Source: https://www.iho.int/mtg_docs/com_wg/ENCWG/maint_docs/NAVTOR Remarks_ECDIS S-52_CHART 1_ver4_0_0.docx

Contents

1.	Edition number of S-57 in COMT subfield of DSID	2		
2.	Display priority	2		
3.	Text group			
4.	Wrong symbols for LNDMRK (DS AA5C1CDE – Natural and man-made features (C, D, E))			
4.1. Wrong screen dump				
	i.2. Sorting of object instance entries in Look-Up tables for LNDMRK object (for paper chart and simplified point symbolization)			
5.	Pivot point of center symbols	7		
<u> </u>	5.1 Symbols are presented not at the defined pivot point	7		
	5.2 Presentation of center symbols. General remarks	8		
	Unintelligible colours for DRGARE objects. DS AA5C1HIO (Depths, currents, etc. (H. I))			
	Miscellaneous			

Below there are our remarks to the released ECDIS CHART 1, IHO ECDIS PRESENTATION LIBRARY, ANNEX A, Edition 4.0.0 (then PL 4.0.0) documentation, screen dumps for ECDIS CHART 1 and correspondent Look-up tables.

1. Edition number of S-57 in COMT subfield of DSID

For all datasets for ECDIS CHART 1 comment in COMT subfield is set to "STED: 3.1.2; DATASET CREATED BY...."

According to the S-57 Supplement No. 3, June 2014 indication of STED in COMT subfield should be: "STED: 3.1.3; DATASET CREATED BY...."

Remark: Comment to the STED in COMT field should be changed to: "STED: 3.1.3; DATASET CREATED BY JEPPESEN"

2. Display priority

According to the table (Changes and Clarifications) in PL 4.0.0 display priorities field for FLODOC, PONTON, HULKES objects should be set to {1}

		Error in LUT entries
Annex A	FLODOC, PONTON, HULKES display priority changed from 5 to 1.	These objects are part of group 1, skin of the earth objects, they all have a solid area fill and should be lowest in the drawing priority. Before the change for example cranes in a flodoc area were masked by the high priority drawing of solid brown colour.

But in Look-up tables listings for area objects display priorities are set to {2}. (For HULKES object with point geometry display priority is set to {5})

Areas with symbolized boundaries

```
"HULKES","","AC(CHBRN);LS(SOLD,2,CSTLN)","2","S","DISPLAYBASE","12410"
"FLODOC","","AC(CHBRN);LS(SOLD,2,CSTLN)","2","S","DISPLAYBASE","12410"
"PONTON","","AC(CHBRN);LS(SOLD,2,CSTLN)","2","S","DISPLAYBASE","12410"
```

Areas with plain boundaries

```
"HULKES","","AC(CHBRN);LS(SOLD,2,CSTLN)","2","S","DISPLAYBASE","12410"
"FLODOC","","AC(CHBRN);LS(SOLD,2,CSTLN)","2","S","DISPLAYBASE","12410"
"PONTON","","AC(CHBRN);LS(SOLD,2,CSTLN)","2","S","DISPLAYBASE","12410"
```

Question: What is correct value for the display priorities for these objects?

GEOMOD: if you look at the array of display priorities and possible conflicts (supplies in the document "TSMAD22_DIPWG3-08.5C_Display_Priorities.pdf"), the hulkes, ponton, and flodoc portrayal rules could be transfer to one or two display priority level without generate new conflicts. The priority one is more consistent with priority affected to the others skin of the earth objects.

3. Text group

In Look-up tables listings for the objects with point geometry text group for CURENT (CURVEL attribute) object is set to {31}.

```
"CURENT","","SY(CURDEF01)","5","O","OTHER","33060"
"CURENT","ORIENTCURVEL","SY(CURENT01,ORIENT);TE('%4.1lf kn','CURVEL',3,1,2,'15110',1,-1,CHBLK, 31)","5","O","OTHER","33060"
```

According to the table in clause 14.4 (Text Groupings) of PL 4.0.0 text group 31 should be used for National Language Text. Text group for CURVEL attribute is absent in this table at all.

Question: What is the correct value for the text group for CURVEL attribute?

