ANNEX 1
PRODUCT SPECIFICATION FOR INLAND ENCS

APPENDIX 1
IENC FEATURE CATALOGUE
EDITION 2.4 (CORR.2)
2015-10-30

Introduction

The IENC Feature Catalogue is based on features, attributes and enumerations of following Data Dictionaries

Data Dictionary Name	Token	Owner	Place of Publishment
HYDRO Data Dictionary	HYDRO	IHO	http://registry.iho.int
IENC Data Dictionary	IENC	IEHG	http://registry.iho.int

Used Abbreviations

Feature Types

G	Geo
M	Meta
C	Cartographic
O	Collection
I	Information

Feature Primitives

P	Point
L	Line
A	Area
N	None

Use of Feature Attribute Bindings

O	Optional
M	Mandatory
C	Conditional mandatory

Type of Attribute Use

F	Feature
N	National
S	Spatial
C	Cartographic

Type of Attribute Value

E	Enumeration
L	List
F	Float
I	Integer
T	Text
S	Structured text

Feature	Administration Area (Named)

Acronym: ADMARE   Code: 1

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A defined (and possibly named) administration area.

Attribute Bindings:

acronym	usage	constraints
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
JRSDTN	M	value list = "1,2,3"
NATION	M	format = "cc"
CONDTN	C	value list = "3"
OBJNAM	M	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Aggregation

Acronym: C_AGGR   Code: 400

Type: O

Primitive: N

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: Used to identify an aggregation of two or more objects. This aggregation may be named.

Attribute Bindings:

acronym	usage	constraints
NOBJNM	O	
unlocd	C	
OBJNAM	M	
INFORM	O	
NINFOM	O	
NTXTDS	O	
PICREP	O	
SCAMIN	O	min = "1"
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

Feature	Airport/airfield

Acronym: AIRARE   Code: 2

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: An area containing at least one runway, used for landing, take-off, and movement of aircraft.

Attribute Bindings:

acronym	usage	constraints
CATAIR	O	value list = "1,2,4,6"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
CONDTN	C	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Association

Acronym: C_ASSO   Code: 401

Type: O

Primitive: N

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: Used to identify an association between two or more objects. The association may be named.

Attribute Bindings:

acronym	usage	constraints
NOBJNM	O	
OBJNAM	O	
INFORM	O	
NINFOM	O	
NTXTDS	O	
PICREP	O	
SCAMIN	M	min = "1"
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

Feature	Beacon, isolated danger

Acronym: BCNISD   Code: 6

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A beacon, is a prominent specially constructed object forming a conspicuous mark as a fixed aid to navigation or for use in hydrographic survey (IHO Dictionary, S-32, 5th Edition, 420). An isolated danger beacon is a beacon erected on an isolated danger of limited extent, which has navigable water all around it. (UKHO NP 735, 5th Edition)

Attribute Bindings:

acronym	usage	constraints
BCNSHP	M	value list = "1,2,3,4,5"
COLOUR	M	value list = "2,3"
COLPAT	M	value list = "1"
CONRAD	O	value list = "3"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

acronym	usage	constraints
NTXTDS	O	

Feature	Beacon, lateral

Acronym: BCNLAT   Code: 7

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A beacon, is a prominent specially constructed object forming a conspicuous mark as a fixed aid to
              navigation or for use in hydrographic survey (IHO Dictionary, S-32, 5th Edition, 420). A lateral beacon, is
              used to indicate the port or starboard hand side of the route to be followed. They are generally used for well
              defined channels and are used in conjunction with a conventional direction of buoyage. (UKHO NP 735, 5th
              Edition)

Attribute Bindings:

acronym	usage	constraints
BCNSHP	M	value list = "1"
CATLAM	M	value list = "1,2"
COLOUR	M	value list = "1,2,3,4"
COLPAT	C	value list = "1"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

acronym	usage	constraints
NTXTDS	O	

Feature	Building, single

Acronym: BUISGL   Code: 12

Type: G

Primitive: P,A

<u>Data Dictionary (DD) Reference:</u>

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A relatively permanent structure, roofed and usually walled. It is designed for some particular use which it may be important to indicate. (Digital Geographic Information Working Group, Oct.87)

<u>Attribute Bindings:</u>

acronym	usage	constraints
CONVIS	O	value list = "1,2"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
FUNCTN	C	value list = "2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42"
CONDTN	O	value list = "1,2,3,4,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Built-up area

Acronym: BUAARE   Code: 13

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: An area containing a concentration of buildings and the supporting road or rail infrastructure.

Attribute Bindings:

acronym	usage	constraints
CATBUA	O	value list = "1,2,3,4,5"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Buoy, cardinal

Acronym: BOYCAR   Code: 14

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A buoy, is a floating object moored to the bottom in a particular place, as an aid to navigation or for other specific purposes. (IHO Dictionary S-32 5th Edition, 565).A cardinal buoy, is used in conjunction with the compass to indicate where the mariner may find the best navigable water. It is placed in one of the four quadrants (North, East, South and West), bounded by inter-cardinal bearings from the point marked. (UKHO NP 735, 5th Edition)

Attribute Bindings:

acronym	usage	constraints
BOYSHP	M	value list = "1,2,3,4,5,6,8"
CATCAM	M	value list = "1,2,3,4"
COLOUR	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13"
COLPAT	C	value list = "1,2,3,4,5,6"
CONRAD	O	value list = "3"
MARSYS	C	value list = "1,2"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
NOBJNM	C	
OBJNAM	C	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"

acronym	usage	constraints
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Buoy, isolated danger

Acronym: BOYISD   Code: 16

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A buoy is a floating object moored to the bottom in a particular place, as an aid to navigation or for other
              specific purposes. (IHO Dictionary S-32 5th Edition, 565). An isolated danger buoy is a buoy moored on or
              above an isolated danger of limited extent, which has navigable water all around it. (UKHO NP 735, 5th
              Edition)

Attribute Bindings:

acronym	usage	constraints
BOYSHP	M	value list = "4,5"
COLOUR	M	value list = "2,3"
COLPAT	M	value list = "1"
CONRAD	O	value list = "3"
MARSYS	C	value list = "1,2"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
NOBJNM	C	
OBJNAM	C	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

acronym	usage	constraints
NTXTDS	O	

Feature	Buoy, lateral

Acronym: BOYLAT   Code: 17

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A buoy, is a floating object moored to the bottom in a particular place, as an aid to navigation or for other specific purposes. (IHO Dictionary, S-32, 5th Edition, 565). A lateral buoy, is used to indicate the port or starboard hand side of the route to be followed. They are generally used for well defined channels and are used in conjunction with a conventional direction of buoyage. (UKHO NP 735, 5th Edition)

Attribute Bindings:

acronym	usage	constraints
BOYSHP	M	value list = "1,2,3,4,5,6,8"
CATLAM	M	value list = "1,2,3,4"
COLOUR	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13"
COLPAT	C	value list = "1,2,3,4,5,6"
CONRAD	O	value list = "3"
MARSYS	C	value list = "1,2"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
NOBJNM	C	
OBJNAM	C	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"

acronym	usage	constraints
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Buoy, safe water

Acronym: BOYSAW   Code: 18

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A buoy, is a floating object moored to the bottom in a particular place, as an aid to navigation or for other
              specific purposes. (IHO Dictionary, S-32, 5th Edition, 565). A safe water buoy, is used to indicate that there
              is navigable water around the mark. (UKHO NP735, 5th Edition)

Attribute Bindings:

acronym	usage	constraints
BOYSHP	M	value list = "1,2,3,4,5,6,8"
COLOUR	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13"
COLPAT	M	value list = "1,2,3,4,5,6"
CONRAD	C	value list = "3"
MARSYS	C	value list = "1,2"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Buoy, special purpose/general

Acronym: BOYSPP   Code: 19

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A buoy, is a floating object moored to the bottom in a particular place, as an aid to navigation or for other specific purposes. (IHO Dictionary, S-32, 5th Edition, 565). A special purpose buoy, is primarily used to indicate an area or feature, the nature of which is apparent from reference to a chart, Sailing Directions or Notices to Mariners. (UKHO NP 735, 5th Edition). Buoy in general: A buoy, whose appearance or purpose is not adequately known.

Attribute Bindings:

acronym	usage	constraints
BOYSHP	M	value list = "1,2,3,4,5,6,8"
CATSPM	M	value list = "6,10,12,37,39,41,45,50,54,55"
COLOUR	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13"
COLPAT	C	value list = "1,2,3,4,5,6"
CONRAD	O	value list = "3"
MARSYS	C	value list = "1,2"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"

acronym	usage	constraints
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Cable area

Acronym: CBLARE   Code: 20

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: An area which contains one or more submarine cables.

Attribute Bindings:

acronym	usage	constraints
CATCBL	O	value list = "1,3,4,5,6"
STATUS	C	value list = "18"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
RESTRN	O	value list = "1,38"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Cable, submarine

Acronym: CBLSUB   Code: 22

Type: G

Primitive: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: An assembly of wires or fibres, or a wire rope or chain which has been laid underwater or buried beneath
              the seabed (Hydrographic Service, Royal Australian Navy)

Attribute Bindings:

acronym	usage	constraints
CATCBL	O	value list = "1,3,4,5,6"
STATUS	C	value list = "18"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Canal

Acronym: CANALS   Code: 23

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: An artificial waterway with no flow, or a controlled flow, used for navigation, or for draining or irrigating land (ditch). (United States Geological Survey, Jan.89)

Attribute Bindings:

acronym	usage	constraints
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Caution area

Acronym: CTNARE   Code: 27

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: Generally, an area where the mariner has to be made aware of circumstances influencing the safety of
              navigation.

Attribute Bindings:

acronym	usage	constraints
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
NOBJNM	O	
OBJNAM	O	
INFORM	M	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Coastline

Acronym: COALNE

Code: 30

Type: G

Primitive: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The line where shore and water meet. Although the terminology of coasts and shores is rather confused, shoreline and coastline are generally used as synonyms. (IHO Dictionary, S-32, 5th Edition, 858,4695)

Attribute Bindings:

acronym	usage	constraints
CATCOA	O	value list = "1,2,3,4,5,6,7,8,9,10,11"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Conveyor

Acronym: CONVYR   Code: 34

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A mechanical apparatus for moving bulk material or people from place to place (as by a moving belt or chain of receptacles).

Attribute Bindings:

acronym	usage	constraints
CATCON	M	value list = "2"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
PRODCT	O	value list = "1,2,3,4,5,6,7,8,14,15,17,21,22"
VERCLR	O	unit = "m" decimal digits = "2"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Coverage

Acronym: M_COVR   Code: 302

Type: M

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A geographical area that describes the coverage and extent of spatial objects.

Attribute Bindings:

acronym	usage	constraints
CATCOV	M	value list = "1,2"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"

Feature	Crane

Acronym: CRANES   Code: 35

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A machine for lifting, shifting and lowering objects or materials by means of a swinging boom or with a
              lifting apparatus supported on an overhead track. (Digital Geographic Information Working Group, Oct.87)

Attribute Bindings:

acronym	usage	constraints
CATCRN	O	value list = "2,3,4,5"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
VERCLR	O	unit = "m" decimal digits = "2"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Dam

Acronym: DAMCON   Code: 38

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A barrier to check or confine anything in motion; particularly one constructed to hold back water and raise its level to form a reservoir, or to prevent flooding. (IHO Dictionary, S-32, 5th Edition, 1196)

Attribute Bindings:

acronym	usage	constraints
CATDAM	M	value list = "1,2,3"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
NATCON	O	value list = "1,2,3,4,5,6,7,8,9"
CONDTN	O	value list = "1,2,3,5"
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
OBJNAM	O	
NOBJNM	O	

Feature	Daymark

Acronym: DAYMAR   Code: 39

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The identifying characteristics of an aid to navigation which serve to facilitate its recognition against a daylight viewing background. On those structures that do not by themselves present an adequate viewing area to be seen at the required distance, the aid is made more visible by affixing a daymark to the structure. A daymark so affixed has a distinctive colour and shape depending on the purpose of the aid. (IHO Dictionary, S-32, 5th Edition, 1248)

Attribute Bindings:

acronym	usage	constraints
COLOUR	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13"
COLPAT	C	value list = "1,2,3,4,5,6"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
TOPSHP	M	value list = "1-33"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Depth area

Acronym: DEPARE   Code: 42

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A depth area is a water area whose depth is within a defined range of values.

Attribute Bindings:

acronym	usage	constraints
DRVAL1	M	unit = "m" decimal digits = "2"
DRVAL2	M	unit = "m" decimal digits = "2"
INFORM	C	
NINFOM	O	
QUASOU	C	value list = "1,2,8,10,11"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

Feature	Depth contour

Acronym: DEPCNT   Code: 43

Type: G

Primitive: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A line connecting points of equal water depth which is sometimes significantly displaced outside of
               soundings, symbols and other chart detail for clarity as well as generalization. Depth contours, therefore,
               often represent an approximate location of the line of equal depth as related to the surveyed line delineated
               on the source. Also referred to as depth curve. (IHO Dictionary, S-32, 5th Edition, 1314, 1315)

Attribute Bindings:

acronym	usage	constraints
VALDCO	M	unit = "m" decimal digits = "1"
SCAMIN	M	min = "1"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
PICREP	O	
INFORM	O	
NINFOM	O	

Feature	Dredged area

Acronym: DRGARE   Code: 46

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: An area of the bottom of a body of water which has been deepened by dredging. (IHO Dictionary, S-32, 5th Edition, 1462)

Attribute Bindings:

acronym	usage	constraints
DRVAL1	O	unit = "m" decimal digits = "2"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
TXTDSC	O	
NTXTDS	O	
PICREP	O	

Feature	Dry dock

Acronym: DRYDOC

Code: 47

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: An artificial basin fitted with a gate or caisson, into which vessels can be floated and the water pumped out to expose the vessel's bottom. Also called graving dock. (IHO Dictionary, S-32, 5th Edition, 1426)

Attribute Bindings:

acronym	usage	constraints
DRVAL1	O	unit = "m" decimal digits = "2"
HORCLR	O	unit = "m" decimal digits = "2"
HORLEN	O	unit = "m" decimal digits = "2"
HORWID	O	unit = "m" decimal digits = "2"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Dumping ground

Acronym: DMPGRD   Code: 48

Type: G

Primitive: A

<u>Data Dictionary (DD) Reference:</u>

DD Name: HYDRO   Date accepted: 2010-09-08

Definition: A sea area where dredged material or other potentially more harmful material, e.g. explosives, chemical waste, is deliberately deposited. (Derived from IHO Chart Specifications, M-4).

<u>Attribute Bindings:</u>

acronym	usage	constraints
CATDPG	M	value list = "2,4,5"
RESTRN	C	value list = "1,3,5,7,8,24"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
TXTDSC	O	
NTXTDS	O	
PICREP	O	

Feature	Dyke

Acronym: DYKCON   Code: 49

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A dyke (or dike) is an artificial embankment to contain or hold back water.(IHO Dictionary, S-32, 5th Edition, 1361)

Attribute Bindings:

acronym	usage	constraints
HEIGHT	O	unit = "m" decimal digits = "2"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Fairway

Acronym: FAIRWY   Code: 51

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: That part of a river, harbour and so on, where the main navigable channel for vessels of larger size lies. It is also the usual course followed by vessels entering or leaving harbours, called 'ship channel'. (International Maritime Dictionary, 2nd Ed.)

Attribute Bindings:

acronym	usage	constraints
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Fence/wall

Acronym: FNCLNE   Code: 52

Type: G

Primitive: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A natural or man-made barrier used as an enclosure or boundary or for protection. (adapted from Digital Geographic Information Working Group, Oct.1987)

Attribute Bindings:

acronym	usage	constraints
CATFNC	M	value list = "1,4"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Ferry route

Acronym: FERYRT   Code: 53

Type: G

Primitive: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A route in a body of water where a ferry crosses from one shoreline to another. (Digital Geographic
              Information Working Group, Oct.87)

Attribute Bindings:

acronym	usage	constraints
CATFRY	M	value list = "1,2"
STATUS	C	value list = "2,3,4,8,9,12,14,16,17"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Floating dock

Acronym: FLODOC   Code: 57

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A form of dry dock consisting of a floating structure of one or more sections which can be partly submerged
              by controlled flooding to receive a vessel, then raised by pumping out the water so that the vessel's bottom
              can be exposed. (IHO Dictionary, S-32, 5th Edition, 1427)

Attribute Bindings:

acronym	usage	constraints
DRVAL1	O	unit = "m" decimal digits = "2"
HORCLR	O	unit = "m" decimal digits = "2"
HORLEN	O	unit = "m" decimal digits = "2"
HORWID	O	unit = "m" decimal digits = "2"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Fog signal

Acronym: FOGSIG   Code: 58

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A warning signal transmitted by a vessel, or aid to navigation, during periods of low visibility. Also, the device producing such a signal. (IHO Dictionary, S-32, 5th Edition, 1890)

Attribute Bindings:

acronym	usage	constraints
CATFOG	M	value list = "1,2,3,4,5,6,7,8,9,10"
SIGFRQ	O	unit = "Hz" min = "0"
SIGGEN	O	value list = "1,2"
SIGGRP	C	format = "(c)(c)..."
SIGPER	C	unit = "s" decimal digits = "2"
SIGSEQ	C	format = "l.ll+(e.ee)"
VALMXR	O	unit = "nm" decimal digits = "1"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

acronym	usage	constraints
NTXTDS	O	

Feature	Free port area

Acronym: FRPARE   Code: 60

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A port where certain import and export duties are waived (unless goods pass into the country) to facilitate reshipment to other countries. (IHO Dictionary, S-32, 5th Edition, 1927)

Attribute Bindings:

acronym	usage	constraints
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Gate

Acronym: GATCON   Code: 61

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A structure that may be swung, drawn, or lowered to block an entrance or passageway. (United States Geological Survey, Jan.89)

Attribute Bindings:

acronym	usage	constraints
CATGAT	M	value list = "4"
HORCLR	M	unit = "m" decimal digits = "2"
VERCLR	O	unit = "m" decimal digits = "2"
VERDAT	O	value list = "4"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
unlocd	C	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Harbour facility

Acronym: HRBFAC

Code: 64

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A harbour installation with a service or commercial operation of public interest.

Attribute Bindings:

acronym	usage	constraints
CATHAF	M	value list = "5"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	M	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Hulk

Acronym: HULKES   Code: 65

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A permanently moored ship.

Attribute Bindings:

acronym	usage	constraints
CATHLK	M	value list = "1,2,3,4,5"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Lake

Acronym: LAKARE

Code: 69

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A large body of water entirely surrounded by land. (IHO Dictionary, S-32, 5th Edition, 2629)

Attribute Bindings:

acronym	usage	constraints
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Land area

Acronym: LNDARE   Code: 71

Type: G

Primitive: P,L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The solid portion of the Earth's surface, as opposed to sea, water. (IHO Dictionary, S-32, 5th Edition, 2635)

Attribute Bindings:

acronym	usage	constraints
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Land region

Acronym: LNDRGN   Code: 73

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: An area of natural scenery on land. It is defined by its geographical characteristics and may be known by its proper name.

Attribute Bindings:

acronym	usage	constraints
CONDTN	C	value list = "1,2,3,5"
OBJNAM	M	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
CATLND	O	value list = "2,9,11,12"

Feature	Landmark

Acronym: LNDMRK   Code: 74

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A prominent object at a fixed location which can be used in determining a location or a direction. (adapted from IHO Dictionary, S-32, 5th Edition, 2643).

Attribute Bindings:

acronym	usage	constraints
CATLMK	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22"
CONVIS	M	value list = "1"
FUNCTN	C	value list = "2-42"
CONDTN	O	value list = "1,2,3,4,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Light

Acronym: LIGHTS   Code: 75

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A luminous or lighted aid to navigation. (adapted from IHO Dictionary, S-32, 5th Edition, 2766)

Attribute Bindings:

acronym	usage	constraints
CATLIT	C	value list = "1,4,5,6,12,13,14,15"
COLOUR	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13"
EXCLIT	C	value list = "1,2,3,4"
LITCHR	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,25,26,27,28,29"
LITVIS	C	value list = "4"
MLTYLT	C	min = "2"
ORIENT	C	unit = "deg" decimal digits = "2"
SECTR1	C	unit = "deg" decimal digits = "2"
SECTR2	C	unit = "deg" decimal digits = "2"
SIGGRP	C	format = "(c)(c)..."
SIGPER	C	unit = "s" decimal digits = "2"
SIGSEQ	C	format = "l.ll+(e.ee)"
STATUS	C	value list = "2,3,4,8,9,12,14,16,17"
CONDTN	C	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	C	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	

acronym	usage	constraints
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
HEIGHT	O	
VALNMR	O	

Feature	Marine farm/culture

Acronym: MARCUL   Code: 82

Type: G

Primitive: P,L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2010-08-12

Definition: An assemblage of cages, nets, rafts and floats or posts where fish, including shellfish,
              are artificially cultivated.

Attribute Bindings:

acronym	usage	constraints
CATMFA	M	value list = "1,2,3,4"
EXPSOU	C	value list = "1,2,3"
VALSOU	C	
QUASOU	O	value list = "1,2,3,4,6,7,8,9"
SOUACC	C	
WATLEV	C	value list = "1,2,3,4,5,7"
STATUS	C	value list = "2,4"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
PICREP	O	
TXTDSC	O	

acronym	usage	constraints
NTXTDS	O	

Feature	Mooring/Warping facility

Acronym: MORFAC   Code: 84

Type: G

Primitive: P,L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The equipment or structure used to secure a vessel (adapted from IHO Dictionary, S-32, 5th Edition, 3322)

Attribute Bindings:

acronym	usage	constraints
CATMOR	M	value list = "1,3,4,5,7"
NATCON	O	value list = "1,2,3,4,5,6,7,8,9"
WATLEV	O	value list = "1,2,3,4,5"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Nautical Publication Information

Acronym: M_NPUB   Code: 305

Type: M

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: Used to relate additional nautical information or publications to the data.

Attribute Bindings:

acronym	usage	constraints
TXTDSC	M	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Navigation line

Acronym: NAVLNE   Code: 85

Type: G

Primitive: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A navigation line is a straight line extending towards an area of navigational interest and generally generated by two navigational aids or one navigational aid and a bearing. (Service Hydrographique et Océanographique de la Marine, France)

Attribute Bindings:

acronym	usage	constraints
CATNAV	C	value list = "1,2,3"
ORIENT	M	unit = "deg" decimal digits = "2"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	New Object

Acronym: NEWOBJ   Code: 18005

Type: G

Primitive: P

<u>Data Dictionary (DD) Reference:</u>

DD Name: HYDRO   Date accepted: 2012-01-01

Definition: A new feature specified by the IMO and that affects safety of navigation which cannot adequately be
               encoded by any existing object class for use in an S-57 data set.

<u>Attribute Bindings:</u>

acronym	usage	constraints
CLSNAM	M	
CLSDEF	M	
SYMINS	M	
DATEND	O	format = "ccyymmdd"
DATSTA	O	format = "ccyymmdd"
INFORM	M	
NINFOM	O	
OBJNAM	O	
NOBJNM	O	
TXTDSC	O	
NTXTDS	O	
PEREND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
PICREP	O	

Feature	Obstruction

Acronym: OBSTRN   Code: 86

Type: G

Primitive: P,L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: In marine navigation, anything that hinders or prevents movement, particularly anything that endangers or prevents passage of a vessel. The term is usually used to refer to an isolated danger to navigation... (IHO Dictionary, S-32, 5th Edition, 3503)

Attribute Bindings:

acronym	usage	constraints
CATOBS	O	value list = "1,2,3,4,5,6,7,8,9,10,11"
NATSUR	C	value list = "9"
VALSOU	C	unit = "m" decimal digits = "2"
WATLEV	C	value list = "1,2,3,4,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
EXPSOU	C	value list = "1,2,3"

acronym	usage	constraints
NATCON	O	value list = "1,2,3,4,6,7,8"

Feature	Oil barrier

Acronym: OILBAR   Code: 89

Type: G

Primitive: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A construction to dam oil flow on water.

Attribute Bindings:

acronym	usage	constraints
CATOLB	O	value list = "1,2"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Pile

Acronym: PILPNT   Code: 90

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A long heavy timber or section of steel, wood, concrete, etc.. forced into the earth which may serve as a support, as for a pier, or a free standing pole within a marine environment. (Adapted from IHO Dictionary, S-32, 5th Edition, 3840)

Attribute Bindings:

acronym	usage	constraints
CONDTN	O	value list = "1,2,3,5"
OBJNAM	C	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Pipeline area

Acronym: PIPARE   Code: 92

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: An area containing one or more pipelines.

Attribute Bindings:

acronym	usage	constraints
CATPIP	O	value list = "2,3,4,6"
PRODCT	O	value list = "1,2,3,4,5,6,7,8,14,15,17,21,22"
RESTRN	M	value list = "1,38"
STATUS	C	value list = "18"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Pipeline, submarine/on land

Acronym: PIPSOL   Code: 94

Type: G

Primitive: P,L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A pipeline is a string of interconnected pipes used for the transport of matter, nowadays mainly oil or gas. (IHO Dictionary, S-32, 5th Edition, 3857). A submarine or land pipeline is a pipeline lying on or buried under the seabed or the land.

Attribute Bindings:

acronym	usage	constraints
CATPIP	O	value list = "2,3,4,6"
PRODCT	O	value list = "1,2,3,4,5,6,7,8,14,15,17,21,22"
STATUS	C	value list = "18"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Pontoon

Acronym: PONTON

Code: 95

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A floating structure, usually rectangular in shape which serves as landing, pier head or bridge support. (IHO Dictionary, S-32, 5th Edition, 3947)

Attribute Bindings:

acronym	usage	constraints
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Production/storage area

Acronym: PRDARE   Code: 97

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: An area on land for the exploitation or storage of natural resources.

Attribute Bindings:

acronym	usage	constraints
CATPRA	O	value list = "1,2,3,4,5,6,7,8,9,10"
PRODCT	O	value list = "1,2,4,5,6,7,14,15,17,21,22"
CONVIS	O	value list = "1,2"
STATUS	O	value list = "2,12,16,17"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
SCAMIN	M	min = "1"
NTXTDS	O	

Feature	Pylon/bridge support

Acronym: PYLONS   Code: 98

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A vertical construction consisting, for example, of a steel framework or pre-stressed concrete to carry cables, a bridge, etc.

Attribute Bindings:

acronym	usage	constraints
CATPYL	M	value list = "1,2,3,4,5"
WATLEV	M	value list = "1,2,3,4,5"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Quality of data

Acronym: M_QUAL   Code: 308

Type: M

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: An area within which a uniform assessment of the quality of the data exists.

Attribute Bindings:

acronym	usage	constraints
CATZOC	O	value list = "1,2,3,4,5,6"
DRVAL1	O	unit = "m" decimal digits = "2"
POSACC	O	unit = "m" decimal digits = "2"
SOUACC	O	unit = "m" decimal digits = "2"
SUREND	O	format = "ccyymmdd"
SURSTA	O	format = "ccyymmdd"
TECSOU	C	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13,14"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

Feature	Radar station

Acronym: RADSTA   Code: 102

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A station with a transmitter emitting pulses of ultra-high frequency radio waves which are reflected by solid objects and are detected upon their return to the sending station. (International Maritime Dictionary, 2nd Ed.)

Attribute Bindings:

acronym	usage	constraints
CATRAS	M	value list = "1"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Radar transponder beacon

Acronym: RTPBCN

Code: 103

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A transponder beacon, transmitting a coded signal on radar frequency, permitting an interrogating craft to determine the bearing and range of the transponder. Also called racon. (IHO Dictionary, S-32, 5th Edition, 4137)

Attribute Bindings:

acronym	usage	constraints
CATRTB	M	value list = "1,2,3"
RADWAL	O	format = "xx.x-b,xx.x-b,...] xx.x = value in meter, b = band"
SIGGRP	O	format = "(c)(c)..."
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Railway

Acronym: RAILWY

Code: 106

Type: G

Primitive: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A rail or set of parallel rails on which a train or tram runs. (Digital Geographic Information Working Group, Oct.87)

Attribute Bindings:

acronym	usage	constraints
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Recommended track

Acronym: RECTRC   Code: 109

Type: G

Primitive: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A track recommended to all or only certain vessels. (IHO Dictionary, S-32, 5th Edition, 5576)

Attribute Bindings:

acronym	usage	constraints
CATTRK	M	value list = "1,2"
ORIENT	M	unit = "deg" decimal digits = "2"
DRVAL1	O	unit = "m" decimal digits = "2"
DRVAL2	O	unit = "m" decimal digits = "2"
TRAFIC	M	value list = "1,2,3,4"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Rescue Station

Acronym: RSCSTA   Code: 111

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2010-09-17

Definition: A place at which life saving equipment is held. (IHO Chart Specifications, M-4)

Attribute Bindings:

acronym	usage	constraints
catrsc	M	value list = "1,2,4,5,6,7,8,9"
STATUS	O	value list = "2,4"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
NTXTDS	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
PICREP	O	

Feature	Restricted area

Acronym: RESARE   Code: 112

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A specified area designated by an appropriate authority within which navigation is restricted in accordance with certain specified conditions. (adapted from IHO Dictionary, S-32, 5th Edition, 4366)

Attribute Bindings:

acronym	usage	constraints
RESTRN	M	value list = "1,7,8,38"
CATREA	C	value list = "12"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	River

Acronym: RIVERS   Code: 114

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A relatively large natural stream of water. (IHO Dictionary, S-32, 5th Edition, 4405)

Attribute Bindings:

acronym	usage	constraints
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Road

Acronym: ROADWY   Code: 116

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A road is an open way for the passage of vehicles. (United States Geological Survey, Jan.89)

Attribute Bindings:

acronym	usage	constraints
CATROD	M	value list = "1,2,3,4"
NATCON	O	value list = "4,5"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Runway

Acronym: RUNWAY   Code: 117

Type: G

Primitive: P,L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A defined rectangular area, on a land aerodrome, prepared for the landing and take-off run of aircraft along its length.

Attribute Bindings:

acronym	usage	constraints
CATRUN	O	value list = "1,2"
CONVIS	O	value list = "1,2"
NATCON	O	value list = "4,5"
OBJNAM	O	
NOBJNM	O	
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
INFORM	O	
NINFOM	O	
TXTDSC	O	
NTXTDS	O	
PICREP	O	

Feature	Sea area/named water area

Acronym: SEAARE   Code: 119

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A geographically defined part of the sea or other navigable waters. It may be specified within its limits by its proper name.

Attribute Bindings:

acronym	usage	constraints
CATSEA	O	value list = "5,12,13,51,52,53,54,57,58,59"
CONDTN	C	value list = "1,2,3,5"
OBJNAM	M	
NOBJNM	O	
INFORM	C	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	C	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Seabed Area

Acronym: SBDARE   Code: 121

Type: G

Primitive: P,L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: An area of the sea where the nature of bottom is homogeneous. The nature of bottom includes the material of which it is composed and its physical characteristics. Also called character (or characteristics) of the bottom, or quality of the bottom. (IHO Dictionary, S-32, 5th Edition, 515).

Attribute Bindings:

acronym	usage	constraints
NATQUA	C	value list = "1,2,3,4"
NATSUR	C	value list = "1,2,3,4,5,6,7,8,9,18"
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
TXTDSC	O	
NTXTDS	O	
PICREP	O	

Feature	Shoreline construction

Acronym: SLCONS   Code: 122

Type: G

Primitive: P,L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A fixed (not afloat) artificial structure between the water and the land, i.e. a man-made coastline.

Attribute Bindings:

acronym	usage	constraints
CATSLC	M	value list = "1,2,4,5,6,7,8,9,10,11,12,13,14,15,16"
NATCON	C	value list = "1,2,3,4,5,6,7,8,9"
STATUS	C	value list = "2,3,4,8,9,12,14,16,17"
WATLEV	O	value list = "1,2,3,4,5"
CONDTN	C	value list = "1,2,3,5"
OBJNAM	C	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Silo/tank

Acronym: SILTNK   Code: 125

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: An enclosed container, used for storage (Digital Geographic Information Working Group, Oct.87)

Attribute Bindings:

acronym	usage	constraints
CATSIL	O	value list = "1,2,3,4"
PRODCT	O	value list = "1,2,3,4,5,6,7,8,14,15,17,21,22"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Slope topline

Acronym: SLOTOP   Code: 126

Type: G

Primitive: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The upper marking of a slope, e.g. the ridge line or the separation line between two different gradients.

Attribute Bindings:

acronym	usage	constraints
CATSLO	M	value list = "2,3,6"
NATSUR	O	value list = "1,2,3,4,5,6,7,8,9,11,14,17,18"
CONDTN	C	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Sloping ground

Acronym: SLOGRD   Code: 127

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: An inclined surface (adapted from IHO Dictionary, S-32, 5th Edition, 4776).

Attribute Bindings:

acronym	usage	constraints
CATSLO	M	value list = "2,3"
NATSUR	O	value list = "1,2,3,4,5,6,7,8,9,11,14,17,18"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Small craft facility

Acronym: SMCFAC   Code: 128

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A place at which a service generally of interest to small craft or pleasure boats is available.

Attribute Bindings:

acronym	usage	constraints
CATSCF	M	value list = "1-33"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Sounding

Acronym: SOUNDG   Code: 129

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A measured water depth or spot which has been reduced to a vertical datum (may be a drying height).

Attribute Bindings:

acronym	usage	constraints
SCAMIN	M	min = "1"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
TXTDSC	O	
NTXTDS	O	
PICREP	O	

Feature	Survey reliability

Acronym: M_SREL   Code: 310

Type: M

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: An area within which a uniform assessment of the reliability of source survey information exists.

