

**Nautical Information Provision Working Group (NIPWG) Meeting
14th December 2022 – VTC, Worldwide**

1. Welcome

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

2. Review of Action Items

See Annex A.

3. Review of other Working Group Reports:

3.1 NIPWG noted update on S-100WG meeting by EM

3.2 NIPWG noted update on S-100WG meeting by JP, SS & EK.

- JP: S-164 will progress and be completed by end of next year. Datasets are being requested
- SM: following links are for the S-1XX Dataset Naming Convention paper and presentation as presented at S-100WG7:
 - o https://iho.int/uploads/user/Services%20and%20Standards/S-100WG/S-100WG7/S100WG7-6.8_2022_EN_IC-ENC%20paper%20DRAFT.pdf
 - o https://iho.int/uploads/user/Services%20and%20Standards/S-100WG/S-100WG7/S100WG7-6.8_2022_EN_S-1XX%20Naming%20Convention_presentation.pdf

ACTION ITEM 01: JP to prepare an input paper on how an MRN should be formatted to identify data producers and other roles within the scope of the IHO data protection scheme, by the scheme administrator; the IHO secretariat. JP, Mar 1st 2023

ACTION ITEM 02: Prepare input paper for NIPWG to review in preparation for next TSM (Mar-23). RM, JP & SS, Feb 17th 2023

4. Input Paper on Data Management – PS

- NIPWG noted input paper and circular letter
- SS to join group to ensure consistency

ACTION ITEM 03: Draft input paper requesting HSSC guidance on how to improve the dialogue with other national entities for the purpose of including the most up to date information. NIPWG Chair Team, PS, SS, YG & MB. VTC-01 (Mar-23).

5. UKC Definitions update – BvS

- NIPWG noted UKC definitions update.
- Sea floor definition will be replaced by that of IHO GI Registry definition.

ACTION ITEM 04: NIPWG members have till January 31st to comment on new and updated definitions (those in red). If no comments received, definitions will be submitted to GI Registry by RM. All NIPWG. Jan 31st 2023.

6. Product Specification Updates

6.1 S-122 – Marine Protected Areas

6.1.1 Task Group Volunteers - EM

Note: FOR REASONS OF ECONOMY, THE DELEGATES ARE KINDLY REQUESTED TO BRING THEIR OWN COPIES OF THE DOCUMENTS TO THE MEETING

ACTION ITEM 05: Chair team to organise first meeting with volunteers (Hannah Szeja (UKHO), Kevin Rigg (UKHO), JP and RM). NIPWG members to volunteer, or provide names, before then. Chair Team, All NIPWG. Jan 20th 2023.

6.2 S-123 – Marine Radio Services

6.2.1 Task Group Update – BG

- NIPWG noted S-123 progress presentation.
- Proposed changes to split NAVAREA/METAREA were approved by NIPWG members.

6.3 S-125 – Marine Aids to Navigation

6.3.1 Development update – SO

- No update received.

6.4 S-126 – Marine Physical Environment

6.4.1 Task Group Lead Update – EM

- Action item: NIPWG will recommend to HSSC, in the HSSC report (due 15th April 2023), that S-126 should be put back in to a dormant state until more interest is regained. Chair Team. Apr 1st 2023

6.5 S-127- Marine Traffic Management

6.5.1 Task Group Update – EK

NIPWG noted S-127 progress presentation.

6.6 S-128 – Catalogue of Nautical Products

6.6.1 S-100WG Update – EM, on behalf of IK

6.6.2 S-128 Test Bed Update

- SS: Primar advisory committee has accepted proposal for the commencement of the S-128 test bed project, in Mar-2023.
- SM: ICENC have added S-128 test bed project in to work plan.
- JP: IIC started working alongside Primar as well.

Action Item: Request continued progress updates from relevant parties. All NIPWG members. VTC-01 (Mar 2023).

6.7 S-131 – Marine Harbor Infrastructure

6.7.1 Project Update - SR

- NIPWG noted S-131 progress update.

6.7.2 Product Spec Update - RM

- NIPWG noted S-131 product spec progress presentation.

ACTION ITEM 06: Members are encouraged to review and comment on the presentation and pass them onto Raphael by email. All NIPWG. VTC-01 (Mar 2023)

6.8 SHOM Gap Analysis – YLF

- NIPWG noted SHOM's gap analysis study.

