2** | **S-123 – Marine Radio Services** |  |  |
| 9.2.1 | Task Group update | Bridget Gagné | 00:05 |
| **9.6** | **S-131 – Marine Harbour Infrastructure** |  |  |
| 9.6.1 | Project update | Sarah Rahr | 00:10 |
| **10.0** | **Next meetings** | Chair | 00:05 |
| **10.1** | NIPWG 11: 24th to 27th September 2024 |  |  |
| **10.2** | Next VTC: 20th June 2024 |  |  |
| **10.3** | Next Dedicated S-128 VTC: 13th March 2024 |  |  |
| **10.4** | Preparation of the 2nd IALA-IHO S-100 Workshop, 9 – 13 September 2024, Annapolis, USA |  |  |