Attribute Bindings:

acronym	usage	constraints
QUAPOS	C	value list = "4,10"
QUASOU	M	value list = "1,2,8,10,11"
SURATH	M	
SUREND	M	format = "ccyymmdd,ccyymm"
SURSTA	M	format = "ccyymmdd,ccyymm"
SURTYP	C	value list = "2"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

Feature	Topmark

Acronym: TOPMAR

Code: 144

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A characteristic shape secured at the top of a buoy, or beacon, to aid in its identification. (IHO Dictionary, S-32, 5th Edition, 5548)

Attribute Bindings:

acronym	usage	constraints
COLOUR	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13"
COLPAT	C	value list = "1,2,3,4,5,6"
TOPSHP	M	value list = "1-33"
CONDTN	C	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	C	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Traffic separation zone

Acronym: TSEZNE   Code: 150

Type: G

Primitive: A

<u>Data Dictionary (DD) Reference:</u>

DD Name: HYDRO   Date accepted: 2010-08-11

Definition: A traffic separation scheme is a scheme which aims to reduce the risk of collision in congested and/or converging areas by separating traffic moving in opposite, or nearly opposite, directions. (IHO Dictionary, S-32, 5th Edition, 5585). A traffic separation zone is a zone separating the lanes in which ships are proceeding in opposite or nearly opposite directions; or separating traffic lanes designated for particular classes of ships proceeding in the same direction (IMO Ships Routeing, 6th Edition).

<u>Attribute Bindings:</u>

acronym	usage	constraints
CATTSS	M	value list = "1,2"
STATUS	C	value list = "3,9"
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
TXTDSC	C	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
OBJNAM	O	
NOBJNM	O	
PEREND	O	
PERSTA	O	
PICREP	O	
NTXTDS	O	

Feature	Tunnel

Acronym: TUNNEL   Code: 151

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A passage that is open to the atmosphere at both ends, buried under the sea bed or laid over the sea floor or bored under the ground or through mountains.

Attribute Bindings:

acronym	usage	constraints
BURDEP	O	unit = "m" decimal digits = "1"
HORCLR	C	unit = "m" decimal digits = "2"
VERCLR	C	unit = "m" decimal digits = "2"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
unlocd	O	

Feature	Two-way route part

Acronym: TWRTPT   Code: 152

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A two-way route is a route within defined limits inside which two-way traffic is established, aimed at providing safe passage of ships through waters where navigation is difficult or dangerous. (IHO Dictionary, S-32, 5th Edition, 5712). A two-way route part is an area of a two-way route within which traffic flow is generally along one bearing (and possibly its reciprocal).

Attribute Bindings:

acronym	usage	constraints
ORIENT	M	unit = "deg" decimal digits = "2"
TRAFIC	M	value list = "1,2,3,4"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Underwater/awash rock

Acronym: UWTROC   Code: 153

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A concreted mass of stony material or coral which dries, is awash or is below the water surface.

Attribute Bindings:

acronym	usage	constraints
VALSOU	M	unit = "m" decimal digits = "2"
WATLEV	M	value list = "1,2,3,4,5"
NATSUR	O	value list = "5,9,11,14,18"
QUASOU	O	value list = "1,2,8,10,11"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
EXPSOU	C	value list = "1,2,3"

Feature	Unsurveyed area

Acronym: UNSARE   Code: 154

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2010-07-29

Definition: An area for which no bathymetric survey information is available.

Attribute Bindings:

acronym	usage	constraints
QUASOU	C	value list = "2,8"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
NTXTDS	O	
TXTDSC	O	
PICREP	O	

Feature	Vegetation

Acronym: VEGATN   Code: 155

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: Collections of, or individual plants.

Attribute Bindings:

acronym	usage	constraints
CATVEG	M	value list = "6,11,13"
CONVIS	O	value list = "1,2"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Water turbulence

Acronym: WATTUR   Code: 156

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The disturbance of water caused by the interaction of any combination of waves, currents, tidal streams, wind, shoal patches and obstructions.

Attribute Bindings:

acronym	usage	constraints
CATWAT	M	value list = "6"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
TXTDSC	O	
NTXTDS	O	
PICREP	O	
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"

Feature	Wreck

Acronym: WRECKS   Code: 159

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The ruined remains of a stranded or sunken vessel which has been rendered useless. (IHO Dictionary, S-32, 5th Edition, 6027)

Attribute Bindings:

acronym	usage	constraints
CATWRK	M	value list = "1,2,3,4,5"
VALSOU	C	unit = "m" decimal digits = "2"
WATLEV	O	value list = "1,2,3,4,5"
QUASOU	O	value list = "1,2,8,10,11"
TECSOU	O	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13,14"
STATUS	O	value list = "12,16,17,18"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

acronym	usage	constraints
EXPSOU	C	value list = "1,2,3"

Feature	Anchor berth

Acronym: achbrt

Code: 17000

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A designated area of water where a single vessel, sea plane, etc... may anchor.

Attribute Bindings:

acronym	usage	constraints
catach	O	value list = "1,2,3,4,5,6,7,9,10,11,12,13"
clsdng	O	value list = "1,2,3,4,5"
restrn	O	value list = "1,2,7,8,13,14,27,28,29,30,31,32,33,34,35,36,38"
STATUS	O	value list = "2,3,4,8,9,12,14,16,17"
NATSUR	O	value list = "1,2,3,4,5,6,7,8,9,11,14,17,18"
unlocd	C	
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Anchorage area

Acronym: achare   Code: 17001

Type: G

Primitive: P,A

<u>Data Dictionary (DD) Reference:</u>

DD Name: IENC   Date accepted: 2001-05-31

Definition: An area in which vessels anchor or may anchor. (IHO Dictionary, S-32, 5th Edition, 130)

<u>Attribute Bindings:</u>

acronym	usage	constraints
catach	O	value list = "1,2,3,4,5,6,7,9,10,11,12,13"
clsdng	O	value list = "1,2,3,4,5"
restrn	O	value list = "1,2,7,8,13,14,27,28,29,30,31,32,33,34,35,36,38"
STATUS	O	value list = "2,3,4,8,9,12,14,16,17"
NATSUR	O	value list = "1,2,3,4,5,6,7,8,9,11,14,17,18"
unlocd	C	
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Beacon, lateral

Acronym: bcnlat   Code: 17028

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A beacon, is a prominent specially constructed object forming a conspicuous mark as a fixed aid to
              navigation or for use in hydrographic survey (IHO Dictionary, S-32, 5th Edition, 420). A lateral beacon, is
              used to indicate the port or starboard hand side of the route to be followed. They are generally used for well
              defined channels and are used in conjunction with a conventional direction of buoyage. (UKHO NP 735, 5th
              Edition)

Attribute Bindings:

acronym	usage	constraints
BCNSHP	M	value list = "1,5"
catlam	M	value list = "1-27"
COLOUR	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13"
COLPAT	C	value list = "1,2,3,4,5,6"
dirimp	C	value list = "1,2,3,4"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"

acronym	usage	constraints
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Berth

Acronym: berths   Code: 17010

Type: G

Primitive: P,L,A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A named or numbered place where a vessel is moored at a wharf. (IHO Dictionary, S-32, 5th Edition, 470)

Attribute Bindings:

acronym	usage	constraints
catbrt	O	value list = "1,2,3,4,5,6,7,8,9"
clsdng	O	value list = "1,2,3,4,5"
DRVAL1	O	unit = "m" decimal digits = "2"
QUASOU	C	value list = "1,2,8,10,11"
SOUACC	C	unit = "m" decimal digits = "2"
STATUS	O	value list = "2,3,4,8,9,12,14,16,17"
trshgd	O	value list = "1,2,3,4,5,6,7,8,9,10"
unlocd	C	
verdat	C	value list = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Bridge

Acronym: bridge   Code: 17011

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A structure erected over a depression or an obstacle such as a body of water, railroad, etc... to provide a roadway for vehicles, pedestrians or to carry utility services. (IHO Dictionary, S-32, 5th Edition, 544)

Attribute Bindings:

acronym	usage	constraints
CATBRG	M	value list = "1,3,4,5,7,9,12,13"
HORCLR	O	unit = "m" decimal digits = "2"
VERCCL	C	unit = "m" decimal digits = "2"
VERCLR	C	unit = "m" decimal digits = "2"
VERCOP	C	unit = "m" decimal digits = "2"
hunits	C	value list = "1,2,3,4,5,6"
unlocd	C	
verdat	C	value list = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
wtwdis	C	decimal digits = "3"
CONDTN	C	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	C	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"

acronym	usage	constraints
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
refgag	C	

Feature	Bridge Arch Aggregation

Acronym: c_brga   Code: 18003

Type: O

Primitive: N

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2012-08-03

Definition: A collection of the bridge arch elements comprising an entire bridge arch.

Attribute Bindings:

acronym	usage	constraints
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
PICREP	O	
TXTDSC	O	
NTXTDS	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"

Feature	Bunker station

Acronym: bunsta   Code: 17054

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A station, at which a ship is able to bunker fuel, water or ballast or to obtain electrical power supply.

Attribute Bindings:

acronym	usage	constraints
bunves	M	value list = "1,2"
catbun	O	value list = "1,2,3,4"
unlocd	C	
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
catvol	C	value list = "1,2"
catfrq	C	value list = "1,2"

acronym	usage	constraints
amoamp	C	
allcon	O	
catplg	O	
shrnum	O	

Feature	Buoy, lateral

Acronym: boylat   Code: 17029

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A buoy, is a floating object moored to the bottom in a particular place, as an aid to navigation or for other specific purposes. (IHO Dictionary, S-32, 5th Edition, 565). A lateral buoy, is used to indicate the right-hand or left-hand side of a channel limit in the waterway.

Attribute Bindings:

acronym	usage	constraints
BOYSHP	M	value list = "1,2,3,4,5,6,8"
catlam	M	value list = "1-27"
COLOUR	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13"
COLPAT	C	value list = "1,2,3,4,5,6"
CONRAD	O	value list = "3"
marsys	C	value list = "1,2,9,10,11,12,13,14,15"
OBJNAM	C	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

acronym	usage	constraints
NTXTDS	O	

Feature	Cable, overhead

Acronym: cblohd   Code: 17012

Type: G

Primitive: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: An overhead cable is an assembly of wires or fibres, or a wire rope or chain, which is supported by structures such as poles or pylons and passing over or nearby navigable waters. (Hydrographic Service, Royal Australian Navy).

Attribute Bindings:

acronym	usage	constraints
catcbl	M	value list = "1,3,4,5,6,7"
VERCLR	M	unit = "m" decimal digits = "2"
hunits	O	value list = "1,2,3,4,5,6"
verdat	O	value list = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
wtwdis	O	decimal digits = "3"
unlocd	C	
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"

acronym	usage	constraints
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
refgag	C	

Feature	Checkpoint

Acronym: chkpnt   Code: 17027

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: An official place to register, declare or check goods and people.

Attribute Bindings:

acronym	usage	constraints
catchp	M	value list = "1,2"
NATION	M	format = "cc"
unlocd	C	
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Communication area

Acronym: comare   Code: 17055

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Indicates the coverage of an area, in which a vessel has to report or may request information.

Attribute Bindings:

acronym	usage	constraints
catcom	O	value list = "1,2,3,4,5,6,7,8,9"
COMCHA	M	format = "xxxx;xxxx;...."
STATUS	O	value list = "2,3,4,8,9,12,14,16,17"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Conveyor

Acronym: convyr   Code: 17034

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A mechanical apparatus for moving bulk material or people from place to place (as by a moving belt or chain of receptacles).

Attribute Bindings:

acronym	usage	constraints
CATCON	M	value list = "2"
PRODCT	O	value list = "1,2,3,4,5,6,7,8,14,15,17,21,22"
VERCLR	O	unit = "m" decimal digits = "2"
verdat	O	value list = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Crane

Acronym: cranes   Code: 17030

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A machine for lifting, shifting and lowering objects or materials by means of a swinging boom or with a lifting apparatus supported on an overhead track. (Digital Geographic Information Working Group, Oct.87)

Attribute Bindings:

acronym	usage	constraints
CATCRN	O	value list = "2,3,4,5"
VERCLR	O	unit = "m" decimal digits = "2"
verdat	O	value list = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Current, non-gravitational

Acronym: curent

Code: 17019

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Currents (non-gravitational) include either singly or in combination: ocean currents (wind and/or density driven), inter-oceanic equalising currents, currents of navigable rivers, river outflow effects offshore and other non-tidal flows.

Attribute Bindings:

acronym	usage	constraints
curvhw	C	unit = "km/h" decimal digits = "1"
curvlw	C	unit = "km/h" decimal digits = "1"
curvmw	C	unit = "km/h" decimal digits = "1"
curvow	C	unit = "km/h" decimal digits = "1"
dirimp	C	value list = "1,2,3,4"
hignam	C	
lownam	C	
meanam	C	
othnam	C	
ORIENT	C	unit = "deg" decimal digits = "2"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"

acronym	usage	constraints
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Daymark

Acronym: daymar   Code: 17035

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2009-09-11

Definition: The identifying characteristics of an aid to navigation which serve to facilitate its recognition against a daylight viewing background. On those structures that do not by themselves present an adequate viewing area to be seen at the required distance, the aid is made more visible by affixing a daymark to the structure. A daymark so affixed has a distinctive colour and shape depending on the purpose of the aid. (IHO Dictionary, S-32, 5th Edition, 1248)

Attribute Bindings:

acronym	usage	constraints
COLOUR	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13"
COLPAT	C	value list = "1,2,3,4,5,6"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
TOPSHP	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33"
ORIENT	C	unit = "deg" decimal digits = "2"
dirimp	C	value list = "1,2,3,4"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Depth area

Acronym: depare   Code: 17003

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A depth area is a water area whose depth is within a defined range of values.

Attribute Bindings:

acronym	usage	constraints
DRVAL1	M	unit = "m" decimal digits = "2"
DRVAL2	M	unit = "m" decimal digits = "2"
eleva1	C	unit = "m" decimal digits = "2"
eleva2	C	unit = "m" decimal digits = "2"
QUASOU	C	value list = "1,2,8,10,11"
hunits	M	value list = "1,2,3,4,5,6"
wtwdis	M	decimal digits = "3"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

Feature	Distance mark

Acronym: dismar

Code: 17004

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A distance mark indicates the distance measured from an origin and consists of either a solid visible structure or a distinct location without special installation. Usually found on canals or rivers.

Attribute Bindings:

acronym	usage	constraints
CATDIS	M	value list = "1,2,3,4"
hunits	M	value list = "1,2,3,4,5,6"
unlocd	C	
wtwdis	M	decimal digits = " 1"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Exceptional navigation structure

Acronym: excnst   Code: 17070

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: An exceptional navigational construction like aqueduct, lift-lock, etc.

Attribute Bindings:

acronym	usage	constraints
catexs	M	value list = "1,2,3,4,5"
DRVAL1	M	unit = "m" decimal digits = "2"
unlocd	C	
verdat	C	value list = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
hunits	M	value list = "1,2,3,4,5,6"
wtwdis	M	decimal digits = "3"
CONDTN	O	value list = "1,2,3,5"
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
OBJNAM	O	

acronym	usage	constraints
NOBJNM	O	

Feature	Ferry route

Acronym: feryrt   Code: 17013

Type: G

Primitive: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A route in a body of water where a ferry crosses from one shoreline to another. (Digital Geographic Information Working Group, Oct.87)

Attribute Bindings:

acronym	usage	constraints
catfry	M	value list = "4"
NOBJNM	O	
OBJNAM	O	
STATUS	O	value list = "2,3,4,8,9,12,14,16,17"
INFORM	O	
NINFOM	O	
NTXTDS	O	
PICREP	O	
SCAMIN	M	min = "1"
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

Feature	Floating dock

Acronym: flodoc   Code: 17025

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A form of dry dock consisting of a floating structure of one or more sections which can be partly submerged by controlled flooding to receive a vessel, then raised by pumping out the water so that the vessel's bottom can be exposed. (IHO Dictionary, S-32, 5th Edition, 1427)

Attribute Bindings:

acronym	usage	constraints
DRVAL1	O	unit = "m" decimal digits = "2"
HORCLR	O	unit = "m" decimal digits = "2"
HORLEN	O	unit = "m" decimal digits = "2"
horcll	O	unit = "m" decimal digits = "2"
horclw	O	unit = "m" decimal digits = "2"
HORWID	O	unit = "m" decimal digits = "2"
verdat	O	value list = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Gate

Acronym: gatcon   Code: 17031

Type: G

Primitive: L,A

<u>Data Dictionary (DD) Reference:</u>

DD Name: IENC   Date accepted: 2001-05-31

Definition: A structure that may be swung, drawn, or lowered to block an entrance or passageway. (United States Geological Survey, Jan.89)

<u>Attribute Bindings:</u>

acronym	usage	constraints
CATGAT	M	value list = "2,4"
HORCLR	M	unit = "m" decimal digits = "2"
VERCLR	O	unit = "m" decimal digits = "2"
hunits	C	value list = "1,2,3,4,5,6"
wtwdis	O	decimal digits = "3"
verdat	O	value list = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
unlocd	C	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"

acronym	usage	constraints
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Harbour area (administrative)

Acronym: hrbare   Code: 17014

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The term "harbour" applies only to the area of water with the works necessary for its formation, protections and maintenance (International Maritime Dictionary, 2d. Edition). A harbour area not only covers the area of water but also the area of land which supplies the harbour installations.

Attribute Bindings:

acronym	usage	constraints
cathbr	O	value list = "1,2,3,4,5"
unlocd	C	
CONDTN	C	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Harbour basin

Acronym: hrbbsn   Code: 17056

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: An enclosed area of water surrounded by quay walls constructed to provide means for the transfer of cargos from and to ships (International Maritime Dictionary, 2d. Edtion).

Attribute Bindings:

acronym	usage	constraints
HORLEN	O	unit = "m" decimal digits = "2"
HORWID	O	unit = "m" decimal digits = "2"
unlocd	C	
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Harbour facility

Acronym: hrbfac   Code: 17015

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A harbour installation with a service or commercial operation of public interest.

Attribute Bindings:

acronym	usage	constraints
cathaf	M	value list = "4,6,9,12,13,16,17"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Hulk

Acronym: hulkes

Code: 17020

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC

Date accepted: 2001-05-31

Definition: A permanently moored ship.

Attribute Bindings:

acronym	usage	constraints
cathlk	O	value list = "1,2,3,4,5,6"
unlocd	C	
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Lock basin

Acronym: lokbsn   Code: 17016

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A lock basin is a wet dock in a waterway, permitting a ship to pass from one level to another. (adapted from IHO Dictionary, S-32, 5th Edition, 2881)

Attribute Bindings:

acronym	usage	constraints
horcll	M	unit = "m" decimal digits = "2"
horclw	M	unit = "m" decimal digits = "2"
HORLEN	O	unit = "m" decimal digits = "2"
HORWID	O	unit = "m" decimal digits = "2"
unlocd	C	
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Lock basin part

Acronym: lkbspt   Code: 17058

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A lock basin is divided into several lock basin parts, if this lock basin has one ground level but several gates.

Attribute Bindings:

acronym	usage	constraints
horcll	M	unit = "m" decimal digits = "2"
horclw	M	unit = "m" decimal digits = "2"
HORLEN	O	unit = "m" decimal digits = "2"
HORWID	O	unit = "m" decimal digits = "2"
unlocd	C	
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Maximum permitted ship dimensions

Acronym: lg_sdm   Code: 18001

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Waterway or waterway section for which a juridical regulation with respect to the maximum permitted vessel dimensions exists.

Attribute Bindings:

acronym	usage	constraints
lg_rel	O	value list = "1,2,3,4"
lg_des	O	
lc_csi	O	value list = "1,2,3,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32"
lc_cse	O	value list = "1,2,3,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32"
lc_asi	O	value list = "1,2,3,5,6,7,8,9,10"
lc_ase	O	value list = "1,2,3,5,6,7,8,9,10"
lc_cci	O	value list = "1,2,4,5,6,7,8,9"
lc_cce	O	value list = "1,2,4,5,6,7,8,9"
lg_bme	O	unit = "m" decimal digits = "2"
lg_lgs	O	unit = "m" decimal digits = "2"
lg_drt	O	unit = "m" decimal digits = "2"
lg_wdp	O	decimal digits = "1"
lg_wdu	O	value list = "1,2,3"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"

acronym	usage	constraints
SORIND	C	format = "cc,cc,ccccc,c..."
lg_pbr	O	

Feature	Maximum permitted vessel speed

Acronym: lg_vsp   Code: 18002

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Waterway or waterway section for which a juridical regulation with respect to the maximum permitted vessel speed exists.

Attribute Bindings:

acronym	usage	constraints
lg_rel	O	value list = "1,2,3,4"
lg_des	O	
lc_csi	O	value list = "1,2,3,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32"
lc_cse	O	value list = "1,2,3,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32"
lc_asi	O	value list = "1,2,3,5,6,7,8,9,10"
lc_ase	O	value list = "1,2,3,5,6,7,8,9,10"
lc_cci	O	value list = "1,2,4,5,6,7,8,9"
lc_cce	O	value list = "1,2,4,5,6,7,8,9"
lg_wdu	O	value list = "1,2,3"
lg_spd	O	unit = "km/h" decimal digits = "2"
lg_spr	O	value list = "1,2,3"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
lg_pbr	O	

Feature	Navigational system of marks

Acronym: m_nsys   Code: 17018

Type: M

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: An area within which a specific system of navigational marks applies and/or a common direction of
              buoyage.

Attribute Bindings:

acronym	usage	constraints
marsys	M	value list = "1,2,9,10,11,12,13,14,15"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

Feature	Notice mark

Acronym: notmrk   Code: 17050

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A signboard used to indicate prohibitions, regulations, restrictions, recommendations and general information which apply to a waterway or a section of a waterway

Attribute Bindings:

acronym	usage	constraints
addmrk	O	value list = "1,2,3,4,5"
catnmk	M	value list = "1 - 122"
dirimp	O	value list = "1,2,3,4,5"
disipd	O	unit = "m" decimal digits = "1"
disipu	O	unit = "m" decimal digits = "1"
disbk1	O	unit = "m" decimal digits = "1"
disbk2	O	unit = "m" decimal digits = "1"
fnctnm	M	value list = "1,2,3,4,5"
marsys	O	value list = "1,2,9,10,11,12,13,14,15"
ORIENT	C	unit = "deg" decimal digits = "2"
STATUS	O	value list = "2,3,4,8,9,12,14,16,17"
bnkwtw	O	value list = "1,2"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	

acronym	usage	constraints
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Pipeline, overhead

Acronym: pipohd   Code: 17024

Type: G

Primitive: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A pipeline is a string of interconnected pipes used for the transport of matter, nowadays mainly oil or gas. (IHO Dictionary, S-32, 5th Edition, 3857). An overhead pipeline is a pipeline supported by pylons and passing over or nearby navigable waters.

Attribute Bindings:

acronym	usage	constraints
CATPIP	M	value list = "2,3,4,6"
PRODCT	M	value list = "1,2,3,4,5,6,7,8,14,15,17,21,22"
VERCLR	M	unit = "m" decimal digits = "2"
verdat	O	value list = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
hunits	O	value list = "1,2,3,4,5,6"
wtwdis	O	decimal digits = "3"
unlocd	C	
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
refgag	C	

Feature	Pontoon

Acronym: ponton   Code: 17021

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A floating structure, usually rectangular in shape which serves as landing, pier head or bridge support. (IHO Dictionary, S-32, 5th Edition, 3947)

Attribute Bindings:

acronym	usage	constraints
unlocd	C	
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Port area

Acronym: prtare   Code: 17059

Type: G

Primitive: A

<u>Data Dictionary (DD) Reference:</u>

DD Name: IENC   Date accepted: 2001-05-31

Definition: Apart from harbours a port includes a city or borough with accommodation and facilities for landing passangers and goods and some amount of overseas trade. A port may possess a harbour but a harbour is not necessarily a port (International Maritime Dictionary, 2d. Edition).

<u>Attribute Bindings:</u>

acronym	usage	constraints
unlocd	C	
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Radio calling-in point

Acronym: rdocal   Code: 17017

Type: G

Primitive: P,L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Also called radio reporting points, they have been established in certain busy waterways and port approaches to assist traffic control. On passing these points or crossing a defined line vessels are required to report on VHF to a Traffic Control Centre. (adapted from IHO Chart Specifications, M-4)

Attribute Bindings:

acronym	usage	constraints
catcom	M	value list = "1,2,3,4,5,6,7,8"
COMCHA	M	format = "xxxx;xxxx;...."
ORIENT	M	unit = "deg" decimal digits = "2"
TRAFIC	M	value list = "1,2,3,4"
OBJNAM	O	
NOBJNM	O	
unlocd	C	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	C	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Refuse dump

Acronym: refdmp   Code: 17062

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: At a refuse dump ships are able to unload their refuse like waste oil or black water.

Attribute Bindings:

acronym	usage	constraints
catrfd	O	value list = "1,2,3,4"
unlocd	C	
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Restricted area

Acronym: resare   Code: 17005

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A specified area designated by an appropriate authority within which navigation is restricted in accordance
              with certain specified conditions. (adapted from IHO Dictionary, S-32, 5th Edition, 4366)

Attribute Bindings:

acronym	usage	constraints
CATREA	O	value list = "4,5,9,12,19,22,23,25,26"
restrn	M	value list = "1,2,7,8,13,14,27,28,29,30,31,32,33,34,35,36,37,38"
NATSUR	O	value list = "1,2,3,4,5,6,7,8,9,11,14,17,18"
OBJNAM	O	
NOBJNM	O	
INFORM	C	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	C	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Sensor

Acronym: sensor   Code: 18004

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2011-12-19

Definition: A device that responds to a physical stimulus (as heat, light, sound, pressure, magnetism or a particular motion) and transmits a resulting impulse (as for measurement or operating a control).

Attribute Bindings:

acronym	usage	constraints
catsen	M	value list = "1,2"
fnctsn	M	value list = "1"
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
TXTDSC	O	
PICREP	O	
NTXTDS	O	

Feature	Shoreline Construction

Acronym: slcons   Code: 17032

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A fixed (not afloat) artificial structure between the water and the land, i.e. a man-made coastline.

Attribute Bindings:

acronym	usage	constraints
catslc	M	value list = "2,7,8,9,18,19,20"
NATCON	O	value list = "1,2,3,4,5,6,7,8,9"
watlev	C	value list = "1,2,3,4,8,9"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Signal station, traffic

Acronym: sistat   Code: 17007

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A signal station is a place on shore from which signals are made to ships at sea. (IHO Dictionary, S-32, 5th Edition, 4742). Traffic signal stations regulate the movement of traffic. (IHO Chart Specifications, M-4)

Attribute Bindings:

acronym	usage	constraints
catsit	M	value list = "2,6,8,10"
dirimp	O	value list = "1,2,3,4"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
unlocd	C	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Signal station, warning

Acronym: sistaw   Code: 17008

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A signal station is a place on shore from which signals are made to ships at sea. (IHO Dictionary, S-32, 5th Edition, 4742)

Attribute Bindings:

acronym	usage	constraints
catsiw	M	value list = "15,16,18"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	C	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Sounding datum

Acronym: m_sdat   Code: 17022

Type: M

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: An area of uniform sounding datum.

Attribute Bindings:

acronym	usage	constraints
verdat	M	value list = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

Feature	Terminal

Acronym: termnl

Code: 17064

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: IENC

Date accepted: 2001-05-31

Definition: A terminal covers that area on shore which provides buildings and constructions for the transfer of cargo or passengers from and to ships.

Attribute Bindings:

acronym	usage	constraints
cathaf	M	value list = "1,3,7,8,10,11"
trshgd	O	value list = "1,2,3,4,5,6,7,8,9,10"
unlocd	C	
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Time Schedule - in general

Acronym: tisdge   Code: 17068

Type: O

Primitive: N

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A schedule listing events and the times at which they will take place (www.wordiq.com/dictionary).

Attribute Bindings:

acronym	usage	constraints
aptref	O	
cattab	M	value list = "1,2"
dirimp	O	value list = "1,2,3,4"
schref	M	
shptyp	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13,14,15"
useshp	M	value list = "1,2,3"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

Feature	Turning basin

Acronym: trnbsn   Code: 17065

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: An area of water or enlargement of a channel used for turning vessels (International Maritime Dictionary, 2d Edition).

Attribute Bindings:

acronym	usage	constraints
HORCLR	O	unit = "m" decimal digits = "2"
unlocd	C	
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Underwater rock / awash rock

Acronym: uwtroc

Code: 17033

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A concreted mass of stony material or coral which dries, is awash or is below the water surface.

Attribute Bindings:

acronym	usage	constraints
VALSOU	M	unit = "m" decimal digits = "2"
watlev	M	value list = "1,2,3,4,8,9"
NATSUR	O	value list = "5,9,11,14,18"
QUASOU	O	value list = "1,2,8,10,11"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
EXPSOU	C	value list = "1,2,3"

Feature	Vehicle transfer

Acronym: vehtrf   Code: 17069

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A place where vehicles can be loaded or unloaded from the inland vessel with onboard or on-shore facilities.

Attribute Bindings:

acronym	usage	constraints
catvtr	M	value list = "1,2,3,4,5,6"
HEIGHT	M	unit = "m" decimal digits = "2"
unlocd	C	
verdat	O	value list = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Vertical datum

Acronym: m_vdat   Code: 17023

Type: M

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: An area of uniform vertical datum.

Attribute Bindings:

acronym	usage	constraints
verdat	M	value list = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

Feature	Waterway area

Acronym: wtware   Code: 17066

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: An area in which uniform general information of the waterway exists.

Attribute Bindings:

acronym	usage	constraints
catccl	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12"
dirimp	M	value list = "1,2,3,4"
unlocd	C	
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Waterway axis

Acronym: wtwaxs   Code: 17051

Type: G

Primitive: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The waterway axis can be defined by e.g: - the middle line of a fairway, (Definition of fairway: That part of a river, harbour; etc. where the main navigable channel for vessels of larger size lies. It is also the usual course followed by vessels entering or leaving harbours, called 'ship channel'. (International Maritime Dictionary, 2nd Ed.). - the middle line of a water way (Definition of waterway: The waterway covers the entire area of a river or canal).

Attribute Bindings:

acronym	usage	constraints
catccl	O	value list = "1,2,3,4,5,6,7,8,9,10,11,12"
OBJNAM	M	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Waterway gauge

Acronym: wtwgag   Code: 17067

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: A waterway gauge is an instrument for measuring water levels

Attribute Bindings:

acronym	usage	constraints
catgag	O	value list = "1,2,3,4,5"
disipd	O	unit = "m" decimal digits = "1"
disipu	O	unit = "m" decimal digits = "1"
ELEVAT	O	unit = "m" decimal digits = "2"
higwat	O	unit = "m" decimal digits = "2"
hignam	O	
lowwat	O	unit = "m" decimal digits = "2"
lownam	O	
meawat	O	unit = "m" decimal digits = "2"
meanam	O	
othwat	O	unit = "m" decimal digits = "2"
othnam	O	
reflev	O	value list = "1,2,3,4,5,6,7,8,9,10"
sdrlev	O	
unlocd	C	
vcrlev	O	
verdat	O	value list = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
hunits	O	value list = "1,2,3,4,5,6"
wtwdis	O	decimal digits = "3"
CONDTN	O	value list = "1,2,3,5"

acronym	usage	constraints
OBJNAM	C	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Feature	Waterway profile

Acronym:		wtwprf													Code:	17052

Type:		G

Primitive:		L

Data Dictionary (DD) Reference:

DD Name:	IENC						Date accepted:		2001-05-31

Definition:		A waterway profile is an imaginary (i.e., physically non-existent) line across the waterway.

Attribute Bindings:

acronym	usage	constraints
hunits	M	value list = "1,2,3,5,6"
wtwdis	M	decimal digits = "3"
HEIGHT	C	unit = "m" decimal digits = "2"
reflev	C	value list = "1,2,3,4,5,6,7,8,9,10"
verdat	C	value list = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

Attribute	Beacon shape

Acronym: BCNSHP   Code: 2

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: BCNSHP_1   Date accepted: 2000-11-01

             Name: stake, pole, perch, post

             Definition: an elongated wood or metal pole, embedded in the bottom to serve as a navigational aid or a support for a navigational aid. (adapted from IHO Dictionary S-32, 5th Edition, 4960)

2   DD Name: HYDRO   Code: BCNSHP_2   Date accepted: 2000-11-01

             Name: withy

             Definition: a tree without roots stuck or spoiled into the bottom of the sea to serve as a navigational aid.

3   DD Name: HYDRO   Code: BCNSHP_3   Date accepted: 2000-11-01

             Name: beacon tower

             Definition: a solid structure of the order of 10 metres in height used as a navigational aid.

4   DD Name: HYDRO   Code: BCNSHP_4   Date accepted: 2000-11-01

             Name: lattice beacon

             Definition: a structure consisting of strips of metal or wood crossed or interlaced to form a structure to serve as an aid to navigation or as a support for an aid to navigation.

5   DD Name: HYDRO   Code: BCNSHP_5   Date accepted: 2000-11-01

             Name: pile beacon

             Definition: a long heavy timber(s) or section(s) of steel, wood, concrete, etc., forced into the seabed to serve as an aid to navigation or as a support for an aid to navigation.(Adapted from IHO Dictionary, S-32, 5th Edition, 3840 and Navigation Dictionary, US National Oceanic and Atmospheric Administration - NOAA, 1969)

Attribute	Buoy shape

Acronym: BOYSHP   Code: 4

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: BOYSHP_1   Date accepted: 2000-11-01

             Name: conical (nun, ogival)

             Definition: the upper part of the body above the water-line, or the greater part of the superstructure, has approximately the shape or the appearance of a pointed cone with the point upwards.

