



Hydrographic Services and Standards Committee

Report of the TSMAD WG – 2013

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Principal activities and achievements

★ Meetings

- TSMAD 25 – Tokyo, Japan

- TSMAD 26 – Silver Spring, USA

- TSMAD DCEG Sub-WG Meeting – Tokyo, Japan

- TSMAD DCEG Sub-WG Meeting – Silver Spring, USA

- TSMAD Sub-WG Meeting – Taunton, UK (S-101 test strategy & S-64)

Final draft versions of S-58, S-57 Supplement 3 and Use of the Object Catalogue completed. Baseline version S-101 Data Classification and Encoding Guide will be finalised next month at TSMAD 27



Principal activities and achievements

- ✦ Also, I would like put on the records of the meeting a big thank you to the dedicated group of M.S. and Expert Contributors from industry (colloquially known as the usual suspects) who have made a huge contribution to the work of TSMAD over the years, but in particular this year.
- ✦ No names, they will know who they are.



Problems or outstanding issues

- ✦ S-64. Although it was a known fact that this new and much more extensive version was dependent on a stable version of S-52, it was not foreseen that the two new editions would be competing for the same limited stakeholder resource to complete the tasks.
- ✦ This highlights the need to ensure that a sufficiently detailed impact study is provided with any proposal for a new work item as prescribed in Res. 2/2007.
- ✦ Although there is advice on producing impact studies in various documents, I strongly advise the development of a dedicated form for providing all the facts required for HSSC to make better informed decisions. It should also include an action for the Proposer to inform all potential interested parties in advance of submission.



Status of Work Items

★ S-100

- Interest in and use of S-100 continues to increase
- Originally it was intended to submit Edition 2.0.0 to this meeting for approval. This was not possible due to the delay in delivery of some new extensions and the heavy TSMAD workload.
- Two of the major new pieces of work Portrayal and a GML schema are now reaching conclusion and I am confident Edition 2.0.0 will be completed by HSSC 6



Status of Work Items

★ S-101

- Progress can be best described as steady.
- TSMAD risk register for test beds developed to complement the register for S-101 itself.
- The good news is that the portrayal element and its accompanying catalogue builder has made significant progress this year (DIPWG chair will add more detail later)
- The bad news is that the loss of a key resource has halted the progress of the feature catalogue builder.
- Work on a test strategy is nearing completion and should be finalized at TSMAD27 next month. Although HSSC action 5.1.7 was complete, it was decided not to tender for the resultant contract until after the completion of the test strategy.



Status of Work Items

- ✦ S-101 Data Classification and Encoding Guide WG
 - Two meetings have been held this year back to back with the main TSMAD meetings.
 - The DCEG baseline is nearing completion and there has been a lot of activity by way of correspondence to review the content.
 - This is one of the major components of S-101 and it very important that M.S.s who should have a high level of experience in encoding data make the time to review it.
 - Industry stakeholders should also be interested, particularly with the new concept of a section on implementation guidance and rules.
 - No doubt the availability of test beds will mean that through iterative testing the guide will be modified until a stable version emerges.



Status of Work Items

- ✦ S-57 - Appendix B1, Annex A Use of the Object Catalogue
 - New edition 4.0.0 prepared to include encoding bulletins published since the last edition and in particular the encoding of a new NEWOBJ feature for Virtual Aids to Navigation.
 - A new paragraph in the section on CATZOC providing encoding advice on extreme events.
 - New advice for encoding certain features for which there may be issues with the display in ECDIS
 - New wording to strengthen the wording for encoding sector limits for all round lights



Status of Work Items

- ✦ S-57 – Supplement No 3
 - strengthens the mandatory role of using S-58 for ENC validation.
 - includes some minor editorial changes to remove known inconsistencies.



Status of Work Items

- ★ S-64 Edition 3.0.0 - IHO Test Data
 - For the reasons described earlier in the presentation a final draft version is not yet complete. A 5 day meeting has been arranged to run in parallel with TSMAD 27 in order to try and complete the project.
 - Given the timeline for the publication of IEC61174, TSMAD recommend that:
 1. HSSC approve by C.L. a familiarization version of S-64 for publication on its completion and
 2. approve final publication together with S-52 at HSSC 6, synchronized with the final publication of IEC61174.



Status of Work Items

✦ S-58 Recommended ENC Validation Checks

- Edition 5.0.0 has been completed
- Discussions are ongoing about the eventual certification of a published ENC. Current thinking is that a new field in the header of the data will flag that it has been certified Critical Error free. Unfortunately this cannot be implemented until S-101 is launched because the required, relatively major, change to S-57 would cause the usual issues with ECDIS maintenance, legacy systems etc.



