Edition 2.0
1.6.2006

Standard

Electronic Chart Display and Information System
for Inland Navigation

Inland ECDIS

Presentation Library for Inland ECDIS

In addition to the
IHO-S-52 Presentation Library

Contents

1 Lookup Tables

The Lookup Tables for areas, lines and points are published as separate documents at http://ienc.openecdis.org.

2 Conditional Symbology Procedures

2.1 Top marks

The CS (TOPMAR01) of S-52 has to be modified because in this CS it is checked on which structure the top mark is fixed. Since the ENC feature BOYLAT was copied, in the CS the feature boylat has to be added to the list of floating structures. If the top mark is located on a boylat the symbols TOPMA1* have to be drawn according the top shape and colour.

2.2 Daymarks

A new CS DAYMAR01 has to be introduced. This CS is similar to the CS TOPMAR01 (see clause 2.1) with the exception that there is no need for the distinction of floating and fixed structures, because daymarks exists only for beacons, i.e. fixed structures.

2.3 Restricted areas

Since the ENC feature RESARE and the attribute RESTRN were copied the CS (RESARE03) of S-52 has to be modified because in this CS the values of the attribute RESTRN are checked. That means that in the case that RESTRN is not given it has to be checked for the copied attribute restrn instead.

2.4 Lights

The CS for LIGHTS (LIGHTS05) of S-52 is affected because in this CS there is a check whether a light is located on a floating object or on a fixed object. The list of floating platforms must be extended by the new feature "boylat". To avoid a copy of this CS which would lead to a copy of the official feature LIGHTS, the Inland ECDIS manufacturers have to extend the official CS for LIGHTS as described above.

2.5 Bridges

A new CS for bridges has to be introduced to be able to indicate for bridge arches
1. the maximum vertical clearance depending on the given beam
2. the available space depending on the given beam and air draft
The condition for this is the encoding of a bridge arch as it is described in the Encoding Guide.
The Inland ECDIS manufacturers have to calculate the vertical clearance of aggregated bridge objects according to the given beam of the ship.
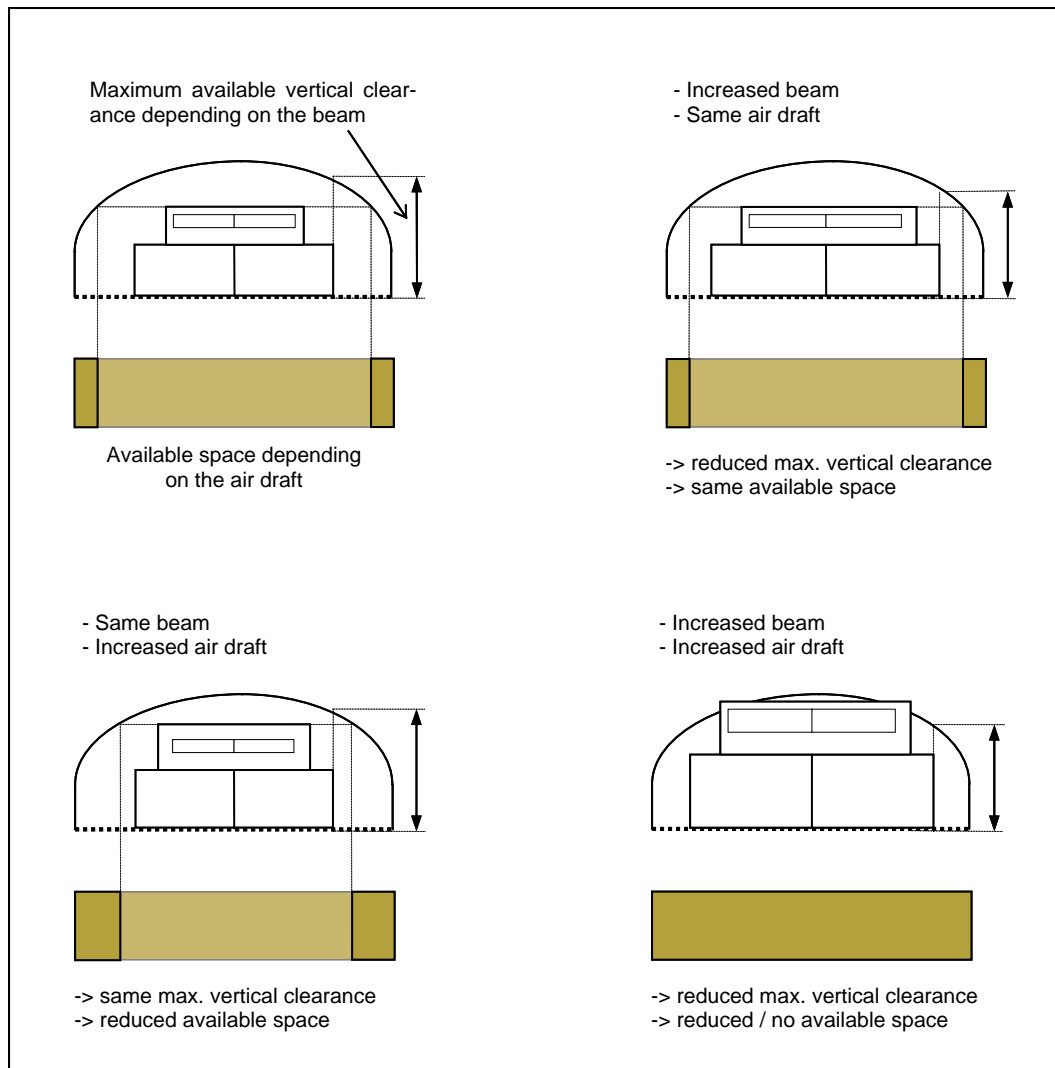
If the vertical clearance of a single bridge object of the aggregation is less than the calculated vertical clearance, this single bridge object must be symbolized by the symbol instruction `AC(CHBRN,3);TX('clr %.1f',1,2,3,'14108',1,1,CHBLK,11)`"