2   DD Name: HYDRO   Code: BOYSHP_2   Date accepted: 2000-11-01

             Name: can (cylindrical)

             Definition: the upper part of the body above the water-line, or the greater part of the superstructure, has the shape of a cylinder, or a truncated cone that approximates to a cylinder, with a flat end uppermost.

3   DD Name: HYDRO   Code: BOYSHP_3   Date accepted: 2000-11-01

             Name: spherical

             Definition: the upper part of the body above the water-line, or the greater part of the superstructure, has the shape of a part of a sphere.

4   DD Name: HYDRO   Code: BOYSHP_4   Date accepted: 2000-11-01

             Name: pillar

             Definition: the upper part of the body above the water-line, or the greater part of the superstructure is a narrow vertical structure, pillar or lattice tower.

5   DD Name: HYDRO   Code: BOYSHP_5   Date accepted: 2000-11-01

             Name: spar (spindle)

             Definition: the upper part of the body above the water-line, or the greater part of the superstructure, has the form of a pole, or of a very long cylinder, floating upright.

Value   Data Dictionary (DD) Reference

6   DD Name: HYDRO   Code: BOYSHP_6   Date accepted: 2000-11-01

             Name: barrel (tun)

             Definition: the upper part of the body above the water-line, or the greater part of the superstructure, has
             the form of a barrel or cylinder floating horizontally.

8   DD Name: HYDRO   Code: BOYSHP_8   Date accepted: 2000-11-01

             Name: ice buoy

             Definition: a specially constructed shuttle shaped buoy which is used in ice conditions.

Attribute	Buried depth

Acronym: BURDEP   Code: 5

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The depth below the sea bed to which an object is buried.

Attribute	Category of airport/airfield

Acronym: CATAIR   Code: 7

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATAIR_1   Date accepted: 2000-11-01

           Name: military aeroplane airport

           Definition: a large military airfield usually equipped with a control tower, hangars and accommodation for the receiving and discharging of passengers or cargo. (adapted from The Macquarie Dictionary, 1988)

2   DD Name: HYDRO   Code: CATAIR_2   Date accepted: 2000-11-01

           Name: civil aeroplane airport

           Definition: a large airfield usually equipped with a control tower, hangars and accommodation for the receiving and discharging of passengers or cargo. (The Macquarie Dictionary, 1988)

4   DD Name: HYDRO   Code: CATAIR_4   Date accepted: 2000-11-01

           Name: civil heliport

           Definition: a landing place for helicopters, often the roof of a building. (The Macquarie Dictionary, 1988)

6   DD Name: HYDRO   Code: CATAIR_6   Date accepted: 2000-11-01

           Name: small planes airfield

           Definition: an area of land set aside for the take-off and landing of small aeroplanes.

Attribute	Category of bridge

Acronym: CATBRG

Code: 9

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATBRG_1   Date accepted: 2000-11-01

Name: fixed bridge

Definition: a bridge having permanent horizontal and vertical alignment. (McGraw-Hill Dictionary of Scientific and Technical Terms, 3rd Edition, 1984)

3   DD Name: HYDRO   Code: CATBRG_3   Date accepted: 2000-11-01

Name: swing bridge

Definition: a movable bridge (or span thereof) which rotates in a horizontal plane about a vertical pivot to allow the passage of vessels. (adapted from McGraw-Hill Encyclopaedia of Science and Technology, 7th Edition, 1992)

4   DD Name: HYDRO   Code: CATBRG_4   Date accepted: 2000-11-01

Name: lifting bridge

Definition: a movable bridge (or span thereof) which is capable of being lifted vertically to allow vessels to pass beneath. (adapted from IHO Dictionary, S-32, 5th Edition, 547)

5   DD Name: HYDRO   Code: CATBRG_5   Date accepted: 2000-11-01

Name: bascule bridge

Definition: a counterpoise bridge rotated in a vertical plane about an axis at one or both ends. Also called a balance. (IHO Dictionary, S-32, 5th Edition, 545)

7   DD Name: HYDRO   Code: CATBRG_7   Date accepted: 2000-11-01

Name: draw bridge

Definition: a general name for bridges of which part or the entire span of the bridge may be raised or drawn aside to allow ships to pass through. IHO Dictionary, S-32, 5th Edition, 546)

Value   Data Dictionary (DD) Reference

9   DD Name: HYDRO   Code: CATBRG_9   Date accepted: 2000-11-01

             Name: footbridge

             Definition: a bridge structure used only for pedestrian traffic. (McGraw-Hill Dictionary of Scientific and
             Technical Terms, 3rd Edition, 1984)

12   DD Name: HYDRO   Code: CATBRG_12   Date accepted: 2000-11-01

             Name: suspension bridge

             Definition: a fixed bridge consisting of either a roadway or a truss suspended from two or more cables
             which pass over towers and are anchored by backstays to a firm foundation. (McGraw-Hill Encyclopaedia of
             Science and Technology, 7th Edition, 1992)

13   DD Name: IENC   Code: CATBRG_13   Date accepted: 2012-08-03

             Name: bridge arch

             Definition: an arched bridge with known clearances

Attribute	Category of built-up area

Acronym: CATBUA   Code: 10

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATBUA_1   Date accepted: 2000-11-01

             Name: urban area

             Definition: an area predominantly occupied by man-made structures used for residential, commercial, and industrial purposes. (Nautical Chart Manual, US Department of Commerce, 1992)

2   DD Name: HYDRO   Code: CATBUA_2   Date accepted: 2000-11-01

             Name: settlement

             Definition: a small collection of dwellings in a remote area.

3   DD Name: HYDRO   Code: CATBUA_3   Date accepted: 2000-11-01

             Name: village

             Definition: a collection of houses in a rural district, usually smaller than a town.

4   DD Name: HYDRO   Code: CATBUA_4   Date accepted: 2000-11-01

             Name: town

             Definition: any considerable collection of dwellings and other buildings larger than a village, but not incorporated as a city.

5   DD Name: HYDRO   Code: CATBUA_5   Date accepted: 2000-11-01

             Name: city

             Definition: a major town inhabited by a large permanent community with all essential services.

Attribute	Category of cable

Acronym: CATCBL   Code: 11

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATCBL_1   Date accepted: 2000-11-01
             Name: power line
             Definition: a cable used for the supply of electricity.

3   DD Name: HYDRO   Code: CATCBL_3   Date accepted: 2000-11-01
             Name: transmission line
             Definition: multiple un-insulated cables usually supported by steel lattice towers. Such features are generally more prominent than normal power lines.

4   DD Name: HYDRO   Code: CATCBL_4   Date accepted: 2000-11-01
             Name: telephone
             Definition: a cable used for the transmission of telephone signals.

5   DD Name: HYDRO   Code: CATCBL_5   Date accepted: 2000-11-01
             Name: telegraph
             Definition: a cable used for the transmission of telegraph signals.

6   DD Name: HYDRO   Code: CATCBL_6   Date accepted: 2000-11-01
             Name: mooring cable/chain
             Definition: a cable or chain used to secure a mooring buoy or other floating structure.

Attribute	Category of cardinal mark

Acronym: CATCAM   Code: 13

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATCAM_1   Date accepted: 2000-11-01

             Name: north cardinal mark

             Definition: Quadrant bounded by the true bearing NW-NE taken from the point of interest it should be passed to the north side of the mark.

2   DD Name: HYDRO   Code: CATCAM_2   Date accepted: 2000-11-01

             Name: east cardinal mark

             Definition: Quadrant bounded by the true bearing NE-SE taken from the point of interest it should be passed to the east side of the mark.

3   DD Name: HYDRO   Code: CATCAM_3   Date accepted: 2000-11-01

             Name: south cardinal mark

             Definition: Quadrant bounded by the true bearing SE-SW taken from the point of interest it should be passed to the south side of the mark.

4   DD Name: HYDRO   Code: CATCAM_4   Date accepted: 2000-11-01

             Name: west cardinal mark

             Definition: Quadrant bounded by the true bearing SW-NW taken from the point of interest it should be passed to the west side of the mark.

Attribute	Category of coastline

Acronym: CATCOA
Code: 15

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO
Date accepted: 2000-11-01

Definition:

Enumerations:

Value	Data Dictionary (DD) Reference

1
DD Name: HYDRO
Code: CATCOA_1
Date accepted: 2000-11-01

Name: steep coast

Definition: a coast backed by rock or earth cliffs, gives a good radar return and is useful for visual identification from a considerable distance off, where cliffs alternate with low lying coast along the shoreline. (IHO Chart Specifications, M-4)

2
DD Name: HYDRO
Code: CATCOA_2
Date accepted: 2000-11-01

Name: flat coast

Definition: a level coast with no obvious topographic features.

3
DD Name: HYDRO
Code: CATCOA_3
Date accepted: 2000-11-01

Name: sandy shore

Definition: a shoreline area made up of sand, i.e. loose material consisting of small but easily distinguishable, separate grains, between 0.0625 and 2.000 millimetres in diameter. (adapted from IHO Dictionary, S-32, 5th Edition, 4497)

4
DD Name: HYDRO
Code: CATCOA_4
Date accepted: 2000-11-01

Name: stony shore

Definition: a shoreline area made up of rock and rock fragments ranging in size from pebbles and gravel to boulders or large rock masses. (adapted from IHO Dictionary, S-32, 5th Edition, 5059)

5
DD Name: HYDRO
Code: CATCOA_5
Date accepted: 2000-11-01

Name: shingly shore

Definition: a shoreline area made up of rounded, often flat waterworn rock fragments larger than approximately 16 millimetres. (adapted from IHO Dictionary, S-32, 5th Edition, 4683)

Value   Data Dictionary (DD) Reference

6   DD Name: HYDRO   Code: CATCOA_6   Date accepted: 2000-11-01

               Name: glacier (seaward end)

               Definition: projecting seaward extension of glacier, usually afloat. Also called glacier tongue. (IHO
               Hydrographic Dictionary, S-32, 5th Edition, 2043)

7   DD Name: HYDRO   Code: CATCOA_7   Date accepted: 2000-11-01

               Name: mangrove

               Definition: one of several genera of tropical trees or shrubs which produce many prop roots and grow
               along low lying coasts into shallow water. (IHO Hydrographic Dictionary, S-32, 5th Edition, 3064)

8   DD Name: HYDRO   Code: CATCOA_8   Date accepted: 2000-11-01

               Name: marshy shore

               Definition: a shoreline area made up of spongy land saturated with water. It may have a shallow covering
               of water, usually with a considerable amount of vegetation appearing above the surface. (adapted from IHO
               Dictionary, S-32, 5th Edition, 5240)

9   DD Name: HYDRO   Code: CATCOA_9   Date accepted: 2000-11-01

               Name: coral reef

               Definition: a reef, often of large extent, composed chiefly of coral and its derivatives. (IHO Dictionary, S-
               32, 5th Edition, 1063)

10   DD Name: HYDRO   Code: CATCOA_10   Date accepted: 2000-11-01

               Name: ice coast

               Definition: a vertical cliff forming the seaward edge of an ice shelf, ranging in height from 2m to 50m or
               more above sea level.

11   DD Name: HYDRO   Code: CATCOA_11   Date accepted: 2000-11-01

               Name: shelly shore

               Definition: a shoreline area made up of shells i.e. made up of the hard outside covering of marine animals.

Attribute	Category of conveyor

Acronym: CATCON   Code: 17

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

2   DD Name: HYDRO   Code: CATCON_2   Date accepted: 2000-11-01

               Name: belt conveyor

               Definition: a conveyor along which material or people are transported by means of a moving belt.

Attribute	Category of coverage

Acronym: CATCOV   Code: 18

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATCOV_1   Date accepted: 2000-11-01

             Name: coverage available

             Definition: continuous coverage of spatial objects is available within this area.

2   DD Name: HYDRO   Code: CATCOV_2   Date accepted: 2000-11-01

             Name: no coverage available

             Definition: an area containing no spatial objects.

Attribute	Category of crane

Acronym: CATCRN   Code: 19

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

2   DD Name: HYDRO   Code: CATCRN_2   Date accepted: 2000-11-01

             Name: container crane/gantry

             Definition: a high speed, shore-based crane used in the lift-on/lift-off operation of specially constructed
             containers. (adapted from Nautical Chart Manual, US Department of Commerce, Coast and Geodetic
             Survey, 7th Edition)

3   DD Name: HYDRO   Code: CATCRN_3   Date accepted: 2000-11-01

             Name: sheerlegs

             Definition: a tripodal structure used in dockyards and harbours for stepping masts or lifting loads in to and
             out of vessels.

4   DD Name: HYDRO   Code: CATCRN_4   Date accepted: 2000-11-01

             Name: travelling crane

             Definition: a crane mounted on rails (track) that can move (usually parallel to the wharf face) in order to
             load and unload cargo vessels. (Canadian Hydrographic Service)

5   DD Name: HYDRO   Code: CATCRN_5   Date accepted: 2000-11-01

             Name: A-frame

             Definition: a type of crane shaped like the letter "A". They are often positioned on river banks or the
             coastline and are used for lifting logs from logging trucks and depositing them in the water. (Canadian
             Hydrographic Service)

Attribute	Category of dam

Acronym: CATDAM   Code: 20

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATDAM_1   Date accepted: 2000-11-01

             Name: weir

             Definition: a dam erected across a river to raise the level of the water. A fence of stakes set in a river or along the shore as a trap for fish.

2   DD Name: HYDRO   Code: CATDAM_2   Date accepted: 2000-11-01

             Name: dam

             Definition: a barrier to check or confine anything in motion; particularly one constructed to hold back water and raise its level to form a reservoir, or to prevent flooding. (IHO Dictionary, S-32, 5th Edition, 1196)

3   DD Name: HYDRO   Code: CATDAM_3   Date accepted: 2000-11-01

             Name: flood barrage

             Definition: an opening dam across a channel which, when required, is closed to control flood waters. (IHO Chart Specifications, M-4 326.7)

Attribute	Category of distance mark

Acronym: CATDIS   Code: 21

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATDIS_1   Date accepted: 2000-11-01

             Name: distance mark not physically installed

             Definition: a point at which a distance from an origin along a feature is given for information, but at which no specific marker exists.

2   DD Name: HYDRO   Code: CATDIS_2   Date accepted: 2000-11-01

             Name: visible mark, pole

             Definition: a point at which a distance from an origin along a feature is given for information and which is marked by a pole.

3   DD Name: HYDRO   Code: CATDIS_3   Date accepted: 2000-11-01

             Name: visible mark, board

             Definition: a point at which a distance from an origin along a feature is given for information and which is marked by a board.

4   DD Name: HYDRO   Code: CATDIS_4   Date accepted: 2000-11-01

             Name: visible mark, unknown shape

             Definition: a point at which a distance from an origin along a feature is given for information and which is physically marked, but the shape of the mark is not known or not given.

Attribute	Category of dumping ground

Acronym: CATDPG   Code: 23

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2010-09-08

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

2   DD Name: HYDRO   Code: CATDPG_2   Date accepted: 2010-09-08

             Name: chemical waste dumping ground

             Definition: an area at sea where chemical waste is dumped.

4   DD Name: HYDRO   Code: CATDPG_4   Date accepted: 2010-09-08

             Name: explosives dumping ground

             Definition: an area at sea where explosives are dumped.

5   DD Name: HYDRO   Code: CATDPG_5   Date accepted: 2010-09-08

             Name: spoil ground

             Definition: an area at sea where dredged material is deposited. Also called dumping ground. (IHO
             Dictionary, S-32, 5th Edition, 4930)

Attribute	Category of fence/wall

Acronym: CATFNC   Code: 24

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATFNC_1   Date accepted: 2000-11-01

             Name: fence

             Definition: a man made barrier used as an enclosure or boundary or for protection. (Digital Geographic Information Working Group -DGIWG, Oct. 1987)

4   DD Name: HYDRO   Code: CATFNC_4   Date accepted: 2000-11-01

             Name: wall

             Definition: a fence constructed from masonry or stone.

Attribute	Category of ferry

Acronym: CATFRY   Code: 25

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATFRY_1   Date accepted: 2000-11-01

              Name: 'free-moving' ferry

              Definition: a ferry which may have routes that vary with weather, tide and traffic. (adapted from M-4)

2   DD Name: HYDRO   Code: CATFRY_2   Date accepted: 2000-11-01

              Name: cable ferry

              Definition: a ferry that follows a fixed route guided by a cable. (adapted from IHO Specifications, M-4)

Attribute	Category of fog signal

Acronym: CATFOG   Code: 27

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATFOG_1   Date accepted: 2000-11-01

             Name: explosive

             Definition: a signal produced by the firing of explosive charges. (Admiralty List of Lights and Fog Signals)

2   DD Name: HYDRO   Code: CATFOG_2   Date accepted: 2000-11-01

             Name: diaphone

             Definition: a diaphone uses compressed air and generally emits a powerful low-pitched sound, which often concludes with a brief sound of suddenly lowered pitch, termed the 'grunt'. (Admiralty List of Lights and Fog Signals)

3   DD Name: HYDRO   Code: CATFOG_3   Date accepted: 2000-11-01

             Name: siren

             Definition: a siren uses compressed air and exists in a variety of types which differ considerably in their sound and power. (Admiralty List of Lights and Fog Signals)

4   DD Name: HYDRO   Code: CATFOG_4   Date accepted: 2000-11-01

             Name: nautophone

             Definition: a horn having a diaphragm oscillated by electricity (IHO Dictionary, S-32, 5th Edition, 3371).

5   DD Name: HYDRO   Code: CATFOG_5   Date accepted: 2000-11-01

             Name: reed

             Definition: a reed uses compressed air and emits a weak, high pitched sound. (Admiralty List of Lights and Fog Signals)

6   DD Name: HYDRO   Code: CATFOG_6   Date accepted: 2000-11-01

Value   Data Dictionary (DD) Reference

        Name: tyfon

        Definition: a diaphragm horn which operates under the influence of compressed air or steam (IHO Dictionary, S-32, 5th Edition, 5717).

7   DD Name: HYDRO   Code: CATFOG_7   Date accepted: 2000-11-01

        Name: bell

        Definition: a ringing sound with a short range. The apparatus may be operated automatically, by hand or by wave action. (IHO Chart Specifications, M-4, 452.5)

8   DD Name: HYDRO   Code: CATFOG_8   Date accepted: 2000-11-01

        Name: whistle

        Definition: a distinctive sound made by a jet of air passing through an orifice. The apparatus may be operated automatically, by hand or by air being forced up a tube by waves acting on a buoy. (IHO Chart Specifications, M-4, 452.6)

9   DD Name: HYDRO   Code: CATFOG_9   Date accepted: 2000-11-01

        Name: gong

        Definition: a sound produced by vibration of a disc when struck. The apparatus may be operated automatically, by hand or by wave action. (IHO Chart Specifications, M-4, 452.7)

10   DD Name: HYDRO   Code: CATFOG_10   Date accepted: 2000-11-01

        Name: horn

        Definition: a horn uses compressed air or electricity to vibrate a diaphragm and exists in a variety of types which differ greatly in their sound and power. (Admiralty List of Lights and Fog Signals)

Attribute	Category of gate

Acronym: CATGAT   Code: 29

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

2   DD Name: HYDRO   Code: CATGAT_2   Date accepted: 2000-11-01

             Name: flood barrage gate

             Definition: an opening gate used to control flood water.

4   DD Name: HYDRO   Code: CATGAT_4   Date accepted: 2000-11-01

             Name: lock gate

             Definition: lock gates are the massive hinged doors at each end of a lock. (adapted from IHO Dictionary, S-32, 5th Edition, 2882)

Attribute	Category of harbour facility

Acronym: CATHAF

Code: 30

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

5   DD Name: HYDRO   Code: CATHAF_5   Date accepted: 2000-11-01

               Name: yacht harbour/marina

               Definition: a harbour with facilities for small boats and yachts (IHO Dictionary, S-32, 5th Edition, 3095).

Attribute	Category of hulk

Acronym: CATHLK

Code: 31

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATHLK_1   Date accepted: 2000-11-01

Name: floating restaurant

Definition: a permanently moored floating structure, such as an old ship, used as a restaurant.

2   DD Name: HYDRO   Code: CATHLK_2   Date accepted: 2000-11-01

Name: historic ship

Definition: a ship of historical interest permanently moored as a tourist attraction.

3   DD Name: HYDRO   Code: CATHLK_3   Date accepted: 2000-11-01

Name: museum

Definition: a permanently moored floating structure, such as an old ship, used as a museum.

4   DD Name: HYDRO   Code: CATHLK_4   Date accepted: 2000-11-01

Name: accommodation

Definition: a permanently moored floating structure, such as an old ship, used for accommodation.

5   DD Name: HYDRO   Code: CATHLK_5   Date accepted: 2000-11-01

Name: floating breakwater

Definition: a permanently moored floating structure, often constructed from old ships, used as a breakwater.

Attribute	Category of land region

Acronym: CATLND   Code: 34

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: Category of land region

Enumerations:

Value   Data Dictionary (DD) Reference

2   DD Name: HYDRO   Code: CATLND_2   Date accepted: 2000-11-01

             Name: marsh

             Definition: an area of wet, often spongy ground that is subject to frequent flooding or tidal inundations, but not considered to be continually under water. It is characterized by the growth of non woody plants and by the lack of trees

9   DD Name: HYDRO   Code: CATLND_9   Date accepted: 2000-11-01

             Name: agricultural land

             Definition: areas used for cultivation of the soil, the breeding of livestock etc. and general farming.

11   DD Name: HYDRO   Code: CATLND_11   Date accepted: 2000-11-01

             Name: parkland

             Definition: a piece of ground kept for ornament and/or recreation or maintained in its natural state as a public property or area.

12   DD Name: HYDRO   Code: CATLND_12   Date accepted: 2000-11-01

             Name: swamp

             Definition: an area of spongy land saturated with water. It may have a shallow covering of water, usually with a considerable amount of vegetation appearing above the surface.

Attribute	Category of landmark

Acronym: CATLMK   Code: 35

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATLMK_1   Date accepted: 2000-11-01

             Name: cairn

             Definition: a mound of stones, usually conical or pyramidal, raised as a landmark or to designate a point of importance in surveying. (IHO Dictionary, S-32, 5th Edition, 601)

2   DD Name: HYDRO   Code: CATLMK_2   Date accepted: 2000-11-01

             Name: cemetery

             Definition: an area of land for burying the dead.

3   DD Name: HYDRO   Code: CATLMK_3   Date accepted: 2000-11-01

             Name: chimney

             Definition: a vertical structure containing a passage or flue for discharging smoke and gases. (Digital Geographic Information Standard - DIGEST)

4   DD Name: HYDRO   Code: CATLMK_4   Date accepted: 2000-11-01

             Name: dish aerial

             Definition: a parabolic aerial for the receipt and transmission of high frequency radio signals. (IHO Dictionary, S-32, 5th Edition, 1400)

5   DD Name: HYDRO   Code: CATLMK_5   Date accepted: 2000-11-01

             Name: flagstaff (flagpole)

             Definition: a staff or pole on which flags are raised. (Digital Geographic Information Standard - DIGEST 1.28)

6   DD Name: HYDRO   Code: CATLMK_6   Date accepted: 2000-11-01

Value   Data Dictionary (DD) Reference

     Name: flare stack

     Definition: a tall structure used for burning-off waste oil or gas. (IHO Dictionary, S-32, 5th Edition, 1836). Normally showing a flame and located at refineries (IHO Chart specifications, M-4).

7   DD Name: HYDRO   Code: CATLMK_7   Date accepted: 2000-11-01

     Name: mast

     Definition: a straight vertical piece of timber or a hollow cylinder. (adapted from Digital Geographic Information Standard - DIGEST)

8   DD Name: HYDRO   Code: CATLMK_8   Date accepted: 2000-11-01

     Name: wind sock

     Definition: a tapered fabric sleeve mounted so as to catch and swing with the wind, thus indicating the wind direction. (Navigation dictionary, US National Oceanic and Atmospheric Administration - NOAA, 1969)

9   DD Name: HYDRO   Code: CATLMK_9   Date accepted: 2000-11-01

     Name: monument

     Definition: a structure erected or maintained as a memorial to a person or event. (Digital Geographic Information Standard - DIGEST)

10   DD Name: HYDRO   Code: CATLMK_10   Date accepted: 2000-11-01

     Name: column (pillar)

     Definition: a cylindrical or slightly tapering body of considerably greater length than diameter erected vertically. (Oxford English Dictionary)

11   DD Name: HYDRO   Code: CATLMK_11   Date accepted: 2000-11-01

     Name: memorial plaque

     Definition: a slab of metal, usually ornamented, erected as a memorial to a person or event.

12   DD Name: HYDRO   Code: CATLMK_12   Date accepted: 2000-11-01

     Name: obelisk

     Definition: a tapering shaft usually of stone or concrete, square or rectangular in section, with a pyramidal apex. (Adapted from Oxford English Dictionary)

13   DD Name: HYDRO   Code: CATLMK_13   Date accepted: 2000-11-01

     Name: statue

     Definition: a representation of a human, animal or fantasy figure in marble, bronze, etc.

14   DD Name: HYDRO   Code: CATLMK_14   Date accepted: 2000-11-01

     Name: cross

     Definition: a monument, or other structure in form of a cross. (Funk and Wagnalls Dictionary)

Value	Data Dictionary (DD) Reference

15 DD Name: HYDRO   Code: CATLMK_15   Date accepted: 2000-11-01

Name: dome

Definition: a landmark comprising a hemispherical or spheroidal shaped structure (adapted from the Macquarie Dictionary).

16 DD Name: HYDRO   Code: CATLMK_16   Date accepted: 2000-11-01

Name: radar scanner

Definition: a device used for directing a radar beam through a search pattern (adapted from Navigation Dictionary, US National Oceanic and Atmospheric Administration - NOAA, 1969)

17 DD Name: HYDRO   Code: CATLMK_17   Date accepted: 2000-11-01

Name: tower

Definition: a relatively tall structure which may be used for observation, support, storage or communication etc. (Digital Geographic Information Working Group -DGIWG, Oct. 1987)

18 DD Name: HYDRO   Code: CATLMK_18   Date accepted: 2000-11-01

Name: windmill

Definition: a wind driven system of vanes attached to a tower like structure (excluding wind-generated power plants). (Digital Geographic Information Standard - DIGEST)

19 DD Name: HYDRO   Code: CATLMK_19   Date accepted: 2000-11-01

Name: windmotor

Definition: a modern structure for the use of windpower. (IHO Chart Specifications, M-4)

20 DD Name: HYDRO   Code: CATLMK_20   Date accepted: 2000-11-01

Name: spire/minaret

Definition: a tall conical or pyramid-shaped structure often built on the roof or tower of a building, especially a church or mosque. (adapted from The New Shorter Oxford English Dictionary, 1993)

21 DD Name: HYDRO   Code: CATLMK_21   Date accepted: 2000-11-01

Name: large rock or boulder on land

Definition: an isolated rocky formation or a single large stone (IHO Dictionary, S-32, 5th Edition).

Attribute	Category of lateral mark

Acronym: CATLAM   Code: 36

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATLAM_1   Date accepted: 2000-11-01

             Name: port-hand lateral mark

             Definition: indicates the port boundary of a navigational channel or suggested route when proceeding in the 'conventional direction of buoyage'.

2   DD Name: HYDRO   Code: CATLAM_2   Date accepted: 2000-11-01

             Name: starboard-hand lateral mark

             Definition: indicates the starboard boundary of a navigational channel or suggested route when proceeding in the 'conventional direction of buoyage'.

3   DD Name: HYDRO   Code: CATLAM_3   Date accepted: 2000-11-01

             Name: preferred channel to starboard lateral mark

             Definition: at a point where a channel divides, when proceeding in the 'conventional direction of buoyage', the preferred channel (or primary route) is indicated by a modified port-hand lateral mark.

4   DD Name: HYDRO   Code: CATLAM_4   Date accepted: 2000-11-01

             Name: preferred channel to port lateral mark

             Definition: at a point where a channel divides, when proceeding in the 'conventional direction of buoyage', the preferred channel (or primary route) is indicated by a modified starboard-hand lateral mark.

Attribute	Category of lights

Acronym: CATLIT   Code: 37

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATLIT_1   Date accepted: 2000-11-01

             Name: directional function

             Definition: a light illuminating a sector of very narrow angle and intended to mark a direction to follow. (IHO Dictionary, S-32, 5th Edition, 2778)

4   DD Name: HYDRO   Code: CATLIT_4   Date accepted: 2000-11-01

             Name: leading light

             Definition: a light associated with other lights so as to form a leading line to be followed. (adapted from IHO Dictionary, S-32, 5th Edition, 2794)

5   DD Name: HYDRO   Code: CATLIT_5   Date accepted: 2000-11-01

             Name: aero light

             Definition: an aero light is established for aeronautical navigation and may be of higher power than marine lights and visible from well offshore

6   DD Name: HYDRO   Code: CATLIT_6   Date accepted: 2000-11-01

             Name: air obstruction light

             Definition: a light marking an obstacle which constitutes a danger to air navigation

12   DD Name: HYDRO   Code: CATLIT_12   Date accepted: 2000-11-01

             Name: front

             Definition: terms used with leading lights to describe the position of the light on the lead as viewed from seaward.

13   DD Name: HYDRO   Code: CATLIT_13   Date accepted: 2000-11-01

Value	Data Dictionary (DD) Reference

Name: rear

Definition: terms used with leading lights to describe the position of the light on the lead as viewed from seaward.

14 DD Name: HYDRO Code: CATLIT_14 Date accepted: 2000-11-01

Name: lower

Definition: terms used with leading lights to describe the position of the light on the lead as viewed from seaward.

15 DD Name: HYDRO Code: CATLIT_15 Date accepted: 2000-11-01

Name: upper

Definition: terms used with leading lights to describe the position of the light on the lead as viewed from seaward.

Attribute	Category of marine farm/culture

Acronym: CATMFA   Code: 38

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2010-08-12

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATMFA_1   Date accepted: 2010-08-12
             Name: crustaceans
             Definition: hard shelled animals, for example crabs or lobsters

2   DD Name: HYDRO   Code: CATMFA_2   Date accepted: 2010-08-12
             Name: oysters/mussels
             Definition: edible bivalve molluscs

3   DD Name: HYDRO   Code: CATMFA_3   Date accepted: 2010-08-12
             Name: fish
             Definition: vertebrate cold blooded animal with gills, living in water.

4   DD Name: HYDRO   Code: CATMFA_4   Date accepted: 2010-08-12
             Name: seaweed
             Definition: the general name for marine plants of the Algae class which grow in long narrow ribbons.
             (International Maritime Dictionary, 2nd Ed.)

Attribute	Category of mooring/warping facility

Acronym: CATMOR   Code: 40

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATMOR_1   Date accepted: 2000-11-01

             Name: dolphin

             Definition: a post or group of posts, which may support a deck, used for mooring or warping a vessel. (IHO Dictionary, S-32, 5th Edition, 1433)

3   DD Name: HYDRO   Code: CATMOR_3   Date accepted: 2000-11-01

             Name: bollard

             Definition: small shaped post, mounted on a wharf or dolphin used to secure ship=s lines.

4   DD Name: HYDRO   Code: CATMOR_4   Date accepted: 2000-11-01

             Name: tie-up wall

             Definition: a tie-up wall is a section of wall designated for tying-up vessels awaiting transit. Bollards and mooring devices are available for both large and small ships.

5   DD Name: HYDRO   Code: CATMOR_5   Date accepted: 2000-11-01

             Name: post or pile

             Definition: a long heavy timber or section of steel, wood, concrete, etc., forced into the seabed to serve as a mooring facility. (IHO Dictionary, S-32, 5th Edition, 3840)

7   DD Name: HYDRO   Code: CATMOR_7   Date accepted: 2000-11-01

             Name: mooring buoy

             Definition: a buoy secured to the bottom by permanent moorings with means for mooring a vessel by use of its anchor chain or mooring lines. (IHO Dictionary, S-32, 5th Edition, 575)

Attribute	Category of navigation line

Acronym: CATNAV   Code: 41

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATNAV_1   Date accepted: 2000-11-01

             Name: clearing line

             Definition: a straight line that marks the boundary between a safe and a dangerous area or that passes
             clear of a navigational danger. (adapted from IHO Dictionary, S-32, 5th Edition, 826)

2   DD Name: HYDRO   Code: CATNAV_2   Date accepted: 2000-11-01

             Name: transit line

             Definition: a line passing through one or more fixed marks.

3   DD Name: HYDRO   Code: CATNAV_3   Date accepted: 2000-11-01

             Name: leading line bearing a recommended track

             Definition: a line passing through one or more clearly defined objects, along the path of which a vessel can
             approach safely up to a certain distance off. (Adapted from IHO Dictionary, S-32, 5th Edition, 2696)

Attribute	Category of obstruction

Acronym: CATOBS   Code: 42

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATOBS_1   Date accepted: 2000-11-01

             Name: snag/stump

             Definition: a tree, branch or broken pile embedded in the ocean floor, river or lake bottom and not visible on the surface, forming thereby a hazard to vessels. (IHO Dictionary, S-32, 5th Edition, 4794)

2   DD Name: HYDRO   Code: CATOBS_2   Date accepted: 2000-11-01

             Name: wellhead

             Definition: a submarine structure projecting some distance above the seabed and capping a temporarily abandoned or suspended oil or gas well. (IHO Dictionary, S-32, 5th Edition, 5976)

3   DD Name: HYDRO   Code: CATOBS_3   Date accepted: 2000-11-01

             Name: diffuser

             Definition: a structure on an outfall through which liquids are discharged. The structure will usually project above the level of the outfall and can be an obstruction to navigation.

