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S-101 Portrayal

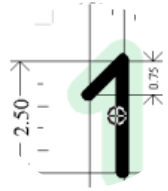
S-101PT5-04.3



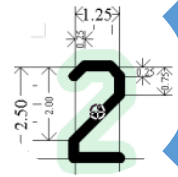
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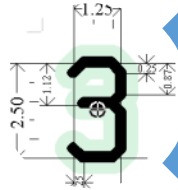
Topics



Introduction



Pending Issues



Portrayal proposals -
workflow and form



Recommendations



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Introduction



Key stakeholders and their links

➤ S100 TSWG

Develop tools and tests to support, through a phased approach, the development of S-100 data and marine navigation systems which meet users' needs.

- **ESRI**

S-57 to S-101 Converter.

- **NIWC**

Development of S-101 FC and Alarms & Indications catalogues; S100 Viewer; on-shore ECDIS.

- **KHOA**

Feature and Portrayal catalogue builder - Produce/supply official versions of the FC & PC to the S-100 Registry; on-board ECDIS prototype; Owner of 'Symbol editor'.

➤ IIC

Assisted by performing S-52 to S-101 portrayal gap analysis and other investigations.

➤ NCWG

Consultative body. The IHO (HSSC/TSWG) expects it to be involved in all portrayal issues. The NCWG must review proposals and provide technical advice before final approval by the corresponding WG/PT.



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Pending Issues



1. Latest version of NIWC's PC (1.1.1):

- Marked as 'Not Implemented' in PC Rules
 - *VirtualAISaidToNavigation*
 - *PhysicalAISaisToNavigation*
 - *PortrayalAPI*
 - *TextPlacement*
- Undefined symbology - Rule points to '*testPCB*' symbol
 - *TrafficServicearea*
 - *PilotageDistrict*
 - *UpdateInformation*
 - *BuoyEmergencyWreckMarking*
 - *CollisionRegulationsLimit*
 - *DiscolouredWater*
 - *FoulGround*
 - *InformationArea*
 - *LocalDirectionOfBuoyage*



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Pending Issues



2. Additional portrayal issues identified in 'S-57 Removed_Remodelled Items_Ed2_OCT2019' spreadsheet due to the:

- Remodelling of existing S-57 Objects, Attributes or Attribute values
 - *There are a number of S-52 symbols not longer required in S-101 (update registry status to 'Retired'?)*
 - *SY(RECDEF51), SY(RECTRC55), SY(RECTRC56), SY(RECTRC57), SY(RECTRC58) – RECTRC (A) is now prohibited*
 - *SY(TIDEHT01) – T_HMON, T_NHMN and T_TIMS objects have been discontinued*
 - *SY(BCNLTC01) – Not required unless remapped to beaconShape = 5 (pile beacon) or 3 (beacon tower) with natureOfConstruction = 11*
 - *There are some Portrayal Rules that must be updated*
 - *RecommendedTrack – Remove portrayal instructions regarding surfaces (Prohibited geometry for this feature in S-101)*
 - *BeaconLateral, IsolatedDanger, SpecialPurposeGeneral, Cardinal and SafeWater – Delete entry regarding beaconShape = 4 (lattice beacon). This feature attribute value is now prohibited in S-101*
- Introduction of new *Features*, *Feature attributes* or *Attribute values*
 - *BuoyEmergencyWreckMarking*
 - *DiscolouredWater*
 - *PhysicalAidsToNavigation*
 - *categoryOfTemporalVariation*
 - *maximumPermittedDraught*
 - *categoryOfPile = Area of Piles*
 - *categoryOfOffshorePlatform = Floating Oil Tank*

