



15th Meeting of the Hydrographic Services and Standards Committee

Report of the NIPWG

Agenda Items 05.3A & B

HSSC-15, Helsinki, Finland, 5 – 9 June 2023



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PRINCIPAL ACTIVITIES AND ACHIEVEMENTS

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1. NIPWG 9 held in Niteroi, Brazil in Sept 2022, hosted by DHN
2. Multi sessional virtual meetings held every quarter
3. NIPWG 10 planned for Monaco, in September 2023
4. Virtual meetings planned every quarter

Chair:	Eivind Mong, CANADIAN COAST GUARD, CA
Vice-Chair:	Stefan Engström, TRAFICOM, FI
Secretary (acting):	James Weston, UKHO, U.K.
Member States:	Argentina, Brazil, Canada, Denmark, Estonia, Finland, France, Germany, Japan, India, Italy, Republic of Korea, Netherlands, Norway, Poland, Russian Federation, South Africa, Spain, UK, USA, (and IHB).
Expert Contributor Organisations:	Anthropocene Institute, CARIS, Bergmann Marine, CIRM, EEC, <u>Fleetmon</u> , <u>Furuno Finland</u> , <u>Geomod</u> , <u>IHMA</u> ; IIC Technologies, KRISO, NV Chats Germany, NOVACO, NTOU, Portolan Sciences, University of New Hampshire.





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PRINCIPAL ACTIVITIES AND ACHIEVEMENTS

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1. NIPWG is responsible for the development and maintenance of S-122, S-123, S-125, S-126, S-127, S-128 and S-131. Status of these will be given on subsequent slides
2. NIPWG is also responsible for the maintenance of S-12 and amendments to M-3.
3. No requests for amendments to S-12 or M-3 were received in the 2022-2023 work period.



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PRINCIPAL ACTIVITIES AND ACHIEVEMENTS

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1. S-122 (Marine Protected Area) (Work Plan section F)
2. Task group formed to review and update the product specification
 - Goal is to align documents with S-100 Edition 5
 - Review lessons learned during recent OGC project
 - Led by Jonathan Pritchard (IIC Technologies)
3. Work is on track according to timeline in the S-100 Implementation plan.



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PRINCIPAL ACTIVITIES AND ACHIEVEMENTS

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1. S-123 (Radio Services) (Work Plan section F)
2. Task group working to update the product specification
 - Working to align documents with S-100 Edition 5
 - Utilizing lessons learned by producers to update the documents
 - Canadian Coast Guard is collecting user feedback on the visualization and user interface to aid in the development of a portrayal catalogue
 - The task group is led by Bridget Gagné (Canadian Coast Guard).
3. Work is on track according to timeline in the S-100 Implementation plan.



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PRINCIPAL ACTIVITIES AND ACHIEVEMENTS

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1. S-125 (Navigational Services) (Work Plan section F, J)
2. Development of the product specification led by IALA ARM Committee
 - Draft version 0.0.3 is under review by NIPWG
 - NIPWG has adopted recommendations made at the Joint IALA-IHO workshop held in Norway, Sept. 2022.
3. Work is on track according to timeline in the S-100 Implementation plan.