4   DD Name: HYDRO   Code: CATOBS_4   Date accepted: 2000-11-01

             Name: crib

             Definition: a permanent structure set in the water, framed with wooden beams and filled with rocks or boulders. They are used to anchor log booms or support other constructions, e.g. submerged outfalls, diffusers etc.. They may always be dry, submerged or cover and uncover.

5   DD Name: HYDRO   Code: CATOBS_5   Date accepted: 2000-11-01

             Name: fish haven

             Definition: areas established by private interests, usually sport fishermen, to simulate natural reefs and wrecks that attract fish. The reefs are constructed by dumping assorted junk in areas which may be of very

Value   Data Dictionary (DD) Reference

small extent or may stretch a considerable distance along a depth contour. Also called fishery reefs.

6   DD Name: HYDRO   Code: CATOBS_6   Date accepted: 2000-11-01

Name: foul area

Definition: an area of numerous unidentified dangers to navigation. The area serves as a warning to the mariner that all dangers are not identified individually and that navigation through the area may be hazardous. Commonly used to encode areas behind danger lines on navigation charts. (adapted from IHO Dictionary, S-32, 5th Edition, 1915)

7   DD Name: HYDRO   Code: CATOBS_7   Date accepted: 2000-11-01

Name: foul ground

Definition: areas over which it is safe to navigate but which should be avoided for anchoring, taking the ground or ground fishing. (IHO Chart Specifications, M-4, 442.8)

8   DD Name: HYDRO   Code: CATOBS_8   Date accepted: 2000-11-01

Name: ice boom

Definition: floating barriers, anchored to the bottom, used to deflect the path of floating ice in order to prevent the obstruction of locks, intakes, etc., and to prevent damage to bridge piers and other structures. (Canadian Hydrographic Service, Chart specifications).

9   DD Name: HYDRO   Code: CATOBS_9   Date accepted: 2000-11-01

Name: ground tackle

Definition: equipment such as anchors, concrete blocks, chains and cables, etc., used to position floating structures such as trot and mooring buoys etc.

10   DD Name: HYDRO   Code: CATOBS_10   Date accepted: 2000-11-01

Name: boom

Definition: a floating barrier used to protect a river or harbour mouth or to create a sheltered area for storage purposes. (IHO Dictionary, S-32, 5th Edition, 505).

11   DD Name: HYDRO   Code: CATOBS_11   Date accepted: 2011-02-23

Name: fishing net

Definition: a piece of open-meshed material made of twine, cord, or something similar, used for catching fish

Attribute	Category of oil barrier

Acronym: CATOLB   Code: 44

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATOLB_1   Date accepted: 2000-11-01

             Name: oil retention (high pressure pipe)

             Definition: a pipe with holes from which air blows. When the air bubbles reach the surface they form a barrier which prevents the spread of oil. (Kort- og Matrikelstyrelsen, Denmark)

2   DD Name: HYDRO   Code: CATOLB_2   Date accepted: 2000-11-01

             Name: floating oil barrier

             Definition: a floating tube shaped structure, with a curtain (2 metre) hanging under it, below the surface, which prevents the spread of oil. (Kort- og Matrikelstyrelsen, Denmark)

Attribute	Category of pipeline/pipe

Acronym: CATPIP   Code: 47

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

2   DD Name: HYDRO   Code: CATPIP_2   Date accepted: 2000-11-01

           Name: outfall pipe

           Definition: a pipe (generally a sewer or drainage pipe) discharging in to the sea or a river.

3   DD Name: HYDRO   Code: CATPIP_3   Date accepted: 2000-11-01

           Name: intake pipe

           Definition: a pipe taking water from a river or other body of water, to drive a mill or supply a canal, waterworks, etc. (IHO Dictionary, S-32, 5th Edition, 2468)

4   DD Name: HYDRO   Code: CATPIP_4   Date accepted: 2000-11-01

           Name: sewer

           Definition: a pipe in a sewage system for carrying water or sewage to a disposal area.

6   DD Name: HYDRO   Code: CATPIP_6   Date accepted: 2000-11-01

           Name: supply pipe

           Definition: a pipe used for supplying of gas or liquid product.

Attribute	Category of production area

Acronym: CATPRA   Code: 48

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATPRA_1   Date accepted: 2000-11-01

         Name: quarry

         Definition: an excavation in solid rock from which building stone, limestone, etc. is removed.

2   DD Name: HYDRO   Code: CATPRA_2   Date accepted: 2000-11-01

         Name: mine

         Definition: an excavation in the earth for the purpose of extracting earth materials.

3   DD Name: HYDRO   Code: CATPRA_3   Date accepted: 2000-11-01

         Name: stockpile

         Definition: a reserve stock of material, equipment or other supplies.

4   DD Name: HYDRO   Code: CATPRA_4   Date accepted: 2000-11-01

         Name: power station area

         Definition: a stationary plant containing apparatus for large-scale conversion of some form of energy
         (hydraulic, steam, chemical, nuclear, etc.) into electrical energy.

5   DD Name: HYDRO   Code: CATPRA_5   Date accepted: 2000-11-01

         Name: refinery area

         Definition: a system of process units used to convert crude petroleum into fuels, lubricants and other
         petroleum-derived products.

6   DD Name: HYDRO   Code: CATPRA_6   Date accepted: 2000-11-01

         Name: timber yard

Value   Data Dictionary (DD) Reference

             Definition: a storage area for wood used for building, carpentry or joinery.

7   DD Name: HYDRO   Code: CATPRA_7   Date accepted: 2000-11-01

             Name: factory area

             Definition: a group of buildings where goods are manufactured.

8   DD Name: HYDRO   Code: CATPRA_8   Date accepted: 2000-11-01

             Name: tank farm

             Definition: an area in which a number of large-capacity storage tanks are located, generally used for crude oil or petroleum products.

9   DD Name: HYDRO   Code: CATPRA_9   Date accepted: 2000-11-01

             Name: wind farm

             Definition: an area in which numerous wind motors are located.

10   DD Name: HYDRO   Code: CATPRA_10   Date accepted: 2000-11-01

             Name: slag heap/spoil heap

             Definition: hill of refuse from a mine, industrial plant etc. on land (adapted from Concise Oxford Dictionary).

Attribute	Category of pylon

Acronym: CATPYL   Code: 49

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATPYL_1   Date accepted: 2000-11-01

              Name: power transmission pylon/pole

              Definition: a vertical construction consisting, for example, of a steel framework or of pre-stressed concrete, to support a power transmission cable or line. (adapted from Digital Geographic Information Standard - DIGEST FACC 1.2)

2   DD Name: HYDRO   Code: CATPYL_2   Date accepted: 2000-11-01

              Name: telephone/telegraph pylon/pole

              Definition: a pylon or pole used to support a telephone or telegraph line. (Digital Geographic Information Standard - DIGEST FACC 1.2)

3   DD Name: HYDRO   Code: CATPYL_3   Date accepted: 2000-11-01

              Name: aerial cableway/sky pylon

              Definition: a tower or pylon supporting steel cables which convey cars, buckets, or other suspended carrier units. (adapted from Digital Geographic Information Standard - DIGEST FACC 1.2)

4   DD Name: HYDRO   Code: CATPYL_4   Date accepted: 2000-11-01

              Name: bridge pylon/tower

              Definition: a tower, abutment or pylon from which a bridge deck is suspended. (adapted from Digital Geographic Information Standard - DIGEST FACC 1.2)

5   DD Name: HYDRO   Code: CATPYL_5   Date accepted: 2000-11-01

              Name: bridge pier

              Definition: a support in the form of a pillar or pier for the spans of a bridge. (adapted from Digital Geographic Information Standard - DIGEST FACC 1.2)

Attribute	Category of radar station

Acronym: CATRAS   Code: 51

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATRAS_1   Date accepted: 2000-11-01

             Name: radar surveillance station

             Definition: a radar station established for traffic surveillance. (IHO Dictionary, S-32, 5th Edition, 4144)

Attribute	Category of radar transponder beacon

Acronym: CATRTB   Code: 52

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATRTB_1   Date accepted: 2000-11-01

             Name: ramark, radar beacon transmitting continuously

             Definition: a radar marker beacon which continuously transmits a signal appearing as a radial line on a
             radar screen, the line indicating the direction of the beacon. Ramarks are intended primarily for marine use.
             The name 'ramark' is derived from the words radar marker. (IHO Dictionary, S-32, 5th Edition, 4208)

2   DD Name: HYDRO   Code: CATRTB_2   Date accepted: 2000-11-01

             Name: racon, radar transponder beacon

             Definition: a radar beacon which returns a coded signal which provides identification of the beacon, as
             well as range and bearing. The range and bearing are indicated by the location of the first character
             received on the radar screen. The name 'racon' is derived from the words radar beacon. (IHO Dictionary, S-
             32, 5th Edition, 4132)

3   DD Name: HYDRO   Code: CATRTB_3   Date accepted: 2000-11-01

             Name: leading racon/radar transponder beacon

             Definition: a radar beacon that may be used (in conjunction with at least one other radar beacon) to
             indicate a leading line.

Attribute	Category of recommended track

Acronym: CATTRK   Code: 54

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATTRK_1   Date accepted: 2000-11-01

             Name: based on a system of fixed marks

             Definition: a straight route (known as a recommended track, range or leading line), which comprises at least two structures (usually beacons or daymarks) and/or natural features, which may carry lights and/or top-marks. The structures/features are positioned so that when observed to be in line, a vessel can follow a known bearing with safety. (adapted from International Association of Lighthouse Authorities - IALA Aids to Navigation Guide, 1990)

2   DD Name: HYDRO   Code: CATTRK_2   Date accepted: 2000-11-01

             Name: not based on a system of fixed marks

             Definition: a route (known as a recommended track or preferred route) which is not based on a series of structures or features in line.

Attribute	Category of restricted area

Acronym: CATREA   Code: 56

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

4   DD Name: HYDRO   Code: CATREA_4   Date accepted: 2000-11-01

         Name: nature reserve

         Definition: a tract of land managed so as to preserve it's flora, fauna, physical features, etc.

5   DD Name: HYDRO   Code: CATREA_5   Date accepted: 2000-11-01

         Name: bird sanctuary

         Definition: a place where birds are bred and protected.

9   DD Name: HYDRO   Code: CATREA_9   Date accepted: 2000-11-01

         Name: military area

         Definition: an area controlled by the military in which restrictions may apply. (Hydrographic Service, Royal Australian Navy)

12   DD Name: HYDRO   Code: CATREA_12   Date accepted: 2000-11-01

         Name: navigational aid safety zone

         Definition: an area around a navigational aid which vessels are prohibited from entering.

19   DD Name: HYDRO   Code: CATREA_19   Date accepted: 2000-11-01

         Name: waiting area

         Definition: an area reserved for vessels waiting to enter a harbour.

22   DD Name: HYDRO   Code: CATREA_22   Date accepted: 2000-11-01

         Name: fish sanctuary

         Definition: a place where fish are protected.

Value   Data Dictionary (DD) Reference

23   DD Name: HYDRO   Code: CATREA_23   Date accepted: 2000-11-01

          Name: ecological reserve

          Definition: a tract of land managed so as to preserve the relation of plants and living creatures to each other and to their surroundings.

25   DD Name: HYDRO   Code: CATREA_25   Date accepted: 2000-11-01

          Name: swinging area

          Definition: an area where vessels turn. (Service Hydrographique et Océanographique de la Marine, France).

26   DD Name: HYDRO   Code: CATREA_26   Date accepted: 2000-11-01

          Name: water skiing area

          Definition: an area within which people may water ski and therefore vessel movement may be restricted.

Attribute	Category of road

Acronym: CATROD

Code: 57

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATROD_1   Date accepted: 2000-11-01

Name: motorway

Definition: a main road with separate carriageways and limited access, specially constructed and controlled for fast motor traffic.

2   DD Name: HYDRO   Code: CATROD_2   Date accepted: 2000-11-01

Name: major road

Definition: a hard surfaced (metalled) road; a main through route.

3   DD Name: HYDRO   Code: CATROD_3   Date accepted: 2000-11-01

Name: minor road

Definition: a secondary road for local traffic.

4   DD Name: HYDRO   Code: CATROD_4   Date accepted: 2000-11-01

Name: track/path

Definition: track - a rough path or way formed by use. path - a way or track laid down for walking or made by continual treading.

Attribute	Category of runway

Acronym: CATRUN   Code: 58

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: Category of runway

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATRUN_1   Date accepted: 2000-11-01

               Name: aeroplane runway

               Definition: a level stretch of land where aeroplanes take off and land

2   DD Name: HYDRO   Code: CATRUN_2   Date accepted: 2000-11-01

               Name: helicopter landing pad

               Definition: a site on which helicopters may land and take off

Attribute	Category of sea area

Acronym: CATSEA   Code: 59

Use Type: F

Value Type: E

<u>Data Dictionary (DD) Reference:</u>

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

5   DD Name: HYDRO   Code: CATSEA_5   Date accepted: 2000-11-01
             Name: bay
             Definition: an indentation in the coastline

12   DD Name: HYDRO   Code: CATSEA_12   Date accepted: 2000-11-01
             Name: narrows
             Definition: a navigable narrow part of a bay, strait, river, etc.

13   DD Name: HYDRO   Code: CATSEA_13   Date accepted: 2000-11-01
             Name: shoal
             Definition: an offshore hazard to surface navigation that is composed of unconsolidated material.

51   DD Name: HYDRO   Code: CATSEA_51   Date accepted: 2000-11-01
             Name: canal
             Definition: an artificial water course used for navigation.

52   DD Name: HYDRO   Code: CATSEA_52   Date accepted: 2000-11-01
             Name: lake
             Definition: a large body of water entirely surrounded by land.

53   DD Name: HYDRO   Code: CATSEA_53   Date accepted: 2000-11-01
             Name: river
             Definition: a relatively large natural stream of water.

Value	Data Dictionary (DD) Reference

54   DD Name: HYDRO   Code: CATSEA_54   Date accepted: 2000-11-01

Name: reach

Definition: a straight section of a river, specially a navigable river between two bends or an arm of the sea extending into the land

57   DD Name: IENC   Code: CATSEA_57   Date accepted: 2014-12-10

Name: chute

Definition: an inclined plane, sloping channel, or passage down or through which things may pass

58   DD Name: IENC   Code: CATSEA_58   Date accepted: 2014-12-10

Name: backwater/slough

Definition: a body of water (as an inlet or tributary) that is out of the main current of a larger body

59   DD Name: IENC   Code: CATSEA_59   Date accepted: 2014-12-10

Name: bend

Definition: a curve or change in direction of a watercourse or river

Attribute	Category of shoreline construction

Acronym: CATSLC   Code: 60

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATSLC_1   Date accepted: 2000-11-01

             Name: breakwater

             Definition: a structure protecting a shore area, harbour, anchorage, or basin from waves. (IHO Dictionary, S-32, 5th Edition, 542)

2   DD Name: HYDRO   Code: CATSLC_2   Date accepted: 2000-11-01

             Name: groyne (groin)

             Definition: a low artificial wall-like structure of durable material extending from the land to seaward for a particular purpose, such as to prevent coast erosion (adapted from IHO Dictionary, S-32, 5th Edition, 2525 and IHO Chart Specifications, M-4)

4   DD Name: HYDRO   Code: CATSLC_4   Date accepted: 2000-11-01

             Name: pier (jetty)

             Definition: a long, narrow structure extending into the water to afford a berthing place for vessels, to serve as a promenade, etc. (IHO Dictionary, S-32, 5th Edition, 3833)

5   DD Name: HYDRO   Code: CATSLC_5   Date accepted: 2000-11-01

             Name: promenade pier

             Definition: a pier built only for recreational purposes. (IHO Chart Specifications, M-4)

6   DD Name: HYDRO   Code: CATSLC_6   Date accepted: 2000-11-01

             Name: wharf (quay)

             Definition: a structure serving as a berthing place for vessels. (IHO Dictionary, S-32, 5th Edition, 5985)

7   DD Name: HYDRO   Code: CATSLC_7   Date accepted: 2000-11-01

Value	Data Dictionary (DD) Reference

Name: training wall

Definition: a wall or bank, often submerged, built to direct or confine the flow of a river or tidal current, or to promote a scour action. (Adapted from IHO Dictionary, S-32, 5th Edition, 5586 and IHO Chart Specifications, M-4).

8	DD Name: HYDRO Code: CATSLC_8 Date accepted: 2000-11-01

Name: rip rap

Definition: A layer of broken rock, cobbles, boulders, or fragments of sufficient size to resist the erosive forces of flowing water and wave action. (Adapted from Marine Chart Manual, US National Oceanic and Atmospheric Administration - NOAA, 1992)

9	DD Name: HYDRO Code: CATSLC_9 Date accepted: 2000-11-01

Name: revetment

Definition: facing of stone or other material, either permanent or temporary, placed along the edge of a stream, river or canal to stabilize the bank and to protect it from the erosive action of the stream. (Adapted from IHO Dictionary, S-32, 5th Edition, 4379)

10	DD Name: HYDRO Code: CATSLC_10 Date accepted: 2000-11-01

Name: sea wall

Definition: an embankment or wall for protection against waves or tidal action along a shore or water front. (IHO Dictionary, S-32, 5th Edition, 4584)

11	DD Name: HYDRO Code: CATSLC_11 Date accepted: 2000-11-01

Name: landing steps

Definition: steps at the shoreline as the connection between land and water on different levels.

12	DD Name: HYDRO Code: CATSLC_12 Date accepted: 2000-11-01

Name: ramp

Definition: a sloping structure that can either be used, as a landing place, at variable water levels, for small vessels, landing ships, or a ferry boat, or for hauling a cradle carrying a vessel, which may include rails. (Adapted from IHO Dictionary, S-32, 5th Edition, 4209)

13	DD Name: HYDRO Code: CATSLC_13 Date accepted: 2000-11-01

Name: slipway

Definition: the prepared and usually reinforced inclined surface on which keel- and bilge-blocks are laid for supporting a vessel under construction. (IHO Dictionary, S-32, 5th Edition, 4775)

14	DD Name: HYDRO Code: CATSLC_14 Date accepted: 2000-11-01

Name: fender

Definition: a protective structure designed to cushion the impact of a vessel and prevent damage.

Value Data Dictionary (DD) Reference

15 DD Name: HYDRO Code: CATSLC_15   Date accepted: 2000-11-01

    Name: solid face wharf

    Definition: a wharf consisting of a solid wall of concrete, masonry, wood etc., such that the water cannot circulate freely under the wharf. The type of construction affects ship-handling; for example, a solid face wharf may give shelter from tidal streams, but under certain circumstances a cushion of water may build up between such a wharf and a ship attempting to berth at it, causing difficulties in ship handling. (Capt. A. Rae, pilot, Port of Halifax and Mr. R. Morash, wharf building engineer, Transport Canada)

16 DD Name: HYDRO Code: CATSLC_16   Date accepted: 2000-11-01

    Name: open face wharf

    Definition: a wharf supported on piles or other structures which allow free circulation of water under the wharf. (Capt. A. Rae, pilot, Port of Halifax and Mr. R. Morash, wharf building engineer, Transport Canada)

Attribute	Category of silo/tank

Acronym: CATSIL   Code: 63

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2008-01-31

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATSIL_1   Date accepted: 2000-11-01

               Name: silo in general

               Definition: a generally cylindrical tower used for storing fodder or grain.

2   DD Name: HYDRO   Code: CATSIL_2   Date accepted: 2000-11-01

               Name: tank in general

               Definition: a fixed structure for storing liquids. (IHO Dictionary, S-32, 5th Edition, 5290)

3   DD Name: HYDRO   Code: CATSIL_3   Date accepted: 2000-11-01

               Name: grain elevator

               Definition: a storage building for grain. Usually a tall frame, metal or concrete structure with an especially compartmented interior. (The New Encyclopaedia Britannica Micropaedia, 15th Edition).

4   DD Name: HYDRO   Code: CATSIL_4   Date accepted: 2000-11-01

               Name: water tower

               Definition: a tower with an elevated container used to hold water.

Attribute	Category of slope

Acronym: CATSLO   Code: 64

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

2   DD Name: HYDRO   Code: CATSLO_2   Date accepted: 2000-11-01

             Name: embankment

             Definition: an artificial elevation constructed from earth, stone, etc. carrying a road, railway or similar or serving to dam water.

3   DD Name: HYDRO   Code: CATSLO_3   Date accepted: 2000-11-01

             Name: dune

             Definition: a mound, ridge or hill of drifted material on the sea coast or in a desert. (adapted from IHO Dictionary, S-32, 5th Edition, 1496)

6   DD Name: HYDRO   Code: CATSLO_6   Date accepted: 2000-11-01

             Name: cliff

             Definition: land rising abruptly for a considerable distance above the water or surrounding land. (IHO Dictionary, S-32, 5th Edition, 829)

Attribute	Category of small craft facility

Acronym: CATSCF   Code: 65

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATSCF_1   Date accepted: 2000-11-01
               Name: visitor's berth
               Definition: a berth set aside for the use of visiting vessels.

2   DD Name: HYDRO   Code: CATSCF_2   Date accepted: 2000-11-01
               Name: nautical club
               Definition: a club for mariners generally associated with other small craft facilities.

3   DD Name: HYDRO   Code: CATSCF_3   Date accepted: 2000-11-01
               Name: boat hoist
               Definition: a hoist for lifting boats out of the water.

4   DD Name: HYDRO   Code: CATSCF_4   Date accepted: 2000-11-01
               Name: sailmaker
               Definition: a place where sails are made or may be taken for repair.

5   DD Name: HYDRO   Code: CATSCF_5   Date accepted: 2000-11-01
               Name: boatyard
               Definition: a place on shore where boats may be built, stored and repaired.

6   DD Name: HYDRO   Code: CATSCF_6   Date accepted: 2000-11-01
               Name: public inn
               Definition: a public house providing food, drink and accommodation. (The Collins Reference English
               Dictionary, 1992)

Value	Data Dictionary (DD) Reference

7   DD Name: HYDRO   Code: CATSCF_7   Date accepted: 2000-11-01

        Name: restaurant

        Definition: a commercial establishment serving food. (The Collins Reference Dictionary, 1992)

8   DD Name: HYDRO   Code: CATSCF_8   Date accepted: 2000-11-01

        Name: chandler

        Definition: a dealer in ships' supplies. (The Collins Reference Dictionary, 1992)

9   DD Name: HYDRO   Code: CATSCF_9   Date accepted: 2000-11-01

        Name: provisions

        Definition: a place where food and other such supplies are available.

10   DD Name: HYDRO   Code: CATSCF_10   Date accepted: 2000-11-01

        Name: doctor

        Definition: a place where a doctor is available to provide medical attention.

11   DD Name: HYDRO   Code: CATSCF_11   Date accepted: 2000-11-01

        Name: pharmacy

        Definition: a place where medical drugs are dispensed.

12   DD Name: HYDRO   Code: CATSCF_12   Date accepted: 2000-11-01

        Name: water tap

        Definition: a place where fresh water is available.

13   DD Name: HYDRO   Code: CATSCF_13   Date accepted: 2000-11-01

        Name: fuel station

        Definition: a place where fuel is available.

14   DD Name: HYDRO   Code: CATSCF_14   Date accepted: 2000-11-01

        Name: electricity

        Definition: a place where a connection to an electrical supply is available.

15   DD Name: HYDRO   Code: CATSCF_15   Date accepted: 2000-11-01

        Name: bottle gas

        Definition: a place where bottled gas is available.

16   DD Name: HYDRO   Code: CATSCF_16   Date accepted: 2000-11-01

        Name: showers

Value   Data Dictionary (DD) Reference

             Definition: a place where showers are available.

17   DD Name: HYDRO   Code: CATSCF_17   Date accepted: 2000-11-01

             Name: launderette

             Definition: a place where there are facilities for washing clothes.

18   DD Name: HYDRO   Code: CATSCF_18   Date accepted: 2000-11-01

             Name: public toilets

             Definition: a place where toilets are available for public use.

19   DD Name: HYDRO   Code: CATSCF_19   Date accepted: 2000-11-01

             Name: post box

             Definition: a place where mail may be posted.

20   DD Name: HYDRO   Code: CATSCF_20   Date accepted: 2000-11-01

             Name: public telephone

             Definition: a place where a telephone is available for public use.

21   DD Name: HYDRO   Code: CATSCF_21   Date accepted: 2000-11-01

             Name: refuse bin

             Definition: a place where refuse may be dumped.

22   DD Name: HYDRO   Code: CATSCF_22   Date accepted: 2000-11-01

             Name: car park

             Definition: a place where cars may be parked.

23   DD Name: HYDRO   Code: CATSCF_23   Date accepted: 2000-11-01

             Name: parking for boats and trailers

             Definition: a place on shore where boats and/or trailers may be parked.

24   DD Name: HYDRO   Code: CATSCF_24   Date accepted: 2000-11-01

             Name: caravan site

             Definition: a place where caravans may be parked or where caravan accommodation is provided.

25   DD Name: HYDRO   Code: CATSCF_25   Date accepted: 2000-11-01

             Name: camping site

             Definition: a place where visitors may pitch tents and camp.

26   DD Name: HYDRO   Code: CATSCF_26   Date accepted: 2000-11-01

Value	Data Dictionary (DD) Reference
	Name: sewerage pump-out station
	Definition: a place where sewerage may be pumped off a vessel.

27 DD Name: HYDRO   Code: CATSCF_27   Date accepted: 2000-11-01

Name: emergency telephone

Definition: a place where a telephone is available for emergency use only.

28 DD Name: HYDRO   Code: CATSCF_28   Date accepted: 2000-11-01

Name: landing/launching place for boats

Definition: a place where boats may be landed or launched.

29 DD Name: HYDRO   Code: CATSCF_29   Date accepted: 2000-11-01

Name: visitors mooring

Definition: a mooring set aside for the use of visiting vessels.

30 DD Name: HYDRO   Code: CATSCF_30   Date accepted: 2000-11-01

Name: scrubbing berth

Definition: a place where vessels may berth for the purpose of careening.

31 DD Name: HYDRO   Code: CATSCF_31   Date accepted: 2000-11-01

Name: picnic area

Definition: a place where people may go to eat a picnic.

32 DD Name: HYDRO   Code: CATSCF_32   Date accepted: 2000-11-01

Name: mechanics workshop

Definition: a place where mechanical repairs can be undertaken to engines or other vessel equipment.

33 DD Name: HYDRO   Code: CATSCF_33   Date accepted: 2000-11-01

Name: guard and/or security service

Definition: a place where a vessel is patrolled by a security service or stored in a secure lockup.

Attribute	Category of special purpose mark

Acronym: CATSPM   Code: 66

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

6   DD Name: HYDRO   Code: CATSPM_6   Date accepted: 2000-11-01

                 Name: cable mark

                 Definition: a mark used to indicate the position of submarine cables or the point at which they run on to the land.

10   DD Name: HYDRO   Code: CATSPM_10   Date accepted: 2000-11-01

                 Name: recording mark

                 Definition: a mark used to record data for scientific purposes.

12   DD Name: HYDRO   Code: CATSPM_12   Date accepted: 2000-11-01

                 Name: recreation zone mark

                 Definition: a mark used to indicate a recreation zone.

37   DD Name: HYDRO   Code: CATSPM_37   Date accepted: 2000-11-01

                 Name: ferry crossing mark

                 Definition: a mark indicating that a ferry route crosses the ship route; often used with a 'sound ship's siren' mark.

39   DD Name: HYDRO   Code: CATSPM_39   Date accepted: 2000-11-01

                 Name: pipeline mark

                 Definition: a mark used to indicate the position of submarine pipelines or the point at which they run on to the land.

41   DD Name: HYDRO   Code: CATSPM_41   Date accepted: 2000-11-01

Value   Data Dictionary (DD) Reference

     Name: clearing mark

     Definition: a mark used to indicate a clearing line.

45   DD Name: HYDRO   Code: CATSPM_45   Date accepted: 2000-11-01

     Name: foul ground mark

     Definition: a mark indicating a foul ground.

50   DD Name: HYDRO   Code: CATSPM_50   Date accepted: 2000-11-01

     Name: entry prohibited mark

     Definition: a mark indicating that entry is prohibited.

54   DD Name: HYDRO   Code: CATSPM_54   Date accepted: 2000-11-01

     Name: channel separation mark

     Definition: a mark indicating the point at which a channel divides separately into two channels.

55   DD Name: HYDRO   Code: CATSPM_55   Date accepted: 2000-11-01

     Name: marine farm mark

     Definition: a mark indicating the existence of a fish, mussel, oyster or pearl farm/ culture.

Attribute	Category of traffic separation scheme

Acronym: CATTSS   Code: 67

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2010-08-11

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATTSS_1   Date accepted: 2010-08-11

             Name: IMO - adopted

             Definition: a defined Traffic Separation Scheme that has been adopted as an IMO routing measure.

2   DD Name: HYDRO   Code: CATTSS_2   Date accepted: 2010-08-11

             Name: not IMO - adopted

             Definition: a defined Traffic Separation Scheme that has not been adopted as an IMO routing measure.

Attribute	Category of vegetation

Acronym: CATVEG   Code: 68

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

6   DD Name: HYDRO   Code: CATVEG_6   Date accepted: 2000-11-01

              Name: wood in general (inc mixed wood)

              Definition: growing trees densely occupying a tract of land. (The Concise Oxford Dictionary)

11   DD Name: HYDRO   Code: CATVEG_11   Date accepted: 2000-11-01

              Name: reed

              Definition: any of various water or marsh plants with a firm stem

13   DD Name: HYDRO   Code: CATVEG_13   Date accepted: 2000-11-01

              Name: tree in general

              Definition: a woody perennial plant, having a self supporting main stem or trunk.

Attribute	Category of water turbulence

Acronym: CATWAT   Code: 69

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: Category of water turbulence

Enumerations:

Value   Data Dictionary (DD) Reference

6   DD Name: IENC   Code: CATWAT_6   Date accepted: 2014-07-11

             Name: under water turbulence

             Definition:

Attribute	Category of wreck

Acronym: CATWRK   Code: 71

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATWRK_1   Date accepted: 2000-11-01

             Name: non-dangerous wreck

             Definition: a wreck which is not considered to be dangerous to surface navigation.

2   DD Name: HYDRO   Code: CATWRK_2   Date accepted: 2000-11-01

             Name: dangerous wreck

             Definition: a wreck which is considered to be dangerous to surface navigation.

3   DD Name: HYDRO   Code: CATWRK_3   Date accepted: 2000-11-01

             Name: distributed remains of wreck

             Definition: (foul ground) an area over which it is safe to navigate but which should be avoided for anchoring, taking the ground or ground fishing. (IHO Chart Specifications, M-4)

4   DD Name: HYDRO   Code: CATWRK_4   Date accepted: 2000-11-01

             Name: wreck showing mast/masts

             Definition: wreck of which only the mast(s) is visible at the sounding datum indicated.

5   DD Name: HYDRO   Code: CATWRK_5   Date accepted: 2000-11-01

             Name: wreck showing any portion of hull or superstructure

             Definition: wreck of which any portion of the hull or superstructure is visible at the sounding datum indicated.

Attribute	Category of zone of confidence in data

Acronym: CATZOC   Code: 72

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATZOC_1   Date accepted: 2000-11-01
             Name: zone of confidence A1
             Definition:

2   DD Name: HYDRO   Code: CATZOC_2   Date accepted: 2000-11-01
             Name: zone of confidence A2
             Definition:

3   DD Name: HYDRO   Code: CATZOC_3   Date accepted: 2000-11-01
             Name: zone of confidence B
             Definition:

4   DD Name: HYDRO   Code: CATZOC_4   Date accepted: 2000-11-01
             Name: zone of confidence C
             Definition:

5   DD Name: HYDRO   Code: CATZOC_5   Date accepted: 2000-11-01
             Name: zone of confidence D
             Definition:

6   DD Name: HYDRO   Code: CATZOC_6   Date accepted: 2000-11-01
             Name: zone of confidence U (data not assessed)
             Definition:

Attribute	Colour

Acronym: COLOUR

Code: 75

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: COLOUR_1   Date accepted: 2000-11-01
     Name: white
     Definition:

2   DD Name: HYDRO   Code: COLOUR_2   Date accepted: 2000-11-01
     Name: black
     Definition:

3   DD Name: HYDRO   Code: COLOUR_3   Date accepted: 2000-11-01
     Name: red
     Definition:

4   DD Name: HYDRO   Code: COLOUR_4   Date accepted: 2000-11-01
     Name: green
     Definition:

5   DD Name: HYDRO   Code: COLOUR_5   Date accepted: 2000-11-01
     Name: blue
     Definition:

6   DD Name: HYDRO   Code: COLOUR_6   Date accepted: 2000-11-01
     Name: yellow
     Definition:

Value   Data Dictionary (DD) Reference

7	DD Name:	HYDRO	Code:	COLOUR_7	Date accepted:	2000-11-01
	Name:	grey				
	Definition:					

8	DD Name:	HYDRO	Code:	COLOUR_8	Date accepted:	2000-11-01
	Name:	brown				
	Definition:					

9	DD Name:	HYDRO	Code:	COLOUR_9	Date accepted:	2000-11-01
	Name:	amber				
	Definition:					

10	DD Name:	HYDRO	Code:	COLOUR_10	Date accepted:	2000-11-01
	Name:	violet				
	Definition:					

11	DD Name:	HYDRO	Code:	COLOUR_11	Date accepted:	2000-11-01
	Name:	orange				
	Definition:					

12	DD Name:	HYDRO	Code:	COLOUR_12	Date accepted:	2000-11-01
	Name:	magenta				
	Definition:					

13	DD Name:	HYDRO	Code:	COLOUR_13	Date accepted:	2000-11-01
	Name:	pink				
	Definition:					

Attribute	Colour pattern

Acronym: COLPAT   Code: 76

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: COLPAT_1   Date accepted: 2000-11-01

             Name: horizontal stripes

             Definition: straight bands or stripes of differing colours painted horizontally.

