Hydrographic Services and Standards Committee

Report of Nautical Information Provision Working Group

Presented by Mr. Jens Schröder-Fürstenberg (NIPWG Chair)

Activities and achievements

- Membership
 - 21 Member States, 11 industry members
- Meetings
 - March 2018, Genova, Italy

Activities and achievements (cont.)

- Developments of NPUB Product Specs
- Contributions to e-Navigation
- Monitoring of IALA AtoN activities
- Developed M-3 amendments
- Prepared discussion paper on provision of products based on S-100
- Prepared discussion paper on architectural strategy of S-100 related products
- Prepared discussion paper on authority of DQWG " Checklist for Product Specifications"



S-122 (Marine Protected Area) and S-123 (Radio Services)

- Product Specification delivery
 - Final version completed in August 2017
- Conduction of Impact Study
 - Duration 1 Dec 2017 to 31 January 2018
 - 104 addressees (incl. ICS, CIRM, IEC, Intertanko, BIMCO, CLIA)
 - response rate of about 10%
- Ready for HSSC10 endorsement and Member State approval

Ref.: Document HSSC10-5.3G

S-127 (Traffic Management) development

- Complementary information for S-101, S-102, S-122 and S-123
- To be renamed (Marine Traffic Management)
- Schedule

Application Schema initial draft
 End of Feb 2018

Preliminary Specification End of May 2018

Deadline IHO comments
 45 days after delivery of prelim spec

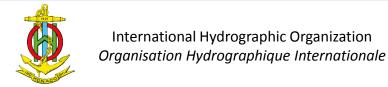
First baseline version
 Further 45 days later

Deadline IHO comments and changes

based on S-101PT meeting 30 Sept 2018

Contract completed End of 2018

HSSC 11 approval
 May 2019



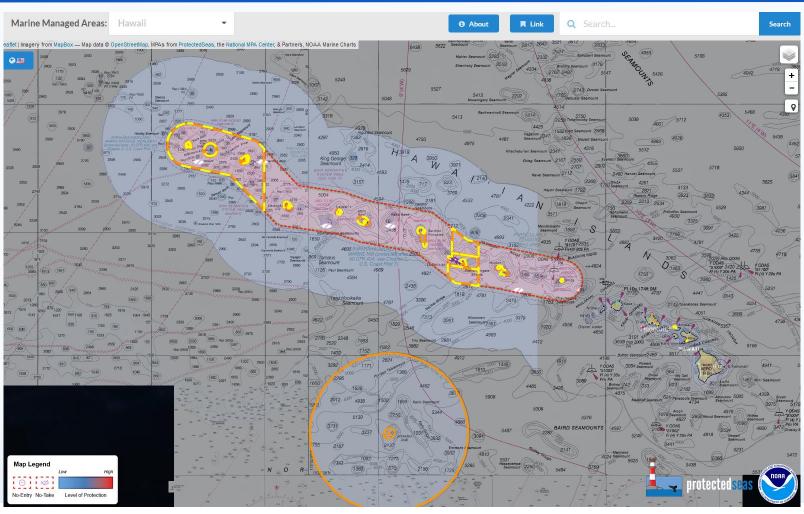
NPUB ProdSpecs Status

Product specs under development	MS Word Test data sample	Data model	Mapping Data sample vs. Data model	Application schema	Overall Working Status
S-125 Navigational Service	In progress	Drafted			On hold
S-126 Physical Environment	Stable	Drafted			On hold
S-127 Traffic Management	Stable	In progress	Drafted	In progress	In progress
S-128 Catalogue of Nautical Information	In progress	In progress		In progress	In progress

NPUB ProdSpecs Status (cont.)

- Hydro Register
 - S-122 and S-123 Feature Concept Dictionary included
 - Missing functionalities requires a parallel world for development
- NIPWG Wiki
 - Acts as the required parallel world
 - Additional repository of NIPWG Feature Concept Dictionary and other components
 - Discussion platform

Interoperability issues between S-122 (Marine Protected Area) and S-121(Limits and Boundaries)



XML harmonisation of NtM Chart corrections

- Improve and anticipate information exchange between HOs
- Pool HOs IT competence
- XML functions
 - Chart related corrections
 - Fact related corrections
 - Easy to implement in production systems
- 2 day workshop in September 2018
 - IT personnel who are working on XML based chart corrections
- NIPWG wiki is ready as pre-discussion basis

Co-operation with IHMA, IALA

• IHMA (International Harbour Masters Association), No action during the reporting period

- IALA, S-201 Product specification
 - Harmonisation with S-101 and potentially S-125
 - Schema for Maritime Resource Name under development

Maintenance of IHO standards and other pubs

- M-3 Res 2/2007 separate NIPWG/HSSC WG Chairs paper
- M-3 Proposals
 - Reflection of current data provision
 - Impact on current S-100 Edition (provision of time information)
- Other standards and products
 - S-12 (List of Lights)

Organisation Hydrographique Internationale

- S-49 (Mariners' Routeing Guide)
- M-3 Resolution 4/1967 as amended, submarine cable (Spanish) translation is still missing (2018-05-12) Ref.: Document HSSC10-5.3B