If the vertical clearance of a single bridge object of the aggregation is larger or equal than the calculated vertical clearance, this single bridge object must be symbolized by the symbol instruction `AC(CHBRN,2)`" without the indication of the non sufficient vertical clearance.

The boundaries of the bridge sequences which are not safe for navigation must be symbolized with the symbol instruction `LS(SOLD,2,DEPSC)`.

The boundaries of the bridge sequences which are safe for navigation must be symbolized with the symbol instruction `LS(SOLD,1,CHGRD)`.

The boundaries of the single bridge objects inside a bridge sequence, either safe or not safe for navigation, may not be symbolized.

3 Symbols for Inland ECDIS

Symbols can be defined in vector format or in raster format. Symbols which will be rotated must be defined in vector format. The size of vector symbols is adapted automatically to the resolution and size of the screen. In case of raster symbols, different symbol sets must be designed to meet the requirements of a readable display.

A list of all Inland ECDIS symbols and their pictures you find in chapter 4 and 5.

The symbols are supplied in digital form at http://ienc.openecdis.org.

4 List of symbol names

4.1 New symbols to be shown on the chart display

4.1.1 Raster symbols

a. Symbols in general

border01:	check point, border
bunsta01:	bunker station, diesel oil station
bunsta02:	bunker station, water
bunsta03:	bunker station, ballast
custom01:	control point, custom
dismar05:	distance mark 100m on river axis
dismar06:	distance mark 1km on river axis
hecmtr01:	hectometre point, 100m
hecmtr02:	hectometre point, 1km
hgwtmk01:	high water mark
notmrk01:	notice mark, prohibition
notmrk02:	notice mark, regulation, restriction
notmrk03:	notice mark, information, recommendation
radhlt01:	radar highlight (CONRAD=1)
refdmp01:	refuse dump
ssentr01:	port entry
sslock01:	signal station, lock
sswars01:	signal station, wahrschau
trnbsn01:	turning basin
vehtrf01:	vehicle transfer
vtclmk01:	vertical clearance mark at bridges
wtlvgg01:	gauge, height of water
wtlvgg02:	recording gauge, height of water

b. Navigational aids

bcnstk03:	river beacon, stake – pole
bcnlat23:	river beacon, separation - simplified
boylat25:	river buoy, fairway separation – simplified
boylat26:	river buoy, obstruction at the right side – simplified
boylat27:	river buoy, obstruction at the left side – simplified
topma100:	beacon top mark, red cone, point down
topma101:	beacon top mark, red boarded cone, point down
topma102:	beacon top mark, green cone, point up
topma103:	beacon top mark, green boarded cone, point up
topma104:	beacon top mark, red cone, point down, green cone, point up, simplified
topma105:	beacon top mark, red boarded cone, point down, green boarded cone, point up, simplified
topma106:	beacon top mark, white-red square board, vertical
topma107:	beacon top mark, red boarded square board, vertical
topma108:	beacon top mark, white-green square board, diagonal
topma109:	beacon top mark, green boarded square board, diagonal
topma110:	beacon top mark, yellow-black square board, vertical
topma111:	beacon top mark, yellow St. Georg cross
topma112:	beacon top mark, yellow-black square board, diagonal
topma113:	beacon top mark, yellow Andreas-cross
topma114:	buoy top mark, red cylinder
topma115:	buoy top mark, green cone, point up
topma116:	buoy top mark, red-white-red board, entry prohibited
topma117:	buoy top mark, red-green sphere