2   DD Name: HYDRO   Code: COLPAT_2   Date accepted: 2000-11-01

             Name: vertical stripes

             Definition: straight bands or stripes of differing colours painted vertically.

3   DD Name: HYDRO   Code: COLPAT_3   Date accepted: 2000-11-01

             Name: diagonal stripes

             Definition: straight bands or stripes of differing colours painted diagonally (ie not horizontally or vertically).

4   DD Name: HYDRO   Code: COLPAT_4   Date accepted: 2000-11-01

             Name: squared

             Definition: often referred to as checker plate, where alternate colours are used to create squares similar to a chess or draught board. The pattern may be straight or diagonal.

5   DD Name: HYDRO   Code: COLPAT_5   Date accepted: 2000-11-01

             Name: stripes (direction unknown)

             Definition: straight bands or stripes of differing colours painted in an unknown direction.

6   DD Name: HYDRO   Code: COLPAT_6   Date accepted: 2000-11-01

             Name: border stripe

             Definition: a band or stripe of colour which is displayed around the outer edge of the object, which may

Value   Data Dictionary (DD) Reference

             also form a border to an inner pattern or plain colour.

Attribute	Communication channel

Acronym: COMCHA   Code: 77

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A channel number assigned to a specific radio frequency, frequencies or frequency band.

Attribute	Condition

Acronym: CONDTN   Code: 81

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2010-11-16

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CONDTN_1   Date accepted: 2010-11-16

               Name: under construction

               Definition: a structure that is in the process of being built.

2   DD Name: HYDRO   Code: CONDTN_2   Date accepted: 2010-11-16

               Name: ruined

               Definition: a structure in a decayed or deteriorated condition resulting from neglect or disuse, or a
               damaged structure in need of repair.(IHO Dictionary, S-32, 5th Edition, 4456)

3   DD Name: HYDRO   Code: CONDTN_3   Date accepted: 2010-11-16

               Name: under reclamation

               Definition: an area of the sea that is being reclaimed as land, usually by the dumping of earth and other
               material.

4   DD Name: HYDRO   Code: CONDTN_4   Date accepted: 2010-11-16

               Name: wingless

               Definition: a windmill or windmotor from which the turbine blades are missing.

5   DD Name: HYDRO   Code: CONDTN_5   Date accepted: 2010-11-16

               Name: planned construction

               Definition: an area where a future construction is planned

Attribute	Conspicuous, radar

Acronym: CONRAD   Code: 82

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

3   DD Name: HYDRO   Code: CONRAD_3   Date accepted: 2000-11-01

             Name: radar conspicuous (has radar reflector)

             Definition: an object which returns a strong radar echo, having a radar reflector.

Attribute	Conspicuous, visually

Acronym: CONVIS   Code: 83

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CONVIS_1   Date accepted: 2000-11-01

             Name: visually conspicuous

             Definition: term applied to an object either natural or artificial which is distinctly and notably visible from seaward. (IHO Dictionary, S-32, 5th Edition, 984)

2   DD Name: HYDRO   Code: CONVIS_2   Date accepted: 2000-11-01

             Name: not visually conspicuous

             Definition: an object which is visible from seaward, but is not conspicuous.

Attribute	Date end

Acronym: DATEND   Code: 85

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The latest date on which an object (e.g., a buoy) will be present.

Attribute	Date start

Acronym: DATSTA   Code: 86

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The earliest date on which an object (e.g., a buoy) will be present.

Attribute	Depth range value 1

Acronym: DRVAL1   Code: 87

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The minimum (shoalest) value of a depth range.

Attribute	Depth range value 2

Acronym: DRVAL2   Code: 88

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The maximum (deepest) value of a depth range.

Attribute	Elevation

Acronym: ELEVAT   Code: 90

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The altitude of the ground level of an object, measured from a specified vertical datum.

Attribute	Exhibition condition of light

Acronym: EXCLIT   Code: 92

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: EXCLIT_1   Date accepted: 2000-11-01

             Name: light shown without change of character

             Definition: a light shown throughout the 24 hours without change of character. IHO Chart Specifications, M-4

2   DD Name: HYDRO   Code: EXCLIT_2   Date accepted: 2000-11-01

             Name: daytime light

             Definition: a light which is only exhibited by day.

3   DD Name: HYDRO   Code: EXCLIT_3   Date accepted: 2000-11-01

             Name: fog light

             Definition: a light which is exhibited in fog or conditions of reduced visibility.

4   DD Name: HYDRO   Code: EXCLIT_4   Date accepted: 2000-11-01

             Name: night light

             Definition: a light which is only exhibited at night.

Attribute	Exposition of sounding

Acronym: EXPSOU   Code: 93

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2010-08-12

Definition: Indicates objects with a 'value of sounding' not within the range of depth of the surrounding depth area.

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: EXPSOU_1   Date accepted: 2010-08-12

             Name: within the range of depth of the surrounding depth area

             Definition: the depth corresponds to the depth range of the surrounding depth area. i.e. the depth is not shoaler than the minimum depth of the surrounding depth area or deeper than the maximum depth of the surrounding depth area.

2   DD Name: HYDRO   Code: EXPSOU_2   Date accepted: 2010-08-12

             Name: shoaler than the range of depth of the surrounding depth area

             Definition: the depth is shoaler than the minimum depth of the surrounding depth area.

3   DD Name: HYDRO   Code: EXPSOU_3   Date accepted: 2010-08-12

             Name: deeper than the range of depth of the surrounding depth area

             Definition: the depth is deeper than the maximum depth of the surrounding depth area.

Attribute	Function

Acronym: FUNCTN   Code: 94

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

2   DD Name: HYDRO   Code: FUNCTN_2   Date accepted: 2000-11-01

             Name: harbour-master's office

             Definition: the office of the local official who has charge of mooring and berthing of vessels, collecting
             harbour fees, etc. (adapted from IHO Dictionary, S-32, 5th Edition, 2191)

3   DD Name: HYDRO   Code: FUNCTN_3   Date accepted: 2000-11-01

             Name: custom office

             Definition: an office which is charged with enforcing customs regulations.

4   DD Name: HYDRO   Code: FUNCTN_4   Date accepted: 2000-11-01

             Name: health office

             Definition: the office which is charged with the administration of health laws and sanitary inspections.
             (adapted from The New Shorter Oxford English Dictionary, 1993)

5   DD Name: HYDRO   Code: FUNCTN_5   Date accepted: 2000-11-01

             Name: hospital

             Definition: an institution or establishment providing medical or surgical treatment for the ill or wounded.
             (The New Shorter Oxford English Dictionary, 1993)

6   DD Name: HYDRO   Code: FUNCTN_6   Date accepted: 2000-11-01

             Name: post office

             Definition: the public department, agency or organisation responsible primarily for the collection,
             transmission and distribution of mail. (The New Shorter Oxford English Dictionary, 1993)

7   DD Name: HYDRO   Code: FUNCTN_7   Date accepted: 2000-11-01

Value   Data Dictionary (DD) Reference

Name: hotel

Definition: an establishment, especially of a comfortable or luxurious kind, where paying visitors are provided with accommodation, meals and other services. (The New Shorter Oxford English Dictionary, 1993)

8   DD Name: HYDRO   Code: FUNCTN_8   Date accepted: 2000-11-01

Name: railway station

Definition: a building with platforms where trains arrive, load, discharge and depart. (The New Shorter Oxford English Dictionary, 1993)

9   DD Name: HYDRO   Code: FUNCTN_9   Date accepted: 2000-11-01

Name: police station

Definition: the office of the local police force.

10   DD Name: HYDRO   Code: FUNCTN_10   Date accepted: 2000-11-01

Name: water-police station

Definition: the headquarters of a local water-police force.

11   DD Name: HYDRO   Code: FUNCTN_11   Date accepted: 2000-11-01

Name: pilot office

Definition: the office or headquarters of pilots; the place where the services of a pilot may be obtained. (IHO Dictionary, S-32, 5th Edition, 3845)

12   DD Name: HYDRO   Code: FUNCTN_12   Date accepted: 2000-11-01

Name: pilot lookout

Definition: a distinctive structure on shore from which personnel keep watch upon events at sea or along the coast. (IHO Dictionary, S-32, 5th Edition, 2917)

13   DD Name: HYDRO   Code: FUNCTN_13   Date accepted: 2000-11-01

Name: bank office

Definition: an office for custody, deposit, loan, exchange or issue of money. (adapted from The New Shorter Oxford English Dictionary, 1993)

14   DD Name: HYDRO   Code: FUNCTN_14   Date accepted: 2000-11-01

Name: headquarters for district control

Definition: the quarters of an executive officer (director, manager, etc.) with responsibility for an administrative area.

15   DD Name: HYDRO   Code: FUNCTN_15   Date accepted: 2000-11-01

Name: transit shed/warehouse

Value   Data Dictionary (DD) Reference

Definition: a building or part of a building for storage of wares or goods. (adapted from The New Shorter Oxford English Dictionary, 1993)

16	DD Name: HYDRO	Code: FUNCTN_16	Date accepted: 2000-11-01

Name: factory

Definition: a building or buildings with equipment for manufacturing; a workshop. (The New Shorter Oxford English Dictionary, 1993)

17	DD Name: HYDRO	Code: FUNCTN_17	Date accepted: 2000-11-01

Name: power station

Definition: a stationary plant containing apparatus for large scale conversion of some form of energy (such as hydraulic, steam, chemical or nuclear energy) into electrical energy. (McGraw-Hill Dictionary of Scientific and Technical Terms, 3rd Edition, 1984)

18	DD Name: HYDRO	Code: FUNCTN_18	Date accepted: 2000-11-01

Name: administrative

Definition: a building for the management of affairs. (adapted from The New Shorter Oxford English Dictionary, 1993)

19	DD Name: HYDRO	Code: FUNCTN_19	Date accepted: 2000-11-01

Name: educational facility

Definition: a building concerned with education (eg. school, college, university, etc.)

20	DD Name: HYDRO	Code: FUNCTN_20	Date accepted: 2000-11-01

Name: church

Definition: a building for public Christian worship. (The New Shorter Oxford English Dictionary, 1993)

21	DD Name: HYDRO	Code: FUNCTN_21	Date accepted: 2000-11-01

Name: chapel

Definition: a place for Christian worship other than a parish, cathedral or church, especially one attached to a private house or institution. (The New Shorter Oxford English Dictionary, 1993)

22	DD Name: HYDRO	Code: FUNCTN_22	Date accepted: 2000-11-01

Name: temple

Definition: a building for public Jewish worship. (adapted from The New Shorter Oxford English Dictionary, 1993)

23	DD Name: HYDRO	Code: FUNCTN_23	Date accepted: 2000-11-01

Name: pagoda

Definition: a Hindu or Buddhist temple or sacred building. (The New Shorter Oxford English Dictionary, 1993)

Value	Data Dictionary (DD) Reference

| 24 | DD Name: HYDRO   Code: FUNCTN_24   Date accepted: 2000-11-01 |

Name: shinto shrine

Definition: a building for public Shinto worship. (adapted from The New Shorter Oxford English Dictionary, 1993)

| 25 | DD Name: HYDRO   Code: FUNCTN_25   Date accepted: 2000-11-01 |

Name: buddhist temple

Definition: see pagoda.

| 26 | DD Name: HYDRO   Code: FUNCTN_26   Date accepted: 2000-11-01 |

Name: mosque

Definition: a Muslim place of worship. (The New Shorter Oxford English Dictionary, 1993)

| 27 | DD Name: HYDRO   Code: FUNCTN_27   Date accepted: 2000-11-01 |

Name: marabout

Definition: a shrine marking the burial place of a Muslim holy man. (The New Shorter Oxford English Dictionary, 1993)

| 28 | DD Name: HYDRO   Code: FUNCTN_28   Date accepted: 2000-11-01 |

Name: lookout

Definition: keeping a watch upon events at sea or along the coast. (adapted from IHO Dictionary, S-32,5th Edition,2917)

| 29 | DD Name: HYDRO   Code: FUNCTN_29   Date accepted: 2000-11-01 |

Name: communication

Definition: transmitting and/or receiving electronic communication signals. (adapted from Digital Geographic Information Standard - DIGEST)

| 30 | DD Name: HYDRO   Code: FUNCTN_30   Date accepted: 2000-11-01 |

Name: television

Definition: broadcast of television signals.

| 31 | DD Name: HYDRO   Code: FUNCTN_31   Date accepted: 2000-11-01 |

Name: radio

Definition: broadcast of radio signals.

| 32 | DD Name: HYDRO   Code: FUNCTN_32   Date accepted: 2000-11-01 |

Name: radar

Definition: a method, system or technique of using beamed, reflected, and timed radio waves for

Value	Data Dictionary (DD) Reference

detecting, locating, or tracking objects, and for measuring altitudes. (IHO Dictionary, S-32, 5th Edition,4158)

33	DD Name: HYDRO	Code: FUNCTN_33	Date accepted: 2000-11-01

Name: light support

Definition: supporting a light

34	DD Name: HYDRO	Code: FUNCTN_34	Date accepted: 2000-11-01

Name: microwave

Definition: broadcasting and receiving signals using microwaves.

35	DD Name: HYDRO	Code: FUNCTN_35	Date accepted: 2000-11-01

Name: cooling

Definition: dissipating heat.

36	DD Name: HYDRO	Code: FUNCTN_36	Date accepted: 2000-11-01

Name: observation

Definition: a place from which the surroundings can be observed but at which a watch is not habitually maintained. (adapted from IHO Dictionary, S-32, 5th Edition,2917)

37	DD Name: HYDRO	Code: FUNCTN_37	Date accepted: 2000-11-01

Name: time ball

Definition: a visual time signal in form of a ball

38	DD Name: HYDRO	Code: FUNCTN_38	Date accepted: 2000-11-01

Name: clock

Definition: visual time signal. (adapted from S-32, 5th Edition, 5536)

39	DD Name: HYDRO	Code: FUNCTN_39	Date accepted: 2000-11-01

Name: control

Definition: used to control the flow of air, rail, or marine traffic. (Digital Geographic Information Standard - DIGEST)

40	DD Name: HYDRO	Code: FUNCTN_40	Date accepted: 2000-11-01

Name: airship mooring

Definition: a facility to secure an airship. (adapted from Digital Geographic Information Standard - DIGEST)

41	DD Name: HYDRO	Code: FUNCTN_41	Date accepted: 2000-11-01

Name: stadium

Definition: a large usually unroofed building with tiers of seats for spectators

Value   Data Dictionary (DD) Reference

42   DD Name: HYDRO   Code: FUNCTN_42   Date accepted: 2000-11-01

            Name: bus station

            Definition: a location at which buses arrive and from which they depart.

Attribute	Height

Acronym: HEIGHT   Code: 95

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The value of the vertical distance to the highest point of the object, measured from a specified vertical datum.

Attribute	Horizontal clearance

Acronym: HORCLR   Code: 98

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The width of an object, such as a canal or a tunnel, which is available for safe navigation. This may, or may not, be the same as the total physical width of the object.

Attribute	Horizontal length

Acronym: HORLEN   Code: 99

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A measurement of the longer of two linear axis. (Digital Geographic Information Working Group -DGIWG, Oct.87)

Attribute	Horizontal width

Acronym: HORWID   Code: 100

Use Type: F

Value Type: F

<u>Data Dictionary (DD) Reference:</u>

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: A measurement of the shorter of two linear axis. (Digital Geographic Information Working Group -DGIWG, Oct.87)

Attribute	Information

Acronym: INFORM
Code: 102

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: HYDRO
Date accepted: 2000-11-01

Definition: Textual information about the object.

Attribute	Information in national language

Acronym: NINFOM   Code: 300

Use Type: N

Value Type: T

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: Textual information in national language characters

Attribute	Jurisdiction

Acronym: JRSDTN   Code: 103

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: JRSDTN_1   Date accepted: 2000-11-01
             Name: international
             Definition: involving more than one country; covering more than one national area.

2   DD Name: HYDRO   Code: JRSDTN_2   Date accepted: 2000-11-01
             Name: national
             Definition: an area administered or controlled by a single nation.

3   DD Name: HYDRO   Code: JRSDTN_3   Date accepted: 2000-11-01
             Name: national sub-division
             Definition: an area smaller than the nation in which it lies.

Attribute	Light characteristic

Acronym: LITCHR   Code: 107

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: LITCHR_1   Date accepted: 2000-11-01

             Name: fixed

             Definition: a signal light that shows continuously, in any given direction, with constant luminous intensity
             and colour. (IHO Dictionary, S-32, 5th Edition, 2780)

2   DD Name: HYDRO   Code: LITCHR_2   Date accepted: 2000-11-01

             Name: flashing

             Definition: a rhythmic light in which the total duration of light in a period is clearly shorter than the total
             duration of darkness and all the appearances of light are of equal duration. (IHO Dictionary, S-32, 5th
             Edition, 2783)

3   DD Name: HYDRO   Code: LITCHR_3   Date accepted: 2000-11-01

             Name: long-flashing

             Definition: a flashing light in which a single flash of not less than two seconds duration is regularly
             repeated. (IHO Dictionary, S-32, 5th Edition, 2796)

4   DD Name: HYDRO   Code: LITCHR_4   Date accepted: 2000-11-01

             Name: quick-flashing

             Definition: a light exhibiting without interruption very rapid regular alternations of light and darkness. (IHO
             Dictionary, S-32, 5th Edition, 2803)

5   DD Name: HYDRO   Code: LITCHR_5   Date accepted: 2000-11-01

             Name: very quick-flashing

             Definition: a flashing light in which flashes are repeated at a rate of not less than 80 flashes per minute but
             less than 160 flashes per minute

Value   Data Dictionary (DD) Reference

6   DD Name: HYDRO   Code: LITCHR_6   Date accepted: 2000-11-01

             Name: ultra quick flashing

             Definition: a flashing light in which flashes are repeated at a rate of not less than 160 flashes per minute

7   DD Name: HYDRO   Code: LITCHR_7   Date accepted: 2000-11-01

             Name: isophased

             Definition: a light with all durations of light and darkness equal. (IHO Dictionary, S-32, 5th Edition, 2779)

8   DD Name: HYDRO   Code: LITCHR_8   Date accepted: 2000-11-01

             Name: occulting

             Definition: a rhythmic light in which the total duration of light in a period is clearly longer than the total
             duration of darkness and all the eclipses are of equal duration

9   DD Name: HYDRO   Code: LITCHR_9   Date accepted: 2000-11-01

             Name: interrupted quick-flashing

             Definition: a quick light in which the sequence of flashes is interrupted by regularly repeated eclipses of
             constant and long duration. (IHO Dictionary, S-32, 5th Edition, 2790)

10   DD Name: HYDRO   Code: LITCHR_10   Date accepted: 2000-11-01

             Name: interrupted very quick-flashing

             Definition: a light in which the very rapid alterations of light and darkness are interrupted at regular
             intervals by eclipses of long duration

11   DD Name: HYDRO   Code: LITCHR_11   Date accepted: 2000-11-01

             Name: interrupted ultra quick-flashing

             Definition: a light in which the ultra quick flashes (160 or more per minute) are interrupted at regular
             intervals by eclipses of long duration

12   DD Name: HYDRO   Code: LITCHR_12   Date accepted: 2000-11-01

             Name: morse

             Definition: a rhythmic light in which appearances of light of two clearly different durations are grouped to
             represent a character or characters in the Morse code

13   DD Name: HYDRO   Code: LITCHR_13   Date accepted: 2000-11-01

             Name: fixed/flash

             Definition:

14   DD Name: HYDRO   Code: LITCHR_14   Date accepted: 2000-11-01

             Name: flash/long-flash

Value	Data Dictionary (DD) Reference
	Definition:

15	DD Name: HYDRO	Code: LITCHR_15	Date accepted: 2000-11-01
	Name: occulting/flash		
	Definition:		

16	DD Name: HYDRO	Code: LITCHR_16	Date accepted: 2000-11-01
	Name: fixed/long-flash		
	Definition:		

17	DD Name: HYDRO	Code: LITCHR_17	Date accepted: 2000-11-01
	Name: occulting alternating		
	Definition:		

18	DD Name: HYDRO	Code: LITCHR_18	Date accepted: 2000-11-01
	Name: long-flash alternating		
	Definition:		

19	DD Name: HYDRO	Code: LITCHR_19	Date accepted: 2000-11-01
	Name: flash alternating		
	Definition:		

20	DD Name: HYDRO	Code: LITCHR_20	Date accepted: 2000-11-01
	Name: group alternating		
	Definition:		

25	DD Name: HYDRO	Code: LITCHR_25	Date accepted: 2000-11-01
	Name: very quick-flash plus long-flash		
	Definition:		

26	DD Name: HYDRO	Code: LITCHR_26	Date accepted: 2000-11-01
	Name: very quick-flash plus long-flash		
	Definition:		

27	DD Name: HYDRO	Code: LITCHR_27	Date accepted: 2000-11-01
	Name: ultra quick-flash plus long-flash		
	Definition:		

28	DD Name: HYDRO	Code: LITCHR_28	Date accepted: 2000-11-01

Value   Data Dictionary (DD) Reference

        Name: alternating

        Definition: a signal light that shows, in any given direction, two or more colours in a regularly repeated sequence with a regular periodicity

29   DD Name: HYDRO   Code: LITCHR_29   Date accepted: 2000-11-01

        Name: fixed and alternating flashing

        Definition:

Attribute	Light visibility

Acronym: LITVIS   Code: 108

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2008-01-31

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

4   DD Name: HYDRO   Code: LITVIS_4   Date accepted: 2000-11-01

             Name: intensified

             Definition: a light in a sector is intensified (i.e. has longer range than other sectors). (Bundesamt für
             Seeschiffahrt und Hydrographie, Germany)

Attribute	Marks navigational - System of

Acronym: MARSYS   Code: 109

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: MARSYS_1   Date accepted: 2000-11-01

             Name: IALA A

             Definition: navigational aids conform to the International Association of Lighthouse Authorities - IALA A
             system.

2   DD Name: HYDRO   Code: MARSYS_2   Date accepted: 2000-11-01

             Name: IALA B

             Definition: navigational aids conform to the International Association of Lighthouse Authorities - IALA B
             system.

Attribute	Multiplicity of lights

Acronym: MLTYLT   Code: 110

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The number of lights of identical character that exist as a co-located group.

Attribute	Nationality

Acronym: NATION   Code: 111

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The nationality of the specific object.

Attribute	Natural surface

Acronym: NATSUR   Code: 113

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2008-01-31

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: NATSUR_1   Date accepted: 2000-11-01

              Name: mud

              Definition: soft, wet earth

2   DD Name: HYDRO   Code: NATSUR_2   Date accepted: 2000-11-01

              Name: clay

              Definition: (particles of less than 0.002 mm); stiff, sticky earth that becomes hard when baked.

3   DD Name: HYDRO   Code: NATSUR_3   Date accepted: 2000-11-01

              Name: silt

              Definition: (particles of 0.002-0.0625 mm); when dried on hand will rub off easily.

4   DD Name: HYDRO   Code: NATSUR_4   Date accepted: 2000-11-01

              Name: sand

              Definition: (particles of 0.0625-2.0 mm); tiny grains of crushed or worn rock.

5   DD Name: HYDRO   Code: NATSUR_5   Date accepted: 2000-11-01

              Name: stone

              Definition: a general term for rock fragments ranging in size from pebbles and gravel to boulders or a large rock mass. (IHO Dictionary, S-32, 5th Edition, 5059)

6   DD Name: HYDRO   Code: NATSUR_6   Date accepted: 2000-11-01

              Name: gravel

              Definition: (particles of 2.0-4.0 mm); small stones with coarse sand.

Value   Data Dictionary (DD) Reference

7   DD Name: HYDRO   Code: NATSUR_7   Date accepted: 2000-11-01

             Name: pebbles

             Definition: (particles of 4.0-64.0 mm); small stones made smooth and round by being rolled in water.

8   DD Name: HYDRO   Code: NATSUR_8   Date accepted: 2000-11-01

             Name: cobbles

             Definition: (particles of 64.0-256.0 mm); stones worn round and smooth by water and used for paving.

9   DD Name: HYDRO   Code: NATSUR_9   Date accepted: 2000-11-01

             Name: rock

             Definition: any formation of natural origin that constitutes an integral part of the lithosphere. The natural
             occurring material that forms firm, hard, and solid masses. (adapted from IHO Dictionary, S-32, 5th Edition,
             4415)

11   DD Name: HYDRO   Code: NATSUR_11   Date accepted: 2000-11-01

             Name: lava

             Definition: the fluid or semi-fluid matter flowing from a volcano. The substance that results from the cooling
             of the molten rock. Part of the ocean bed is composed of lava. (IHO Dictionary, S-32, 5th Edition, 2680)

14   DD Name: HYDRO   Code: NATSUR_14   Date accepted: 2000-11-01

             Name: coral

             Definition: hard calcareous skeletons of many tribes of marine polyps. (IHO Dictionary, S-32, 5th Edition,
             1061)

17   DD Name: HYDRO   Code: NATSUR_17   Date accepted: 2000-11-01

             Name: shells

             Definition: exoskeletons of various water dwelling animals. (adapted from IHO Dictionary, S-32, 5th
             Edition, 4680)

18   DD Name: HYDRO   Code: NATSUR_18   Date accepted: 2000-11-01

             Name: boulder

             Definition: a rounded rock with diameter of 256 mm or larger. (adapted from IHO Dictionary, S-32, 5th
             Edition, 527)

Attribute	Nature of construction

Acronym: NATCON   Code: 112

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: NATCON_1   Date accepted: 2000-11-01

            Name: masonry

            Definition: constructed of brick or stone.

2   DD Name: HYDRO   Code: NATCON_2   Date accepted: 2000-11-01

            Name: concreted

            Definition: constructed of concrete, a material made of sand and gravel that is united by cement into a
            hardened mass used for roads, foundations, etc. (adapted from the Illustrated Contemporary Dictionary,
            Encyclopaedic Edition, 1978)

3   DD Name: HYDRO   Code: NATCON_3   Date accepted: 2000-11-01

            Name: loose boulders

            Definition: constructed from large stones or blocks of concrete, often placed loosely for protection against
            waves or water turbulence.

4   DD Name: HYDRO   Code: NATCON_4   Date accepted: 2000-11-01

            Name: hard surfaced

            Definition: constructed with a surface of hard material, usually a term applied to roads surfaced with
            asphalt or concrete.

5   DD Name: HYDRO   Code: NATCON_5   Date accepted: 2000-11-01

            Name: unsurfaced

            Definition: constructed with no extra protection, usually a term applied to roads not surfaced with a hard
            material.

Value   Data Dictionary (DD) Reference

6	DD Name:	HYDRO	Code:	NATCON_6	Date accepted:	2000-11-01

Name: wooden

Definition: constructed from wood.

7	DD Name:	HYDRO	Code:	NATCON_7	Date accepted:	2000-11-01

Name: metal

Definition: constructed from metal.

8	DD Name:	HYDRO	Code:	NATCON_8	Date accepted:	2000-11-01

Name: glass reinforced plastic (GRP)

Definition: constructed from a plastic material strengthened with fibres of glass.

9	DD Name:	HYDRO	Code:	NATCON_9	Date accepted:	2000-11-01

Name: painted

Definition: the application of paint to some other construction or natural feature.

Attribute	Nature of surface - qualifying terms

Acronym: NATQUA   Code: 114

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: Nature of surface - qualifying terms

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: NATQUA_1   Date accepted: 2000-11-01
             Name: Fine
             Definition: falls within the smallest size continuum for a particular nature of surface term

2   DD Name: HYDRO   Code: NATQUA_2   Date accepted: 2000-11-01
             Name: Medium
             Definition: falls within the moderate size continuum for a particular nature of surface term

3   DD Name: HYDRO   Code: NATQUA_3   Date accepted: 2000-11-01
             Name: Coarse
             Definition: falls within the largest size continuum for a particular nature of surface term

4   DD Name: HYDRO   Code: NATQUA_4   Date accepted: 2000-11-01
             Name: Broken
             Definition: fractured or in pieces

Attribute	Object class definition

Acronym: CLSDEF   Code: 18027

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2015-01-01

Definition: Specifies the defining characteristics of a 'new object'.

Attribute	Object class name

Acronym: CLSNAM   Code: 18028

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2015-01-01

Definition: Specifies the descriptive name of a 'new object' feature object class.

Attribute	Object name

Acronym: OBJNAM   Code: 116

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The individual name of an object.

Attribute	Object name in national language

Acronym: NOBJNM   Code: 301

Use Type: N

Value Type: T

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: Name of object in national language characters

Attribute	Orientation

Acronym: ORIENT   Code: 117

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The angular distance measured from true north to the major axis of the object. (Digital Geographic
              Information Working Group -DGIWG, Oct.87)

Attribute	Periodic date end

Acronym: PEREND   Code: 118

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The end of the active period for a seasonal object (e.g. a buoy).

Attribute	Periodic date start

Acronym: PERSTA   Code: 119

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The start of the active period for a seasonal object (e.g. a buoy).

Attribute	Pictorial representation

Acronym: PICREP   Code: 120

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: Indicates whether a pictorial representation of the object is available.

Attribute	Positional Accuracy

Acronym: POSACC   Code: 401

Use Type: F,S

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The best estimate of the accuracy of a position. The expected input is the maximum of the two-dimensional
             error. The error is assumed to be positive and negative. The plus/minus character shall not be encoded.

Attribute	Product

Acronym: PRODCT   Code: 123

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: PRODCT_1   Date accepted: 2000-11-01

          Name: oil

          Definition: a thick, slippery liquid that will not dissolve in water, usually petroleum based in the context of storage tanks. (adapted from the Oxford Minidictionary, Third Edition)

2   DD Name: HYDRO   Code: PRODCT_2   Date accepted: 2000-11-01

          Name: gas

          Definition: a substance with particles that can move freely, usually a fuel substance in the context of storage tanks. (adapted from the Oxford Minidictionary, Third Edition)

3   DD Name: HYDRO   Code: PRODCT_3   Date accepted: 2000-11-01

          Name: water

          Definition: a colourless, odourless, tasteless liquid that is a compound of hydrogen and oxygen. (adapted from the Oxford Minidictionary, Third Edition)

4   DD Name: HYDRO   Code: PRODCT_4   Date accepted: 2000-11-01

          Name: stone

          Definition: a general term for rock fragments. (IHO Dictionary, S-32, 5th Edition, 5059)

5   DD Name: HYDRO   Code: PRODCT_5   Date accepted: 2000-11-01

          Name: coal

          Definition: a hard black mineral that is burned as fuel. (adapted from the Oxford Minidictionary, Third Edition)

6   DD Name: HYDRO   Code: PRODCT_6   Date accepted: 2000-11-01

Value   Data Dictionary (DD) Reference

          Name: ore

          Definition: a solid rock or mineral from which metal is obtained. (adapted form the Oxford Minidictionary, Third Edition)

7   DD Name: HYDRO   Code: PRODCT_7   Date accepted: 2000-11-01

          Name: chemicals

          Definition: any substance obtained by or used in a chemical process. (adapted from the Oxford Minidictionary, Third Edition)

8   DD Name: HYDRO   Code: PRODCT_8   Date accepted: 2000-11-01

          Name: drinking water

          Definition: water that is suitable for human consumption. (adapted from the Oxford Minidictionary, Third Edition)

14   DD Name: HYDRO   Code: PRODCT_14   Date accepted: 2000-11-01

          Name: sand

          Definition: tiny grains of crushed or worn rock. (adapted from the Oxford Minidictionary, Third Edition)

15   DD Name: HYDRO   Code: PRODCT_15   Date accepted: 2000-11-01

          Name: timber

          Definition: wood prepared for use in building or carpentry. (adapted from the Oxford Minidictionary, Third Edition)

17   DD Name: HYDRO   Code: PRODCT_17   Date accepted: 2000-11-01

          Name: scrap metal

          Definition: discarded metal suitable for being reprocessed. (adapted from the Oxford Minidictionary, Third Edition)

21   DD Name: HYDRO   Code: PRODCT_21   Date accepted: 2000-11-01

          Name: cement

          Definition: a substance made of powdered lime and clay, mixed with water. (adapted from the Websters New World Dictionary)

22   DD Name: HYDRO   Code: PRODCT_22   Date accepted: 2000-11-01

          Name: grain

          Definition: a small hard seed, especially that of any cereal plant such as wheat, rice, corn, rye etc. (adapted from the Websters New World Dictionary)

Attribute	Quality of position

Acronym: QUAPOS   Code: 402

Use Type: F,S

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

4   DD Name: HYDRO   Code: QUAPOS_4   Date accepted: 2000-11-01

             Name: approximate

             Definition: a position that is considered to be less than third-order accuracy, but is generally considered to be within 30.5 metres of its correct geographic location. Also may apply to an object whose position does not remain fixed. (adapted from IHO Dictionary, S-32, 213, 3967, and IHO Specifications, M-4, 424.1)

10   DD Name: HYDRO   Code: QUAPOS_10   Date accepted: 2000-11-01

             Name: precisely known

             Definition: a position that is of a known value, such as the position of an anchor berth or other defined object.