ACTION ITEM 07: The gap analysis study should be discussed in more detail at the next VTC. All interested members to provide their own individual findings. All NIPWG. VTC-01 (Mar 2023).

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- 7. GML Way Forward presentation – RM
- 8. IHO GI Registry Updates Presentation - RM
- 9. Recommendations on how the association of information types should be managed in the production and user tools – RM

ACTION ITEM 08: NIPWG members to review papers and presentation provided as Agenda items 7, 8 & 9 (that were unfortunately unable to be discussed during meeting) and to provide feedback by email to Raphael. All NIPWG. Jan 31st 2023.

10. Next Meetings

- 10.1 Next VTC: 2nd March 2023, via MS Teams
- 10.2 NIPWG-10: 12th to 15th September 2023, Monaco

Table of names & initials:

EM	Eivind Mong
JP	Jonathan Pritchard
SS	Svein Skjaeveland
EK	Ed Kuwalek
PS	Philipp Schwedas
BvS	Ben van Scherpenzeel
BG	Bridget Gagné
SO	Seewong OH
SM	Su Marks
IK	Iji Kim
SR	Sarah Rahr
RM	Raphael Malyankar
YLF	Yves le Franc

Table of Acronyms:

EGDH	Expert Group on Data Harmonization
TSM	Test Strategy Meeting
MRN	Maritime Resource Names
HSSC	Hydrographic Services and Standards Committee
OGC	Open Geospatial Consortium
WEND	Worldwide ENC Database
FAL	Facilitation Committee

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Annex A: Action Items

#	Action Item	Agenda Item	Assigned	Status
NIPWG 9, 2022 – Hybrid Meeting				
01	Working group asked to determine whether they agree with the information provided in the two tables and definitions? If any adjustments/anything missing is thought of, please provide comments to EM.	4.4	All	COMPLETED
04	NGA are invited to present the presentation on WPI to the S-130 PT, for their consideration, as the names of water bodies may not be included as such in the S-130 product specification (use of Unique Identifiers instead).	13.1	JS/MK	NIPWG-10
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	NIPWG-10
06	NGA will update NIPWG when public facing website of the World Port Index is live.	13.1	JS	NIPWG-10
07	A statement needs to be created for the need to cooperate across governments and to identify the best organization to provide data services to ensure the best possible whole service for the end user, and sent as a circular letter within NIPWG and in copy to the S-100WG.	13.5	PS, JM, MS, YLF, SR, SS	COMPLETED
08	To replace VTC 01/2022, Action Item 02: S-126 task group to be officially organized, volunteers: JC, JP, JS, SR, MK, RM (? TBC by Sep 30 th) Lead: MS (TBC by Sep 30 th) Current timeline for S-126 is End of 2024	9.1	Chair team JC, JP, MS, JS, SR, MK, RM	VTC-03 (Dec-22)
09	Chair group to work on a statement to provide to the IHO so they can in turn formulate a response to MSC 106.	14.2A	Chair team	COMPLETED
10	Provide an input paper from NIPWG to the IALA ARM committee working group 2, recommending that S-201 should hold all features and attributes of S-125, to permit the creation of S-125 products by non-ATON authorities, such as; HOs. With reference to outcome of the IALA IHO S100/S200 workshop and NIPWG-9 discussion.	8.2A	Chair Team to draft on behalf of NIPWG	COMPLETED

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11	Feedback requested to review the product specification, DCEG Feature Catalogue and GML schemas (using the review form). Feedback to be sent RM, CC'ing SE and EM. (See slide 5 of presentation 12.1A)	12.1A	All	COMPLETED
12	Review the DCEG styles in S-131 draft and S-127 1.0.0 and advise on preferred format for the feature tables in the DCEG, as to which is better to read, by providing feedback to RM. (See slide 5 of presentation 12.1A)	12.1A	All	COMPLETED
13	SR to please organize a project update meeting in September 2022.	12.2.1A	SR	COMPLETED
14	JP to inform NIPWG when OGC report is published to allow NIPWG members to review and feedback as required	6.2	JP	COMPLETED
15	Working group members to volunteer to be part of S-122 task group and assist with finding individuals within own organizations who will be able to effectively contribute. To be decided in time for a task group to be formed at next VTC (04).	6.1	All	VTC-04 (Dec-22)
16	Input paper from NIPWG to S-100WG on how the mixed datasets containing coverage outside a nations EEZ and national boundary should be created in accordance with the S-100 Framework.	7.1A	Chair Team Supported by HA	COMPLETED
17	S-123 task group to come up with a proposal of how the data model should change (see slide 3).	7.1A	BG	COMPLETED
18	A review of which services should consider using S-128 products and services will be completed by SE and HP.	11.1	SE, HP	NIPWG-10
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-04 (Dec-22)

