

Paper for consideration by IHO DIPWG4 meeting, Monaco May 2012

Clarifications and changes for IHO ECDIS Chart 1

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<i>Executive Summary:</i>	<p>Background of this paper is the ECDIS anomalies process as whole.</p> <p>This paper proposes clarifications (or changes) to make it absolutely clear how the ECDIS Chart 1 should look like.</p> <p>Expected result of this paper is that</p> <ul style="list-style-type: none">• IHO will publish new edition 3.5 of ECDIS presentation library part of S-52. The new edition contains both printed part and digital files
<i>Related Documents:</i>	<p>S-52, ECDIS presentation library ed. 3.4, dated Jan 2008 (printed document)</p> <p>S-52, ECDIS presentation library ed. 3.4, dated Jan 2008 (CDROM containing digital files)</p>
<i>Related Projects:</i>	New request for clarification of the rules

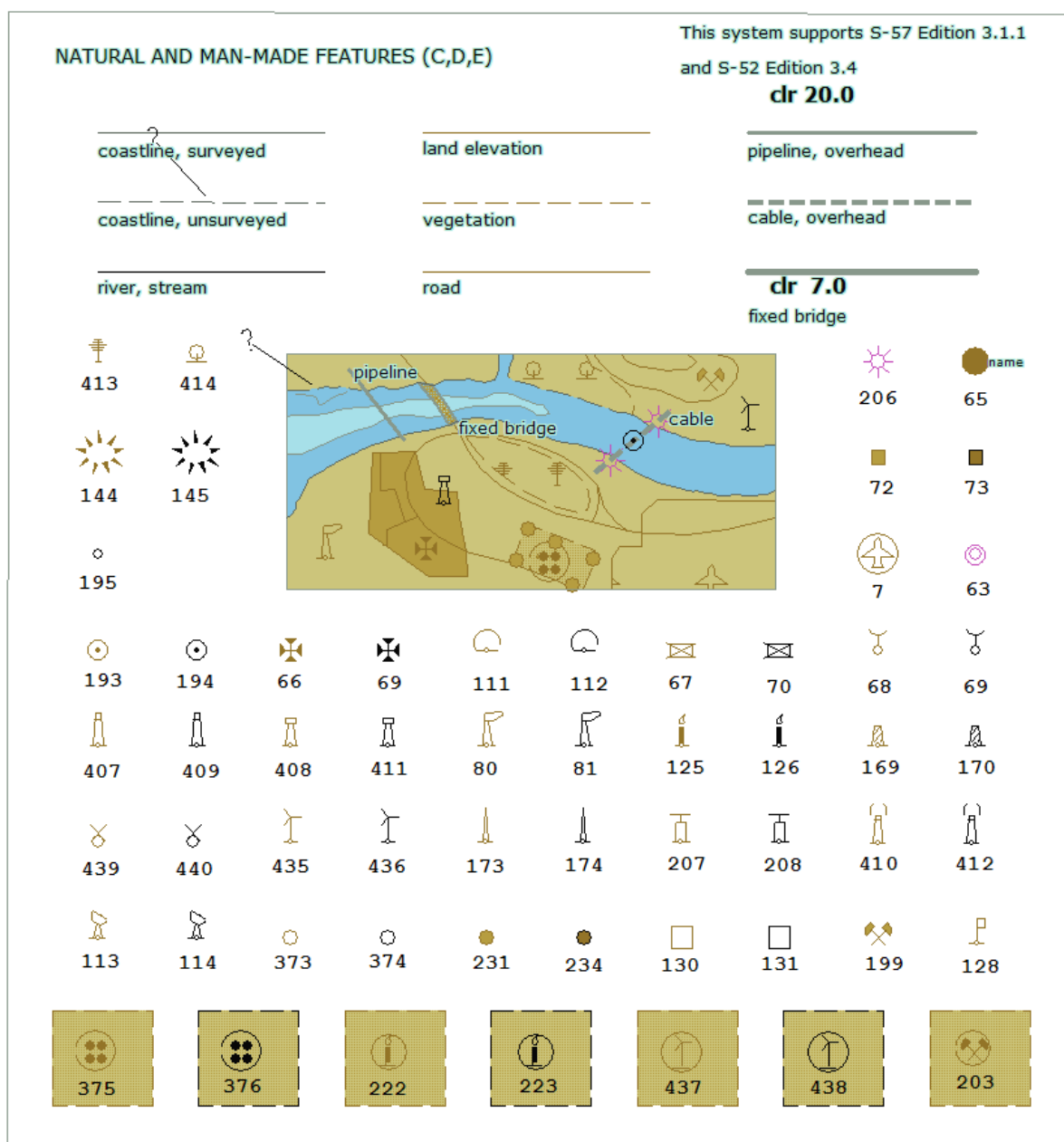
1 Introduction

We have found in internal test discrepancies between chart content of the IHO ECDIS chart 1 printed version (as available in the S-52, ECDIS presentation library ed. 3.4, dated Jan 2008) and digital version (as available in the folder “\Digital_Files\ECDIS_Chart1_and_Colour_Test_Diagram”).