Attribute	Quality of sounding measurement

Acronym: QUASOU   Code: 125

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: QUASOU_1   Date accepted: 2000-11-01

          Name: depth known

          Definition: the depth from chart datum to the bottom is a known value.

2   DD Name: HYDRO   Code: QUASOU_2   Date accepted: 2000-11-01

          Name: depth unknown

          Definition: the depth from chart datum to the bottom is unknown.

3   DD Name: HYDRO   Code: QUASOU_3   Date accepted: 2000-11-01

          Name: doubtful sounding

          Definition: a depth that may be less than indicated. (adapted from IHO Dictionary, S-32, 5th Edition, 4840)

4   DD Name: HYDRO   Code: QUASOU_4   Date accepted: 2000-11-01

          Name: unreliable sounding

          Definition: a depth that is considered to be an unreliable value.

6   DD Name: HYDRO   Code: QUASOU_6   Date accepted: 2000-11-01

          Name: least depth known

          Definition: the shoalest depth over a feature is of known value. (adapted from IHO Dictionary, S-32, 5th Edition, 2705)

7   DD Name: HYDRO   Code: QUASOU_7   Date accepted: 2000-11-01

          Name: least depth unknown, safe clearance at depth shown

          Definition: the least depth over a feature is unknown, but there is considered to be safe clearance at this

Value	Data Dictionary (DD) Reference
	depth.

8   DD Name: HYDRO   Code: QUASOU_8   Date accepted: 2000-11-01

Name: value reported (not surveyed)

Definition: depth value obtained from a report, but not fully surveyed.

9   DD Name: HYDRO   Code: QUASOU_9   Date accepted: 2000-11-01

Name: value reported (not confirmed)

Definition: depth value obtained from a report, which it has not been possible to confirm.

10   DD Name: HYDRO   Code: QUASOU_10   Date accepted: 2000-11-01

Name: maintained depth

Definition: the depth at which a channel is kept by human influence, usually by dredging. (IHO Dictionary, S-32, 5th Edition, 3057)

11   DD Name: HYDRO   Code: QUASOU_11   Date accepted: 2000-11-01

Name: not regularly maintained

Definition: depths may be altered by human influence, but will not be routinely maintained.

Attribute	Radar wave length

Acronym: RADWAL   Code: 126

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The distance between two successive peaks (or other points of identical phase) on an electromagnetic
                wave in the radar band of the electromagnetic spectrum.

Attribute	Restriction

Acronym: RESTRN   Code: 131

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The official legal statute of each kind of restricted area.

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: RESTRN_1   Date accepted: 2000-11-01

Name: anchoring prohibited

Definition: an area within which anchoring is not permitted.

3   DD Name: HYDRO   Code: RESTRN_3   Date accepted: 2010-09-08

Name: fishing prohibited

Definition: an area within which fishing is not permitted.

5   DD Name: HYDRO   Code: RESTRN_5   Date accepted: 2010-09-08

Name: trawling prohibited

Definition: an area within which trawling is not permitted.

7   DD Name: HYDRO   Code: RESTRN_7   Date accepted: 2010-09-08

Name: entry prohibited

Definition: an area within which navigation and/or anchoring is prohibited. (adapted from IHO Dictionary,
S-32, 5th Edition, 4044)

8   DD Name: HYDRO   Code: RESTRN_8   Date accepted: 2010-09-08

Name: entry restricted

Definition: a specified area designated by appropriate authority, within which navigation is restricted in
accordance with certain specified conditions. (adapted from IHO Dictionary, S-32, 5th Edition, 4366)

24   DD Name: HYDRO   Code: RESTRN_24   Date accepted: 2010-09-08

Name: dragging prohibited

Value   Data Dictionary (DD) Reference

             Definition: an area in which the dragging of anything along the bottom, e.g. bottom trawling, is prohibited.

38   DD Name: IENC   Code: restrn_38   Date accepted: 2014-11-26

             Name: use of spuds prohibited

             Definition: The use of anchoring spuds (telescopic piles) is prohibited

Attribute	Scale minimum

Acronym: SCAMIN   Code: 133

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The minimum scale at which the object may be used e.g. for ECDIS presentation.

Attribute	Sector limit one

Acronym: SECTR1   Code: 136

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2008-01-31

Definition: A sector is the part of a circle between two straight lines drawn from the centre to the circumference. (Advanced Learner=s Dictionary, 2nd Edition) Sector limit 1 specifies the first limit of the sector. The order of sector limit 1 and sector limit 2 is clockwise around the central object (e.g. a light).

Attribute	Sector limit two

Acronym: SECTR2   Code: 137

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2008-01-31

Definition: A sector is the part of a circle between two straight lines drawn from the centre to the circumference.
(Advanced Learner=s Dictionary, 2nd Edition) The sector limit 2 specifies the second limit of the sector.
The order of sector limit 1 and sector limit 2 is clockwise around the central object (e.g. a light).

Attribute	Signal frequency

Acronym: SIGFRQ   Code: 139

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The frequency of a signal.

Attribute	Signal generation

Acronym: SIGGEN   Code: 140

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: SIGGEN_1   Date accepted: 2000-11-01

             Name: automatically

             Definition: signal generation is initiated by a self regulating mechanism such as a timer or light sensor.

2   DD Name: HYDRO   Code: SIGGEN_2   Date accepted: 2000-11-01

             Name: by wave action

             Definition: the signal is generated by the motion of the sea surface such as a bell in a buoy.

Attribute	Signal group

Acronym: SIGGRP   Code: 141

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The number of signals, the combination of signals or the morse character(s) within one period of full
sequence.

Attribute	Signal period

Acronym: SIGPER   Code: 142

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The time occupied by an entire cycle of intervals of light and eclipse.

Attribute	Signal sequence

Acronym: SIGSEQ   Code: 143

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The sequence of times occupied by intervals of light and eclipse for all 'light characteristics' except for
occulting where the sequence of times is occupied by intervals of eclipse and light.

Attribute	Sounding accuracy

Acronym: SOUACC   Code: 144

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The best estimate of the accuracy of the sounding data. The maximum of the one-dimensional error. The error is assumed to be positive and negative. The plus/minus character shall not be encoded.

Attribute	Source date

Acronym: SORDAT   Code: 147

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The production date of the source, e.g. the date of measurement.

Attribute	Source indication

Acronym: SORIND   Code: 148

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: Information about the source of the object.

Attribute	Status

Acronym: STATUS   Code: 149

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

2   DD Name: HYDRO   Code: STATUS_2   Date accepted: 2000-11-01

          Name: occasional

          Definition: acting on special occasions; happening irregularly. (The Concise Oxford Dictionary, 7th Edition)

3   DD Name: HYDRO   Code: STATUS_3   Date accepted: 2000-11-01

          Name: recommended

          Definition: presented as worthy of confidence, acceptance, use, etc. (The Macquarie Dictionary, 1988)

4   DD Name: HYDRO   Code: STATUS_4   Date accepted: 2000-11-01

          Name: not in use

          Definition: no longer used for the purpose intended; disused.

8   DD Name: HYDRO   Code: STATUS_8   Date accepted: 2000-11-01

          Name: private

          Definition: not in public ownership or operation.

9   DD Name: HYDRO   Code: STATUS_9   Date accepted: 2000-11-01

          Name: mandatory

          Definition: compulsory; enforced. (The Concise Oxford Dictionary, 7th Edition)

12   DD Name: HYDRO   Code: STATUS_12   Date accepted: 2000-11-01

          Name: illuminated

          Definition: lit by floodlights, strip lights, etc.

Value   Data Dictionary (DD) Reference

14   DD Name: HYDRO   Code: STATUS_14   Date accepted: 2000-11-01

             Name: public

             Definition: belonging to, available to, used or shared by, the community as a whole and not restricted to private use. (adapted from The New Shorter Oxford English Dictionary, 1993)

16   DD Name: HYDRO   Code: STATUS_16   Date accepted: 2000-11-01

             Name: watched

             Definition: looked at or observed over a period of time especially so as to be aware of any movement or change. (adapted from The New Shorter Oxford English Dictionary, 1993)

17   DD Name: HYDRO   Code: STATUS_17   Date accepted: 2000-11-01

             Name: un-watched

             Definition: usually automatic in operation, without any permanently-stationed personnel to superintend it. (adapted from IHO Dictionary, S-32, 5th Edition, 2814)

18   DD Name: HYDRO   Code: STATUS_18   Date accepted: 2000-11-01

             Name: existence doubtful

             Definition: an object that has been reported but has not been definitely determined to exist.

Attribute	Survey authority

Acronym: SURATH   Code: 150

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The authority which was responsible for the survey.

Attribute	Survey date - end

Acronym: SUREND   Code: 151

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The end date of the survey.

Attribute	Survey date - start

Acronym: SURSTA   Code: 152

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The start date of the survey.

Attribute	Survey type

Acronym: SURTYP   Code: 153

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

2   DD Name: HYDRO   Code: SURTYP_2   Date accepted: 2000-11-01

              Name: controlled survey

              Definition: a thorough survey usually conducted with reference to guidelines.

Attribute	Symbol instruction

Acronym: SYMINS   Code: 18029

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2015-01-01

Definition: This specifies the S-52 Presentation Library symbol instruction to be adopted in ECDIS for the new object
               class (as specified in the S-52 Symbol Library - Addendum to S-52 Presentation Library).

Attribute	Technique of sounding measurement

Acronym: TECSOU   Code: 156

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: TECSOU_1   Date accepted: 2000-11-01

             Name: found by echo-sounder

             Definition: the depth was determined by using an instrument that determines depth of water by measuring
             the time interval between emission of a sonic or ultrasonic signal and return of its echo from the bottom.
             (adapted from IHO Dictionary, S-32, 1547)

2   DD Name: HYDRO   Code: TECSOU_2   Date accepted: 2000-11-01

             Name: found by side-scan-sonar

             Definition: the depth was computed from a record produced by active sonar in which fixed acoustic beams
             are directed into the water perpendicularly to the direction of travel to scan the bottom and generate a
             record of the bottom configuration. (adapted from IHO Dictionary, S-32, 4710)

3   DD Name: HYDRO   Code: TECSOU_3   Date accepted: 2000-11-01

             Name: found by multi-beam

             Definition: the depth was determined by using a wide swath echo sounder that uses multiple beams to
             measure depths directly below and transverse to the ship's track. (adapted from IHO Dictionary, S-32, 3339)

4   DD Name: HYDRO   Code: TECSOU_4   Date accepted: 2000-11-01

             Name: found by diver

             Definition: the depth was determined by a person skilled in the practice of diving. (adapted from IHO
             Dictionary, S-32, 1422)

5   DD Name: HYDRO   Code: TECSOU_5   Date accepted: 2000-11-01

             Name: found by lead-line

             Definition: the depth was determined by using a line, graduated with attached marks and fastened to a

Value	Data Dictionary (DD) Reference

sounding lead. (adapted from IHO Dictionary, S-32, 2698)

6   DD Name: HYDRO   Code: TECSOU_6   Date accepted: 2000-11-01

Name: swept by wire-drag

Definition: the given area was determined to be free from navigational dangers to a certain depth by towing a buoyed wire at the desired depth by two launches, or a least depth was identified using the same technique. (adapted from IHO Dictionary, S-32, 5248, 6013)

7   DD Name: HYDRO   Code: TECSOU_7   Date accepted: 2000-11-01

Name: found by laser

Definition: the depth was determined by using an instrument that measures distance by emitting timed pulses of laser light and measuring the time between emission and reception of the reflected pulses. (adapted from IHO Dictionary, S-32, 2763)

8   DD Name: HYDRO   Code: TECSOU_8   Date accepted: 2000-11-01

Name: swept by vertical acoustic system

Definition: the given area has been swept using a system comprised of multiple echo sounder transducers attached to booms deployed from the survey vessel.

9   DD Name: HYDRO   Code: TECSOU_9   Date accepted: 2000-11-01

Name: found by electromagnetic sensor

Definition: the depth was determined by using an instrument that compares electromagnetic signals. (adapted from IHO Dictionary, S-32, 1571)

10   DD Name: HYDRO   Code: TECSOU_10   Date accepted: 2000-11-01

Name: photogrammetry

Definition: the depth was determined by applying mathematical techniques to photographs. (adapted from IHO Dictionary, S-32, 3791)

11   DD Name: HYDRO   Code: TECSOU_11   Date accepted: 2000-11-01

Name: satellite imagery

Definition: the depth was determined by using instruments placed aboard an artificial satellite. (adapted from IHO Dictionary, S-32, 4509)

12   DD Name: HYDRO   Code: TECSOU_12   Date accepted: 2000-11-01

Name: found by levelling

Definition: the depth was determined by using levelling techniques to find the elevation of the point relative to a datum. (adapted from IHO Dictionary, S-32, 2741)

13   DD Name: HYDRO   Code: TECSOU_13   Date accepted: 2000-11-01

Name: swept by side-scan-sonar

Value   Data Dictionary (DD) Reference

Definition: the given area was determined to be free from navigational dangers to a certain depth by towing a side-scan-sonar. (adapted from IHO Dictionary, S-32, 5248, 4710) [415.2]

14   DD Name: HYDRO   Code: TECSOU_14   Date accepted: 2000-11-01

Name: computer generated

Definition: the sounding was determined from a bottom model constructed using a computer.

Attribute	Textual description

Acronym: TXTDSC   Code: 158

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The string encodes the file name of an external text file that contains the text in English

Attribute	Textual description in national language

Acronym: NTXTDS   Code: 304

Use Type: N

Value Type: T

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The file name of an external text file that contains the text in a national language.

Attribute	Topmark/daymark shape

Acronym: TOPSHP   Code: 171

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: TOPSHP_1   Date accepted: 2000-11-01

            Name: cone, point up

            Definition: is where the vertex points up.

2   DD Name: HYDRO   Code: TOPSHP_2   Date accepted: 2000-11-01

            Name: cone, point down

            Definition: is where the vertex points down.

3   DD Name: HYDRO   Code: TOPSHP_3   Date accepted: 2000-11-01

            Name: sphere

            Definition: a body the surface of which is at all points equidistant from the centre. (The New Shorter
            Oxford English Dictionary. 1993. vol 2). Spheres are commonly used as International Association of
            Lighthouse Authorities - IALA topmarks (safe water).

4   DD Name: HYDRO   Code: TOPSHP_4   Date accepted: 2000-11-01

            Name: 2 spheres

            Definition: two black spheres are commonly used as an International Association of Lighthouse Authorities
            - IALA topmark (isolated danger).

5   DD Name: HYDRO   Code: TOPSHP_5   Date accepted: 2000-11-01

            Name: cylinder (can)

            Definition: a solid geometrical figure generated by straight lines fixed in direction and describing with one
            of point a closed curve, especially a circle (in which case the figure is circular cylinder, it's ends being
            parallel circles). (The New Shorter Oxford English Dictionary. 1993. vol 2). Cylinders are commonly used as
            International Association of Lighthouse Authorities - IALA topmarks (lateral).

Value   Data Dictionary (DD) Reference

6   DD Name: HYDRO   Code: TOPSHP_6   Date accepted: 2000-11-01

Name: board

Definition: usually of rectangular shape, made from timber or metal and used to provide a contrast with the natural background of a daymark. The actual daymark is often painted on to this board.

7   DD Name: HYDRO   Code: TOPSHP_7   Date accepted: 2000-11-01

Name: x-shape (St. Andrew's cross)

Definition: having a shape or a cross-section like the capital letter X. (The New Shorter Oxford English Dictionary. 1993. vol 2). An x-shape as an International Association of Lighthouse Authorities - IALA topmark should be 3 dimensional in shape. It is made of at least three crossed bars.

8   DD Name: HYDRO   Code: TOPSHP_8   Date accepted: 2000-11-01

Name: upright cross (St George's cross)

Definition: a cross with one vertical member and one horizontal member, i.e. similar in shape to the character '+'.

9   DD Name: HYDRO   Code: TOPSHP_9   Date accepted: 2000-11-01

Name: cube, point up

Definition: a cube standing on one of its vertexes.

10   DD Name: HYDRO   Code: TOPSHP_10   Date accepted: 2000-11-01

Name: 2 cones, point to point

Definition: 2 cones, one above the other, with their vertices together in the centre.

11   DD Name: HYDRO   Code: TOPSHP_11   Date accepted: 2000-11-01

Name: 2 cones, base to base

Definition: 2 cones, one above the other, with their bases together in the centre and their vertices pointing up and down.

12   DD Name: HYDRO   Code: TOPSHP_12   Date accepted: 2000-11-01

Name: rhombus (diamond)

Definition: a plane figure having four equal sides and equal opposite angles (two acute and two obtuse); an oblique equilateral parallelogram. (The New Shorter Oxford English Dictionary. 1993. vol 2)

13   DD Name: HYDRO   Code: TOPSHP_13   Date accepted: 2000-11-01

Name: 2 cones (points upward)

Definition: 2 cones, one above the other, with their their vertices pointing up

14   DD Name: HYDRO   Code: TOPSHP_14   Date accepted: 2000-11-01

Name: 2 cones (points downward)

Value   Data Dictionary (DD) Reference

             Definition: 2 cones, one above the other, with their their vertices pointing down

15   DD Name: HYDRO   Code: TOPSHP_15   Date accepted: 2000-11-01

             Name: besom, point up (broom or perch)

             Definition: a bundle of rods or twigs. (The New Shorter Oxford English Dictionary. 1993. vol 1)

16   DD Name: HYDRO   Code: TOPSHP_16   Date accepted: 2000-11-01

             Name: besom, point down (broom or perch)

             Definition: a bundle of rods or twigs. (The New Shorter Oxford English Dictionary. 1993. vol 1)

17   DD Name: HYDRO   Code: TOPSHP_17   Date accepted: 2000-11-01

             Name: flag

             Definition: a flag mounted on a short pole.

18   DD Name: HYDRO   Code: TOPSHP_18   Date accepted: 2000-11-01

             Name: sphere over rhombus

             Definition: A sphere located above a rhombus.

19   DD Name: HYDRO   Code: TOPSHP_19   Date accepted: 2000-11-01

             Name: square

             Definition: a plane figure with four right angles and four equal straight sides (The New Shorter Oxford
             English Dictionary. 1993. vol 2)

20   DD Name: HYDRO   Code: TOPSHP_20   Date accepted: 2000-11-01

             Name: rectangle, horizontal

             Definition: a plane figure with four right angles and four straight sides, opposite sides being parallel and
             equal in length where the two longer opposite sides are standing horizontally (The New Shorter Oxford
             English Dictionary. 1993. vol 2).

21   DD Name: HYDRO   Code: TOPSHP_21   Date accepted: 2000-11-01

             Name: rectangle, vertical

             Definition: a plane figure with four right angles and four straight sides, opposite sides being parallel and
             equal in length where the two longer opposite sides are standing vertically (The New Shorter Oxford English
             Dictionary. 1993. vol 2).

22   DD Name: HYDRO   Code: TOPSHP_22   Date accepted: 2000-11-01

             Name: trapezium, up

             Definition: a quadrilateral having one pair of opposite sides parallel which stands on its longer parallel
             side. (The New Shorter Oxford English Dictionary. 1993. vol 2).

23   DD Name: HYDRO   Code: TOPSHP_23   Date accepted: 2000-11-01

Value   Data Dictionary (DD) Reference

              Name: trapezium, down

              Definition: a quadrilateral having one pair of opposite sides parallel which stands on its shorter parallel side. (The New Shorter Oxford English Dictionary. 1993. vol 2).

24   DD Name: HYDRO   Code: TOPSHP_24   Date accepted: 2000-11-01

              Name: triangle, point up

              Definition: a figure having three angles and three sides with point up. (New Shorter Oxford English Dictionary. 1993. vol 2)

25   DD Name: HYDRO   Code: TOPSHP_25   Date accepted: 2000-11-01

              Name: triangle, point down

              Definition: a figure having three angles and three sides with point down. (New Shorter Oxford English Dictionary. 1993. vol 2)

26   DD Name: HYDRO   Code: TOPSHP_26   Date accepted: 2000-11-01

              Name: circle

              Definition: a perfectly round plane figure whose circumference is everywhere equidistant from its centre. (The New Shorter Oxford English Dictionary. 1993. vol 1)

27   DD Name: HYDRO   Code: TOPSHP_27   Date accepted: 2000-11-01

              Name: two upright crosses (one over the other)

              Definition: two upright crosses, generally vertically disposed one above the other.

28   DD Name: HYDRO   Code: TOPSHP_28   Date accepted: 2000-11-01

              Name: T-shape

              Definition: having a shape like the capital letter T.

29   DD Name: HYDRO   Code: TOPSHP_29   Date accepted: 2000-11-01

              Name: triangle pointing up over a circle

              Definition: a triangle, vertex uppermost, located above a circle.

30   DD Name: HYDRO   Code: TOPSHP_30   Date accepted: 2000-11-01

              Name: upright cross over a circle

              Definition: an upright cross located above a circle.

31   DD Name: HYDRO   Code: TOPSHP_31   Date accepted: 2000-11-01

              Name: rhombus over a circle

              Definition: a rhombus located above a circle.

32   DD Name: HYDRO   Code: TOPSHP_32   Date accepted: 2000-11-01

Value   Data Dictionary (DD) Reference

         Name: circle over a triangle pointing up

         Definition: a circle located over a triangle, vertex uppermost.

33   DD Name: HYDRO   Code: TOPSHP_33   Date accepted: 2000-11-01

         Name: other shape (see INFORM)

         Definition:

Attribute	Traffic flow

Acronym: TRAFIC   Code: 172

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: TRAFIC_1   Date accepted: 2000-11-01

           Name: inbound

           Definition: traffic flow in a general direction toward a port or similar destination.

2   DD Name: HYDRO   Code: TRAFIC_2   Date accepted: 2000-11-01

           Name: outbound

           Definition: traffic flow in a general direction away from a port or similar point of origin.

3   DD Name: HYDRO   Code: TRAFIC_3   Date accepted: 2000-11-01

           Name: one-way

           Definition: traffic flow in one general direction only.

4   DD Name: HYDRO   Code: TRAFIC_4   Date accepted: 2000-11-01

           Name: two-way

           Definition: traffic flow in two generally opposite directions.

Attribute	Value of depth contour

Acronym: VALDCO

Code: 174

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The depth of a sea bottom contour.

Attribute	Value of maximum range

Acronym: VALMXR   Code: 177

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The extreme distance at which an object can be seen or a signal detected.

Attribute	Value of nominal range

Acronym: VALNMR   Code: 178

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The nominal range at which an object can be seen or a signal detected

Attribute	Value of sounding

Acronym: VALSOU   Code: 179

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The value of the measurement of a sounding relative to the chart datum.

Attribute	Vertical clearance

Acronym: VERCLR   Code: 181

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The vertical clearance measured from the plane towards the object overhead.

Attribute	Vertical clearance, closed

Acronym: VERCCL   Code: 182

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The vertical clearance of an object in closed condition (e.g. a closed lifting bridge) measured from the plane towards the object overhead.

Attribute	Vertical clearance, open

Acronym: VERCOP   Code: 183

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition: The vertical clearance of an object in opened condition (e.g. an opened lifting bridge) measured from the plane towards the object overhead.

Attribute	Vertical datum

Acronym: VERDAT   Code: 185

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2001-05-31

Definition: Vertical datum

Enumerations:

Value   Data Dictionary (DD) Reference

4   DD Name: HYDRO   Code: VERDAT_4   Date accepted: 2001-05-31

             Name: Lowest low water

             Definition: an arbitrary level conforming to the lowest tide observed at a place, or some what lower.

Attribute	Water level effect

Acronym: WATLEV   Code: 187

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2000-11-01

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: WATLEV_1   Date accepted: 2000-11-01

             Name: partly submerged at high water

             Definition: partially covered and partially dry at high water.

2   DD Name: HYDRO   Code: WATLEV_2   Date accepted: 2000-11-01

             Name: always dry

             Definition: not covered at high water under average meteorological conditions.

3   DD Name: HYDRO   Code: WATLEV_3   Date accepted: 2000-11-01

             Name: always under water/submerged

             Definition: remains covered by water at all times under average meteorological conditions.

4   DD Name: HYDRO   Code: WATLEV_4   Date accepted: 2000-11-01

             Name: covers and uncovers

             Definition: expression intended to indicate an area of a reef or other projection from the bottom of a body of water which periodically extends above and is submerged below the surface. Also referred to as dries or uncovers. (IHO Dictionary, S-32, 5th Edition, 1111)

5   DD Name: HYDRO   Code: WATLEV_5   Date accepted: 2000-11-01

             Name: awash

             Definition: flush with, or washed by the waves at low water under average meteorological conditions. (adapted from IHO Dictionary, S-32, 5th Edition, 308)

7   DD Name: HYDRO   Code: WATLEV_7   Date accepted: 2000-11-01

Value   Data Dictionary (DD) Reference

        Name: floating

        Definition: resting or moving on the surface of a liquid without sinking (Concise Oxford Dictionary)

Attribute	Additional mark

Acronym: addmrk   Code: 17050

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Shape and position of an additional board on a notice mark

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: addmrk_1   Date accepted: 2001-05-31
             Name: top (board)
             Definition: a rectangular board at the top of the main sign

2   DD Name: IENC   Code: addmrk_2   Date accepted: 2001-05-31
             Name: bottom (board)
             Definition: a rectangular board at the bottom of the main sign

3   DD Name: IENC   Code: addmrk_3   Date accepted: 2001-05-31
             Name: right (triangle to the right)
             Definition: a triangular board at the right side of the main sign

4   DD Name: IENC   Code: addmrk_4   Date accepted: 2001-05-31
             Name: left (triangle to the left)
             Definition: a triangular board at the left side of the main sign

5   DD Name: IENC   Code: addmrk_5   Date accepted: 2001-05-31
             Name: bottom (triangle to the bottom)
             Definition: a triangular board at the bottom of the main sign

Attribute	Allowed consumption

Acronym: allcon   Code: 18033

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2014-11-26

Definition: The maximum allowed power that may be used by the vessel

Attribute	Amount of amperage

Acronym: amoamp   Code: 18032

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2014-11-26

Definition: The maximum electric amperage possible

Attribute	Assemblies of ship (excluding)

Acronym: lc_ase   Code: 18015

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Excluding list of assemblies of ships for the applicability of a feature

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: lc_ase_1   Date accepted: 2001-05-31
         Name: all types
         Definition:

2   DD Name: IENC   Code: lc_ase_2   Date accepted: 2001-05-31
         Name: other
         Definition:

3   DD Name: IENC   Code: lc_ase_3   Date accepted: 2001-05-31
         Name: single vessel
         Definition:

5   DD Name: IENC   Code: lc_ase_5   Date accepted: 2001-05-31
         Name: convoy
         Definition: a rigid or towed convoy of craft

6   DD Name: IENC   Code: lc_ase_6   Date accepted: 2001-05-31
         Name: formation
         Definition: the manner in which a convoy is assembled

7   DD Name: IENC   Code: lc_ase_7   Date accepted: 2001-05-31
         Name: rigid convoy
         Definition: a pushed convoy or breasted up formation

Value   Data Dictionary (DD) Reference

8   DD Name: IENC   Code: lc_ase_8   Date accepted: 2001-05-31

               Name: pushed convoy

               Definition: a rigid assembly of craft of which at least one is positioned in front of the craft providing the power for propelling the convoy, known as the "pusher(s)"; a convoy composed of a pusher craft and a pushed craft coupled so as to permit guided articulation is also considered as rigid

9   DD Name: IENC   Code: lc_ase_9   Date accepted: 2001-05-31

               Name: breasted up formation

               Definition: an assembly of craft coupled rigidly side by side, none of which is positioned in front of the craft propelling the assembly

10   DD Name: IENC   Code: lc_ase_10   Date accepted: 2001-05-31

               Name: towed convoy

               Definition: an assembly of one or more craft, floating establishments or floating installations towed by one or more self-propelled craft forming part of the convoy

Attribute	Assemblies of ship (including)

Acronym: lc_asi   Code: 18014

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Including list of assemblies of ships for the applicability of a feature

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: lc_asi_1   Date accepted: 2001-05-31
             Name: all types
             Definition:

2   DD Name: IENC   Code: lc_asi_2   Date accepted: 2001-05-31
             Name: other
             Definition:

3   DD Name: IENC   Code: lc_asi_3   Date accepted: 2001-05-31
             Name: single vessel
             Definition:

5   DD Name: IENC   Code: lc_asi_5   Date accepted: 2001-05-31
             Name: convoy
             Definition: a rigid or towed convoy of craft

6   DD Name: IENC   Code: lc_asi_6   Date accepted: 2001-05-31
             Name: formation
             Definition: the manner in which a convoy is assembled

7   DD Name: IENC   Code: lc_asi_7   Date accepted: 2001-05-31
             Name: rigid convoy
             Definition: a pushed convoy or breasted up formation

Value   Data Dictionary (DD) Reference

8   DD Name: IENC   Code: lc_asi_8   Date accepted: 2001-05-31

             Name: pushed convoy

             Definition: a rigid assembly of craft of which at least one is positioned in front of the craft providing the
             power for propelling the convoy, known as the "pusher(s)"; a convoy composed of a pusher craft and a
             pushed craft coupled so as to permit guided articulation is also considered as rigid

9   DD Name: IENC   Code: lc_asi_9   Date accepted: 2001-05-31

             Name: breasted up formation

             Definition: an assembly of craft coupled rigidly side by side, none of which is positioned in front of the craft
             propelling the assembly

10   DD Name: IENC   Code: lc_asi_10   Date accepted: 2001-05-31

             Name: towed convoy

             Definition: an assembly of one or more craft, floating establishments or floating installations towed by one
             or more self-propelled craft forming part of the convoy

Attribute	Average Passing Time Reference

Acronym: aptref   Code: 17099

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The string encodes the file name of an external file

Attribute	Bank of the waterway

Acronym: bnkwtw   Code: 17105

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2009-09-11

Definition: Bank of the river (waterway)

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: bnkwtw_1   Date accepted: 2009-09-11

           Name: left

           Definition: left bank of the river

2   DD Name: IENC   Code: bnkwtw_2   Date accepted: 2009-09-11

           Name: right

           Definition: right bank of the river

Attribute	Bunker vessel, availability

Acronym:　　bunves　　　　　　　　　　　　　　　　　　　　　　　　　　　Code:　17065

Use Type:　　F

Value Type:　　E

Data Dictionary (DD) Reference:

DD Name:　IENC　　　　　　　Date accepted:　2001-05-31

Definition:　　Indication of the availability of a bunker vessel

Enumerations:

Value　　　　Data Dictionary (DD) Reference

1　　　　　　DD Name:　IENC　　　　Code:　bunves_1　　　　Date accepted:　2001-05-31

　　　　　　Name:　　　bunker vessel available

　　　　　　Definition:　　a bunker vessel is available

2　　　　　　DD Name:　IENC　　　　Code:　bunves_2　　　　Date accepted:　2001-05-31

　　　　　　Name:　　　no bunker vessel available

　　　　　　Definition:　　a bunker vessel is not available

Attribute	Category of anchorage

Acronym: catach   Code: 17000

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of anchorage

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catach_1   Date accepted: 2001-05-31
               Name: unrestricted anchorage
               Definition: an area in which vessels anchor or may anchor. (IHO Dictionary, S-32, 5th Edition, 130)

2   DD Name: IENC   Code: catach_2   Date accepted: 2001-05-31
               Name: deep water anchorage
               Definition: an area in which vessels of deep draught anchor or may anchor.

3   DD Name: IENC   Code: catach_3   Date accepted: 2001-05-31
               Name: tanker anchorage
               Definition: an area in which tankers anchor or may anchor.

4   DD Name: IENC   Code: catach_4   Date accepted: 2001-05-31
               Name: explosives anchorage
               Definition: an area set apart for anchored ships discharging or receiving explosives. (IHO Dictionary, S-32, 5th Edition, 1732)

5   DD Name: IENC   Code: catach_5   Date accepted: 2001-05-31
               Name: quarantine anchorage
               Definition: an area where a vessel anchors when satisfying quarantine regulations. (IHO Dictionary, S-32, 5th Edition, 4117)

6   DD Name: IENC   Code: catach_6   Date accepted: 2001-05-31
               Name: sea-plane anchorage

Value   Data Dictionary (DD) Reference

             Definition: an area in which sea-planes anchor or may anchor.

7   DD Name: IENC   Code: catach_7   Date accepted: 2001-05-31

             Name: small craft anchorage

             Definition: an area in which yachts and small boats anchor or may anchor.

9   DD Name: IENC   Code: catach_9   Date accepted: 2001-05-31

             Name: anchorage for periods up to 24 hours

             Definition: an area in which vessels anchor or may anchor for periods of up to 24 hours.

10   DD Name: IENC   Code: catach_10   Date accepted: 2001-05-31

             Name: anchorage for pushing-navigation vessels

             Definition: an area where pushing-navigation vessels may anchor

11   DD Name: IENC   Code: catach_11   Date accepted: 2001-05-31

             Name: anchorage for other vessels than pushing-navigation vessels

             Definition: an area where other vessels than pushing-navigation vessels may anchor

12   DD Name: IENC   Code: catach_12   Date accepted: 2009-12-09

             Name: anchorage for dry cargo vessels

             Definition: an area where dry cargo vessels may anchor

13   DD Name: IENC   Code: catach_13   Date accepted: 2009-12-09

             Name: anchorage for rafts

             Definition: an area where rafts may anchor

Attribute	Category of berth

Acronym: catbrt   Code: 17066

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of berth

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catbrt_1   Date accepted: 2001-05-31
             Name: loading
             Definition: A place where vessels may berth for loading cargo.