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20	Requested that BvS take back to the task group that a definition for best draft estimate should be made, including the discussion of whether the term safety margin should be defined and then included in either the best draft estimate, or in the description of margin for ship's draft. With also links to definitions of each section, highlighting NET UKC (including whether this considers protection of certain seabeds) and definition of 'baseline' (i.e., is it the true echo sounder reading)	11.2	BvS	COMPLETED
21	YLF invited to describe the gap between French SDs and the S-100 based nautical publications.	11.2	BvS	COMPLETED
22	With reference to the action from HSSC14/87, NIPWG should prepare a clarification and definition of ENDS for HSSC-15, following the adoption of amendments to MSC.232(82) (which are up for approval at MSC in November).	11.2	ALL	VTC-01 (Mar-23)
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	NIPWG-10
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	NIPWG-10
25	Chair team to draft a paper for the ARM committee for the recommendations for S-125 from the IALA/IHO S-100/S-200 Workshop, including the comments made during NIPWG-9 regarding temporary navigational aids, when the deployments are shorter than the update frequency of the ENC update period, given as a further use case.	5.1	Chair Team	COMPLETED
26	Chair team to provide an input to HSSC15 reporting on the outcomes of the workshop, with regards to how S-201, S-101, S-125 and S-124 will work in relation to each other.	5.1	Chair Team	HSSC-15 (6-weeks before)
27	RM to create a space within the NIPWG wiki, to commence dialogue on best practices in creation of S-12x data.	10.3	RM	VTC-03 (Dec-22) In progress

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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	NIPWG-10
29	New S-127 task group to organize first meeting. Interested participants invited to take part in the S-127 task-group. IIC (Group Lead), NGA (JS, MK), RM, CCG, SE, LY, SJC, YLF	10.3	EK	COMPLETED
30	China invited to submit sample test to MK (NGA) so that NP2 data samples can be updated.	14.1	LY	VTC-03 (Dec-22) In progress
31	The newly established S-127 task group are also invited to take note of the proposals made by China and to implement them into the S-127 product specifications.	14.1	S-127 task group	COMPLETED
32	China was invited to submit S-127 change proposals to EA.	14.1	LY	VTC-01 (Mar-23)
NIPWG VTC-03				
1	JP to prepare an input paper on how an MRN should be formatted to identify data producers and other roles within the scope of the IHO data protection scheme, by the scheme administrator; the IHO secretariat.	3.2	JP	Mar 1 st 2023
2	Prepare input paper for NIPWG to review in preparation for next TSM (Mar-23).	3.2	RM, JP, SS	Feb 17 th 2023
3	Draft input paper requesting HSSC guidance on how to improve the dialogue with other national entities for the purpose of including the most up to date information.	4	NIPWG Chair Team, PS, SS, YG & MB	VTC-01 (Mar-2023)
4	NIPWG members have till January 31 st to comment on new and updated definitions (those in red). If no comments received, definitions will be submitted to GI Registry by RM.	5	All NIPWG	Jan 31 st 2023
5	Chair team to organise first meeting with volunteers (Hannah Szeja (UKHO), Kevin Rigg (UKHO), JP and RM). NIPWG members to volunteer, or provide names, before then.	6.1.1	Chair Team, All NIPWG	Jan 20 th 2023
6	Members are encouraged to review and comment on the presentation and pass them onto Raphael by email.	6.7.2	All NIPWG	VTC-01 (Mar-2023)
7	The gap analysis study should be discussed in more detail at the next VTC. All interested members to provide their own individual findings.	6.8	All NIPWG	VTC-01 (Mar 2023)

