

**Nautical Information Provision Working Group (NIPWG)**  
**2<sup>nd</sup> Monthly dedicated S-128 Meeting**  
**20<sup>th</sup> November 2023 – VTC, Worldwide**

Annex A: List of Action items

Annex B: Agenda

Annex D: List of Attendees

**1. Update Status of the S-128 Product Specification**

- NIPWG noted the presentation.
- KHOA S-128 team plans to share the new S-128 Data Model 23<sup>rd</sup> November to be approved by NIPWG members at NIPWG VTC 03/23 (6<sup>th</sup> December).
- JP: Question: Will the new model that comes out on the 23<sup>rd</sup> have an Edition 5 GML Schema? To help significantly with testing.
- EM: The new data model will be the UML for review following the comments that have been received. The 23<sup>rd</sup> is best guess due to still waiting to receive the combined comments for Edition 1.1.0. The goal to have a new feature catalogue and GML schema will be end of January 2024, hopefully before.
- JP: This is for S-164 test data sets, building capability to put S-128 into it.
- JP: Question: are you going to go through the comments or are you going to agree to everything?
- EM: Depends on the comments. Editorial non confusing comments usually get accepted, technical comments it depends. A dedicated meeting is possible for comments that require further discussion.
  
- EM: Extension to the deadline for delivery Edition 2.0 due to at S-100WG8 it was decided to go to S-100 Edition 5.2 which will need its own rounds of approval. IEC provided clarifications to their needs. End of March no longer the deadline, around a few months extra, now end of June (exact date to be confirmed).

**2. UKHO Info Paper: S-128 Proposal Discussion**

- Paper: S-100WG8-6.23Info ([Link](#))
- TM: UKHO is trying to remove the ambiguity that we see now to be able to create a viable service and if we can do that the OEMs know for definite what is expected of them. It is to make sure that the systems that exist today do not build in one way of doing things.
- JP: Recommendations 4, 5 and 6. Best if this is included in S-98. This is because any ECDIS functionality that you want to happen needs to go into S-98 Annex C. Agreement not need for recommendations 1, 2 and 3 because you can already do this.  
There are tests already defined for S-164 in terms of receiving data sets and merging them, and what happens if you receive a data set from another provider that says something is more up to date than what another provider says it is and resolving those. If these are agreed and goes into S-98, test can be redefined for S-128. S-98/S-164 meeting Week 4<sup>th</sup> Dec. Strongly suggest this is discussed with Hannu at IEC.
- TM: This is all tied to the trailing of S-100. It needs to be clear that these are all documented, so that if there are different ways to do things it is clearly explained that you can do it each way with trial test data in S-164.
- SM: Agreed with JP regarding recommendations 4,5 and 6.

**Recommendation 1:**

- SM: Support this recommendation to focus on route monitoring Phase 1 aspect.
- EM: It is recognised that S-128 is part of Phase 1. However, what will not happen if for S-128 to be narrowed in its scope. Continue to focus on S-128 to meet its current scope and it is delivered on time.
- TM: This point is not about narrowing the scope but making sure the principal activity and delivering a workable solution for S-100 ECDIS is there by the required timeframe. Other requirements can be met by another edition of the product specification.

**Recommendation 2:**

- AR: UKHO not looking to limit what goes into the .xml but the mandatory attributes that are required should be derived from the original catalogue file. Not looking to take away the scope of what S-128 is trying to deliver and the optional attributes.

- SS: Which mandatory attributes are not available now in the catalogue.xml?

**Action Item 1:** UKHO to define any of the catalogue metadata fields that's mandatory for the S-128 generation that doesn't originate from the original catalogue.xml. AR/MK. 3<sup>rd</sup> S-128 VTC 19<sup>th</sup> Dec

**Recommendation 3:**

- SS: This can already be done.
- SM: IC-ENC is already producing product specific S-128 data sets. There is nothing in the product specification that limits this.
- EM: This is fully possible, there is nothing in S-128 that talks about S-128 having all products available from a producer for it to be a valid S-128 product. Could this point be clarified.
- JP: The current S-164 includes tests for concatenated and the merging of individual S-128 data sets.
- TM: UKHO wants to make sure that it is explicitly known by the ECDIS manufacturers that both must be accounted for in their system.
- JP: S-98 Annex C is the place to clarify the ECDIS operation.