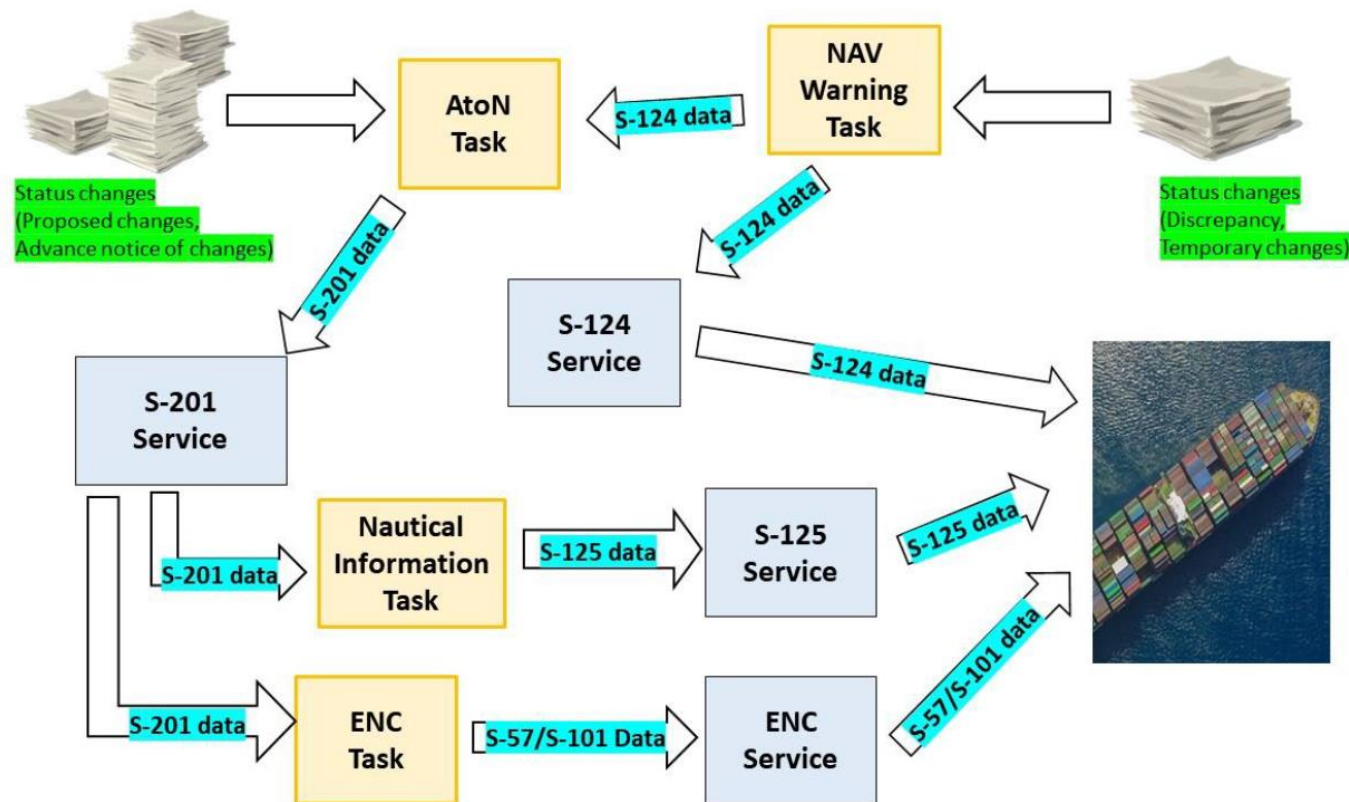


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S-125 DEVELOPMENT

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- Figure showing how a typical national data flow could work for S-101, S-124, S-124, and S-201 was developed at the workshop and supported by NIPWG and IALA.
- Testbed held at the IHO-Singapore Lab testing AtoN data flow from S-124 to S-125 and how the visualization of said data is observed in the user equipment yielded very positive results.



Interoperability of S-201, 124 and 125 with S-101



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PRINCIPAL ACTIVITIES AND ACHIEVEMENTS

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1. S-126 (Physical Environment) (Work Plan section F)
2. It was attempted to form a task group to work on the S-126 product specification, but no task group lead could be appointed.
3. Indicates the work is low priority among NIPWG members.
4. Recommended that the development of S-126 is put back on hold till such a time as the necessary resources become available.



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PRINCIPAL ACTIVITIES AND ACHIEVEMENTS

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1. S-127 (Traffic Management) (Work Plan section F)
2. Task group formed to review and update the product specification
 - Working to align documents with S-100 Edition 5
 - Utilizing lessons learned by producers to update the documents
 - Canadian Coast Guard is collecting user feedback on the visualization and user interface to aid in the development of a portrayal catalogue
 - The task group is led by Ed Kuwalec (IIC)
3. Work is on track according to timeline in the S-100 Implementation plan.



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PRINCIPAL ACTIVITIES AND ACHIEVEMENTS

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1. S-128 (Catalogue of Nautical Products) (Work Plan section F)

Task group working to update the product specification

- Ad hoc discussion group held during the S-100WG Test Strategy Meeting 9 in Seoul, ROK. Concluded S-128 seems to support all use scenarios. But the how needs to be described fuller
- Authentication of S-128 products being worked on
- The task group is led by Izzy Kim (KHOA)