S-57 Removed_Remodelled Items

S-57 Features, Attributes and Enumerates that have not been included in S-101, or have been remodelled					Impact on Portrayal							
					Symbology				CSP			
					Symbol impacted	Discontinue ? (i.e. symbol only used for this Object-attribute combination)	Not affected	Remap	CSP impacted	Discontinue ? (i.e. CSP only used for this Object-attribute combination)	Not affected	Remap
<p>GENERAL NOTES:</p> <p>1. For enumerate values not allowed in S-101 the S-101PT used S-58 Check 2000 as the principle reference in its deliberations. Other criteria used were determination of a "default" state where the value is self-evident and would not add any additional information relevant to safe navigation and protection of the marine environment (for instance UnderwaterAwashRock / natureOfSurface = 9 (rock)); values that are illogical for the specific feature (for instance lights features, attribute colour = 2 (black)); and values specifically included for application to a single or selected set of features (for instance natureOfConstruction values 4 (hard surfaced) and 5 (unsurfaced) specifically intended for the Road feature).</p> <p>2. Features excluded by geometric primitive are generally based on the particular combination of feature/geometric primitive not displaying in ECDIS. This was discussed at length by the (former) Digital Information Portrayal Working Group (DIPWG) and it was confirmed that there was no requirement for these combinations to symbolize.</p> <p>3. Where possible, optional encoding/conversion is identified where the removal of an enumerate value results in a S-101 mandatory attribute having no value.</p> <p>FEATURES</p> <p>NOTE: (A), (L), and (P) denotes features not included by designated area, line or point geometric primitive only.</p>												
S-57 Acronym	Value	Not in S-101	Remodelled in S-101	Remodelled To	Comments	SY(REFDEF51), SY(RECTRC55), SY(RECTRC56), SY(RECTRC57), SY(RECTRC58), LC(NAVARES1)	YES	NO	RecommendedTrack	Retain BUT Must be updated to remove instructions for the portrayal of 'Surfaces'		
RECTRC (A)		X			S-101PT decision: Not required in S-101. NOTE: Suggest that RECTRC of type area convert to a RecommendedTrafficLanePart or a TwoWayRoute feature in S-101.							
ROADWY (P)		X			S-101PT decision: Not required in S-101, noting that ROADWY of type point does not display in ECDIS.			x				
TOPMAR			X	topmark	Complex attribute. NOTE: Only S-57 TOPMRK attributes COLOUR (colour), TOPSHP (topmarkDaymarkShape) and INFORM (shapeInformation / text) are included as sub-attributes to the topmark complex in S-101, noting that INFORM should only be included in shapeInformation if the text relates to the shape of the topmark. If the TOPMAR object has a value for the attribute COLPAT, then this should be converted to a Daymark feature.	TOPMARnn SVG symbols not present in IHO's PC but available in NIWC's	NO		YES	CS(TOPMAR02)	NO	Rule does not exist in IHO's PC but implemented by NIWC (Lua)
TS_PNH		X			This S-57 feature is not included in S-101, as it will be included in another (tidal) S-100 based Product Specification.	SY(TIDSTR01), LC(TIDINF51)	NO					
TS_PRH		X			This S-57 feature is not included in S-101, as it will be included in another (tidal) S-100 based Product Specification.	SY(TIDSTR01), LC(TIDINF51)	NO					
TS_TIS		X			This S-57 feature is not included in S-101, as it will be included in another (tidal) S-100 based Product Specification.	SY(TIDSTR01), LC(TIDINF51)	NO					
TUNNEL (P)		X			S-101PT decision: Not required in S-101, noting that TUNNEL of type point does not display in ECDIS.			x				
T_HMON		X			This S-57 feature is not included in S-101, as it will be included in another (tidal) S-100 based Product Specification.	SY(TIDEHT01); LC(TIDINF51)	YES	NO				
T_NHMN		X			This S-57 feature is not included in S-101, as it will be included in another (tidal) S-100 based Product Specification.	SY(TIDEHT01); LC(TIDINF51)	YES	NO				
T_TIMS		X			This S-57 feature is not included in S-101, as it will be included in another (tidal) S-100 based Product Specification.	SY(TIDEHT01); LC(TIDINF51)	YES	NO				
ATTRIBUTES / ENUMERATES												
BCNSHP	4: lattice beacon		X	natureOfConstruction = 11 (latticed)	S-101PT decision: "lattice" is not a shape - is more a type of construction. NOTE: beaconShape is mandatory for beacons in S-101. Suggest that the default option for S-57 conversions is to populate beaconShape = 5 (pile beacon), although value 3 (beacon tower) may also be appropriate. Data producers will need to confirm.	SY(BCNLTC01) Delete mapping of beaconShape = 4 to BCNLTC01 from BCNnnn LUA rules !! 4 is a prohibited attribute value not listed in Feature Catalogue.	YES unless suggested remap is implemented			Create new Rule (??) to map beaconShape = 5 (pile beacon) or 3 (beacon tower) with natureOfConstruction = 11		

