

## Paper for Consideration by TSMAD27

## S-100 Test Strategy Meeting Actions

<b>Submitted by:</b>	TSMAD Vice Chair
<b>Executive Summary:</b>	During the September 2013 test strategy meeting there were several gaps that were identified in both S-101 and S-100. This paper is to report on these gaps and determine a way forward.
<b>Related Documents:</b>	S-100, S-100
<b>Related Projects:</b>	S-100, S-101

**Introduction / Background**

In early September 2013, a small working group was held to discuss a framework for the testing of S-100 and more specifically S-101. As a result of this meeting a list of follow on actions was developed. While some of these actions resulted in a revised framework and test strategy – there were other action that need to be agreed to by both TSMAD and DIPWG that would result in changes to S-100. This paper is a report on these actions and to have TSMAD discussion on how the working group can move forward.

**Analysis/Discussion**

ACTION	DESCRIPTION	STATUS	WHO
1	It was noted that the S-100 GFM does not cater for conditional/mandatory situations. As S-101 still utilizes conditional/mandatory the ECDIS will need to be able to cater for this. This is part of the requirement for mariners' updates. Either the S-100 GFM will have to be changed or S-101 will have to work to eliminate the conditional/mandatory attributes. Raise to DCEG this issue.	Incomplete	DCEG
TSMAD Discussion	Should the GFM be modified to handle C/M attributes, or should the DCEG group work to eliminate them. Is there an alternative solution through validation?		
2	Ensure that Digital Signatures are part of the FC and PC models in S-100. It was determined that digital signatures will be utilized as part of the authentication process in S-101 and be made available for other S-100 based product specifications.	Incomplete	
TSMAD Discussion	This is a recommendation from the test strategy working group. Does TSMAD agree to this? If so then should it be referred to the DPSWG? Note that it is not needed for the early stages of testing.		
3	Raise to TSMAD that the feature catalogue model does not have a mechanism for marking something as retired – this would be needed if we are creating a feature catalogue that contains all the features from different versions of the product specifications. This methodology is also needed for the Portrayal Catalogue.	Incomplete	
TSMAD Discussion	At TSMAD26/DIPWG5 it was decided that the S-101 feature and portrayal catalogues would contain cumulative information. This means that we would have to retain retired information from the registry in the FC and PC until we are sure that there are no products that are using this particular feature or portrayal rule. Does TSMAD agree to this in principle?		

4	Amend the test strategy to note that there should be at least one simple viewer and at least three companies on-board for the shore-based and full ECDIS. In addition, at least three companies need to say that the S-100 mechanisms and S-101 are successful before it is officially released for implementation.	Complete	JLP
	This is included in the test framework document		
5	Ensure that the draft S-100 part 9 allows for user defined symbols	Complete	JLP
TSMAD	Hugh Astle pointed out that they are in part 9 as "context parameters"		
6	Check if portrayal catalogue builder can import a separate .xml feature catalogue. There is some concern that it will only be able read from the database as this would be too restricted.	Incomplete	
TSMAD Discussion	If it is read from a database to database connection then the feature catalogue builder will have to be able to import external feature catalogues into the IHO database so that other's may be able to use the IHO portrayal catalogue builder.  This will need TSMAD discussion as it would require a contract modification for the portrayal catalogue builder and if this was the direction that TSMAD recommends then DIPWG would have to then agree and take action.		
7	Need to think about the catalogs versus product specification maintenance and how it is numbered. Need to look at the S-100 to see how the catalogue is inherited and how to wire it back so that systems know what versions of the catalog it can be traced back to. Look at the S_100 catalogue fields.	Incomplete	
TSMAD Discussion	See follow on TSMAD paper.		
8	HP and TM will talk with Colby to make sure that the PC builder will account for a couple of ECDIS specific issues. The viewing group look up table will need to be added to the portrayal register and the portrayal catalogue builder would add the name on to the end of the LUT string. Maybe something similar can be done for alerts and indications.	In Process	DIPWG
TSMAD	For information only as this is a DIPWG specific action. It should be noted that the portrayal register will have to be modified as S-100 Part 9 already caters to this as the by using the viewing group description		
9	Will need to develop portrayal rules for the Text Placement feature so ECDIS knows how to handle it.	Incomplete	
TSMAD	Possibly something that the DIPWG LUT/DCEG working group can look into		
10	Vector Product Specification template needs to have portrayal advice for what is forbidden for products that are intended to be used in conjunction with an ECDIS. For examples, magenta dashed lines.	Incomplete	JLP
TSMAD	This will be carried forward to TSMAD28/DIPWG6 for action		
11	Propose to TSMAD that CRCs should be on the Catalogue	Incomplete	
TSMAD Discussion	We have CRC's on the dataset and on support files, should we also put them on the catalogues or would a digital signature suffice?		
12	There needs to be consideration that alerts and indications are part of the portrayal catalogue.	Incomplete	

TSMAD	For information only. This will be part of a paper at DIPWG. It will also require a contract modification and Part 9 would have to be modified.  NOTE: There was a suggestion to handle alerts and indications as an extension to the list of possible portrayal instruction types by adding an instruction element for Alert that carries a message and sound.		
13	Need to make sure the user-defined variables are in the portrayal catalogue	Complete	JLP
TSMAD	It is confirmed that they are already in S-100 part 9 as context parameters and will be carried in the portrayal catalogue		
14	Hannu to draft a paper on the Human Machine Interface for TSMAD and propose what needs to be added to S-101 to make these completely machine-readable.	In Progress	HP
TSMAD	See Hannu's Paper (if one is submitted)		
15	Check that the portrayal catalogue builder accounts for viewing group classifications, and colour tokens.	Complete	JLP
TSMAD	It will support the selection of viewing group identifiers and colour tokens as found in the existing Portrayal registers. As per the definition in S-100 Part 9 each Portrayal Instruction can have a viewing group identifier assigned to it. Colours are assigned by way of Colour token strings		
16	Ensure that all the portrayal support components (colour tokens, colour palettes, viewing groups, etc.) are stored in the registry and the portrayal builder can retrieve and integrate them directly into the portrayal catalogue	Incomplete	
TSMAD	For Information Only		

### Action Required of TSMAD

The TSMAD is invited to:

- a. note the actions from the test strategy workshop
- b. discuss and develop official TSMAD action's for further progress