**Recommendation 4:**

- EM: This is not S-128, but S-98 Annex C.

**Recommendation 5:**

- JP: Issue with the terms Partial and Delta, this needs to be made clearer. Understanding it now means updates which part 10b allows you to do for GML, adding specifics would sort this point.
- EM: Unclear what is intended. It is more on the producer to determine what the S-128 catalogue should contain, the product specification simply says this is how you do it.
- TM: This comes from in the past where there is the product.txt file that's been used in an ECDIS to satisfy the update status report. There is a concept of a partial and a full product.txt file, however the only way you can determine which it is, is by opening the file and reading the header text. However, if you load a partial product.txt file it overwrites the existing file in the system if its newer. That then would mean all your ENC update status report becomes out of date if you had only inserted a partial product.txt file. What is needed is a mechanism that allows you when moving to S-100 which has much more frequent update regimes to send smaller incremental 'delta' files to an S-128 which will append and concatenate the file.
- EM: Are you asking the delta to be the change between two points in time and only contain the attributes that have changed or is it sufficient to replace the full product item. Having new feature classes in to replace previous feature classes is less work to figure out than to do something more granular.
- TM: Just looking for something that is quick. An Insert and replace or add.
- JP: Part 10b has an update mechanism for GML products that allows you to add and replace, it doesn't allow you to delete. S-100 cannot be amended. Comments in S-128 product specification: make sure that the product specification is explicit in how it explains how to do these things using the mechanisms that are in part 10b. Need to be careful in defining what is a partial and what is a delta.
- EM: Need to add a section in the data set about how a full dataset is different to an update dataset.

**Recommendation 6:**

- TM: This is the same time frame used in S-63.
- JP: Best if this is included in S-98.

**Action Item 2:** UKHO discuss with recommendations with IEC and to submit paper through S-98/S-164 meeting. TM/AR. Week Beginning 4<sup>th</sup> Dec 2023.

### 3. Product Type Table

- EM: Summarised the Revised Product Type Table 20231107.
- MK: Concern that we leaving it up to the data producer to populate the mappings such as between traditional products and the carriage requirements, isn't it a set thing? Isn't it a standard mapping rather than a data producer to choose what the mappings are.
- EM: No, we cannot dictate to an independent nation how they do mapping. The mapping is on the product level therefore we cannot pre determine for example S-101 ENC maps to all S-57 ENCs. Same for the

carriage compliance. It is left as free text because it is difficult to determine how it would be modelled. This has been requested by industry, but we do not have enough yet to determine how we are going to do it.

- MK: Presently UKHO would not populate these mapping columns. Currently UKHO is looking at making sure that most that goes into S-128 comes from the catalogue.xml.
- EM: this has been added because the industry has been very vocal at IHO meetings, they want to know what products meet carriage requirements.

#### 4. Close & Next meetings

- Next Dedicated S-128 VTC 19<sup>th</sup> December 2023 12:00 UTC
- NIPWG VTC 03/23 6<sup>th</sup> December 2023 12:00 UTC

#### Table of names & initials:

JP	Jonathan Pritchard
EM	Eivind Mong
TM	Tom Mellor
SM	Su Marks
AR	Andrew Richardson
SS	Svein Skjaeveland
MK	Marcey Klimek