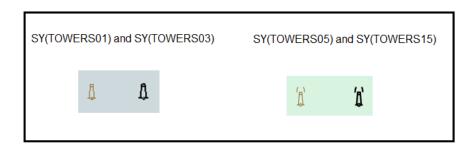
GEOMOD: The same problem exists on TS_FEB text portrayal instructions.

Proposal

- 1. Add Text Group 30 « CURRENT/TIDAL INFORMATION»
- 2. fix TS_FEB and CURRENT portrayal rules by changing text group 31 to 31.
- 4. Wrong symbols for LNDMRK (DS AA5C1CDE Natural and man-made features (C, D, E))

4.1. Wrong screen dump

On the screen dump for DS AA5C1CDE (Natural and man-made features (C, D, E)) for LNDMRK object instance (tower, radio) symbols SY(TOWERS01) (not visually conspicuous) and SY(TOWERS03) (visually conspicuous) are presented



According to Look-up tables (for simplified and paper chart point presentation) in this case symbols SY(TOWERS05) (not visually conspicuous) and SY(TOWERS15) should be shown.

"LNDMRK","CATLMK17FUNCTN31","SY(TOWERS05);TX(OBJNAM,3,2,2,'15110',1,1,CHBLK,26)","4","O","OTHER","32220" "LNDMRK","CATLMK17FUNCTN31CONVIS1","SY(TOWERS15);TX(OBJNAM,3,2,2,'15110',1,1,CHBLK,26)","6","O","STANDARD","22220"

Remark: Correspondent screen dump should be corrected

4.2. Sorting of object instance entries in Look-Up tables for LNDMRK object (for paper chart and simplified point symbolization)

According to the table (Changes and Clarifications) in PL 4.0.0 typo style errors for some objects have been fixed.

		Clarification
Annex A App B, C, D, E, F	Found typo style errors have been fixed for CURENT, FERYRT, LNDMRK, RCRTCL, VEGATN.	As part of the expert review process the existing printed version of the LUT has been fixed for typo style errors.

In particular, additional entries for LNDMRK were added and entries for the object instances were re-sorted. Formally such order of the entries for LNDMRK does not contradict the description done in clause 10.3.3.1 of PL 4.0.0 (Look-Up Table Entry Matching). But:

- Nevertheless in this clause there is the example for matching entries of 'List' type attributes
- Such sorting could not be met nowhere for the other objects in Look-up tables
- In our opinion such sorting of the object entry instead of the customary (used for many years in S-52 LUTs) style creates only useless headache (gathering of all used attributes with further their processing) and leads to the possible mistakes in presentation.

Such sorting of entries for LNDMRK object is used also in PresLib_e4.0.0.dai file.

