

Paper for Consideration by TSMAD/DIPWG

S-101 DCEG Maintenance Requirements

Submitted by:	TSMAD Vice Chair, S-101 DCEG Leader
Executive Summary:	This paper describes potential requirements to manage the S-101 DCEG.
Related Documents:	S-101 Data Classification and Encoding Guide
Related Projects:	TSMAD27 Action #30 KHOA S-57 UOC project

Introduction / Background

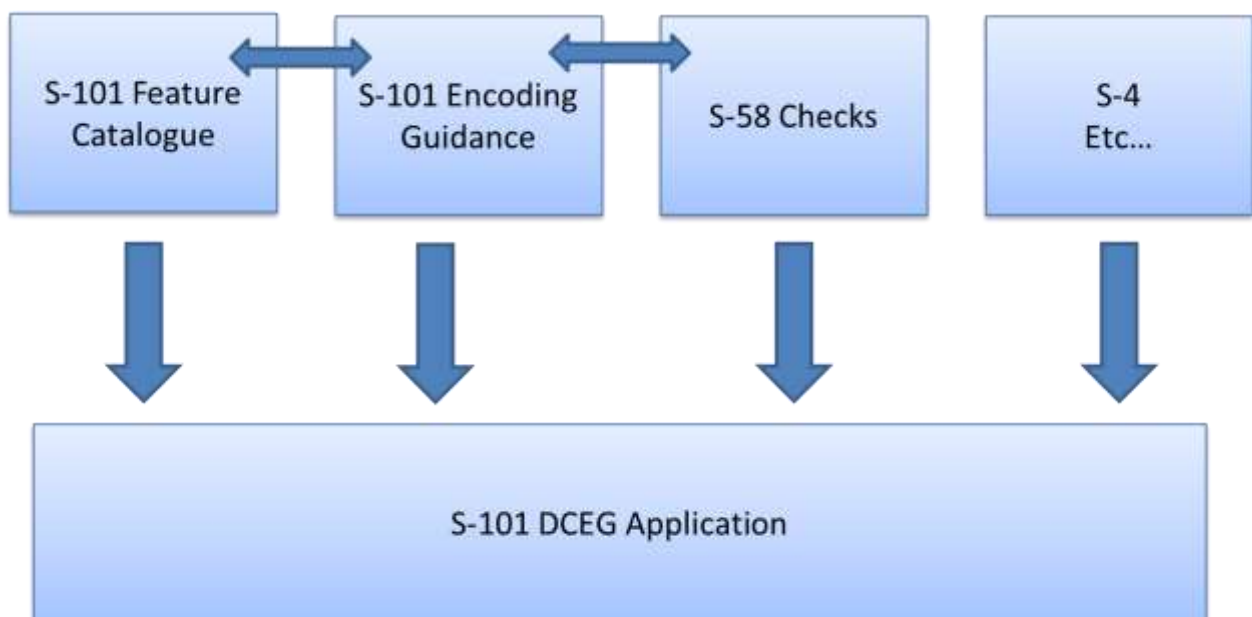
The S-101 Data Classification and Encoding Guide (DCEG) is a major component of S-101 and is designed to provide consistent, standardized instructions for encoding S-101 ENCs. The purpose of the DCEG is to facilitate S-101 encoding to meet IHO standards for the proper display of ENC in an ECDIS. The primary users of the DCEG are cartographers who determine what is relevant in an ENC; ENC production software manufacturers; and ECDIS Original Equipment Manufacturers (OEM's) for guidance as to how encoded information is intended to be used by the ECDIS.

The current baseline (2014) of the DCEG utilizes Microsoft word and is currently 631 pages. As part of the development of S-101 this iteration of the DCEG will be used to populate the S-100 registry and facilitate the building of the S-101 feature catalogue. However, it has become apparent that in the future managing the DCEG as a word document is not a practical solution for the long term.

At TSMAD27 KHOA presented its S-57 UOC Software that put together the S-57 UOC with other relevant IHO standards such as S-58 and S-4 that utilizes a common interface. This demonstration sparked TSMAD discussion as to what is needed to maintain the S-101 DCEG in the future.

Analysis/Discussion

Currently the DCEG is being used to build the S-101 Feature Catalogue, however in the future this process should be reversed where new changes in the S-101 feature catalogue should feed into the compilation of the DCEG. In addition, in the future there should be links to the relevant S-58 checks and S-4.



The following are potential requirements for the future of the DCEG:

ReqID	M/O	Requirement	Comment
1	M	web-based application	
2	M	Have the ability to read in latest versions of the S-101 Feature Catalogue	
2.1	M	Have the ability to store S-101 Encoding remarks in a separate table	The remarks should be linked using the feature name to the feature catalogue
2.2	M	Must be able to have a editable interface for the S-101 encoding remarks	
2.2.1	M	Edit a Remark	
2.2.2	M	Add a new remark	
2.2.3	M	Delete a remark	
3	O	Have the ability to cross reference the S-101 S-58 checks to the appropriate feature	
4	O	Have the ability to open up S-4	
5	M	Have a search function	
6	M	Be able to export the DCEG as a PDF	

Outstanding Issues:

How does TSMAD want to handle the information that is not directly associated with a feature? E.g. the introduction, SCAMIN guidance...

Should the above be contained in a separate word document that becomes part of the web-based application? Should the DCEG be managed as a database from which web-based applications and textual documents (e.g. pdf) can be derived, similar to the Inland ENC Encoding Guide maintained by the IEHG?

Recommendations

The next step would be to develop an interface design document for TSMAD approval and to seek funding or volunteers to develop the application. Note that there is the possibility of an IHB resource being assigned to such a project.

Justification and Impacts

At 631 pages the current iteration of the DCEG has become unmanageable. The existing word document is too large to send via email and when S-101 becomes finalized and the DCEG officially becomes part of the product specification change will have to be carefully managed.

By creating a web-based application or database that utilizes the latest versions of the S-101 feature catalogue will enable TSMAD to better manage the maintenance of the DCEG and ensure that the latest version is readily available via the web.

Action Required of TSMAD

The TSMAD is invited to:

- a. endorse the concept of a web-based S-101 DCEG
- b. discuss the proposed requirements and make recommendations for additional requirements
- c. approve the creation of an interface design document for approval at the next TSMAD meeting
- d. Seek volunteers to assist in the development of a database or web-based DCEG.