

Paper for Consideration by DIPWG

S-101 Portrayal Section Review

Submitted by:	S-101 Work Item Leader
Executive Summary:	There is a need to fast track the basic requirements that need to be detailed for portrayal in clause 9 and the Implementation Guidance Annex of S-101.
Related Documents:	S-101, S-52, IEC 61174, S-100
Related Projects:	IEC 61174 Revision

Introduction / Background

S-101 development has progressed significantly over the years and is reaching the test bed stage. However, one of the key components to S-101 has had slow progress due to the finalization of the S-100 portrayal model. As the model is not expected to gain approval at DIPWG5, it is time to begin fast tracking S-101 portrayal.

Analysis/Discussion

According to S-100 – the portrayal clause of a product specification states:

The data product specification may provide information on how the data is to be presented as graphic output, e.g. as a plot or as an image. This is an optional section; however it is strongly recommended that it is included where a product specification defines an IHO navigational product. Where included, this shall take the form of a reference to a portrayal library that contains a set of portrayal rules and a set of portrayal specifications (Table 10). The product specification shall include this information for each identified scope.

Classes and attributes required to support portrayal for a particular product need to be registered in a feature catalog dictionary and the feature catalogue for that product specification. Examples could be cartographic object classes, scale maximum / minimum attributes, attributes which suggest layout for textual information (e.g. \$TINTS, \$JUSTH).

The portrayal library shall be defined in accordance with S-100 Part 9.

Item Name	Description	Multiplicity	type
portrayalLibraryCitation	Bibliographic reference to the portrayal library	0..1	CI_Citation (ISO 19115)

While this work will be taken care of by the portrayal catalogue sub-working group (if approved by DIPWG), there are additional portrayal items that need to be incorporated into S-101.

The concept behind S-101 portrayal is to provide all the necessary information needed for implementation, which would include the portrayal catalogue and those pieces of S-52 that are still required for S-101. Over the past couple of years, some initial work has been done to extract those pieces of S-52 that would still be needed for S-101 and they are currently in the Implementation Guidance Annex of the Product Specification. However, there has not been a thorough review of this section by the experts in portrayal. This section includes such details as:

- Tidal Adjustment
- Physical Display
- Units
- Size of lines symbols and text
- Colours
- Abbreviations
- Organization of Display – including viewing groups
- Date Dependant features
- Display Components
- Types of ECDIS Symbols
- Etc...

While most of this may be covered by the portrayal catalogue, there will be a need to describe the functionality that the portrayal catalogue will be performing and there are other items that are outside the scope of the portrayal catalogue.

Recommendations

It is recommended that a sub-working group be formed (or this work be added to the scope of the LUT working group) to review and re-write this section as needed. The group should keep in mind the changes that have been made to S-52 and IEC 61174.

Ideally, this work should be fast tracked so that test cases can be written for the S-101 test bed. The S-101 work item leader also recognizes that this work will not be completed in time for the test case contract to be let out, and that there may need to be a follow on contract to complete the test cases for these specific requirements.

Action Required of DIPWG

The DIPWG is invited to:

- a. agree to the formation of a sub-working group or add this as an additional item to the LUT sub-working group.