Remark: In our opinion entries for LNDMRK object (both for paper chart and simplified point presentation) should be re-sorted as following:

```
"LNDMRK","","SY(POSGEN01)","4","O","OTHER","32220"

"LNDMRK","CATLMK1CONVIS1","SY(CAIRNS11)","6","O","STANDARD","22220"

"LNDMRK","CATLMK3CONVIS1","SY(CHIMNY11)","6","O","STANDARD","22220"

"LNDMRK","CATLMK4CONVIS1","SY(DSHAER11)","6","O","STANDARD","22220"

"LNDMRK","CATLMK5CONVIS1","SY(FLGSTF01)","6","O","STANDARD","22220"

"LNDMRK","CATLMK6CONVIS1","SY(FLASTK11)","6","O","STANDARD","22220"

"LNDMRK","CATLMK7CONVIS1","SY(MSTCON14)","6","O","STANDARD","22220"

"LNDMRK","CATLMK8CONVIS1","SY(POSGEN03)","6","O","STANDARD","22220"
```

```
"LNDMRK","CATLMK9CONVIS1","SY(MONUMT12)","6","0","STANDARD","22220"
"LNDMRK", "CATLMK10CONVIS1", "SY(MONUMT12)", "6", "0", "STANDARD", "22220"
"LNDMRK","CATLMK12CONVIS1","SY(MONUMT12)","6","O","STANDARD","22220"
"LNDMRK", "CATLMK13CONVIS1", "SY(MONUMT12)", "6", "0", "STANDARD", "22220"
"LNDMRK","CATLMK15FUNCTN20CONVIS1","SY(BUIREL13)","6","O","STANDARD","22220"
"LNDMRK","CATLMK15FUNCTN21CONVIS1","SY(BUIREL13)","6","O","STANDARD","22220"
"LNDMRK", "CATLMK15CONVIS1", "SY(DOMESO11)", "6", "0", "STANDARD", "22220"
"LNDMRK","CATLMK16CONVIS1","SY(RASCAN11)","6","O","STANDARD","22220"
"LNDMRK","CATLMK17FUNCTN20CONVIS1","SY(BUIREL13)","6","O","STANDARD","22220"
"LNDMRK","CATLMK17FUNCTN21CONVIS1","SY(BUIREL13)","6","O","STANDARD","22220"
"LNDMRK","CATLMK17FUNCTN31CONVIS1","SY(TOWERS15);TX(OBJNAM,3,2,2,'15110',1,1,CHBLK,26)","6","0","STANDARD","22220"
"LNDMRK","CATLMK17FUNCTN33CONVIS1","SY(TOWERS03);TX(OBJNAM,3,2,2,'15110',1,-1,CHBLK,26)","6","0","STANDARD","22220"
"LNDMRK","CATLMK17CONVIS1","SY(TOWERS03)","6","0","STANDARD","22220"
"LNDMRK", "CATLMK18CONVIS1", "SY(WNDMIL12)", "6", "0", "STANDARD", "22220"
"LNDMRK", "CATLMK19CONVIS1", "SY(WIMCON11)", "6", "0", "STANDARD", "22220"
"LNDMRK","CATLMK20FUNCTN20CONVIS1","SY(BUIREL13)","6","O","STANDARD","22220"
"LNDMRK","CATLMK20FUNCTN21CONVIS1","SY(BUIREL13)","6","O","STANDARD","22220"
"LNDMRK", "CATLMK20FUNCTN26CONVIS1", "SY(BUIREL15)", "6", "0", "STANDARD", "22220"
"LNDMRK","CATLMK20FUNCTN27CONVIS1","SY(BUIREL15)","6","O","STANDARD","22220"
"LNDMRK","CATLMK20CONVIS1","SY(POSGEN03)","6","O","STANDARD","22220"
"LNDMRK","CONVIS1","SY(POSGEN03)","6","O","STANDARD","22220"
"LNDMRK","CATLMK1","SY(CAIRNS01)","4","O","OTHER","32220"
"LNDMRK","CATLMK3","SY(CHIMNY01)","4","O","OTHER","32220"
"LNDMRK","CATLMK4","SY(DSHAER01)","4","O","OTHER","32220"
"LNDMRK","CATLMK5","SY(FLGSTF01)","4","O","OTHER","32220"
"LNDMRK", "CATLMK6", "SY(FLASTK01)", "4", "O", "OTHER", "32220"
"LNDMRK","CATLMK7","SY(MSTCON04)","4","O","OTHER","32220"
"LNDMRK", "CATLMK8", "SY(POSGEN03)", "4", "O", "OTHER", "32220"
"LNDMRK","CATLMK9","SY(MONUMT02)","4","O","OTHER","32220"
"LNDMRK","CATLMK10","SY(MONUMT02)","4","O","OTHER","32220"
"LNDMRK","CATLMK12","SY(MONUMT02)","4","O","OTHER","32220"
"LNDMRK","CATLMK13","SY(MONUMT02)","4","O","OTHER","32220"
"LNDMRK", "CATLMK15FUNCTN20", "SY(BUIREL01)", "4", "0", "OTHER", "32220"
```

```
"LNDMRK","CATLMK15","SY(DOMES001)","4","O","OTHER","32220"

"LNDMRK","CATLMK16","SY(RASCAN01)","4","O","OTHER","32220"

"LNDMRK","CATLMK17FUNCTN20","SY(BUIREL01)","4","O","OTHER","32220"

"LNDMRK","CATLMK17FUNCTN31","SY(TOWERS05);TX(OBJNAM,3,2,2,'15110',1,1,CHBLK,26)","4","O","OTHER","32220"

"LNDMRK","CATLMK17FUNCTN33","SY(TOWERS01);TX(OBJNAM,3,2,2,'15110',1,-1,CHBLK,26)","4","O","OTHER","32220"

"LNDMRK","CATLMK17","SY(TOWERS01)","4","O","OTHER","32220"

"LNDMRK","CATLMK18","SY(WNDMIL02)","4","O","OTHER","32220"

"LNDMRK","CATLMK19","SY(WIMCON01)","4","O","OTHER","32220"

"LNDMRK","CATLMK20","SY(POSGEN01)","4","O","OTHER","32220"

"LNDMRK","CATLMK20FUNCTN20","SY(BUIREL01)","4","O","OTHER","32220"
```