c. Harbour facilities and terminals

hrbfac10:	default harbour facility
hrbfac11:	harbour facility naval base
hrbfac12:	harbour facility ship yard
hrbfac13:	harbour facility harbour-master's office
hrbfac14:	harbour facility pilot
hrbfac15:	harbour facility water police
hrbfac16:	harbour facility customs office
hrbfac17:	harbour facility service and repair
hrbfac18:	harbour facility quarantine station
termnl01:	terminal, passenger terminal
termnl02:	terminal, ferry terminal
termnl03:	terminal, Container transshipment
termnl04:	terminal, Bulk transshipment
termnl05:	terminal, Oil transshipment

termnl06:   terminal, Fuel transshipment

termnl07:   terminal, Chemical transshipment

termnl08:   terminal, Liquid Goods transshipment

termnl09:   terminal, Explosive goods transshipment

termnl10:   terminal, Fish transshipment

termnl11:   terminal, Car transshipment

termnl12:   terminal, General Cargo transshipment

termnl13:   terminal, RoRo Terminal

4.1.2   Vector symbols (must be rotated, the numbers refer to CEVNI)

- nmkprh02:   no entry (A.1)

- nmkprh12:   no passing on left side (A.10)

- nmkprh13:   no passing on right side (A.10)

- nmkrcd01:   recommended channel in both directions (D.1a)

- nmkrcd02:   recommended channel only in the direction indicated (D.1b)

- nmkrcd03:   you are recommended to keep on right side (D.2)

- nmkrcd04:   you are recommended to keep on left side (D.2)

- nmkinf01:   entry permitted (E.1)

4.2   New symbols to be shown in the "information window on notice marks"

a. notice marks (the numbers refer to CEVNI)

- nmkprh03:   closed area, but small craft boats without engine permitted (A.1.a, only RheinSchPV
                and Binnenvaartpolitiereglement)

- nmkprh04:   no overtaking (A.2)

- nmkprh05:   no overtaking of convoys by convoys (A.3)

- nmkprh06:   no passing or overtaking (A.4)

- nmkprh07:   no berthing (i.e. no anchoring or making fast to the bank)(A.5)

- nmkprh08:   no anchoring or trailing of anchors, cables or chains (A.6)

- nmkprh09:   no making fast to the bank (A.7)

- nmkprh10:   no turning (A.8)

- nmkprh11:   do not create wash (A.9)

- nmkprh14:   motorized craft prohibited (A.12)

- nmkprh15:   all sports or pleasure craft prohibited (A.13)

- nmkprh16:   water skiing prohibited (A.14)

- nmkprh17:   sailing vessels prohibited (A.15)

- nmkprh18:   all craft other than motorized vessels or sailing craft prohibited (A.16)

- nmkprh19:   use of sail boards prohibited (A.17)

- nmkprh20:   water bikes prohibited (A.20)