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8	NIPWG members to review papers and presentation provided as Agenda items 7, 8 & 9 (that were unfortunately unable to be discussed during meeting) and to provide feedback by email to Raphael.	7, 8, 9	All NIPWG	Jan 31 st 2023
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Annex B: NIPWG List of Decisions & Action Items Arising from HSSC-14

5.3 Nautical Information Provision (NIPWG)					
5.3A	S-100 System Architecture, IMO’s Maritime Services	HSSC14/44 (former 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-15	In progress with Canadian Coast Guard.
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 “ <i>Maritime Services in context of e-navigation</i> ” 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	
5.3A	Maritime Services, e-navigation	HSSC14/46 (former 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	

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5.3A	Scale Dependent (SD)/Scale Independent (SI)	HSSC14/47 (former 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-15	In progress
5.3A	S-125	HSSC14/48	<p>HSSC approved the name change for S-125 from “<i>Navigational Services</i>” to “<i>Marine Aids to Navigation (AtoN)</i>”.</p> <p>IHO Secretariat to change the name on the IHO website accordingly, and leave the content as is.</p> <p>HSSC tasked NIPWG in liaison with IALA to provide a timeline for the development of S-125.</p>	<p>End of June 2022</p>	Decision
5.3A	S-100 Whole Picture	HSSC14/49 (former 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-15	In progress
5.3A	S-12x (S-122, S-123, ...)	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. 5.0.0 and the remaining challenges (Portrayal, etc.).	HSSC-15	

5.3B	S-128	HSSC14/51	<p>HSSC approved the S-128 draft Edition 1.0.0 dated 11 March 2022- <i>Catalogue of Nautical Products</i> for implementation and testing.</p> <p>NIPWG to provide amendments to the executive summary of the scope of S-128 for the Registry and the website (S-100 Products Specifications) to the IHO Secretariat, when appropriate.</p> <p>IHO Secretariat to issue an IHO CL informing the IHO MS on the publication of Ed.1.0.0 of S-128 and encouraging stakeholders (Industry partners, RENCs) on behalf of HSSC to establish S-128 testbeds and share experiences with NIPWG.</p>	End of June 2022	<u>Decision</u>
5.3B	S-128	HSSC14/52	<p>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.</p>	WENDWG-13/HSSC-15	
7.1B	S-124	HSSC14/53	<p>HSSC noted the progress made by the S-124PT under the WVNWS-SC in the development of S-124.</p> <p>HSSC agreed on the way forward (candidate Ed.1.0.0 to be directly submitted by the WVNWS-SC to HSSC for approval by correspondence).</p>	November 2022 /HSSC-15	<u>Decision</u>

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7.7 OGC					
HSS C14/ 96	HSSC thanked OGC for their comprehensive update report and highlights on pilot projects related to IHO/HSSC work items.		Decision		
HSS C14/ 97	HSSC invited OGC to consider the possibility of reporting on S-122 implementation experimentation (pilot projects) and IGIF Roadmap in Baltic and North Sea to NIPWG and WENDWG at their next meetings.	NIPWG-9 / WENDWG-13			

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Annex C: Agenda

NIPWG December 22 – VTC-03
Draft agenda v2.0

12-12-2022

1.0	Welcome		
2.0	Review of Action Items		15min
3.0	Review of other Working Group reports	Chair	10min
4.0	Input Paper on Data Management	Philipp Schwedas	10min
5.0	UKC Definitions update	Ben van Scherpenzeel	15min
6.0	Product Specification updates		
6.1	S-122 – Marine Protected Areas		
6.1.1	Task Group volunteers	Chair	10min
6.2	S-123 – Marine Radio Services		
6.2.1	Task Group update	Bridget Gagné	20min
6.3	S-125 – Marine Aids to Navigation		
6.3.1	Development update	Dr Sewoong Oh	15min
6.4	S-126 – Marine Physical Environment		
6.4.1	Task group lead update	Chair	10min
6.5	S-127 – Marine Traffic Management		
6.5.1	Task Group update	Ed Kuwalek	10min
6.6	S-128 – Catalogue of Nautical Products		
6.6.1	S-100WG update	Izzy Kim	10min
6.6.2	S-128 Test Bed update	Izzy Kim/chair	15min
6.7	S-131 – Marine Harbour Infrastructure		
6.7.1	Project update	Sarah Rahr	10min
6.7.2	Product spec update	Raphael Malyankar	15min
6.8	SHOM Gap Analysis	Yves Le Franc	15min
7.0	GML Way Forward presentation	Raphael Malyankar	10min
8.0	IHO GI Registry Updates presentation	Raphael Malyankar	10min
9.0	Recommendations on how the association of information types should be managed in the production and user tools	Raphael Malyankar	15min
10.0	Next meetings		
10.1	Next VTC – March 2023		
10.2	NIPWG 10 – September 2023, Monaco		