2. Work is on track according to timeline in the S-100 Implementation plan.



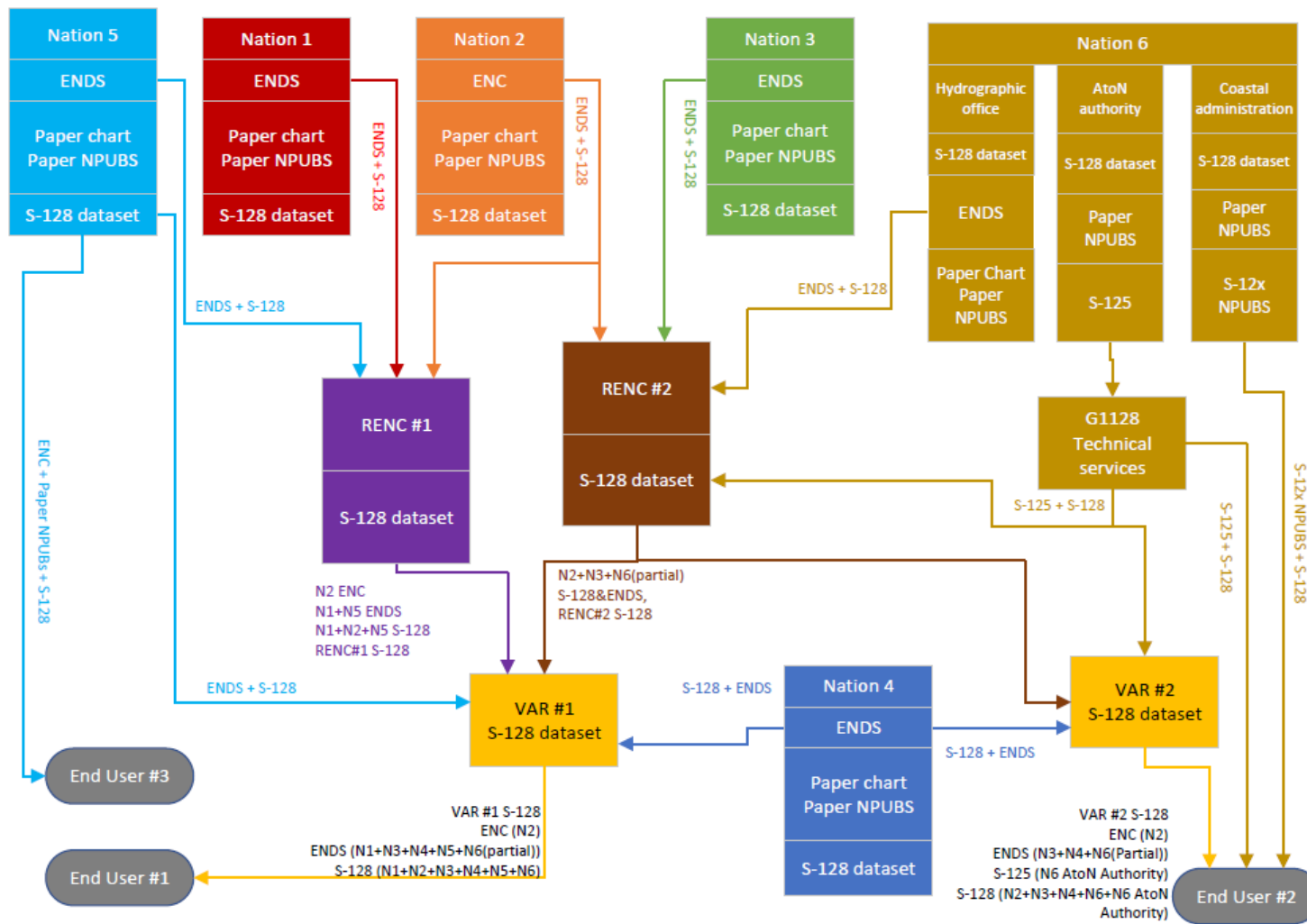
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S-128 (CATALOGUE OF NAUTICAL PRODUCTS)

International Hydrographic Organization

This diagram represent a set of potential scenarios that may be encountered in the future and how S-128 can be utilized in these scenarios. The scenarios are formulated using input from NIPWG members based on the current situation in their countries. Amendments are planned using discussion results.

The core thought is that S-128 will be used by each service provider to describe their service.





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PRINCIPAL ACTIVITIES AND ACHIEVEMENTS

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1. S-131 (Marine Harbour Infrastructure)(Work Plan section F)
2. Task group, supported by contractor Portolan Sciences, finished to release candidate product specification
 - Recommend approving product specification package for release as Edition 1.0.0 for testing (HSSC15-05.3B)
3. Work is on track according to timeline in the S-100 Implementation plan.



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S-131 DATABASE TESTBED

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- The S-131 Database testbed 2-year project is at the halfway mark
- Database system development is continuing
 - API in development
 - GUI in development
 - Single feature upload working
 - Dialogue with select group of ports for test data
 - Planning direct port upload 2nd part of 2023
- Funding from Canadian Hydrographic Office continues till March 2024



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IMO RELATED WORK (WORK PLAN SECTION G) (HSSC14/46)

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1. IMO Expert Group on Data Harmonization (EGDH) is a subgroup of the IMO FAL committee and Stefan Engstrom will act as the permanent IHO liaison to this group.
2. The EGDH maintains the IMO Compendium on Facilitation and Electronic Business.
3. Expansion of the IMO Compendium beyond the FAL convention has introduced some overlap with IHO GI-Registry concepts requiring harmonization of definitions.
4. Collaboration between NIPWG and EGDH has been sporadic over the years, but has increased since 2022 with NIPWG participation at EGDH since EGDH 7 in 2022.