	A	B	C	D	E	F	G	H	I	J
1	Combined S-52 Look-up tables information									
2	Code of the object class	Geometry	S-52 Table	Attribute combination	Symbolization instruction	Display priority	Radar	IMO display category	Viewing group (optional)	
201	BOYSPP	Point	Simplified Points	BOYSH7	SY(BOYSUP02);TE('by %s','OBJNAM',2,1,2,'15110',-1,-1,CHBLK,21)	8	O	STANDARD	27010	
202	BOYSPP	Point	Simplified Points	BOYSH8	SY(BOYSPP35);TE('by %s','OBJNAM',2,1,2,'15110',-1,-1,CHBLK,21)	8	O	STANDARD	27010	
203	BOYSPP	Point	Paper Chart Points		SY(BOYGEN03);TE('by %s','OBJNAM',2,1,2,'15110',-1,-1,CHBLK,21)	8	O	STANDARD	27010	
204	BOYSPP	Point	Paper Chart Points	CATSPM9	SY(BOYSUP01);TE('by %s','OBJNAM',2,1,2,'15110',-2,-1,CHBLK,21)	8	O	STANDARD	27010	
205	BOYSPP	Point	Paper Chart Points	CATSPM15	SY(BOYSUP03);TE('by %s','OBJNAM',2,1,2,'15110',-2,-1,CHBLK,21)	8	O	STANDARD	27010	
206	BOYSPP	Point	Paper Chart Points	BOYSH1	SY(BOYCON01);TE('by %s','OBJNAM',2,1,2,'15110',-1,-1,CHBLK,21)	8	O	STANDARD	27010	
207	BOYSPP	Point	Paper Chart Points	BOYSH2	SY(BOYCAN01);TE('by %s','OBJNAM',2,1,2,'15110',-1,-1,CHBLK,21)	8	O	STANDARD	27010	
208	BOYSPP	Point	Paper Chart Points	BOYSH3	SY(BOYSPH01);TE('by %s','OBJNAM',2,1,2,'15110',-1,-1,CHBLK,21)	8	O	STANDARD	27010	
209	BOYSPP	Point	Paper Chart Points	BOYSH4	SY(BOYPIL01);TE('by %s','OBJNAM',2,1,2,'15110',-1,-1,CHBLK,21)	8	O	STANDARD	27010	
210	BOYSPP	Point	Paper Chart Points	BOYSH5	SY(BOYSPR01);TE('by %s','OBJNAM',2,1,2,'15110',-1,-1,CHBLK,21)	8	O	STANDARD	27010	
211	BOYSPP	Point	Paper Chart Points	BOYSH6	SY(BOYBAR01);TE('by %s','OBJNAM',2,1,2,'15110',-1,-1,CHBLK,21)	8	O	STANDARD	27010	
212	BOYSPP	Point	Paper Chart Points	BOYSH7	SY(BOYSUP01);TE('by %s','OBJNAM',2,1,2,'15110',-2,-1,CHBLK,21)	8	O	STANDARD	27010	
213	BOYSPP	Point	Paper Chart Points	BOYSH8	SY(BOYSPR01);TE('by %s','OBJNAM',2,1,2,'15110',-2,-1,CHBLK,21)	8	O	STANDARD	27010	
214	BRIDGE	Point	Simplified Points							
215	BRIDGE	Point	Paper Chart Points							
216	BRIDGE	Line	Lines		LS(SOLD,5,CHGRD);TX(OBJNAM,3,1,2,'15110',1,0,CHBLK,21);TE('clr %4.1lf','VERCLR',3,1,2,'15110',1,1,CHBLK,11)	8	O	DISPLAYBASE	12210	
217	BRIDGE	Line	Lines	CATBRG2	LS(SOLD,5,CHGRD);SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11)	8	O	DISPLAYBASE	12210	
218	BRIDGE	Line	Lines	CATBRG3	LS(SOLD,5,CHGRD);SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11)	8	O	DISPLAYBASE	12210	
219	BRIDGE	Line	Lines	CATBRG4	LS(SOLD,5,CHGRD);SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11)	8	O	DISPLAYBASE	12210	
220	BRIDGE	Line	Lines	CATBRG5	LS(SOLD,5,CHGRD);SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11)	8	O	DISPLAYBASE	12210	
221	BRIDGE	Line	Lines	CATBRG7	LS(SOLD,5,CHGRD);SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11)	8	O	DISPLAYBASE	12210	