2   DD Name: IENC   Code: catbrt_2   Date accepted: 2001-05-31
             Name: unloading
             Definition: A place where vessels may berth for unloading cargo.

3   DD Name: IENC   Code: catbrt_3   Date accepted: 2001-05-31
             Name: overnight accommodation
             Definition: Berths that are suitable/ meant for berthing overnight.

4   DD Name: IENC   Code: catbrt_4   Date accepted: 2001-05-31
             Name: berth for pushing-navigation vessels
             Definition: an place where pushing-navigation vessels may berth.

5   DD Name: IENC   Code: catbrt_5   Date accepted: 2001-05-31
             Name: berth for other vessels than pushing-navigation vessels
             Definition: an place where other vessels than pushing-navigation vessels may berth.

6   DD Name: IENC   Code: catbrt_6   Date accepted: 2001-05-31
             Name: fleeting area
             Definition: A legally permitted area in or near the waterway designated for temporary barge mooring.

Value   Data Dictionary (DD) Reference

7   DD Name: IENC   Code: catbrt_7   Date accepted: 2001-05-31

             Name: first class landing

             Definition: A federally designated area that provides tie-ups and at least 9 feet (2.7m) of water depth during low water level.

8   DD Name: IENC   Code: catbrt_8   Date accepted: 2001-05-31

             Name: second class landing

             Definition: A federally designated area that provides tie-ups and at least 9 feet (2.7m) of water depth normal pool level.

9   DD Name: IENC   Code: catbrt_9   Date accepted: 2012-12-19

             Name: berth for passenger vessels

             Definition:

Attribute	Category of bunker station

Acronym: catbun   Code: 17067

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of bunker station

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catbun_1   Date accepted: 2001-05-31
             Name: diesel oil
             Definition: diesel oil available

2   DD Name: IENC   Code: catbun_2   Date accepted: 2001-05-31
             Name: water
             Definition: water available

3   DD Name: IENC   Code: catbun_3   Date accepted: 2001-05-31
             Name: ballast
             Definition: ballast available

4   DD Name: IENC   Code: catbun_4   Date accepted: 2014-11-26
             Name: power
             Definition: power supply available

Attribute	Category of cable

Acronym: catcbl   Code: 17101

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of cable

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catcbl_1   Date accepted: 2001-05-31

             Name: power line

             Definition: a cable used for the supply of electricity.

3   DD Name: IENC   Code: catcbl_3   Date accepted: 2001-05-31

             Name: transmission line

             Definition: multiple un-insulated cables usually supported by steel lattice towers. Such features are generally more prominent than normal power lines.

4   DD Name: IENC   Code: catcbl_4   Date accepted: 2001-05-31

             Name: telephone

             Definition: a cable used for the transmission of telephone signals.

5   DD Name: IENC   Code: catcbl_5   Date accepted: 2001-05-31

             Name: telegraph

             Definition: a cable used for the transmission of telegraph signals.

6   DD Name: IENC   Code: catcbl_6   Date accepted: 2001-05-31

             Name: mooring cable/chain

             Definition: a cable or chain used to secure a mooring buoy or other floating structure.

7   DD Name: IENC   Code: catcbl_7   Date accepted: 2001-05-31

             Name: ferry cable

             Definition: a cable where a cable ferry is connected to

Attribute	Category of cargo (excluding)

Acronym: lc_cce   Code: 18017

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Excluding list of categories of cargo for the applicability of a feature

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: lc_cce_1   Date accepted: 2001-05-31
             Name: all types
             Definition:

2   DD Name: IENC   Code: lc_cce_2   Date accepted: 2001-05-31
             Name: other
             Definition:

4   DD Name: IENC   Code: lc_cce_4   Date accepted: 2001-05-31
             Name: bulk
             Definition: unpacked homogenous cargo poured loose in a certain space of a vessel e.g. oil or grain

5   DD Name: IENC   Code: lc_cce_5   Date accepted: 2001-05-31
             Name: dry cargo
             Definition:

6   DD Name: IENC   Code: lc_cce_6   Date accepted: 2001-05-31
             Name: liquid cargo
             Definition:

7   DD Name: IENC   Code: lc_cce_7   Date accepted: 2001-05-31
             Name: liquid cargo (type N)
             Definition:

Value	Data Dictionary (DD) Reference				

8   DD Name: IENC   Code: lc_cce_8   Date accepted: 2001-05-31

           Name: liquid cargo (type C)

           Definition:

9   DD Name: IENC   Code: lc_cce_9   Date accepted: 2001-05-31

           Name: gas

           Definition:

Attribute	Category of cargo (including)

Acronym: lc_cci   Code: 18016

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Including list of categories of cargo for the applicability of a feature

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: lc_cci_1   Date accepted: 2001-05-31
            Name: all types
            Definition:

2   DD Name: IENC   Code: lc_cci_2   Date accepted: 2001-05-31
            Name: other
            Definition:

4   DD Name: IENC   Code: lc_cci_4   Date accepted: 2001-05-31
            Name: bulk
            Definition: unpacked homogenous cargo poured loose in a certain space of a vessel e.g. oil or grain

5   DD Name: IENC   Code: lc_cci_5   Date accepted: 2001-05-31
            Name: dry cargo
            Definition:

6   DD Name: IENC   Code: lc_cci_6   Date accepted: 2001-05-31
            Name: liquid cargo
            Definition:

7   DD Name: IENC   Code: lc_cci_7   Date accepted: 2001-05-31
            Name: liquid cargo (type N)
            Definition:

Value	Data Dictionary (DD) Reference

8	DD Name:	IENC	Code:	lc_cci_8	Date accepted:	2001-05-31
	Name:	liquid cargo (type C)				
	Definition:					

9	DD Name:	IENC	Code:	lc_cci_9	Date accepted:	2001-05-31
	Name:	gas				
	Definition:					

Attribute	Category of CEMT class

Acronym: catccl   Code: 17068

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of CEMT class

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catccl_1   Date accepted: 2001-05-31

             Name: 0 small vessels and pleasure craft

             Definition: designated for small vessels and pleasure crafts only

2   DD Name: IENC   Code: catccl_2   Date accepted: 2001-05-31

             Name: I peniche

             Definition: designated for barges of type "Péniche" (west of river Elbe) or of type "Gross Finow" (east of river Elbe)

3   DD Name: IENC   Code: catccl_3   Date accepted: 2001-05-31

             Name: II campine barge

             Definition: designated for barges of type "Kempenaar" (west of river Elbe) or of type "BM-500" (east of river Elbe)

4   DD Name: IENC   Code: catccl_4   Date accepted: 2001-05-31

             Name: III Dortmund-Ems barge

             Definition: designated for barges of type "Gustav Koenigs" (west of river Elbe) or of a similar type concerning the dimensions (east of river Elbe)

5   DD Name: IENC   Code: catccl_5   Date accepted: 2001-05-31

             Name: IV Rhine-Herne barge

             Definition: designated for barges of type "Johann Welker"

6   DD Name: IENC   Code: catccl_6   Date accepted: 2001-05-31

Value   Data Dictionary (DD) Reference

             Name: Va Large Rhine barge; 1-barge push-tow unit

             Definition: designated for barges of type "Large Rhine barge" or pushed convoys with one barge

7   DD Name: IENC   Code: catccl_7   Date accepted: 2001-05-31

             Name: Vb 2-barge push-tow unit; long formation

             Definition: designated for pushed convoys with two barges, long formation

8   DD Name: IENC   Code: catccl_8   Date accepted: 2001-05-31

             Name: VIa 2-barge push-tow unit; wide formation

             Definition: designated for pushed convoys with two barges, wide formation

9   DD Name: IENC   Code: catccl_9   Date accepted: 2001-05-31

             Name: VIb 4-barge push-tow unit

             Definition: designated for pushed convoys with four barges

10   DD Name: IENC   Code: catccl_10   Date accepted: 2001-05-31

             Name: VIc 6-barge push-tow unit

             Definition: designated for pushed convoys with six barges

11   DD Name: IENC   Code: catccl_11   Date accepted: 2001-05-31

             Name: No CEMT class

             Definition:

12   DD Name: IENC   Code: catccl_12   Date accepted: 2011-10-04

             Name: VII 9-barge push-town unit

             Definition:

Attribute	Category of checkpoint

Acronym: catchp   Code: 17010

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of checkpoint

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catchp_1   Date accepted: 2001-05-31

             Name: custom

             Definition: an office, especially in ports, at which customs dues are collected or administrated. (adapted from The New Shorter Oxford English Dictionary, 1993)

2   DD Name: IENC   Code: catchp_2   Date accepted: 2001-05-31

             Name: border

             Definition: an office, at which immigration control takes place

Attribute	Category of communication

Acronym: catcom   Code: 17069

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of communication

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catcom_1   Date accepted: 2001-05-31

            Name: VTS centre

            Definition: The centre from which Vessel Traffic Services are operated. A VTS is a service implemented by a competent authority, designed to improve the safety and efficiency of vessel traffic and to protect the environment. The services should have the capability to interact with the traffic and to respond to traffic situations developing in the area.

2   DD Name: IENC   Code: catcom_2   Date accepted: 2001-05-31

            Name: VTS sector

            Definition: The service area of a VTS centre.

3   DD Name: IENC   Code: catcom_3   Date accepted: 2001-05-31

            Name: IVS point

            Definition: A reporting point of the "Informatie en Volgsysteem voor de Scheepvaart" in the Netherlands.

4   DD Name: IENC   Code: catcom_4   Date accepted: 2001-05-31

            Name: MIB

            Definition: A reporting point of the "Melde- und Informationssystem Binnenschifffahrt" in Germany.

5   DD Name: IENC   Code: catcom_5   Date accepted: 2001-05-31

            Name: lock

            Definition: A reporting point for vessels at a lock.

6   DD Name: IENC   Code: catcom_6   Date accepted: 2001-05-31

Value   Data Dictionary (DD) Reference

            Name: bridge

            Definition: A reporting point for vessels at a movable bridge.

7   DD Name: IENC   Code: catcom_7   Date accepted: 2001-05-31

            Name: custom

            Definition: A reporting point of the customs services for vessels.

8   DD Name: IENC   Code: catcom_8   Date accepted: 2001-05-31

            Name: harbour

            Definition: A reporting point of a harbour.

9   DD Name: IENC   Code: catcom_9   Date accepted: 2011-12-09

            Name: WLAN area

            Definition: An area where free wireless network is available

Attribute	Category of exceptional structure

Acronym: catexs   Code: 17100

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of exceptional navigational structure

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catexs_1   Date accepted: 2001-05-31

             Name: Lift-Lock

             Definition: A lock of which the lock chamber itself is lifted vertically to level with the next waterway section

2   DD Name: IENC   Code: catexs_2   Date accepted: 2001-05-31

             Name: Aqueduct

             Definition: A structure (similar to the ancient aqueducts), for conveying a canal over a river or hollow; more properly called an aqueduct bridge. (From Webster's Revised Unabridged Dictionary, 1913)

3   DD Name: IENC   Code: catexs_3   Date accepted: 2001-05-31

             Name: Sloping plane lock

             Definition: A lock of which the lock chamber itself travels over a sloping plane to level with the next waterway section

4   DD Name: IENC   Code: catexs_4   Date accepted: 2001-05-31

             Name: Water slope lock (Pente d'Eau)

             Definition: In French "Pente d'Eau". A lock of which the lock chamber is formed by a sloping plane and moving gate, which is pushing a triangular section of water up along the slope to level with the next waterway section

5   DD Name: IENC   Code: catexs_5   Date accepted: 2001-05-31

             Name: Other

             Definition: other categories of an exceptional structure

Attribute	Category of ferry

Acronym: catfry   Code: 17007

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of ferry

Enumerations:

Value   Data Dictionary (DD) Reference

4   DD Name: IENC   Code: catfry_4   Date accepted: 2001-05-31

             Name: swinging wire ferry

             Definition: ferry connected to a fixed point (e.g., an anchor in the middle of the waterway) and swings around this point from shore to shore via a cable to an anchor. The cable runs more or less parallel to the current

Attribute	Category of frequency

Acronym: catfrq   Code: 18030

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2014-11-26

Definition: The electrical frequency provided by the power supply station

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catfrq_1   Date accepted: 2014-11-26

             Name: 50Hz

             Definition: 50 Hertz

2   DD Name: IENC   Code: catfrq_2   Date accepted: 2014-11-26

             Name: 60Hz

             Definition: 60 Hertz

Attribute	Category of harbour area

Acronym: cathbr   Code: 17070

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of harbour

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: cathbr_1   Date accepted: 2001-05-31

             Name: custom harbour

             Definition: A harbour that is administered by the customs. It may be a free harbour.

2   DD Name: IENC   Code: cathbr_2   Date accepted: 2001-05-31

             Name: port of refuge

             Definition: A harbour that can be used to find shelter for bad environmental conditions or where efforts to mitigate larger damage or threat(s) of damage to either the vessel, her crew or the environment can be rendered.

3   DD Name: IENC   Code: cathbr_3   Date accepted: 2001-05-31

             Name: yacht harbour/marina

             Definition: a harbour with facilities for small boats and yachts (IHO Dictionary, S-32, 5th Edition, 3095).

4   DD Name: IENC   Code: cathbr_4   Date accepted: 2001-05-31

             Name: fishing harbour

             Definition: a harbour with facilities for fishing boats.

5   DD Name: IENC   Code: cathbr_5   Date accepted: 2001-05-31

             Name: private harbour

             Definition: a harbour operated by a private body.

Attribute	Category of harbour facility

Acronym: cathaf   Code: 17008

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of harbour facility

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: cathaf_1   Date accepted: 2001-05-31
           Name: RoRo-terminal
           Definition: a terminal for roll-on roll-off ferries.

3   DD Name: IENC   Code: cathaf_3   Date accepted: 2001-05-31
           Name: ferry terminal
           Definition: a terminal for passenger and vehicle ferries.

4   DD Name: IENC   Code: cathaf_4   Date accepted: 2001-05-31
           Name: fishing harbour
           Definition: a harbour with facilities for fishing boats.

6   DD Name: IENC   Code: cathaf_6   Date accepted: 2001-05-31
           Name: naval base
           Definition: a centre of operations for naval vessels (adapted from The Collins Dictionary).

7   DD Name: IENC   Code: cathaf_7   Date accepted: 2001-05-31
           Name: tanker terminal
           Definition: a terminal for the bulk handling of liquid cargoes.

8   DD Name: IENC   Code: cathaf_8   Date accepted: 2001-05-31
           Name: passenger terminal
           Definition: a terminal for the loading and unloading of passengers.

Value   Data Dictionary (DD) Reference

9   DD Name: IENC   Code: cathaf_9   Date accepted: 2001-05-31

             Name: shipyard

             Definition: a place where ships are built or repaired (IHO Dictionary, S-32, 5th Edition, 4686).

10   DD Name: IENC   Code: cathaf_10   Date accepted: 2001-05-31

             Name: container terminal

             Definition: a terminal for container ships.

11   DD Name: IENC   Code: cathaf_11   Date accepted: 2001-05-31

             Name: bulk terminal

             Definition: a terminal for the handling of bulk materials such as iron ore, coal, etc.

12   DD Name: IENC   Code: cathaf_12   Date accepted: 2001-05-31

             Name: syncrolift

             Definition: a platform powered by synchronous electric motors used to lift vessels (larger than boats) in
             and out of the water.

13   DD Name: IENC   Code: cathaf_13   Date accepted: 2001-05-31

             Name: straddle carrier

             Definition: a wheeled vehicle designed to lift and carry containers or vessels within its own framework. It is
             used for moving, and sometimes stacking, shipping containers and vessels.

16   DD Name: IENC   Code: cathaf_16   Date accepted: 2001-05-31

             Name: service and repair

             Definition: a place where mechanical services or repairs can be undertaken to engines or other vessel
             equipment.

17   DD Name: IENC   Code: cathaf_17   Date accepted: 2001-05-31

             Name: quarantine station

             Definition: A medical control center located in an isolated spot ashore where patients with contagious
             diseases from vessel in quarantine are taken.

Attribute	Category of hulk

Acronym: cathlk   Code: 17102

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of hulk

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: cathlk_1   Date accepted: 2001-05-31

             Name: floating restaurant

             Definition: a permanently moored floating structure, such as an old ship, used as a restaurant.

2   DD Name: IENC   Code: cathlk_2   Date accepted: 2001-05-31

             Name: historic ship

             Definition: a ship of historical interest permanently moored as a tourist attraction.

3   DD Name: IENC   Code: cathlk_3   Date accepted: 2001-05-31

             Name: museum

             Definition: a permanently moored floating structure, such as an old ship, used as a museum.

4   DD Name: IENC   Code: cathlk_4   Date accepted: 2001-05-31

             Name: accommodation

             Definition: a permanently moored floating structure, such as an old ship, used for accommodation.

5   DD Name: IENC   Code: cathlk_5   Date accepted: 2001-05-31

             Name: floating breakwater

             Definition: a permanently moored floating structure, often constructed from old ships, used as a
             breakwater.

6   DD Name: IENC   Code: cathlk_6   Date accepted: 2001-05-31

             Name: casino boat

             Definition: a permanently moored floating structure, such as an old ship, used as a casino boat

Attribute	Category of lateral mark

Acronym: catlam   Code: 17011

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of lateral mark

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catlam_1   Date accepted: 2001-05-31

               Name: port-hand lateral mark

               Definition: indicates the port boundary of a navigational channel or suggested route when proceeding in
               the 'conventional direction of buoyage'.

2   DD Name: IENC   Code: catlam_2   Date accepted: 2001-05-31

               Name: starboard-hand lateral mark

               Definition: indicates the starboard boundary of a navigational channel or suggested route when
               proceeding in the 'conventional direction of buoyage'.

3   DD Name: IENC   Code: catlam_3   Date accepted: 2001-05-31

               Name: preferred channel to starboard lateral mark

               Definition: at a point where a channel divides, when proceeding in the 'conventional direction of buoyage',
               the preferred channel (or primary route) is indicated by a modified port-hand lateral mark.

4   DD Name: IENC   Code: catlam_4   Date accepted: 2001-05-31

               Name: preferred channel to port lateral mark

               Definition: at a point where a channel divides, when proceeding in the 'conventional direction of buoyage',
               the preferred channel (or primary route) is indicated by a modified starboard-hand lateral mark.

5   DD Name: IENC   Code: catlam_5   Date accepted: 2001-05-31

               Name: right-hand side of the waterway

               Definition: indicates the right-hand side of the inland waterway

6   DD Name: IENC   Code: catlam_6   Date accepted: 2001-05-31

Value   Data Dictionary (DD) Reference

        Name: left-hand side of the waterway

        Definition: indicates the left-hand side of the inland waterway

7   DD Name: IENC   Code: catlam_7   Date accepted: 2001-05-31

        Name: right-hand side of the channel

        Definition: indicates the right-hand side of a channel of an inland waterway

8   DD Name: IENC   Code: catlam_8   Date accepted: 2001-05-31

        Name: left-hand side of the channel

        Definition: indicates the left-hand side of a channel of an inland waterway

9   DD Name: IENC   Code: catlam_9   Date accepted: 2001-05-31

        Name: bifurcation of the waterway

        Definition: indicates a bifurcation of the inland waterway

10   DD Name: IENC   Code: catlam_10   Date accepted: 2001-05-31

        Name: bifurcation of the channel

        Definition: indicates a bifurcation of a channel of an inland waterway

11   DD Name: IENC   Code: catlam_11   Date accepted: 2001-05-31

        Name: channel near the right bank

        Definition: indicates that the channel is near the right bank

12   DD Name: IENC   Code: catlam_12   Date accepted: 2001-05-31

        Name: channel near the left bank

        Definition: indicates that the channel is near the left bank

13   DD Name: IENC   Code: catlam_13   Date accepted: 2001-05-31

        Name: channel cross-over to the right bank

        Definition: indicates that the channel crosses from the left to the right bank

14   DD Name: IENC   Code: catlam_14   Date accepted: 2001-05-31

        Name: channel cross-over to the left bank

        Definition: indicates that the channel crosses from the right to the left bank

15   DD Name: IENC   Code: catlam_15   Date accepted: 2001-05-31

        Name: danger point or obstacles at the right-hand side

        Definition: indicates a danger point or obstacles at the right-hand side

Value   Data Dictionary (DD) Reference

16   DD Name: IENC   Code: catlam_16   Date accepted: 2001-05-31

            Name: danger point or obstacles at the left-hand side

            Definition: indicates a danger point or obstacles at the left-hand side

17   DD Name: IENC   Code: catlam_17   Date accepted: 2001-05-31

            Name: turn off at the right-hand side

            Definition: indicates a turn off at the right-hand side

18   DD Name: IENC   Code: catlam_18   Date accepted: 2001-05-31

            Name: turn off at the left-hand side

            Definition: indicates a turn off at the left-hand side

19   DD Name: IENC   Code: catlam_19   Date accepted: 2001-05-31

            Name: junction at the right-hand side

            Definition: indicates a junction at the right-hand side

20   DD Name: IENC   Code: catlam_20   Date accepted: 2001-05-31

            Name: junction at the left-hand side

            Definition: indicates a junction at the left-hand side

21   DD Name: IENC   Code: catlam_21   Date accepted: 2001-05-31

            Name: harbour entry at the right-hand side

            Definition: indicates a harbour entry at the right-hand side

22   DD Name: IENC   Code: catlam_22   Date accepted: 2001-05-31

            Name: harbour entry at the left-hand side

            Definition: indicates a harbour entry at the left-hand side

23   DD Name: IENC   Code: catlam_23   Date accepted: 2001-05-31

            Name: bridge pier mark

            Definition: indicates a bridge pier in a inland waterway

24   DD Name: IENC   Code: catlam_24   Date accepted: 2013-01-01

            Name: entry from a lake to a narrower waterway, right bank

            Definition: indicates the right bank of the entry from a lake or a lake-like expansion to a section of the
            waterway which is narrower

25   DD Name: IENC   Code: catlam_25   Date accepted: 2013-01-01

Value   Data Dictionary (DD) Reference

       Name: entry from a lake to a narrower waterway, left bank

       Definition: indicates the left bank of the entry from a lake or a lakelike expansion to a section of the waterway which is narrower

26   DD Name: IENC   Code: catlam_26   Date accepted: 2013-12-30

       Name: change bank

       Definition:

27   DD Name: IENC   Code: catlam_27   Date accepted: 2013-12-30

       Name: continue along bank

       Definition:

Attribute	Category of notice mark

Acronym: catnmk   Code: 17052

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of notice mark

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catnmk_1   Date accepted: 2001-05-31

         Name: (A.1) no entry

         Definition: Prohibition mark A.1: no entry

2   DD Name: IENC   Code: catnmk_2   Date accepted: 2001-05-31

         Name: (A.1a) sections closed to use, no entry except for non-motorized small craft

         Definition: Prohibition mark A.1a: sections closed to use, no entry except for non-motorized small craft

3   DD Name: IENC   Code: catnmk_3   Date accepted: 2001-05-31

         Name: (A.2) no overtaking

         Definition: Prohibition mark A.2: no overtaking

4   DD Name: IENC   Code: catnmk_4   Date accepted: 2001-05-31

         Name: (A.3) no overtaking of convoys by convoys

         Definition: Prohibition mark A.3: no overtaking of convoys by convoys

5   DD Name: IENC   Code: catnmk_5   Date accepted: 2001-05-31

         Name: (A.4) no passing or overtaking

         Definition: Prohibition mark A.4: no passing or overtaking

6   DD Name: IENC   Code: catnmk_6   Date accepted: 2001-05-31

         Name: (A.5) no berthing on the side of the waterway on which the sign is placed

         Definition: Prohibition mark A.5: no berthing (i.e. no anchoring or making fast to the bank) on the side of the waterway on which the sign is placed

Value   Data Dictionary (DD) Reference

7   DD Name: IENC   Code: catnmk_7   Date accepted: 2001-05-31

             Name: (A.5.1) no berthing on the stretch of water whose breadth, measured from the sign, is shown in metres on the sign

             Definition: Prohibition mark A.5.1: no berthing on the stretch of water whose breadth, measured from the sign, is shown in metres on the sign

8   DD Name: IENC   Code: catnmk_8   Date accepted: 2001-05-31

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

             Definition: Prohibition mark A.6: no anchoring or trailing of anchors, cables or chains on the side of the waterway on which the sign is placed

9   DD Name: IENC   Code: catnmk_9   Date accepted: 2001-05-31

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

             Definition: Prohibition mark A.7: no making fast to the bank on the side of the waterway on which the sign is placed

10   DD Name: IENC   Code: catnmk_10   Date accepted: 2001-05-31

             Name: (A.8) no turning

             Definition: Prohibition mark A.8: no turning

11   DD Name: IENC   Code: catnmk_11   Date accepted: 2001-05-31

             Name: (A.9) Do not create wash

             Definition: Prohibition mark A.9: do not create wash likely to cause damage

12   DD Name: IENC   Code: catnmk_12   Date accepted: 2001-05-31

             Name: (A.10) no passing on left side (in openings of bridges or weirs)

             Definition: Prohibition mark A.10: no passing on left side (in openings of bridges or weirs)

13   DD Name: IENC   Code: catnmk_13   Date accepted: 2001-05-31

             Name: (A.10) no passing on right side (in openings of bridges or weirs)

             Definition: Prohibition mark A.10: no passing on right side (in openings of bridges or weirs)

14   DD Name: IENC   Code: catnmk_14   Date accepted: 2001-05-31

             Name: (A.12) motorized craft prohibited

             Definition: Prohibition mark A.12: motorized craft prohibited

15   DD Name: IENC   Code: catnmk_15   Date accepted: 2001-05-31

             Name: (A.13) sports and pleasure craft prohibited

             Definition: Prohibition mark A.13: sports and pleasure craft prohibited

Value   Data Dictionary (DD) Reference

16   DD Name: IENC   Code: catnmk_16   Date accepted: 2001-05-31

             Name: (A.14) water skiing prohibited

             Definition: Prohibition mark A.14: water skiing prohibited

17   DD Name: IENC   Code: catnmk_17   Date accepted: 2001-05-31

             Name: (A.15) sailing vessels prohibited

             Definition: Prohibition mark A.15: sailing vessels prohibited

18   DD Name: IENC   Code: catnmk_18   Date accepted: 2001-05-31

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

             Definition: Prohibition mark A.16: all craft other than motorized vessels or sailing craft prohibited

19   DD Name: IENC   Code: catnmk_19   Date accepted: 2001-05-31

             Name: (A.17) use of sailboards prohibited

             Definition: Prohibition mark A.17: use of sailboards prohibited

20   DD Name: IENC   Code: catnmk_20   Date accepted: 2001-05-31

             Name: (A.20) water bikes prohibited

             Definition: Prohibition mark A.20: water bikes prohibited

21   DD Name: IENC   Code: catnmk_21   Date accepted: 2001-05-31

             Name: (A.18) end of zone authorized for high speed navigation of small sport and pleasure craft
                         prohibited

             Definition: Prohibition mark A.18: end of zone authorized for high speed navigation of small sport and
             pleasure craft prohibited

22   DD Name: IENC   Code: catnmk_22   Date accepted: 2001-05-31

             Name: (A.19) no launching or beaching of vessels

             Definition: Prohibition mark A.19: no launching or beaching of vessels

23   DD Name: IENC   Code: catnmk_23   Date accepted: 2001-05-31

             Name: (B.1) proceed in left direction

             Definition: Regulation mark B.1: proceed in left direction

24   DD Name: IENC   Code: catnmk_24   Date accepted: 2001-05-31

             Name: (B.1) proceed in right direction

             Definition: Regulation mark B.1: proceed in right direction

25   DD Name: IENC   Code: catnmk_25   Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference

        Name: (B.2a) move to the side of the fairway on your port side

        Definition: Regulation mark B.2a: move to the side of the fairway on your port side

26   DD Name: IENC   Code: catnmk_26   Date accepted: 2001-05-31

        Name: (B.2b) move to the side of the fairway on your starboard side

        Definition: Regulation mark B.2b: move to the side of the fairway on your starboard side

27   DD Name: IENC   Code: catnmk_27   Date accepted: 2001-05-31

        Name: (B.3a) keep on the side of the fairway on your port side

        Definition: Regulation mark B.3a: keep on the side of the fairway on your port side

28   DD Name: IENC   Code: catnmk_28   Date accepted: 2001-05-31

        Name: (B.3b) keep on the side of the fairway on your starboard side

        Definition: Regulation mark B.3b: keep on the side of the fairway on your starboard side

29   DD Name: IENC   Code: catnmk_29   Date accepted: 2001-05-31

        Name: (B.4a) cross fairway to port

        Definition: Regulation mark B.4a: cross fairway to port

30   DD Name: IENC   Code: catnmk_30   Date accepted: 2001-05-31

        Name: (B.4b) cross fairway to starboard

        Definition: Regulation mark B.4b: cross fairway to starboard

31   DD Name: IENC   Code: catnmk_31   Date accepted: 2001-05-31

        Name: (B.5) stop as prescribed in the regulations

        Definition: Regulation mark B.5: stop as prescribed in the regulations

32   DD Name: IENC   Code: catnmk_32   Date accepted: 2001-05-31

        Name: (B.6) do not exceed the speed indicated (in km/h)

        Definition: Regulation mark B.6: do not exceed the speed indicated (in km/h)

33   DD Name: IENC   Code: catnmk_33   Date accepted: 2001-05-31

        Name: (B.7) give a sound signal

        Definition: Regulation mark B.7: give a sound signal

34   DD Name: IENC   Code: catnmk_34   Date accepted: 2001-05-31

        Name: (B.8) keep a particularly sharp lookout

        Definition: Regulation mark B.8: keep a particularly sharp lookout

Value   Data Dictionary (DD) Reference

35   DD Name: IENC   Code: catnmk_35   Date accepted: 2001-05-31

            Name: (B.9a) do not enter the main waterway until certain that this will not oblige vessels proceeding
                         on it to change their course or speed

            Definition: Regulation mark B.9a: do not enter the main waterway until certain that this will not oblige
            vessels proceeding on it to change their course or speed

36   DD Name: IENC   Code: catnmk_36   Date accepted: 2001-05-31

            Name: (B.9b) do not cross the main waterway until certain that this will not oblige vessels proceeding
                         on it to change their course or speed

            Definition: Regulation mark B.9b: do not cross the main waterway until certain that this will not oblige
            vessels proceeding on it to change their course or speed

37   DD Name: IENC   Code: catnmk_37   Date accepted: 2001-05-31

            Name: (B.11) obligation to enter into a radiotelephone link on the channel as indicated on the board

            Definition: Regulation mark B.11: obligation to enter into a radiotelephone link on the channel as indicated
            on the board

38   DD Name: IENC   Code: catnmk_38   Date accepted: 2001-05-31

            Name: (C.1) depth of water limited

            Definition: Restriction mark C.1: depth of water limited

39   DD Name: IENC   Code: catnmk_39   Date accepted: 2001-05-31

            Name: (C.2) headroom limited

            Definition: Restriction mark C.2: headroom limited

40   DD Name: IENC   Code: catnmk_40   Date accepted: 2001-05-31

            Name: (C.3) width of passage or channel limited

            Definition: Restriction mark C.3: width of passage or channel limited

41   DD Name: IENC   Code: catnmk_41   Date accepted: 2001-05-31

            Name: (C.4) there are restrictions on navigation

            Definition: Restriction mark C.4: there are restrictions on navigation: see the information plate below the
            sign

42   DD Name: IENC   Code: catnmk_42   Date accepted: 2001-05-31

            Name: (C.5) the channel lies at a distance from the left bank

            Definition: Restriction mark C.5: the channel lies at a distance from the left bank

43   DD Name: IENC   Code: catnmk_43   Date accepted: 2001-05-31

            Name: (C.5) the channel lies at a distance from the right bank

Value   Data Dictionary (DD) Reference

             Definition: Restriction mark C.5: the channel lies at a distance from the right bank

44   DD Name: IENC   Code: catnmk_44   Date accepted: 2001-05-31

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

             Definition: Recommendation mark D.1a: recommended channel in both directions

45   DD Name: IENC   Code: catnmk_45   Date accepted: 2001-05-31

             Name: (D.1b) recommended channel only in the direction indicated, passage in the opposite direction prohibited (at bridges)

             Definition: Recommendation mark D.1b: recommended channel only in the direction indicated, passage in the opposite direction prohibited (at bridges)

46   DD Name: IENC   Code: catnmk_46   Date accepted: 2001-05-31

             Name: (D.2) you are recommended to keep on right side (in openings of bridges and weirs)

             Definition: Recommendation mark D.2: you are recommended to keep on right side (in openings of bridges and weirs)

47   DD Name: IENC   Code: catnmk_47   Date accepted: 2001-05-31

             Name: (D.2) you are recommended to keep on left side (in openings of bridges and weirs)

             Definition: Recommendation mark D.2: you are recommended to keep on left side (in openings of bridges and weirs)

48   DD Name: IENC   Code: catnmk_48   Date accepted: 2001-05-31

             Name: (D.3) you are recommended to proceed in the left direction

             Definition: Recommendation mark D.3: you are recommended to proceed in the left direction

49   DD Name: IENC   Code: catnmk_49   Date accepted: 2001-05-31

             Name: (D.3) you are recommended to proceed in the right direction

             Definition: Recommendation mark D.3: you are recommended to proceed in the right direction