- nmkprh21:   end of zone authorized for high speed navigation of small sport and pleasure craft (A.18)
- nmkprh22:   no launching or beaching of vessels (A.19)
- nmkreg01:   there are restrictions on navigation: make enquiries (with additional sign at bottom of main sign) (C.4)
- nmkreg02:   proceed in left direction (B.1)
- nmkreg03:   proceed in right direction (B.1)
- nmkreg04:   move to the side of the channel on your port side (B.2a)
- nmkreg05:   move to the side of the channel on your starboard side (B.2b)
- nmkreg06:   keep the side of the channel on your port side (B.3a)
- nmkreg07:   keep the side of the channel on your starboard side (B.3b)
- nmkreg08:   cross channel to port (B.4a)
- nmkreg09:   cross channel to starboard (B.4b)
- nmkreg10:   stop as prescribed in the regulations (B.5)
- nmkreg11:   give a sound signal (B.7)
- nmkreg12:   keep a particularly sharp outlook (B.8)
- nmkreg13:   do not enter the main waterway until certain that this will not oblige vessels proceeding on it to change their course or speed (B.9a)
- nmkreg14:   do not cross the main waterway until certain that this will not oblige vessels proceeding on it to change their course or speed (B.9b)
- nmkreg15:   obligation to enter in a radiotelephone link on the channel as indicated on the board (B.11)
- nmkreg16:   depth of water limited(C.1)
- nmkreg17:   headroom limited (C.2)
- nmkreg18:   width of passage or channel limited (C.3)
- nmkreg19:   the channel lies at a distance from the left bank (C.5)
- nmkreg20:   the channel lies at a distance from the right bank (C.5)
- nmkrcd05:   you are recommended to proceed in the left direction (D.3)
- nmkrcd06:   you are recommended to proceed in the right direction (D.3)
- nmkinf02:   overhead cable crossing (E.2)
- nmkinf03:   weir (E.3)
- nmkinf04:   ferry-boat not moving independently (E.4)
- nmkinf05:   ferry-boat moving independently (E.4b)
- nmkinf06:   berthing (i.e. anchoring or making fast to the bank) permitted (E.5)
- nmkinf07:   berthing area reserved for pushing navigation vessels that are not required to carry blue lights or blue cones (E.5.4)
- nmkinf08:   berthing area reserved for pushing navigation vessels that are required to carry one blue light or one blue cone (E.5.5)
- nmkinf09:   berthing area reserved for pushing navigation vessels that are required to carry two blue lights or two blue cones (E.5.6)

- nmkinf10:   berthing area reserved for pushing navigation vessels that are required to carry three blue lights or three blue cones (E.5.7)
- nmkinf11:   berthing area reserved for vessels other than pushing navigation vessels that are not required to carry blue lights or blue cones (E.5.8)
- nmkinf12:   berthing area reserved for vessels other than pushing navigation vessels that are required to carry one blue light or one blue cone (E.5.9)
- nmkinf13:   berthing area reserved for vessels other than pushing navigation vessels that are required to carry two blue lights or two blue cones (E.5.10)
- nmkinf14:   berthing area reserved for vessels other than pushing navigation vessels that are required to carry three blue lights or three blue cones (E.5.11)
- nmkinf15:   berthing area reserved for all vessels that are not required to carry blue lights or blue cones (E.5.12)
- nmkinf16:   berthing area reserved for all vessels that are required to carry one blue light or one blue cone (E.5.13)
- nmkinf17:   berthing area reserved for all vessels that are required to carry two blue lights or two blue cones (E.5.14)
- nmkinf18:   berthing area reserved for all vessels that are required to carry three blue lights or three blue cones (E.5.15)
- nmkinf19:   anchoring or trailing of anchors, cables or chains permitted (E.6)
- nmkinf20:   making fast to the bank permitted (E.7)
- nmkinf21:   berthing area reserved for loading and unloading vehicles (E.7.1)
- nmkinf22:   turning area (E.8)
- nmkinf23:   crossing with secondary waterway ahead (E.9a)
- nmkinf24:   secondary waterway ahead on the right (E.9.b)
- nmkinf25:   secondary waterway ahead on the left (E.9.c)
- nmkinf26:   secondary waterway ahead (main waterway right)
- nmkinf27:   secondary waterway ahead (main waterway left)
- nmkinf28:   secondary waterway left (main waterway right)
- nmkinf29:   secondary waterway right (main waterway left)
- nmkinf30:   secondary waterway ahead and left (main waterway right)
- nmkinf31:   secondary waterway ahead and right (main waterway left)
- nmkinf32:   crossing with main waterway ahead (E.10.a)
- nmkinf33:   junction with main waterway ahead (E.10.b)
- nmkinf34:   junction with main waterway ahead and right
- nmkinf35:   junction with main waterway ahead and left
- nmkinf36:   junction with main waterway ahead and right (secondary waterway left)
- nmkinf37:   junction with main waterway ahead and left (secondary waterway right)
- nmkinf38:   end of prohibition or obligation applying to traffic in one direction only, or end of restriction (E.11)
- nmkinf39:   drinking water supply(E.13)

- nmkinf40:   telephone (E.14)
- nmkinf41:   motorized vessels permitted (E.15)
- nmkinf42:   sport and pleasure craft permitted (E.16)
- nmkinf43:   water skiing permitted (E.17)
- nmkinf44:   sailing vessels permitted (E.18)
- nmkinf45:   craft other than motorized vessels or sailing craft permitted (E.19)
- nmkinf46:   use of sailboards permitted (E.20)
- nmkinf47:   possibility of obtaining nautical information by radio-telephone on the channel indi-
                cated (E.23)
- nmkinf48:   water bikes permitted(E.24)
- nmkinf49:   zone authorized for high speed navigation of small sport and pleasure craft (E.21)
- nmkinf50:   launching or beaching of vessels permitted (E.22)
- nmkinf51-55: maximum number of vessels permitted to berth abreast (E.5.3)

b. Auxiliary panels (CEVNI Annex 7, Section II)