#### Annex A: Action Items

#	Action Item	Agenda Item	Assigned	Status
<b>1st Dedicated S-128, Oct 2023 – Hybrid Meeting</b>				
1	All members to review the Product Type Table (Slide 4) and submit comments to JM/JW.	2	All	27 <sup>th</sup> Oct 2023. <b>COMPLETE</b>
2	Dedicated 1.5hr VTC on Product Type Table (Slide 4).	2	JM, SS, AA, RB, JSC, DS, SM, CJ, AC, HSV.	Week Beginning 30 <sup>th</sup> Oct 2023 <b>COMPLETE</b>
3	HC to provide S-128 Edition 1.1.0 to JW to distribute to NIPWG Members	4	HC, JW.	20 <sup>th</sup> Oct 2023. <b>COMPLETE</b>
4	2 <sup>nd</sup> Dedicated S-128 meeting to be held. Strict focus on finalising PS development	4	All	Week Beginning 20 <sup>th</sup> Nov 2023 <b>COMPLETE</b>
<b>2nd Dedicated S-128, Nov 2023 – Hybrid Meeting</b>				
1	UKHO to define any of the catalogue metadata fields that's mandatory for the S-128 generation that doesn't originate from the original catalogue.xml	2	AR/MK	3 <sup>rd</sup> S-128 VTC 19 <sup>th</sup> Dec
2	<b>UKHO discuss with recommendations with IEC and to submit paper through S-98/S-164 meeting.</b>	2	TM/AR	Week Beginning 4 <sup>th</sup> Dec 2023.

## Annex B: Agenda

<b>1.0</b>	<b>Update Status of the S-128 Product Specification</b>	HyunSoo CHOI
<b>2.0</b>	<b>UKHO Info Paper: S-128 Proposal Discussion</b>	Andrew Richardson
<b>3.0</b>	<b>Product Type Table</b>	Eivind Mong
<b>4.0</b>	<b>Close &amp; Next meetings</b>	Jo Marks/James Weston

## Annex C: List of Attendees

<b>Attendees</b>		
<b>IHO MEMBER STATES</b>		
<b>Name</b>	<b>Country</b>	<b>Organization / Company</b>
Alper Celebi	Australia	Australian Hydrographic Office
Bridget Gagné	Canada	Canadian Hydrographic Service (CHS)
Eivind Mong	Canada	Canadian Hydrographic Service (CHS) - Chair
Deanna Sokoloski	Canada	Canadian Hydrographic Service (CHS)
Jens Søe Christiansen	Denmark	Danish Geodata Agency/Geodatastyrelsen (GST)
Stefan Engström	Finland	Finnish Transport Agency Hydrographic Office - Vice Chair
Roderick Bera	France	Service Hydrographique et Oceanographique de la Marine (SHOM)
Philipp Schwedas	Germany	Bundesamt für Seeschifffahrt & Hydrographie (BSH)
Tetsuichiro Yabuki	Japan	Hydrographic Department, Japan Coast Guard
Herman Schouten van der Velden	Netherlands	Hydrographic Service - Royal Netherlands Navy (NLHO)
Richard Flapper	Netherlands	Hydrographic Service - Royal Netherlands Navy (NLHO)
Caroline Johansson	Sweden	Swedish Maritime Administration
Andrew Richardson	UK	UK Hydrographic Office (UKHO)
James Weston	UK	UK Hydrographic Office (UKHO) - Secretary
Jo Marks	UK	UK Hydrographic Office (UKHO)
Marcy Klimek	UK	UK Hydrographic Office (UKHO)
Thomas Mellor	UK	UK Hydrographic Office (UKHO)
Noel Dyer	USA	National Oceanic and Atmospheric Administration (NOAA)
<b>INDUSTRY &amp; TECHNICAL EXPERTS</b>		
Carlo Alberto Galli		GARMIN
Yann Corlay		GEOMOD
Harin OH		GreenBlue INC
Su Marks		IC-ENC
Ed Kuwalek		IIC Technologies
Jonathan Pritchard		IIC Technologies
Hyunsoo Choi		KRISO
Shwu-Jing Chang		NTOU
Svein Skjaeveland		PRIMAR / ECC