

Paper for Consideration by S-101 PT12

S-101 2.0.0 Impact Study

Submitted by:	S-101PT Chair
Executive Summary:	This paper provides an outline Impact Study as requested by the HSSC Chair following S-100WG8. It is presented for comment and feedback from the S-101PT.
Related Documents:	S-101PT Report to S-100WG8 M-3 Resolution 2/2007
Related Projects:	S-100

1. The IHO Resolution 2/2007 sets out the Principles and Procedures for Making Changes to IHO Technical Standards and Specifications. S-101 is a specification listed in Appendix 1 of the Resolution meaning that clause 3.1.2 applies.
2. In the S-101PT report to S-100WG8 the requirement for an impact study set out in IHO Resolution 2/2007 was noted and direction sought from the Working Group on how that should be addressed. After the S-100WG8 meeting a HSSC Chair letter provided the following direction:

Project Teams are to conduct a “light” version of an impact study to at least address clause 3.1.2 of resolution 2/2007

Clause 3.1.2 states;

For those standards listed in Appendix 1, the Committee should always consider the impact on relevant stakeholders when assessing a proposal and planning any subsequent work on standard changes; likewise, the Committee should assess the impact on other IHO standards or guidance, especially for interoperability, data/product quality and portrayal. Appendix 3 of this Resolution provides details on the impact study conduction. This assessment should systematically include a risk and feasibility analysis, and an estimate of the resources required for the development and the implementation of a new or revised standard, including but not limited to Member States Hydrographic Services.

3. In order to address the HSSC Chair’s tasking the S-101PT Chair group have developed and reviewed a table covering various stakeholders. This has sought to summarise the impact on each stakeholder; make an assessment of their readiness based on available knowledge; and provide an overall rating using a RAG (Red Amber Green) classification system. We consider that this meets the requirement of a light impact study and the intent of resolution 2/2007.
4. At this stage this study is based on the understanding of the Chair group, therefore it is proposed that after the PT12 meeting surveys are conducted to validate and improve the contents of this table. For some stakeholder groups direct engagement may be appropriate. Once responses are received an updated table will be prepared for submission to HSSC 16.

Recommendations

- A. S-101PT members are invited to discuss and provide comment on the Impact study provided at Annex A of this paper.
- B. S-101PT members to agree to the development and conduct of feedback surveys to allow this table to be updated and evidenced.

Annex A – S-101 2.0.0 Impact Study

RAG – Red Amber Green – classification where Red indicates not ready at all, Amber indicates partly ready, Green indicates fully ready

Stakeholder Group	Impact Summary	Readiness Assessment	RAG* Status
IHO Secretariat	S-101 2.0.0 requires the IHO Secretariat to operate the GI Registry and associated infrastructure to manage the various concepts and items used in S-101 2.0.0	This infrastructure is available including the GI Registry. Additional work and testing is needed to ensure that effective processes exist for the revision and distribution of updated catalogues. (Feature and Portrayal Catalogues)	Amber
Production Software Providers	S-101 2.0.0 requires these stakeholders to develop, test and make available to their customers software which supports the relevant versions of S-100 and S-101.	All known Production Software Manufacturers have software which is available. This was evidenced by the recent conversion workshop held at the IHO Singapore Lab.	Green
ENC Producers	ENC producers will need to obtain updated software that is S-101 2.0.0 capable, develop processes, train staff. They will also need to determine how to support dual production of S-57 ENC and S-101.	Some producers have created S-101 trial datasets, but some are still developing the capability and training staff.	Amber
Validation Software Providers	S-101 2.0.0 will require updates to validation software so that S-101 datasets can be validated against the relevant validation checks (equivalent to S-58 for S-57 ENC).	Currently only one software application implements S-101 validation checks. This situation reflects that the checks are not yet mature. Therefore, at this time the readiness of these tools does not support operational S-101 data.	Red
RENCS	S-101 2.0.0 will require RENCS to develop their systems and offer S-101 services. This will include the need to create signed S-100 Exchange Sets. RENCS are dependent on the availability of validation tools.	Some RENCS are actively involved in the S-101PT and are known to be developing these capabilities. Further information is needed to confirm this.	Amber

Value Added Resellers	S-101 2.0.0 will require Value Added Resellers to develop their systems and offer S-101 services to their customers.	Some development is understood to be underway but more information is needed on this stakeholder group.	
ECDIS System Manufacturers	S-101 2.0.0 will require new ECDIS software to be developed in line with the new ECDIS Performance Standard and compliant with the IEC test standard.	Although some development is underway no ECDIS systems are currently available, and the IEC standard is yet to be developed.	
Regulatory Organisations	S-101 2.0.0 will require flag state administrations, type approval laboratories and Port State Control inspectors to update their processes to reflect S-101.	As the changes between S-57 ENC and S-101 are limited for some of the stakeholders the impact is considered low. However for type approval laboratories the impact is high and there may be challenges with the capacity to type approve systems as was an issue when S-52 was last revised.	
Shipping Companies	S-101 2.0.0 will only impact shipping companies through the updated IMO Performance Standard.	Engagement with these stakeholders depends on operational systems being available.	
Training Organisations	Training organisations will need to offer training that covers S-101 ENCs. This will require S-101 capable ECDIS to be available along with adequate coverage of S-101 data.	Engagement with these stakeholders depends on operational systems being available.	
End Users (navigators)	Navigators will need to be adequately familiar with S-101 ENCs before their operational use.	Engagement with these stakeholders depends on operational systems being available.	