222	BRIDGE	Line	Lines	CATBRG8	LS(SOLD,5,CHGRD);SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11)	8	O	DISPLAYBASE	12210	
223	BRIDGE	Area	Symbolized Boundaries		TX(OBJNAM,3,1,2,'15110',1,0,CHBLK,21);TE('clr %4.1lf','VERCLR',3,1,2,'15110',1,1,CHBLK,11);LS(SOLD,4,CHGRD)	8	O	DISPLAYBASE	12210	
224	BRIDGE	Area	Symbolized Boundaries	CATBRG2	SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11);LS(SOLD,4,CHGRD)	8	O	DISPLAYBASE	12210	
225	BRIDGE	Area	Symbolized Boundaries	CATBRG3	SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11);LS(SOLD,4,CHGRD)	8	O	DISPLAYBASE	12210	
226	BRIDGE	Area	Symbolized Boundaries	CATBRG4	SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11);LS(SOLD,4,CHGRD)	8	O	DISPLAYBASE	12210	
227	BRIDGE	Area	Symbolized Boundaries	CATBRG5	SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11);LS(SOLD,4,CHGRD)	8	O	DISPLAYBASE	12210	
228	BRIDGE	Area	Symbolized Boundaries	CATBRG7	SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11);LS(SOLD,4,CHGRD)	8	O	DISPLAYBASE	12210	
229	BRIDGE	Area	Symbolized Boundaries	CATBRG8	SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11);LS(SOLD,4,CHGRD)	8	O	DISPLAYBASE	12210	
230	BRIDGE	Area	Plain Boundaries		TX(OBJNAM,3,1,2,'15110',1,0,CHBLK,21);TE('clr %4.1lf','VERCLR',3,1,2,'15110',1,1,CHBLK,11);LS(SOLD,4,CHGRD)	8	O	DISPLAYBASE	12210	
231	BRIDGE	Area	Plain Boundaries	CATBRG2	SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11);LS(SOLD,4,CHGRD)	8	O	DISPLAYBASE	12210	
232	BRIDGE	Area	Plain Boundaries	CATBRG3	SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11);LS(SOLD,4,CHGRD)	8	O	DISPLAYBASE	12210	
233	BRIDGE	Area	Plain Boundaries	CATBRG4	SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11);LS(SOLD,4,CHGRD)	8	O	DISPLAYBASE	12210	
234	BRIDGE	Area	Plain Boundaries	CATBRG5	SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11);LS(SOLD,4,CHGRD)	8	O	DISPLAYBASE	12210	
235	BRIDGE	Area	Plain Boundaries	CATBRG7	SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11);LS(SOLD,4,CHGRD)	8	O	DISPLAYBASE	12210	
236	BRIDGE	Area	Plain Boundaries	CATBRG8	SY(BRIDGE01);TE('clr cl %4.1lf','VERCCL',3,1,2,'15110',1,0,CHBLK,11);TE('clr op %4.1lf','VERCOP',3,1,2,'15110',1,1,CHBLK,11);LS(SOLD,4,CHGRD)	8	O	DISPLAYBASE	12210	
237	BUAARE	Point	Simplified Points		SY(BUAARE02);TX(OBJNAM,3,2,2,'15110',1,0,CHBLK,26)	3	O	STANDARD	22240	
238	BUAARE	Point	Paper Chart Points		SY(BUAARE02);TX(OBJNAM,3,2,2,'15110',1,0,CHBLK,26)	3	O	STANDARD	22240	
239	BUAARE	Area	Symbolized Boundaries		AC(CHBRN);TX(OBJNAM,1,2,3,'15110',0,0,CHBLK,26);LS(SOLD,1,LANDF)	3	S	STANDARD	22240	
240	BUAARE	Area	Plain Boundaries		AC(CHBRN);TX(OBJNAM,1,2,3,'15110',0,0,CHBLK,26);LS(SOLD,1,LANDF)	3	S	STANDARD	22240	