Document HSSC10-5.3C

IHO/ HSSC and IMO e-Navigation

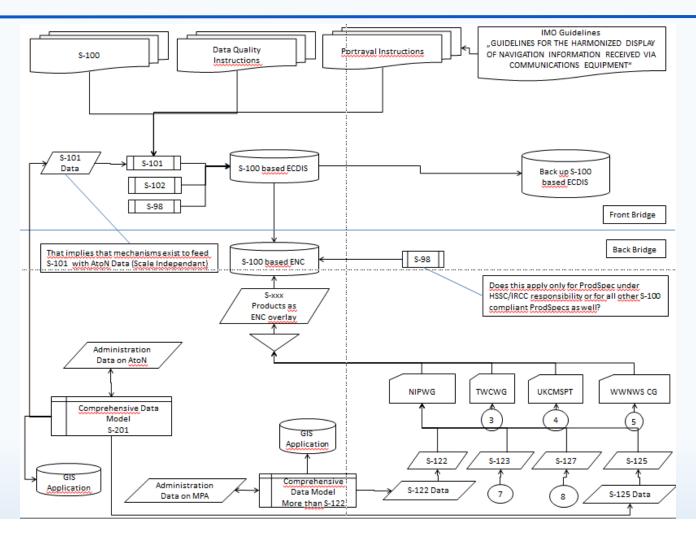
- Marine Services combined to a Maritime Service Portfolio
 - maritime service No.5 (Maritime Safety Information Service (MSI)) WWNWS-CG
 - maritime service No.11 (Nautical Chart Service) NCWG, ENCWG
 - maritime service No.12 (Nautical Publications Service) NIPWG
 - maritime service No.15 (Real-time hydrographic and environmental information Service) TWCWG
- Display of information received via communication equipment (postponed)
- Participation in IMO/IHO Harmonization Group on Data Modelling (HGDM)
 - Involved IHO WG/CG encouraged to use the template draft to submit Maritime Services to NIPWG for coordination Action item HSSC 9/46)
 - Due date for Maritime Services template provision is 16 October 2018
- Insufficient provision of supporting material and IHO contributions on the IHO website

Allocate budget for outsourcing of work

Work item	Budget
Overarching architectural analysis	\$ 10-50k
Incremental GML update tests	\$ 10k
Experimental production tool and viewer on the web	\$ 40k
Prototyping system for vector S-100-based data	\$ 42k

Ref.: Document HSSC10-5.3D Document HSSC10-5.3F

Overarching architectural analysis (example)

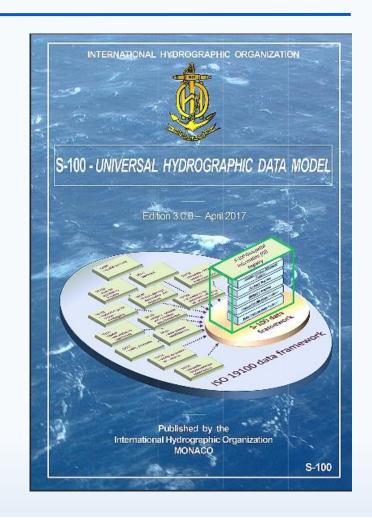


All I'm saying is that they didn't allow controversial discussions and look what happened to them.



S-100 discussion

- Purpose
- Universal
- Discussions of controversial positions
- Goal keeper
- Tests and assessments
- NIPWG positions



Status of DQWG DQ Checklist

- NIPWG appreciates the efforts made to assess DQ aspects in S-127
 - Results will be considered by contractors
- Principle question
 - Is the Data Quality Checklist for Product Specifications mandatory or are modifications per need possible?
- Pros and Cons
 - Simplify the product specification development and ensures a cross product specification harmony
 - Block data quality solutions which could be considered more appropriate for purpose

 Ref.: Document HSSC10-5.3E

Provision of products based on S-100

- Common NIPWG, TWCWG, IEC TC80 paper
- Main topics
 - Availability of production tools
 - SOLAS V, Replacement of printed products
 - Applicability of WEND principles
 - Distribution of the data
 - Products outside the SOLAS market
 - Implementation on board
 - Test of products

Ref.: Document HSSC10-5.3D



TOP 2 action items priorities

- Develop S-12n Nautical Information Product Specification (See work plan F8.1)
- Coordinate the IHO contribution to the definition and harmonization of IMO Maritime Services within IHO's remit (See work plan task G)

- Further work
 - KHOA: Development of the S-128 product specification
 - UNH: Assessment of data structure to support S-126 development
 - NIPWG: Continue to explore more data exchange via XML methods for NtM chart corrections

Action requested of HSSC10

• Note:

- Chairman's report and
 - NIPWG's submissions HSSC10-05.3A, B, C, E, F, G
 - Joint NIPWG, TWCWG, IEC TC80 submission HSSC10-05.3D

• Endorse:

 the completion of the S-122 and S-123 ProdSpecs development and results of the impact studies and their submission for Member State approval

• Suggest:

- an appropriate presentation of e-Navigation information on the IHO website incl. the place of the IMO Maritime Service Template
- the provision of Marine Services description based on IMO template from involved IHO WG/CGs
- an appropriate repository where IHO ProdSpecs could be stored until the Registry is ready to host them
- the provision of the Spanish translation of M-3 Res 4/1967 as amended

Action requested of HSSC10 (cont.)

Suggest

- Description of product specification use under HSSC remit
- That the level of authority of Data Quality Checklist for Product Specifications is a recommendation, which can be adapted as necessary by WGs
- Continuation if work on the issues addressed by paper
 - HSSC 10-05.3C (Revision of Resolution 2/2007)

Initiate

- Campaigning within the IHO to start the regular production and provision of products based on S-100
- strategic discussion on efficient implementation of S-100 based products

Action requested of HSSC10 (cont.)

Endorse

- the proposed amendments of the referred M-3 resolutions
- the renaming of S-127 to "Marine Traffic Management"
- proceeding with the Top 2 priorities and additional work items
- the conduction of a NIPWG XML workshop in Sept 2018
- the collection of HSSC WGs marine services descriptions and the provision of a consolidated IHO submission to the HGDM (Action item HSSC 9/46)
- the continuation of the Work Plan
 - the assignment of further development of the architecture paper to NIPWG