This document highlights the found discrepancies, requests clarification and changes for the referenced documents.


2 Details of the discrepancies and proposed changes


2.1 Natural and man made features – C, D, E



Picture from page I-235 of the current S-52 document

Symbols 410 and 412 in above picture do not represent what is coded in the chart cell AA5C1CDE.000.

Object in printed document	Object in chart cell AA5C1CDE.000	Attributes in chart cell AA5C1CDE.000	What is in the lookup table	Presentation based on the look up table
410	LNDMRK	CATLMK = tower (17) FUNCTN = radio (31) CONVIS = not visually conspicuous (2) SCAMIN = 180000	"LNDMRK", "CATLMK17", "SY(TOWERS01)", "4", "O", "OTHER", "32220"	TOWERS01 

412	LNDMRK	CATLMK = tower (17) FUNCTN = radio (31) CONVIS = visually conspicuous (1) SCAMIN = 180000	"LNDMRK", "CATLMK17CONVIS1", "SY(TOWERS03)", "6", "O", "STANDARD", "22220"	TOWERS03 
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2.1.1 Analysis of the lookup table

As reference below is a copy of all lookup table instructions for LNDMRK, CATLMK = Tower (17)

```
"LNDMRK","CATLMK17FUNCTN33CONVIS1","SY(TOWERS03);TX(OBJNAM,3,2,2,'15110',1,-1,CHBLK,26)","6","O","STANDARD","22220"
"LNDMRK","CATLMK17FUNCTN20CONVIS1","SY(BUIREL13)","6","O","STANDARD","22220"
"LNDMRK","CATLMK17FUNCTN21CONVIS1","SY(BUIREL13)","6","O","STANDARD","22220"
"LNDMRK","CATLMK17FUNCTN33","SY(TOWERS01);TX(OBJNAM,3,2,2,'15110',1,-1,CHBLK,26)","4","O","OTHER","32220"
"LNDMRK","CATLMK17CONVIS1","SY(TOWERS03)","6","O","STANDARD","22220"
"LNDMRK","CATLMK17","SY(TOWERS01)","4","O","OTHER","32220"
```

We can see that cases 410 and 412 fall into the default symbol for visually conspicuous (TOWER03) or the default symbol for not visually conspicuous (TOWER01).

Further we can see that there is special treatment for

- Church (FUNCTN = 20), symbol BUIREL13
- Chapel (FUNCTN = 21), symbol BUIREL13
- Light support (FUNCTN = 33), symbol is same as default, but name of the object is displayed

2.1.2 Possible fix by changing the printed document of the S-52

This is the simplest change as it only requires fix of the picture in the page I-235.

2.1.3 Possible fix by changing the lookup tables of the S-52

Towers with radio transmission wave symbols are available in the symbol library with following names:

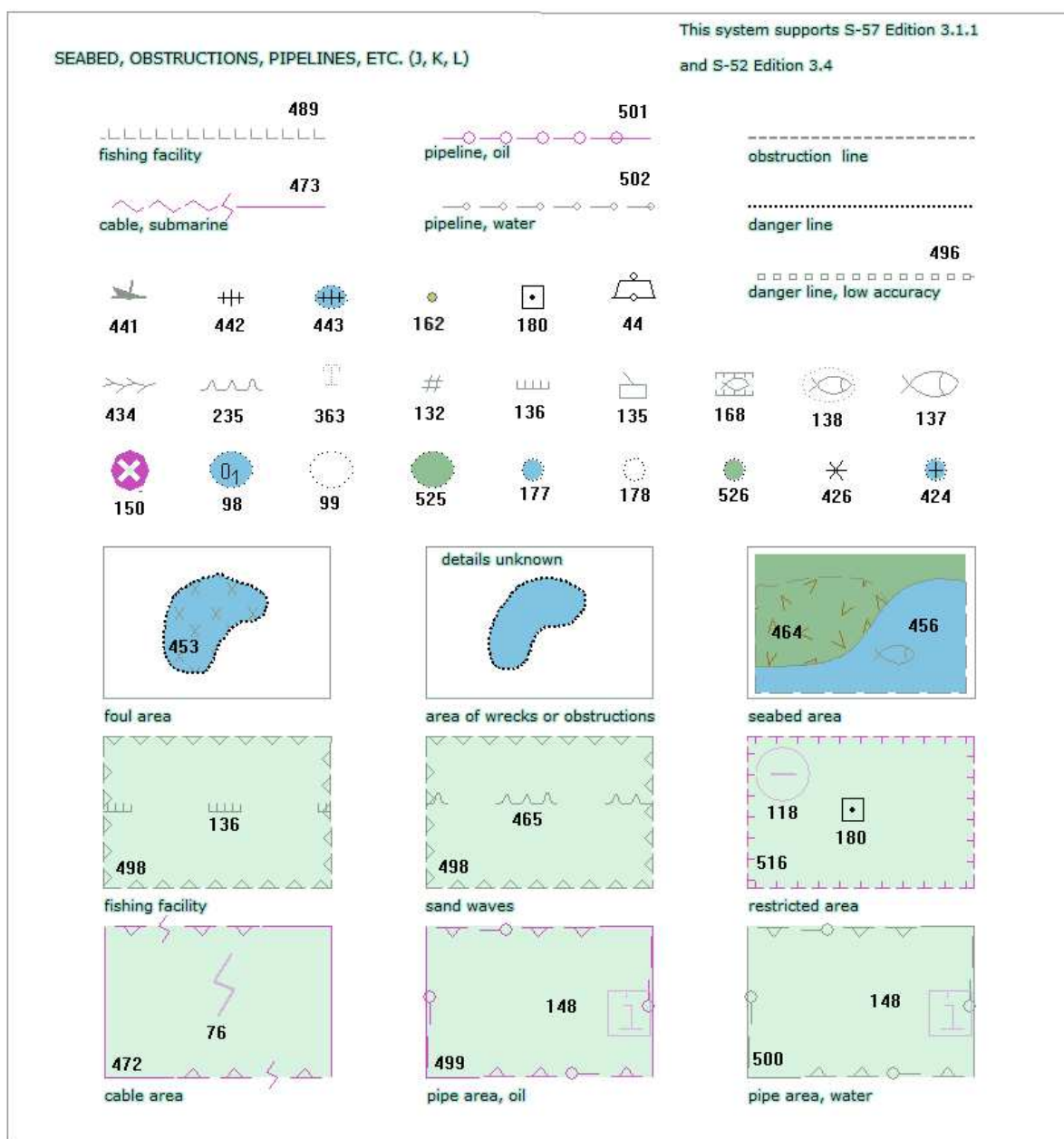
TOWERS05 TOWERS15



Following two rows to be added in the lookup table would instruct the ECDIS to draft towers with radio waves.

```
"LNDMRK","CATLMK17FUNCTN31CONVIS1","SY(TOWERS15);","6","O","STANDARD","22220"
"LNDMRK","CATLMK17FUNCTN31","SY(TOWERS05);","4","O","OTHER","32220"
```



2.2 Seabed, obstructions, pipelines, etc. – J, K, L



Picture from page I-238 of the current S-52 document

Symbols 138 and 516 in above picture do not represent what is coded in the chart cell AA5C1JKL.000.

Object in printed document	Object in chart cell AA5C1JKL.000	Attributes in chart cell AA5C1JKL.000	What is in the lookup table	Presentation based on the look up table
516	RESARE	CATREA = offshore safety zone (1) RESTRN = entry restricted (8) SCAMIN = 350000	"RESARE", " " CS(RESARE03) ", "5", "S", "STANDARD", "26010"	The conditional symbology procedure RESARE03 return C.TNARE51

138	OBSTRN	CATOBS = fish haven (5) VALSOU = no value QUASOU = depth known (1) WATLEV = always under water / submerged (3)	"OBSTRN", "" "CS(OBSTRN06)", "4", "O", "OTHER", "34050"	Depending of the value of the safety contour the conditional symbology procedure OBSTRN06 return either OBSTRN01  Or ISODGR01 
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2.2.1 Analysis of the lookup table for case 516

Conditional symbology RESARE03 select different central symbols based on value of the CATREA and RESTRN. However the default line type is LC(CTNARE51) instead of LC(ENTRES51). No attribute combination today request use of LC(ENTRES51).

2.2.2 Possible fix by changing the printed document of the S-52 for case 516

This is the simplest change as it only requires fix of the picture in the page I-238.

2.2.3 Analysis of the lookup table for case 138

Currently this object is coded as OBSTRN in the chart cell AA5C1JKL.000. The conditional symbology procedure OBSTRN06 has no method to draw any fish symbols. The fish symbol is available in the lookup table for object FSHFAC as below:

```
"FSHFAC", "", "SY(FSHHAV01)", "4", "O", "OTHER", "34040"
```

2.2.4 Possible fix by changing the content of the chart cell AA5C1JKL.000 for case 138

This is the simplest change as it only requires that the object is coded as FSHFAC instead of OBSTRN.