S-101 New_Remodelled Items

3. Items in squared brackets [] are "parent" binding items, which may be a simple attribute (for enumerates) or a complex attribute (for simple attributes).						Impact on Portrayal		
7 FEATURES / ASSOCIATIONS						YES		NO
8 NOTE: (S), (C), (P) and (N) denotes features included by designated surface, curve, point, (or have no) geometric primitive only.						Needs symbology	Needs Rule	
S-101 Item	Type	Remodelled From S-57	Remodelled From	Comments				
Deep Water Route	Geo feature (no geometry)			In S-57 this will be encoded by using a C_AGGR. Suggest in S-101 the portrayal should include the name of the Deep Water route as populated in the complex attribute featureName.		Update <i>DeepWaterRoute</i> to display <i>featureName.name</i> . What about <i>DeepWaterRoutePart</i> and <i>DeepWaterRouteCentreline</i> ??		
Depth - No Bottom Found	Geo feature	X	QUASOU = 5	Refer to QUASOU entry in the "S-57" table. Suggest retain existing "no bottom found" symbol.	NO - Symbology retained	Rule has been created (<i>DepthNoBottomFound</i>) and uses rule <i>SNDFRM04</i> to symbolise features as per S-57.	x	
Discoloured Water	Geo feature			May be populated using INFORM for CTNARE in S-57. Suggest that an option should be considered for ECDIS portrayal.	Point and Surface	Rule has been created (<i>DiscolouredWater</i>) but refers to 'testPCB.svg' symbol.		
Fairway System	Geo feature (no geometry)			In S-57 this will be encoded by using a C_AGGR. Suggest in S-101 the portrayal should include the name of the fairway system as populated in the complex attribute featureName.		Update <i>FairwaySystem</i> to display <i>featureName.name</i> . <i>Fairway</i> currently includes the display of <i>featureName.name</i>		
Foul Ground	Geo feature	X	CATOBS = 7	Refer to CATOBS entry in the "S-57" table. Suggest retain existing "foul ground" symbol.	Point, Curve and Surface Note: The 3 of them should run through CS(OBSTRN07) when VALSOU isPresent.	Rule has been created (<i>FoulGround</i>) but: Point geometry refers to 'testPCB.svg' although S-57 LUT directs to use SY(FOULGND1). Curve geometry is set to display a dashed line, although S-57 LUT directs to CS(OBSTRN07) Surface geometry is set to display a dashed line although S-57 LUT directs to use SY(FOULGND1);LC(NAVARE51).		
Information Area	Geo feature			While new in S-101, this feature is considered to be for information that is of less navigational significance than the S-57 CTNARE object class, and will need to map for S-57 to S-101 conversion. Producing authorities will need to assess converted CautionArea features for consideration of "downgrading" to InformationArea. Will need to be considered for S-101 portrayal.	Point, Curve and Surface Note: Use same as S-57 M_NPUB ??	Rule has been created (<i>InformationArea</i>) but: Point geometry refers to 'testPCB.svg'. M_NPUB entry is SY(CHINFO07). Curve geometry is set to display a dashed line Surface geometry is set to display a dashed line		
Island Group	Geo feature (no geometry)			In S-57 this could be encoded by using a C_AGGR or a LNDGRN covering the area of the islands. If encoded as LNDGRN will cause problems with conversion to S-101. Suggest in S-101 the portrayal should include the name of the island group as populated in the complex attribute featureName.		Update <i>IslandGroup</i> to display <i>featureName.name</i> .		
Light Air Obstruction	Geo feature	X	LIGHTS	Refer to LIGHTS entry in the "S-57" table.	NO - Symbology retained	Rule has been created (<i>LightAirObstruction</i>)		
Light All Around	Geo feature	X	LIGHTS	Refer to LIGHTS entry in the "S-57" table.	NO - Symbology retained	Rule has been created (<i>LightAllAround</i>)		
Light Fog Detector	Geo feature	X	LIGHTS	Refer to LIGHTS entry in the "S-57" table.	NO - Symbology retained	Rule has been created (<i>LightFogDetector</i>)		
Light Sectored	Geo feature	X	LIGHTS	Refer to LIGHTS entry in the "S-57" table.	NO - Symbology retained	Rule has been created (<i>LightSectored</i>)		
Local Direction of Buoyage	Geo feature	X	M_NSYS	Refer to M_NSYS / ORIENT entry in the "S-57" table.	Surface Pending decision on	Rule has been created (<i>LocalDirectionOfBuoyage</i>). Central		



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Pending Issues



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3. S-52 Improvement proposals collected by the ENCWG's '*ENC Display subWG*' :

- subWG chaired by Christian Mouden (France)
- Approved proposals to be formalised using new 'Portrayal request process and form' (?)