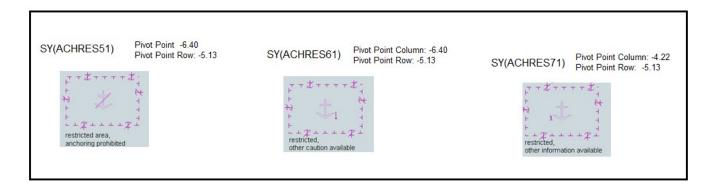
GEOMOD: we support this proposal except the two last rules that must be inverted.

5. Pivot point of center symbols

5.1 Symbols are presented not at the defined pivot point

On several screen dumps symbols are presented with wrong pivot point. Most of them are on the screen dump for DS AA5C1N00 (Special Areas (N))

On the picture below symbols are presented at the center of correspondent area, but according to the S-52 ENC Symbol Catalogue EDITION 4.0.0 (2014) these symbols should be shifted from the center (pivot point is not at the center of the symbol)



GEOMOD: The remark is correct but to due of the scale of the plots, The risk is that the centred symbol lies outside the area and in turn not to be drawn.

On the picture below symbols are presented with the shift from the center of correspondent area, but according to the S-52 ENC Symbol Catalogue EDITION 4.0.0 (2014) these symbols should be presented at the center of area (pivot point is in the center of symbol)



Remark: Screen dump for DS AA5C1N00 (Special Areas (N)) should be fixed

5.2 Presentation of center symbols. General remarks

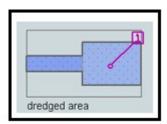
In PL 4.0.0 (see clause 8.5.1 *Positioning centred symbols and text*) many important for navigation center symbols should be presented with shift relatively to the center of their Bounding Box. It looks well if the geometry of the object is regular rectangle. But, unfortunately, such regular shapes can be met on real chart very seldom. In case of concave polygon (e.g. L-shape) in most cases the position of center symbol will be calculated correctly but then shifted outside of the object (see clause 8.5.1.1 *Centred symbol*). Center symbol will not be presented. And what is more in case of ship-centred display (see clause 8.5.2 Centred symbols on a ship-centred display) such offset should be ignored. Algorithm for calculating of the position of center symbol becomes more complex and shifted coordinates of pivot points will be useless.

Suggestion: In our opinion it will be useful to add to the clause 8.5.1 (*Positioning centred symbols and text*) the following remark:

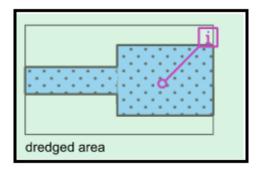
REMARK: Manufacturers can use own algorithms for calculating the position of centre symbols which don't use predefined shifts of pivot points. Centre symbol should not be shown outside the limits of the boundaries of the symbolized object

6. Unintelligible colours for DRGARE objects. DS AA5C1HIO (Depths, currents, etc. (H. I))

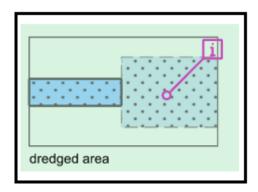
On the correspondent screenshot in PL 4.0.0 two colours (apparently DEPVS and DEPMS) are used for colour fill of DRGARE objects. Besides, DRGARE objects are emphasized with Safety contour



With default settings DRGAREs objects should be coloured only with DEPDW colour (according to CS SEABED01)



It is possible to get two colours for DRGARE objects (to set Safety contour to 5.0m). But in this case Safety contour will be drawn only around DRGARE with DRVAL1 equal to {4m}



Question: What settings should be used for this presentation? Is it correct screen dump?

7. Miscellaneous

Suggestion: In our opinion it will be very useful to add before each Screen dump for ECDIS CHART 1 Datasets the values of settings to be used, namely:

- Value of shallow contour
- Value of safety contour
- Value of deep contour
- Value of safety depth
- IMO display category
- Used Look-up table: Paper chart symbols, simplified symbols, symbolized boundaries, plain boundaries
- Shallow water dangers ON/OFF