Paper for Consideration by TSMAD

S-101 Project Plan, Progress, and Gap Analysis

S-101 Work Item Leader This Paper is intended to update TSMAD members on the progression of S- 101, promote discussion regarding completion timelines and to discuss potential gaps in the project.
S-101 N/A

Introduction / Background

S-101 is taking an iterative approach and is broken out into four phases. The phases are as follows:

Phase 1: S-57 content equivalent. It will contain only those features that are currently defined in S-57, but use complex attributes, information types and compound geometry.

STATUS: COMPLETED

Phase 2: Enhanced Packaging and Data Loading Mechanisms. This phase builds on phase 1, yet adds in functionality for new support file formats and functionality to update text files. In this phase the entire set is packaged into a complete exchange set.

STATUS: 95% COMPLETED

Phase 3: Extending the Model. This phase builds on the previous phases and extends the data model to include additional complex attributes and information types. In addition, this phase will explore the use of cartographic attributes.

STATUS: Due May 2012

Phase 4: Scalability. This phase represents Version 1.0 of S-101. By the completion of this phase the open source translator must be able to take an existing S-57 dataset and translate it into an S-101 dataset. TSMAD will provide the final S-57 to S-101 Feature Catalogue mapping.

STATUS: Due December 2012

Analysis/Discussion

Phase 1 was completed in December 2010 and the subsequent document was sent out for comments. Two sets of comments were received and will be adjudicated at this meeting.

In addition, NOAA has contracted ESRI to provide an open source S-57 to S-101 translator to be turned over to the IHO when completed. This work is an important step forward in providing initial test data for S-101, but also enabling the IHO to have a proper phase in date for S-101 as there will be a period of time where there will be S-57 and S-101 based ECDIS systems in operation. The convertor will be demonstrated at this meeting.

The current Phase 2 deliverables are:

S-101 Phase 2 Product Specification S-101 Phase 2 Feature Catalogue S-101 Phase 2 Portrayal Catalogue S-101 Exchange set with updates

The expected completion date is August 2011.

While the initial completion date was intended for August 2011, due to the TSMAD meeting schedule this deliverable has been moved to January 2012. For the most part TSMAD has completed the deliverables for this phase and the outstanding issues will be discussed at TSMAD 23. These issues include wrapping up the exchange set discussion, metadata, support files and data loading and unloading.

However, it should be noted that the Portrayal still remains to be completed for S-100 so it can be used by S-101 and that there is limited time in the schedule to complete and test the portrayal component of S-101.

Phase 3 Activities:

The following activities are assigned as part of Phase 3:

- 1. Final determination for scale independent and dependent data for inclusion into S-101
- 2. Finalization of Text Placement approach
- 3. 90% of the Data Classification and Encoding Guide
- 4. Phase 3 version of the Feature Catalogue that includes the work from the DCEG subwg
- 5. Significant progress towards portrayal including those pieces of S-52 that need to migrate to S-101

As the schedule is dependent upon the joint TSMAD/DIPWG meeting – phase 3 should be complete and approved by May 2012.

Phase 4

As phase four is mainly concerned with the finalization of the product specification this should be finalized by TSMAD by the end of December 2012.

However, there is still the outstanding issue of S-101 Test Beds. TSMAD has proven that S-57 can be translated to S-101 with the use of an open source converter; however we still have yet to develop a basic editor and viewer to test out the different functionality that is proposed. Additionally, TSMAD needs to consider the need for test data sets that can be used by type approval authorities and OEMs for the implementation phase after S-101 has been approved by the IHO Member states.



Conclusions

While S-101 is progressing with the completion of phase 2, TSMAD still needs to plan for phase, 3 and 4 and final publication of the standard and recommend an appropriate transition plan from S-57 to S-101.

Action Required of TSMAD

The TSMAD is invited to Note the progress of S-101