4. S-52 amendment proposals presented in a number of *ENCWG papers* in the last 5 years:

- Although some of the proposals were agreed by the ENCWG, any 'Corrections' or 'Extensions' to the standard were marked as to be 'referred' to the S-101PT. Some of them never made it to 'the other side'. – Recommend ENCWG Chair to review list of pending actions and hand over details to S-101PT Chair.



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Pending Issues



5. Is the *ECDIS Chart1* concept still valid in S100 ECDIS?

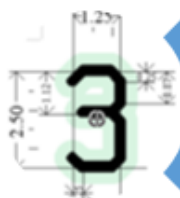
- Should we have one? Do mariners use it ?
- S-101 only or each PS may need to assess the need for one?

6. Where can we manage *orphan S-52 portrayal and ECDIS performance requirements* not included in the S-101 PC, the S-101 Alarms & Indications catalogue or IMO's Resolution MSC.232(82)?

- For example:
 - Overscale pattern/Indication (When, How)
 - Practical use of QoBD's 'Category of Temporal Variation', 'Vertical accuracy' and 'Horizontal Position Accuracy' attributes.
- Should we consolidate all S100 ECDIS performance requirements in one place?
- Should it become a new document (e.g. S-152)?
 - We could start by outlining DF S-57/S-101 requirements and expand it (using annexes or chapters) as new products become operational?



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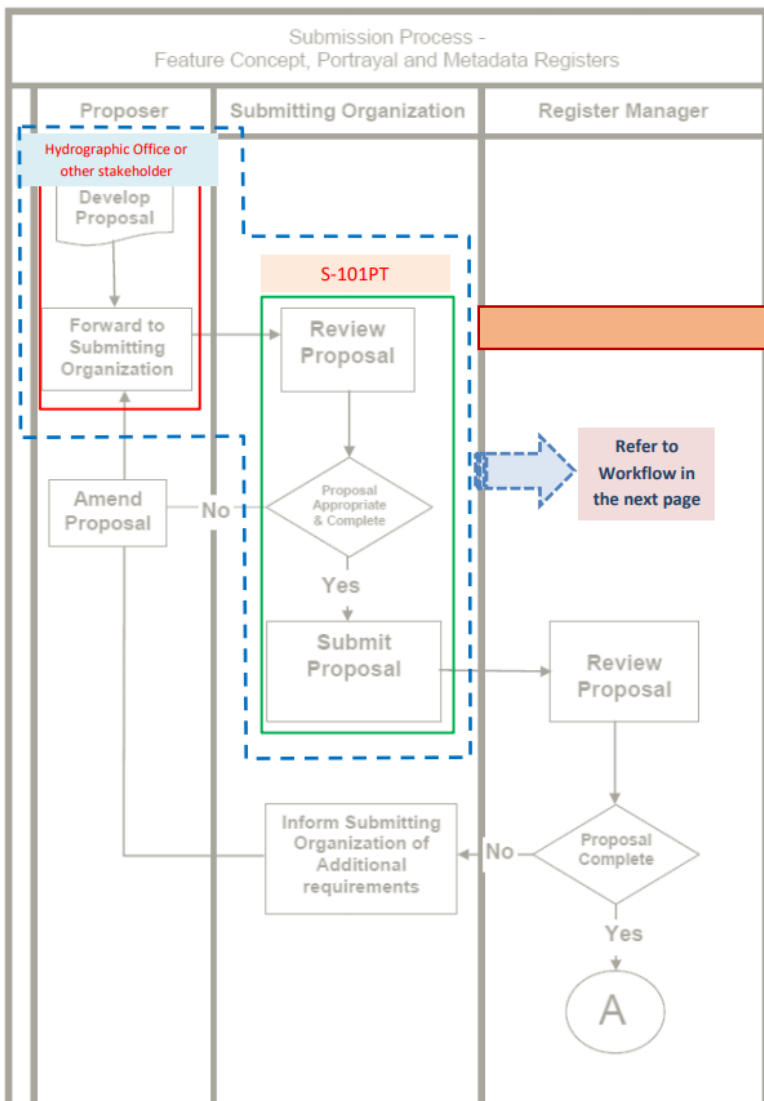
Portrayal proposals - workflow and form

S-101 Portrayal Update Process Workflow

This process must be followed when proposing changes and/or additions to the content of the S-101 portrayal.