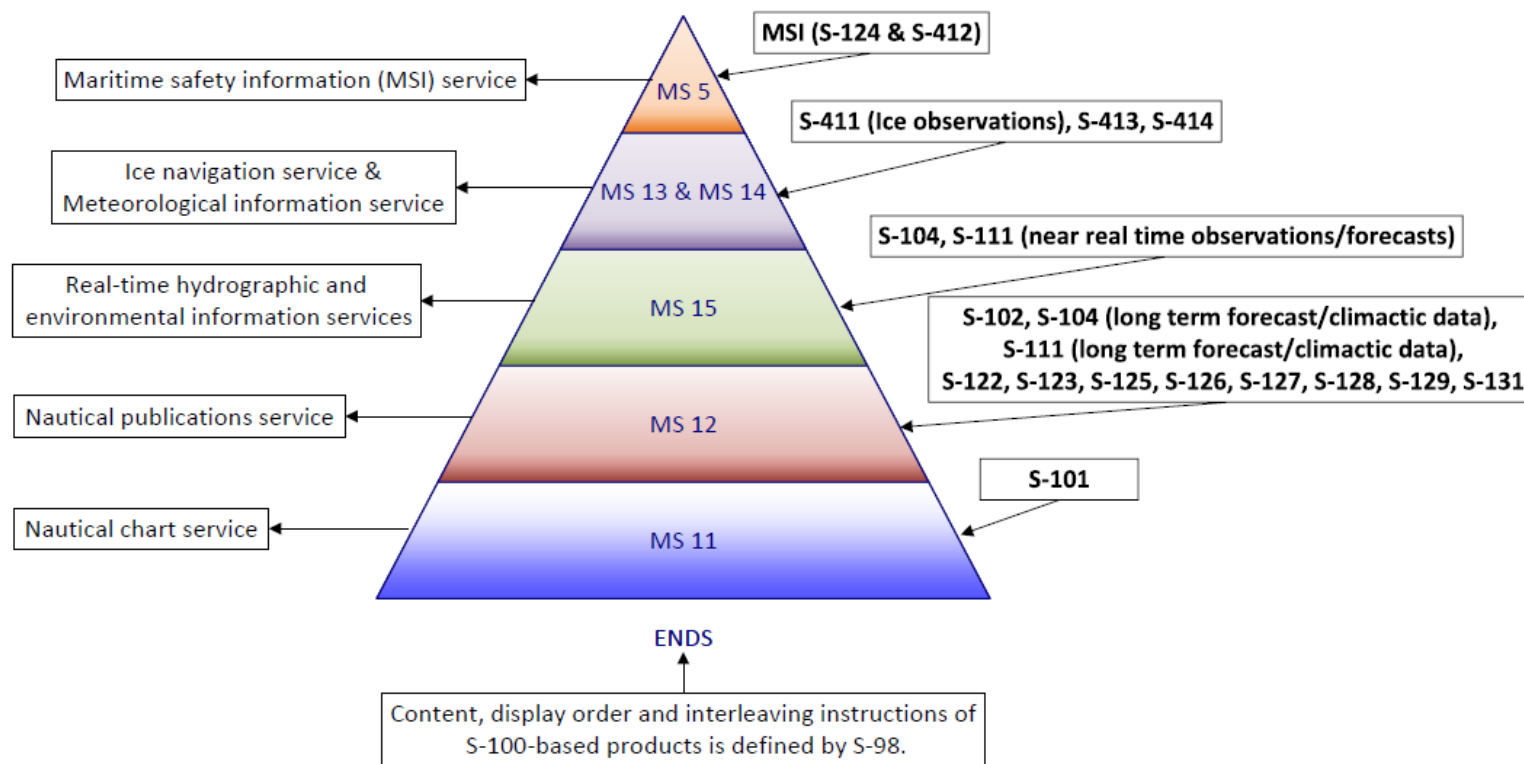
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CLASSIFICATION OF S-100 BASED PRODUCTS AND SERVICES (WORK PLAN SECTION F, H)

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NIPWG has drafted a diagram to link S-100 products to the e-navigation maritime services as a way to describe what ENDS is, and to classify S-100 products and services.

The classification is an important part of S-128 product catalogue creation and NIPWG is therefore working on guidance for this purpose. The figure is 'work in progress' and comments are invited





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ACTIONS REQUESTED FROM HSSC

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1. Endorse the activities of NIPWG;
2. Endorse the continuance of the revised Work Plan as annexed to the report;
3. Approve that S-126 development be put on hold till sufficient resources are identified.
4. Approve that S-131 (see HSSC15-05.3B) be released as Edition 1.0.0 for testing.