- addmrk01:   right (triangle to the right)
- addmrk02:   left (triangle to the left)
- addmrk03:   bottom (rectangle, portrait main board)
- addmrk04:   top (rectangle, portrait main board)
- addmrk05:   bottom (rectangle)
- addmrk06:   top (rectangle)
- addmrk07:   right (triangle to the right, landscape main board)
- addmrk08:   left (triangle to the left, landscape main board)
- addmrk09:   bottom (triangle to the bottom)
- addmrk10:   bottom (triangle to the bottom, portrait main board)

5 Pictures of Inland ECDIS symbols

5.1 Raster symbols

5.1.1 Symbols in general

BORDER01	BUNSTA01	BUNSTA02
BUNSTA03	CUSTOM01	DISMAR05
DISMAR06	HECMTR01	HECMTR02
HGWTMK01	NOTMRK01	NOTMRK02
NOTMRK03	RADHLT01	REFDMP01
SSENTR01	SSLOCK01	SSWARS01
TRNBSN01	VEHTRF01	VTCLMK01
WTLVGG01	WTLVGG02	

5.1.2 Navigational aids

BCNSTK03	BCNLAT23	BOYLAT25
BOYLAT26	BOYLAT27	TOPMA100
TOPMA101	TOPMA102	TOPMA103
TOPMA104	TOPMA105	TOPMA106
TOPMA107	TOPMA108	TOPMA109
TOPMA110	TOPMA111	TOPMA112
TOPMA113	TOPMA114	TOPMA115
TOPMA116	TOPMA117	

5.1.3 Harbour facilities, terminals

HRBFAC10	HRBFAC11
HRBFAC12	HRBFAC13
HRBFAC14	HRBFAC15
HRBFAC16	HRBFAC17
HRBFAC18	TERMNL01
TERMNL02	TERMNL03
TERMNL04	TERMNL05
TERMNL06	TERMNL07
TERMNL08	TERMNL09
TERMNL10	TERMNL11
TERMNL12	TERMNL13

5.2 Symbols for the "information window on notice marks"

NMKPRH03	NMKPRH04	NMKPRH05
NMKPRH06	NMKPRH07	NMKPRH08
NMKPRH09	NMKPRH10	NMKPRH11
NMKPRH14	NMKPRH15	NMKPRH16
NMKPRH17	NMKPRH18	NMKPRH19
NMKPRH20	NMKPRH21	NMKPRH22

NMKREG01	NMKREG02	NMKREG03
NMKREG04	NMKREG05	NMKREG06
NMKREG07	NMKREG08	NMKREG09
NMKREG10	NMKREG11	NMKREG12
NMKREG13	NMKREG14	NMKREG15
NMKREG16	NMKREG17	NMKREG18
NMKREG19	NMKREG20	

NMKRCD05	NMKRCD06	NMKINF02	NMKINF03	NMKINF04	NMKINF05
NMKINF06	NMKINF07	NMKINF08	NMKINF09	NMKINF10	NMKINF11
NMKINF12	NMKINF13	NMKINF14	NMKINF15	NMKINF16	NMKINF17
NMKINF18	NMKINF19	NMKINF20	NMKINF21	NMKINF22	NMKINF38
NMKINF39	NMKINF40	NMKINF41	NMKINF42	NMKINF43	NMKINF44
NMKINF45	NMKINF46	NMKINF47	NMKINF48	NMKINF49	NMKINF50
NMKINF51	NMKINF52	NMKINF53	NMKINF54	NMKINF55	

NMKINF23	NMKINF24
NMKINF25	NMKINF26
NMKINF27	NMKINF28
NMKINF29	NMKINF30
NMKINF31	NMKINF32
NMKINF33	NMKINF34
NMKINF35	NMKINF36
NMKINF37	

ADDMRK01	ADDMRK02
ADDMRK03	ADDMRK04
ADDMRK05	ADDMRK06
ADDMRK07	ADDMRK08
ADDMRK09	ADDMRK10

5.3 Vector symbols

NMKINF01

NMKPRH02

NMKPRH12

NMKPRH13

NMKRCD01

NMKRCD02

NMKRCD03

NMKRCD04