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Annex D: List of those Registered

Name	Country	Organization / Company	Y/N
IHO MEMBER STATES			
Alper CELEBI	Australia	Australian Hydrographic Office	Y
Paul WOOLLARD	Australia	Australian Hydrographic Office	Y
André BIONDI	Brazil	Directorate of Hydrography and Navigation (DHN)	Y
Vitor ROMANO	Brazil	Directorate of Hydrography and Navigation (DHN)	Y
Bridget GAGNÉ	Canada	Canadian Hydrographic Service (CHS)	Y
Sarah RAHR	Canada	Canadian Hydrographic Service (CHS)	Y
Eivind MONG	Canada	Canadian Hydrographic Service (CHS) - Chair	Y
Lyu YUXIAO	China	China Maritime Safety Administration (China MSA)	Y
Jakob CHRISTENSEN	Denmark	Danish Geodata Agency/Geodatastyrelsen (GST)	Y
Jen Søe CHRISTIANSEN	Denmark	Danish Geodata Agency/Geodatastyrelsen (GST)	Y
Stefan ENGSTRÖM	Finland	Finnish Transport Agency Hydrographic Office	Y
Geoffrey SCRIVE	France	Service Hydrographique et Oceanographique de la Marine (SHOM)	Y
Yves LE FRANC	France	Service Hydrographique et Oceanographique de la Marine (SHOM)	Y
Philipp SCHWEDAS	Germany	Bundesamt für Seeschifffahrt & Hydrographie (BSH)	Y
Elena ARMANINO	Italy	Istituto Idrografico Della Marina	N
Kosei TAKAHASHI	Japan	Japan Hydrographic and Oceanographic Department (JHOD)	Y
Tadashi YAMAMOTO	Japan	Japan Hydrographic and Oceanographic Department (JHOD)	N
Matilde Skæveland SKÅR	Norway	Norwegian Hydrographic Service	Y
Piotr PASZTELAN	Poland	Hydrographic Office of the Polish Navy	Y
Miguel Angel LOBEIRAS DE LA CRUZ	Spain	Instituto Hidrografico de la Marine	Y
Wilfred VAN TOOM	Netherlands	Hydrographic Service - Royal Netherlands Navy (NLHO)	Y
Christopher GILL	UK	UK Hydrographic Office	Y
Jason YOUE	UK	UK Hydrographic Office	Y
Jo MARKS	UK	UK Hydrographic Office (UKHO)	Y
Marcy KLIMEK	UK	UK Hydrographic Office (UKHO)	Y
Neil SALTER	UK	UK Hydrographic Office (UKHO)	Y
Laura HALL-KING	UK	UK Hydrographic Office (UKHO) - Secretary	Y
Jason STROM	USA	National Geospatial-Intelligence Agency (NGA)	Y
Michael KUSHLA	USA	National Geospatial-Intelligence Agency (NGA)	Y
INDUSTRY & TECHNICAL EXPERTS			
Gregor STEVENS		International Chamber of Shipping (ICS)	Y
Raphael MALYANKAR		Portolan Sciences	Y
Ed KUWALEK		IIC Technologies	Y
Ben VAN SCHERPENZEEL		International Harbour Master Association	Y

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Svein SKJAEVELAND		PRIMAR	Y
Yves GUILLAM		International Hydrographic Office (IHO)	Y
Seewong OH		Korea Research Institute of Ships & Ocean Engineering (KRISO)	Y
Shwu-Jing CHANG		National Taiwan Ocean University (NTOU)	Y
Michael BERGMANN		Bergmann Marine	Y
Su MARKS		IC-ENC	Y
Jonathan PRITCHARD		IIC Technologies	Y
Hugh ASTLE		Teledyne Geospatial (CARIS)	Y

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