Status of Work Items

- ✦ Generic Template for Product Specifications
 - The template for products such as MIOs used on a common platform is still ongoing and will not be finalized until test bed analysis is completed.
 - New templates for vector and gridded based P.S. are under development for inclusion in S-100 2.0.0



Status of Work Items

★ Liaison with other organizations

- IALA have continued to use S-100 in support of their work on e-Navigation. A workshop on developing S-100 product specifications for e-Navigation was held in June 2013 and was supported by TSMAD members. IALA have produced a guideline on the use of S-100 and also a template for developing product specifications. IALA have identified some areas where S-100 could be improved and extended.
- ISO TC211, a IHB representative continues to attend and monitor activities on behalf of TSMAD
- DOALOS, TSMAD has continued to support Geoscience Australia in the development of a S-100 Maritime Boundary Exchange Product Specification



Status of Work Items

- ✦ Liaison with other organizations
 - OGP (International Association of Oil and Gas Producers) have produced a Seabed Survey Data Model and TSMAD chair was tasked by IHB to liaise with the OGP Geomatics Committee to ensure the greatest possible level of synergy with S-100. Subsequently, the Directing Committee was informed of a “Request for information on a common operating picture for oil spill response” issued by the Open Geospatial Consortium (OGC). Further details and a proposed response can be found in CL 52/13



HSSC Actions

HSSC3/05	S-64	On Going
HSSC3/06	S-58	Complete
HSSC3/06	S-58 certification	On going
HSSC4/07	S-101 Roadmap	Complete
HSSC4/11	Identifiers for S-100 based P.S.	Complete
HSSC4/14	S-101 Test Plan Funding	On Going
HSSC4/16	AIS AtoN and ENC's (EB)	Complete
HSSC4/25	S-100 & S-101 Master Plan	Pending
HSSC4/29	Change to the Use of Object Catalogue	Complete



TSMAD Workplan



Action requested of HSSC

- ★ The HSSC is invited to
 - note this report and approve the continuance of TSMAD under the Work Plan at Annex A.
 - approve and recommend to M.S the adoption of S-57 Appendix B1 Annex A (UoOC) edition 4.0.0.
 - approve and recommend to M.S the adoption of S-57 Supplement No 3.
 - approve and recommend to M.S the adoption of S-58 edition 5.0.0. approve the publication



Action requested of HSSC

- approve an initial familiarization version of S-64 Edition 3.0 by means of a letter to members on completion.
- approve the final edition at HSSC 6 and recommend to M.S. for publication in 2015, in line with the publication of the new edition of IEC 61174.



S-101 Value Added Road Map

- ✦ HSSC4 tasked TSMAD to produce a S-101 road map
- ✦ Section 1 provides an estimated timeline supported by a more detailed account of the processes involved.
- ✦ Section 2 provides a detailed account in the development and testing of S-101, its environment and the transition from S-57 ENC's into products of the new format, and its surrounding IHO, IMO and IEC standardization environment, including participation of affected OEMs.
- ✦ Section 3 provides details of the inner construction of S-101, its impact on the production of ENC's and their processing along the chain from production via dissemination and use in an ECDIS in particular.



S-101 Value Added Road Map

✦ Action required of HSSC

- The HSSC is invited to:
 - a. **note** this report;
 - b. **endorse** the draft S-101 Roadmap,
 - c. **agree** to review the S-101 Roadmap annually,
and
 - d. **take** any other action as appropriate.



S-100 Master Plan

- ✦ Section 1 –Introduces the purpose of the document is to determine the long term goals and objectives of the development and implementation of S-100 and related specifications and tools, and to outline the tasks that need to be considered to achieve these objectives and the associated timelines.
- ✦ Section 2 provides an overview of the S-100 based architecture and governance;
- ✦ Section 3 addresses use and maintenance of the S-100 Registry;



S-100 Master Plan

- ✦ Section 4 discusses existing and planned data product specifications based on the S-100 Registry in general
- ✦ Section 5 presents the specific roadmap for the development and implementation of S-101 ENC's
- ✦ Section 6 outlines the process for developing and implementing other S-100 based product specifications for IHO products and services;
- ✦ Section 7 outlines the process for developing and implementing S-100 based product specifications for non-IHO products and services;
- ✦ Section 8, finally elaborates the impacts on and interactions with the various stakeholders as anticipated so far.



S-100 Master Plan

✦ Action required of HSSC

- The HSSC is invited to:
 - a. **note** this report;
 - b. **consider** the draft Master Plan,
 - c. **agree** on the structure of the document,
 - d. **decide** on the way forward to finalize it, and
 - e. **take** any other action as appropriate.