S-101 Portrayal Update Process Workflow

This process must be followed when proposing changes and/or additions to the content of the S-101 portrayal.



New Portrayal requirement

- Complete 'Portrayal request form' ([click here](#)).
- Submit proposal to S-101PT Vice-Chair.
- S101PT Vice-Chair checks completeness, look for duplicates and liaise with stakeholder if required.

Preliminary approval

- Portrayal proposals are presented to the S-101PT for preliminary approval at the next S101PT meeting by the Vice-Chair
- Proposals approved by the S101PT must seek:
 - a) Mariners review (*HOW? to be discussed by the PT*)
 - b) NCWG input (*coordinated by WG Chair*)
 - c) S100TSWG input (*coordinated by S100WG Chair*)
- Feedback must be provided back to the S101PT within 90 days of notification.

Final approval

- The decision to proceed with portrayal update proposals sits with the S-101PT.
- S101PT Vice-Chair collates responses and submits external comments and voting form to S101PT members. Final approval is decided by **correspondence and based on the majority of the casted votes (by any member !?)**. The review and voting process must not take longer than 6 weeks.

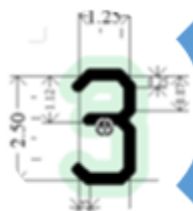
Submit proposal

- S101PT Chair formalises portrayal proposals via IHO S-100 Registry site (may require assistance from KOHA to finalize SVG file using 'Symol Editor' tool).



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Portrayal proposals - workflow and form

Form: [\(link\)](#)



Used to

Propose new or amend existing:

- *Fonts*
- *Colours*
- *Alarms/Indications*
- *Symbology*
- *CSP (Rule)*

S-104 Water Level Information for Surface Navigation

S-201 Aids to Navigation Information

Provide real-time information

S-128 Catalogues of Nautical Products

Marine Protected Area

S-101 Portrayal request form

Change proposals must be specific. Unrelated requests must be completed using different forms.

* Required

1. The S-101 Project Team will collect and use submitted information only for the original purpose to manage portrayal change requests. Do you agree with it? *

Yes

No

2. Date proposed *

Please input date in format of M/d/yyyy



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Recommendations



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1. Activate 'S-101 Portrayal' subWG

- S-101PT Vice Chair to lead
- Confirm membership
- Meet online before HSSC12

2. Expand scope and rename 'S-101 Portrayal and ECDIS performance' subWG

3. Scope:

- Manage proposals and coordinate the development of S-101 [portrayal](#), [A & I](#) and [DF-ECDIS performance requirements](#).
- Keep a registry and prioritise development/testing of new S-101 [portrayal](#), [A & I](#) and [ECDIS functionalities](#) approved by the S101PT.

4. Priority 1: Ensure that, by the end of 2022, new and legacy ENC and navigation systems do not have

- data presentation 'gaps'
- Functional (ECDIS performance) 'gaps'

5. Priority 2: Implement new portrayal or ECDIS functionalities approved by the S101PT.

Note: Special consideration must be taken during the 'Dual Fuel' period as new S101 functionalities must not cause 'significant' differences with S-57 ([see IHO paper to NCSR7](#)).



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Recommendations



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IHO's paper at NCSR7 (Jan 2020) – *'Report on Monitoring of ECDIS issues by IHO'*

Resulted in proposed amendments to Resolution MSC.232(82)

22. Safety of navigation will be maintained by cartographic content of both S-57 and S-101 standards. From the user's perspective, presentation of cartographic and functional features to meet the IMO mandated content in a mixed environment of S-57 ENC's and S-101 ENC's in one ECDIS device will be seamless and presented under the identical presentation regime for charted features and navigational objects.

Figure 1: IHO Paper to NCSR