Hydrographic Services and Standards Committee

Report of Nautical Information Provision Working Group

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



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Activities and achievements

- Membership
 - 20 Member States, 12 industry members, 2 academia
- Meetings
 - NtM XML Workshop October 2018, Genoa, Italy
 - NIPWG6
 - Stakeholder Forum
- January 2019, Rostock, Germany
- n January 2019, Rostock, Germany



Activities and achievements (cont.)

- Developments of NPUB Product Specs
- Contributions to e-Navigation
- Developed an XML structure for NtM chart corrections exchange
- Monitoring of IALA AtoN activities
- Developed M-3 amendments
- Review of IHO-Standards
- Contributions to HSSC Chair on S-100SIP
- Review of architectural display of S-100 related products
- Contributions to S-97 draft
- Stakeholders' forum



NPUB ProdSpecs Status

- Successful Member State approval for S-122 and S-123
 - Production of S-122and S-123 data sets
- Successful WG endorsement of S-127, Awaiting HSSC endorsement
- Renaming
 - Radio Services → Marine Radio Services (agreed with HSSC Chair and DirTech)
 - Traffic Management \rightarrow Marine Traffic Management (endorsed by HSSC10)
- 2 years life circle
- Remain on current ed. number and S-100 ed. 3 for proof-of-concept



NPUB ProdSpecs Status (cont.)

| Product specs under development | MS Word Test data sample | Data model | Mapping Data sample vs. Data model | Application schema | Overall Working Status |
|---|-----------------------------|---------------------|--|-----------------------|---------------------------------------|
| S-125 Marine Navigational Service | In progress | Drafted | | | On hold, under IALA development |
| S-126 Marine Physical Environment | Stable | Drafted Revision | | | Officially on hold |
| S-128 Catalogue of Nautical Information | In progress | In progress | | In progress | In progress |



NPUB ProdSpecs Status (cont.)

- Hydro Register
 - Harmonisation
 - Improvements
 - FCB functionality
- NIPWG Wiki



Maritime Services in context of e-navigation

- Maritime Services under the responsibility of IHO
 - No.5 (Maritime Safety Information Service (MSI)) WWNWS-CG
 - No.11 (Nautical Chart Service) NCWG, ENCWG
 - No.12 (Nautical Publications Service) NIPWG
 - No.15 (Real-time hydrographic and environmental information Service) TWCWG
- Participation in IMO/IHO Harmonization Group on Data Modelling (HGDM)
- Insufficient provision of supporting material and IHO contributions on the IHO website



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XML harmonisation of NtM Chart corrections

- Defined information flow
- Consideration of existing data models
- Establishment of best practice
- *.svg symbols repository (NCWG?)
- Final meeting (tbc)



Co-operation with IALA

• IALA, S-201 Product specification

- S-125 🕨
- Schema for Maritime Resource Name finalised
- Mobile AtoN
- Ship Reporting Tool
- 2 Workshops (IHO/IALA and IMO/IHO/IALA /Stakeholders)



Co-operation with IALA



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Maintenance of IHO standards and publications

- M-3 Proposals
 - Provision of time reference
- Other standards and products
 - S-12 (List of Lights)
 - S-49 (Mariners' Routeing Guide)

Ref.: Document HSSC11-5.3B



Allocate budget for outsourcing of work

| Work item | Budget | Performance period |
|---|-------------------------|--------------------|
| Incremental GML update tests | € 20k | 3-6 months |
| Experimental production tool and viewer <u>on the web</u> | € 40k | 6-9 months |
| Prototyping system for vector S- 100-based data | € 42k (for 2020 budget) | 6-9 months |



Contributions to HSSC Chair on S-100SIP

- the provision of standards;
- the establishment of a governance authority;
- the synchronisation of standards and products; and
- the operationalisation of the data.



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Overarching architectural analysis





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As of 14 March 2019

Contributions to S-97 draft

- Description of product specifications
- Match between expectations and deliverables



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Stakeholders' forum

- Participation/Presentations:
 - 8 Stakeholders of which 2 participated via Skype,
 - 5 presentations.
- Topics:
 - Stakeholders appreciate the IHO efforts on S-100 development;
 - cooperation with Stakeholders is appreciated and they are keen to support IHO in the product specification development;
 - standardization in isolation will fail;
 - Parallel developments of services should be avoided.



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Stakeholders' forum (cont.)

- Topics (cont.):
 - specifications should be aligned to support customising;
 - no additional chart icons to portray NPUB information;
 - product specifications should follow a platform agnostic approach;
 - support user specific selection of individual chart items;
 - CATZOC "unassessed" is not acceptable. Data coverage is vital especially in the advent of automated shipping;
 - Order of display (in layers) should be discussed with stakeholders;
 - Integrated data need situation based data provision;
 - Vectorise NPUB data, No PDF.



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TOP 3 work items

- Initiate prototype implementation of existing S-12x products in an S-100 based environment to explore governance architecture and service delivery mechanism
- Develop S-12x nautical information Product Specifications
- Coordinate the IHO contributions to the definition and harmonisation of maritime services as defined by IMO within the remit of IHO



Action requested of HSSC11

• Note:

- Chairman's report and
- NIPWG's submissions HSSC10-05.3A, B, C,
- Confirm:
 - the assignment of the development and maintenance of an INT1 based symbol repository as defined to NCWG;
 - the conduction of a final follow-up XML workshop as t.b.c.
 - that responsible WGs should review the initial descriptions of "Maritime Services in context of e-navigation" under their remit and to provide them to NIPWG for further action.
 - an appropriate presentation of e-Navigation information on the IHO website incl. the place of the IMO Maritime Service Template



Action requested of HSSC11 (cont.)

- Initiate
 - the M-3 amendment process by submitting a draft resolution revision to the Council-3 to seek the Member State approval
 - a survey to seek information from Member States that are not represented at NIPWG (possibly at IRCC level) to specify their intention to produce S-122 and S-123 data sets.
- Endorse:
 - the continued activity of NIPWG according to the work plan;
 - the renaming of the product specification under the remit of NIPWG;
 - the completion of S-127 (Marine Traffic Management)
 - the two years revision life circle for product specification under the remit of NIPWG;
 - the Top 3 priorities.