50   DD Name: IENC   Code: catnmk_50   Date accepted: 2001-05-31

             Name: (E.1) entry permitted (general sign)

             Definition: Information mark E.1: entry permitted (general sign)

51   DD Name: IENC   Code: catnmk_51   Date accepted: 2001-05-31

             Name: (E.2) overhead cable crossing

             Definition: Information mark E.2: overhead cable crossing

52   DD Name: IENC   Code: catnmk_52   Date accepted: 2001-05-31

             Name: (E.3) weir

Value   Data Dictionary (DD) Reference

               Definition: Information mark E.3: weir

53   DD Name: IENC   Code: catnmk_53   Date accepted: 2001-05-31

               Name: (E.4a) ferry-boat not moving independently

               Definition: Information mark E.4a: ferry-boat not moving independently

54   DD Name: IENC   Code: catnmk_54   Date accepted: 2001-05-31

               Name: (E.4b) ferry-boat moving independently

               Definition: Information mark E.4b: ferry-boat moving independently

55   DD Name: IENC   Code: catnmk_55   Date accepted: 2001-05-31

               Name: (E.5) berthing (i.e. no anchoring or making fast to the bank) permitted

               Definition: Information mark E.5: berthing (i.e. no anchoring or making fast to the bank) permitted on the side of the waterway on which the sign is placed

56   DD Name: IENC   Code: catnmk_56   Date accepted: 2001-05-31

               Name: (E.5.1) berthing permitted on the stretch of water of the breadth measured from, and shown on the board in meters

               Definition: Information mark E.5.1: berthing permitted on the stretch of water of the breadth measured from, and shown on the board in meters

57   DD Name: IENC   Code: catnmk_57   Date accepted: 2001-05-31

               Name: (E.5.2) berthing permitted on the stretch of water bounded by the distances measured from, and shown on the board in meters

               Definition: Information mark E.5.2: berthing permitted on the stretch of water bounded by the distances measured from, and shown on the board in meters

58   DD Name: IENC   Code: catnmk_58   Date accepted: 2001-05-31

               Name: (E.5.3) maximum number of vessels permitted to berth abreast

               Definition: Information mark E.5.3: maximum number of vessels permitted to berth abreast on the side of the waterway on which the sign is placed

59   DD Name: IENC   Code: catnmk_59   Date accepted: 2001-05-31

               Name: (E.5.4) berthing area reserved for pushing-navigation vessels that are not required to carry blue lights or blue cones

               Definition: Information mark E.5.4: berthing area reserved for pushing-navigation vessels that are not required to carry blue lights or blue cones on the side of the waterway on which the sign is placed

60   DD Name: IENC   Code: catnmk_60   Date accepted: 2001-05-31

               Name: (E.5.5) berthing area reserved for pushing-navigation vessels that are required to carry one blue light or one blue cone

Value   Data Dictionary (DD) Reference

Definition: Information mark E.5.5: berthing area reserved for pushing-navigation vessels that are required to carry one blue light or one blue cone on the side of the waterway on which the sign is placed

61   DD Name: IENC   Code: catnmk_61   Date accepted: 2001-05-31

Name: (E.5.6) berthing area reserved for pushing-navigation vessels that are required to carry two blue lights or two blue cones

Definition: Information mark E.5.6: berthing area reserved for pushing-navigation vessels that are required to carry two blue lights or two blue cones on the side of the waterway on which the sign is placed

62   DD Name: IENC   Code: catnmk_62   Date accepted: 2001-05-31

Name: (E.5.7) berthing area reserved for pushing-navigation vessels that are required to carry three blue lights or three blue cones

Definition: Information mark E.5.7: berthing area reserved for pushing-navigation vessels that are required to carry three blue lights or three blue cones on the side of the waterway on which the sign is placed

63   DD Name: IENC   Code: catnmk_63   Date accepted: 2001-05-31

Name: (E.5.8) berthing area reserved for vessels other than pushing-navigation vessels that are not required to carry blue lights or blue cones

Definition: Information mark E.5.8: berthing area reserved for vessels other than pushing-navigation vessels that are not required to carry blue lights or blue cones on the side of the waterway on which the sign is placed

64   DD Name: IENC   Code: catnmk_64   Date accepted: 2001-05-31

Name: (E.5.9) berthing area reserved for vessels other than for pushing-navigation vessels that are required to carry one blue light or one blue cone

Definition: Information mark E.5.9: berthing area reserved for vessels other than pushing-navigation vessels that are required to carry one blue light or one blue cone on the side of the waterway on which the sign is placed

65   DD Name: IENC   Code: catnmk_65   Date accepted: 2001-05-31

Name: (E.5.10) berthing area reserved for vessels other than for pushing-navigation vessels that are required to carry two blue lights or two blue cones

Definition: Information mark E.5.10: berthing area reserved for vessels other than pushing-navigation vessels that are required to carry two blue lights or two blue cones on the side of the waterway on which the sign is placed

66   DD Name: IENC   Code: catnmk_66   Date accepted: 2001-05-31

Name: (E.5.11) berthing area reserved for vessels other than for pushing-navigation vessels that are required to carry three blue lights or three blue cones

Definition: Information mark E.5.11: berthing area reserved for vessels other than pushing-navigation vessels that are required to carry three blue lights or three blue cones on the side of the waterway on which the sign is placed

Value   Data Dictionary (DD) Reference

67   DD Name: IENC   Code: catnmk_67   Date accepted: 2001-05-31

             Name: (E.5.12) berthing area reserved for all vessels that are not required to carry blue lights or blue
                          cones

             Definition: Information mark E.5.12: berthing area reserved for all vessels that are not required to carry
             blue lights or blue cones on the side of the waterway on which the sign is placed

68   DD Name: IENC   Code: catnmk_68   Date accepted: 2001-05-31

             Name: (E.5.13) berthing area reserved for all vessels that are required to carry one blue light or one
                          blue cone

             Definition: Information mark E.5.13: berthing area reserved for all vessels that are required to carry one
             blue light or one blue cone on the side of the waterway on which the sign is placed

69   DD Name: IENC   Code: catnmk_69   Date accepted: 2001-05-31

             Name: (E.5.14) berthing area reserved for all vessels that are required to carry two blue lights or two
                          blue cones

             Definition: Information mark E.5.14: berthing area reserved for all vessels that are required to carry two
             blue lights or two blue cones on the side of the waterway on which the sign is placed

70   DD Name: IENC   Code: catnmk_70   Date accepted: 2001-05-31

             Name: (E.5.15) berthing area reserved for all vessels that are required to carry three blue lights or
                          three blue cones

             Definition: Information mark E.5.15: berthing area reserved for all vessels that are required to carry three
             blue lights or three blue cones on the side of the waterway on which the sign is placed

71   DD Name: IENC   Code: catnmk_71   Date accepted: 2001-05-31

             Name: (E.6) anchoring or trailing of anchors, cables or chains permitted

             Definition: Information mark E.6: anchoring or trailing of anchors, cables or chains permitted on the side of
             the waterway on which the sign is placed

72   DD Name: IENC   Code: catnmk_72   Date accepted: 2001-05-31

             Name: (E.7) making fast to the bank permitted

             Definition: Information mark E.7: making fast to the bank permitted on the side of the waterway on which
             the sign is placed

73   DD Name: IENC   Code: catnmk_73   Date accepted: 2001-05-31

             Name: (E.7.1) berthing area reserved for loading and unloading of vehicles

             Definition: Information mark E.7.1: berthing area reserved for loading and unloading of vehicles

74   DD Name: IENC   Code: catnmk_74   Date accepted: 2001-05-31

             Name: (E.8) turning area

Value   Data Dictionary (DD) Reference

          Definition: Information mark E.8: turning area

75   DD Name: IENC   Code: catnmk_75   Date accepted: 2001-05-31

          Name: (E.9a) crossing with secondary waterway ahead

          Definition: Information mark E.9a: crossing with secondary waterway ahead

76   DD Name: IENC   Code: catnmk_76   Date accepted: 2001-05-31

          Name: (E.9b) secondary waterway ahead on the right

          Definition: Information mark E.9b: secondary waterway ahead on the right

77   DD Name: IENC   Code: catnmk_77   Date accepted: 2001-05-31

          Name: (E.9c) secondary waterway ahead on the left

          Definition: Information mark E.9c: secondary waterway ahead on the left

78   DD Name: IENC   Code: catnmk_78   Date accepted: 2001-05-31

          Name: (E.9d) secondary waterway ahead, main waterway on the right

          Definition: Information mark E.9d: secondary waterway ahead, main waterway on the right

79   DD Name: IENC   Code: catnmk_79   Date accepted: 2001-05-31

          Name: (E.9e) secondary waterway ahead, main waterway on the left

          Definition: Information mark E.9e: secondary waterway ahead, main waterway on the left

80   DD Name: IENC   Code: catnmk_80   Date accepted: 2001-05-31

          Name: (E.9f) secondary waterway on the left, main waterway on the right

          Definition: Information mark E.9f: secondary waterway on the left, main waterway on the right

81   DD Name: IENC   Code: catnmk_81   Date accepted: 2001-05-31

          Name: (E.9g) secondary waterway on the right, main waterway on the left

          Definition: Information mark E.9g: secondary waterway on the right, main waterway on the left

82   DD Name: IENC   Code: catnmk_82   Date accepted: 2001-05-31

          Name: (E.9h) secondary waterway ahead and on the left, main waterway on the right

          Definition: Information mark E.9h: secondary waterway ahead and on the left, main waterway on the right

83   DD Name: IENC   Code: catnmk_83   Date accepted: 2001-05-31

          Name: (E.9i) secondary waterway ahead and on the right, main waterway on the left

          Definition: Information mark E.9i: secondary waterway ahead and on the right, main waterway on the left

84   DD Name: IENC   Code: catnmk_84   Date accepted: 2001-05-31

Value   Data Dictionary (DD) Reference

            Name: (E.10a) crossing with main waterway ahead

            Definition: Information mark E.10a: crossing with main waterway ahead

85   DD Name: IENC   Code: catnmk_85   Date accepted: 2001-05-31

            Name: (E.10b) main waterway ahead

            Definition: Information mark E.10b: main waterway ahead

86   DD Name: IENC   Code: catnmk_86   Date accepted: 2001-05-31

            Name: (E.10c) junction with main waterway ahead and right

            Definition: Information mark E.10c: junction with main waterway ahead and right

87   DD Name: IENC   Code: catnmk_87   Date accepted: 2001-05-31

            Name: (E.10d) junction with main waterway ahead and left

            Definition: Information mark E.10d: junction with main waterway ahead and left

88   DD Name: IENC   Code: catnmk_88   Date accepted: 2001-05-31

            Name: (E.10e) junction with main waterway ahead and right, secondary waterway on the left

            Definition: Information mark E.10e: junction with main waterway ahead and right, secondary waterway on the left

89   DD Name: IENC   Code: catnmk_89   Date accepted: 2001-05-31

            Name: (E.10f) junction with main waterway ahead and left, secondary waterway on the right

            Definition: Information mark E.10f: junction with main waterway ahead and left, secondary waterway on the right

90   DD Name: IENC   Code: catnmk_90   Date accepted: 2001-05-31

            Name: (E.11) end of prohibition or obligation applying to traffic in one direction only, or end of a restriction

            Definition: Information mark E.11: end of prohibition or obligation applying to traffic in one direction only, or end of a restriction

91   DD Name: IENC   Code: catnmk_91   Date accepted: 2001-05-31

            Name: (E.13) drinking water supply

            Definition: Information mark E.13: drinking water

92   DD Name: IENC   Code: catnmk_92   Date accepted: 2001-05-31

            Name: (E.14) telephone

            Definition: Information mark E.14: telephone

93   DD Name: IENC   Code: catnmk_93   Date accepted: 2001-05-31

Value   Data Dictionary (DD) Reference

             Name: (E.15) motorized vessels permitted

             Definition: Information mark E.15: motorized vessels permitted

94   DD Name: IENC   Code: catnmk_94   Date accepted: 2001-05-31

             Name: (E.16) sport and pleasure craft permitted

             Definition: Information mark E.16: sport and pleasure craft permitted

95   DD Name: IENC   Code: catnmk_95   Date accepted: 2001-05-31

             Name: (E.17) water skiing permitted

             Definition: Information mark E.17: water skiing permitted

96   DD Name: IENC   Code: catnmk_96   Date accepted: 2001-05-31

             Name: (E.18) sailing vessels permitted

             Definition: Information mark E.18: sailing vessels permitted

97   DD Name: IENC   Code: catnmk_97   Date accepted: 2001-05-31

             Name: (E.19) craft other than motorized vessels or sailing craft permitted

             Definition: Information mark E.19: craft other than motorized vessels or sailing craft permitted

98   DD Name: IENC   Code: catnmk_98   Date accepted: 2001-05-31

             Name: (E.20) use of sailboards permitted

             Definition: Information mark E.20: use of sailboards permitted

99   DD Name: IENC   Code: catnmk_99   Date accepted: 2001-05-31

             Name: (E.23) possibility of obtaining nautical information by radiotelephone on the channel indicated

             Definition: Information mark E.23: possibility of obtaining nautical information by radiotelephone on the channel indicated

100   DD Name: IENC   Code: catnmk_100   Date accepted: 2001-05-31

             Name: (E.24) water bikes permitted

             Definition: Information mark E.24: water bikes permitted

101   DD Name: IENC   Code: catnmk_101   Date accepted: 2001-05-31

             Name: (E.21) zone authorized for high speed navigation of small sport and pleasure

             Definition: Information mark E.21: zone authorized for high speed navigation of small sport and pleasure

102   DD Name: IENC   Code: catnmk_102   Date accepted: 2001-05-31

             Name: (E.22) launching or beaching of vessels permitted

             Definition: Information mark E.22: launching and beaching of vessels permitted

Value   Data Dictionary (DD) Reference

103   DD Name: IENC   Code: catnmk_103   Date accepted: 2009-09-11

         Name: (BR) proceed close to the margin on your port side

         Definition: regulation mark (BR): proceed close to the margin on your port side

104   DD Name: IENC   Code: catnmk_104   Date accepted: 2009-09-11

         Name: (BR) proceed close to the margin on your starboard side

         Definition: regulation mark (BR): proceed close to the margin on your starboard side

105   DD Name: IENC   Code: catnmk_105   Date accepted: 2009-09-11

         Name: (BR) proceed in the middle of the river

         Definition: regulation mark (BR): proceed in the middle of the river

106   DD Name: IENC   Code: catnmk_106   Date accepted: 2009-09-11

         Name: (BR) cross river to port

         Definition: regulation mark (BR): cross river to port

107   DD Name: IENC   Code: catnmk_107   Date accepted: 2009-09-11

         Name: (BR) cross river to starboard

         Definition: regulation mark (BR): cross river to starboard

108   DD Name: IENC   Code: catnmk_108   Date accepted: 2009-09-11

         Name: (BR) traffic between margins

         Definition: information mark (BR): traffic between margins

109   DD Name: IENC   Code: catnmk_109   Date accepted: 2009-09-11

         Name: (BR) reduce speed

         Definition: regulation mark (BR): reduce speed

110   DD Name: IENC   Code: catnmk_110   Date accepted: 2009-09-11

         Name: wreck pontoon, passage allowed on side showing red-white sign

         Definition: a red-white sign shown on a wreck pontoon to indicate the side on which passage is permitted
         (without wash of waves) and a red sign on the side on which passage is not permitted

111   DD Name: IENC   Code: catnmk_111   Date accepted: 2009-09-11

         Name: wreck pontoon, passage allowed on both sides

         Definition: red-white signs shown on a wreck pontoon to indicate that passage is permitted on both sides
         (without wash of waves)

112   DD Name: IENC   Code: catnmk_112   Date accepted: 2009-12-09

Value   Data Dictionary (DD) Reference

Name: no passing or overtaking of convoys

Definition: Russian notice mark: 1.2, no passing or overtaking of convoys

| 113 | DD Name: IENC | Code: catnmk_113 | Date accepted: | 2009-12-09 |

Name: small crafts prohibited

Definition: Russian notice mark: 1.5, small crafts prohibited

| 114 | DD Name: IENC | Code: catnmk_114 | Date accepted: | 2009-12-09 |

Name: Attention! (Keep caution)

Definition: Russian notice mark: 2.1, Attention! (keep caution)

| 115 | DD Name: IENC | Code: catnmk_115 | Date accepted: | 2009-12-09 |

Name: fairway crossing

Definition: Russian notice mark: 2.2, fairway crossing

| 116 | DD Name: IENC | Code: catnmk_116 | Date accepted: | 2009-12-09 |

Name: shipping inspection point

Definition: Russian notice mark: 3.3, shipping inspection point

| 117 | DD Name: IENC | Code: catnmk_117 | Date accepted: | 2014-10-20 |

Name: (E.25) electrical power supply point

Definition: Information mark E.25: electrical power supply point

| 118 | DD Name: IENC | Code: catnmk_118 | Date accepted: | 2014-10-20 |

Name: (E.26) winter harbour

Definition: Information mark E.26: winter harbour

| 119 | DD Name: IENC | Code: catnmk_119 | Date accepted: | 2014-10-20 |

Name: (E.27) maximum number of vessels permitted to berth in winter harbour

Definition: Information mark E.27: maximum number of vessels permitted to berth in winter harbour

| 120 | DD Name: IENC | Code: catnmk_120 | Date accepted: | 2014-10-20 |

Name: (E.28) winter shelter

Definition: Information mark E.28: winter shelter

| 121 | DD Name: IENC | Code: catnmk_121 | Date accepted: | 2014-10-20 |

Name: (E.29) maximum number of vessels permitted to berth in winter shelter; maximum number of vessels permitted to berth abreast;
maximum number of rows of vessels which are berthed abreast

Value   Data Dictionary (DD) Reference

Definition: Information mark E.29: maximum number of vessels permitted to berth in winter shelter;
maximum number of vessels permitted to berth abreast;
maximum number of rows of vessels which are berthed abreast

122   DD Name: IENC   Code: catnmk_122   Date accepted: 2014-10-20

Name: (E.30) use of spuds permitted

Definition: Information mark E.30: use of spuds permitted

Attribute	Category of plug

Acronym: catplg   Code: 18034

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2014-11-26

Definition: The type of plug(s) available at the power supply station.

Attribute	Category of refuse dump

Acronym: catrfd   Code: 17071

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of refuse dump

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catrfd_1   Date accepted: 2001-05-31
              Name: cargo residue/slop
              Definition: A facility where vessels can dispose of cargo residues and/or slops.

2   DD Name: IENC   Code: catrfd_2   Date accepted: 2001-05-31
              Name: waste oil
              Definition: A facility where vessels can dispose of waste oil.

3   DD Name: IENC   Code: catrfd_3   Date accepted: 2001-05-31
              Name: grey/black water
              Definition: A facility where vessels can dispose of grey and/or black waste water.

4   DD Name: IENC   Code: catrfd_4   Date accepted: 2001-05-31
              Name: domestic refuse
              Definition: A facility where vessels can dispose of domestic refuse.

Attribute	Category of rescue station

Acronym: catrsc   Code: 17106

Use Type: F

Value Type: L

<u>Data Dictionary (DD) Reference:</u>

DD Name: IENC   Date accepted: 2010-09-17

Definition: Category of rescue station

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catrsc_1   Date accepted: 2010-09-17

             Name: rescue station with life boat

             Definition: a place where equipment for saving life at sea is maintained; the type of lifeboat may vary from fast, long distance boats to inflatable inshore boats. (IHO Chart Specifications, M-4).

2   DD Name: IENC   Code: catrsc_2   Date accepted: 2010-09-17

             Name: rescue station with rocket

             Definition: rocket - a pyrotechnic projectile used for signalling or for life-saving purposes. (IHO Dictionary, S-32, 5th Edition, 4418).

3   DD Name: IENC   Code: catrsc_3   Date accepted: 2010-09-17

             Name: not in use

             Definition:

4   DD Name: IENC   Code: catrsc_4   Date accepted: 2010-09-17

             Name: refuge for ship-wrecked mariners

             Definition: shelter or protection from danger or distress at sea.

5   DD Name: IENC   Code: catrsc_5   Date accepted: 2010-09-17

             Name: refuge for intertidal area walkers

             Definition: shelter or protection from danger in areas exposed to extreme and sudden tides or tidal streams.

6   DD Name: IENC   Code: catrsc_6   Date accepted: 2010-09-17

Value   Data Dictionary (DD) Reference

              Name: lifeboat lying at a mooring

              Definition: a place where a lifeboat is moored ready for use.

7   DD Name: IENC   Code: catrsc_7   Date accepted: 2010-09-17

              Name: aid radio station

              Definition: a radio station reserved for emergency situations, might also be a public telephone.

8   DD Name: IENC   Code: catrsc_8   Date accepted: 2010-09-17

              Name: first aid equipment

              Definition: a place where first aid equipment is available.

9   DD Name: IENC   Code: catrsc_9   Date accepted: 2010-09-17

              Name: lifebuoy, ring buoy, life ring, life saver

              Definition: a "kisby ring" or "perry buoy" designed to be thrown to a person in the water, to provide buoyancy and to prevent drowning.

Attribute	Category of sensor

Acronym: catsen

Code: 18019

Use Type: F

Value Type: L

<u>Data Dictionary (DD) Reference:</u>

DD Name: IENC

Date accepted: 2011-12-19

Definition: Category of sensor

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catsen_1   Date accepted: 2011-12-19

Name: light activated

Definition: A sensor which is activated by a spotlight

2   DD Name: IENC   Code: catsen_2   Date accepted: 2011-12-19

Name: telephone activated

Definition: A sensor which is activated by telephone

Attribute	Category of ship (excluding)

Acronym: lc_cse   Code: 18013

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: lc_cse_1   Date accepted: 2001-05-31
             Name: all types
             Definition:

2   DD Name: IENC   Code: lc_cse_2   Date accepted: 2001-05-31
             Name: other
             Definition:

3   DD Name: IENC   Code: lc_cse_3   Date accepted: 2001-05-31
             Name: non-motorized vessel
             Definition:

5   DD Name: IENC   Code: lc_cse_5   Date accepted: 2001-05-31
             Name: craft
             Definition: a vessel or item of floating equipment

6   DD Name: IENC   Code: lc_cse_6   Date accepted: 2001-05-31
             Name: vessel
             Definition: an inland waterway vessel or sea going ship

7   DD Name: IENC   Code: lc_cse_7   Date accepted: 2001-05-31
             Name: inland waterway vessel
             Definition: a vessel intended solely or mainly for navigation on inland waterways

Value   Data Dictionary (DD) Reference

8   DD Name: IENC   Code: lc_cse_8   Date accepted: 2001-05-31

             Name: sea going ship

             Definition: a vessel certificated for sea-going service

9   DD Name: IENC   Code: lc_cse_9   Date accepted: 2001-05-31

             Name: motor vessel

             Definition: a motor cargo vessel or a motor tanker

10   DD Name: IENC   Code: lc_cse_10   Date accepted: 2001-05-31

             Name: motor tanker

             Definition: a vessel intended for the carriage of goods in fixed tanks and built to navigate independently
             under its own motive power

11   DD Name: IENC   Code: lc_cse_11   Date accepted: 2001-05-31

             Name: motor cargo vessel

             Definition: a vessel, other than a motor tanker, intended for the carriage of goods and built to navigate
             independently under its own motive power

12   DD Name: IENC   Code: lc_cse_12   Date accepted: 2001-05-31

             Name: canal barge

             Definition: an inland waterway vessel not exceeding 38.5 m in length and 5.05 m in breadth and usually
             operating on the Rhine-Rhône-Canal

13   DD Name: IENC   Code: lc_cse_13   Date accepted: 2001-05-31

             Name: tug

             Definition: a vessel specially built to perform towing operations

14   DD Name: IENC   Code: lc_cse_14   Date accepted: 2001-05-31

             Name: pusher

             Definition: a vessel specially built to propel a pushed convoy

15   DD Name: IENC   Code: lc_cse_15   Date accepted: 2001-05-31

             Name: barge

             Definition: a dumb barge or tank barge

16   DD Name: IENC   Code: lc_cse_16   Date accepted: 2001-05-31

             Name: tank barge

             Definition: a vessel intended for the carriage of goods in fixed tanks and built to be towed, either having no
             motive power of its own or having only sufficient motive power to perform restricted manoeuvres

Value   Data Dictionary (DD) Reference

17   DD Name: IENC   Code: lc_cse_17   Date accepted: 2001-05-31

             Name: dumb barge

             Definition: a vessel, other than a tank barge, intended for the carriage of goods and built to be towed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres

18   DD Name: IENC   Code: lc_cse_18   Date accepted: 2001-05-31

             Name: lighter

             Definition: a tank lighter, cargo lighter or ship borne lighter

19   DD Name: IENC   Code: lc_cse_19   Date accepted: 2001-05-31

             Name: tank lighter

             Definition: a vessel intended for the carriage of goods in fixed tanks, built or specially modified to be pushed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres when not part of a pushed convoy

20   DD Name: IENC   Code: lc_cse_20   Date accepted: 2001-05-31

             Name: cargo lighter

             Definition: a vessel, other than a tank lighter, intended for the carriage of goods and built or specially modified to be pushed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres when not part of a pushed convoy

21   DD Name: IENC   Code: lc_cse_21   Date accepted: 2001-05-31

             Name: ship borne lighter

             Definition: a lighter built to be carried aboard sea going ships and to navigate on inland waterways

22   DD Name: IENC   Code: lc_cse_22   Date accepted: 2001-05-31

             Name: passenger vessel

             Definition: a day trip or cabin vessel constructed and equipped to carry more than 12 passengers

23   DD Name: IENC   Code: lc_cse_23   Date accepted: 2001-05-31

             Name: passenger sailing vessel

             Definition: a passenger vessel fitted out mainly with a view to propulsion under sail

24   DD Name: IENC   Code: lc_cse_24   Date accepted: 2001-05-31

             Name: day trip vessel

             Definition: a passenger vessel without overnight passenger cabins

25   DD Name: IENC   Code: lc_cse_25   Date accepted: 2001-05-31

             Name: cabin vessel

Value   Data Dictionary (DD) Reference

             Definition: a passenger vessel with overnight passenger cabins

26   DD Name: IENC   Code: lc_cse_26   Date accepted: 2001-05-31

             Name: High-speed vessel

             Definition: a motorised vessel capable of reaching speeds over 40km/h with respect to water

27   DD Name: IENC   Code: lc_cse_27   Date accepted: 2001-05-31

             Name: floating equipment

             Definition: a floating installation carrying working gear such as cranes, dredging equipment, pile drivers or elevators

28   DD Name: IENC   Code: lc_cse_28   Date accepted: 2001-05-31

             Name: worksite craft

             Definition: a vessel, appropriately built and equipped for use at worksites, such as a reclamation barge, hopper or pontoon barge, pontoon or stone-dumping vessel

29   DD Name: IENC   Code: lc_cse_29   Date accepted: 2001-05-31

             Name: recreational craft

             Definition: a vessel other than a passenger vessel, intended for sport or pleasure

30   DD Name: IENC   Code: lc_cse_30   Date accepted: 2001-05-31

             Name: Dinghy

             Definition: a boat for use in transport, rescue, salvage and work duties

31   DD Name: IENC   Code: lc_cse_31   Date accepted: 2001-05-31

             Name: floating establishment

             Definition: any floating installation not normally intended to be moved, such as a swimming bath, dock, jetty or boathouse

32   DD Name: IENC   Code: lc_cse_32   Date accepted: 2001-05-31

             Name: floating object

             Definition: a raft or other structure, object or assembly capable of navigation, not being a vessel or floating equipment or establishment

Attribute	Category of ship (including)

Acronym: lc_csi   Code: 18012

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: lc_csi_1   Date accepted: 2001-05-31
             Name: all types
             Definition:

2   DD Name: IENC   Code: lc_csi_2   Date accepted: 2001-05-31
             Name: other
             Definition:

3   DD Name: IENC   Code: lc_csi_3   Date accepted: 2001-05-31
             Name: non-motorized vessel
             Definition: non-motorized vessel

5   DD Name: IENC   Code: lc_csi_5   Date accepted: 2001-05-31
             Name: craft
             Definition: a vessel or item of floating equipment

6   DD Name: IENC   Code: lc_csi_6   Date accepted: 2001-05-31
             Name: vessel
             Definition: an inland waterway vessel or sea going ship

7   DD Name: IENC   Code: lc_csi_7   Date accepted: 2001-05-31
             Name: inland waterway vessel
             Definition: a vessel intended solely or mainly for navigation on inland waterways

Value   Data Dictionary (DD) Reference

8   DD Name: IENC   Code: lc_csi_8   Date accepted: 2001-05-31

             Name: sea going ship

             Definition: a vessel certificated for sea-going service

9   DD Name: IENC   Code: lc_csi_9   Date accepted: 2001-05-31

             Name: motor vessel

             Definition: a motor cargo vessel or a motor tanker

10   DD Name: IENC   Code: lc_csi_10   Date accepted: 2001-05-31

             Name: motor tanker

             Definition: a vessel intended for the carriage of goods in fixed tanks and built to navigate independently
             under its own motive power

11   DD Name: IENC   Code: lc_csi_11   Date accepted: 2001-05-31

             Name: motor cargo vessel

             Definition: a vessel, other than a motor tanker, intended for the carriage of goods and built to navigate
             independently under its own motive power

12   DD Name: IENC   Code: lc_csi_12   Date accepted: 2001-05-31

             Name: canal barge

             Definition: an inland waterway vessel not exceeding 38.5 m in length and 5.05 m in breadth and usually
             operating on the Rhine-Rhône-Canal

13   DD Name: IENC   Code: lc_csi_13   Date accepted: 2001-05-31

             Name: tug

             Definition: a vessel specially built to perform towing operations

14   DD Name: IENC   Code: lc_csi_14   Date accepted: 2001-05-31

             Name: pusher

             Definition: a vessel specially built to propel a pushed convoy

15   DD Name: IENC   Code: lc_csi_15   Date accepted: 2001-05-31

             Name: barge

             Definition: a dumb barge or tank barge

16   DD Name: IENC   Code: lc_csi_16   Date accepted: 2001-05-31

             Name: tank barge

             Definition: a vessel intended for the carriage of goods in fixed tanks and built to be towed, either having no
             motive power of its own or having only sufficient motive power to perform restricted manoeuvres

Value	Data Dictionary (DD) Reference

17   DD Name: IENC   Code: lc_csi_17   Date accepted: 2001-05-31

Name: dumb barge

Definition: a vessel, other than a tank barge, intended for the carriage of goods and built to be towed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres

18   DD Name: IENC   Code: lc_csi_18   Date accepted: 2001-05-31

Name: lighter

Definition: a tank lighter, cargo lighter or ship borne lighter

19   DD Name: IENC   Code: lc_csi_19   Date accepted: 2001-05-31

Name: tank lighter

Definition: a vessel intended for the carriage of goods in fixed tanks, built or specially modified to be pushed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres when not part of a pushed convoy

20   DD Name: IENC   Code: lc_csi_20   Date accepted: 2001-05-31

Name: cargo lighter

Definition: a vessel, other than a tank lighter, intended for the carriage of goods and built or specially modified to be pushed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres when not part of a pushed convoy

21   DD Name: IENC   Code: lc_csi_21   Date accepted: 2001-05-31

Name: ship borne lighter

Definition: a lighter built to be carried aboard sea going ships and to navigate on inland waterways

22   DD Name: IENC   Code: lc_csi_22   Date accepted: 2001-05-31

Name: passenger vessel

Definition: a day trip or cabin vessel constructed and equipped to carry more than 12 passengers

23   DD Name: IENC   Code: lc_csi_23   Date accepted: 2001-05-31

Name: passenger sailing vessel

Definition: a passenger vessel fitted out mainly with a view to propulsion under sail

24   DD Name: IENC   Code: lc_csi_24   Date accepted: 2001-05-31

Name: day trip vessel

Definition: a passenger vessel without overnight passenger cabins

25   DD Name: IENC   Code: lc_csi_25   Date accepted: 2001-05-31

Name: cabin vessel

Value			Data Dictionary (DD) Reference

			Definition:	a passenger vessel with overnight passenger cabins

26			DD Name:	IENC			Code:	lc_csi_26			Date accepted:	2001-05-31

			Name:		High-speed vessel

			Definition:	a motorised vessel capable of reaching speeds over 40km/h with respect to water

27			DD Name:	IENC			Code:	lc_csi_27			Date accepted:	2001-05-31

			Name:		floating equipment

			Definition:	a floating installation carrying working gear such as cranes, dredging equipment, pile drivers or elevators

28			DD Name:	IENC			Code:	lc_csi_28			Date accepted:	2001-05-31

			Name:		worksite craft

			Definition:	a vessel, appropriately built and equipped for use at worksites, such as a reclamation barge, hopper or pontoon barge, pontoon or stone-dumping vessel

29			DD Name:	IENC			Code:	lc_csi_29			Date accepted:	2001-05-31

			Name:		recreational craft

			Definition:	a vessel other than a passenger vessel, intended for sport or pleasure

30			DD Name:	IENC			Code:	lc_csi_30			Date accepted:	2001-05-31

			Name:		Dinghy

			Definition:	a boat for use in transport, rescue, salvage and work duties

31			DD Name:	IENC			Code:	lc_csi_31			Date accepted:	2001-05-31

			Name:		floating establishment

			Definition:	any floating installation not normally intended to be moved, such as a swimming bath, dock, jetty or boathouse

32			DD Name:	IENC			Code:	lc_csi_32			Date accepted:	2001-05-31

			Name:		floating object

			Definition:	a raft or other structure, object or assembly capable of navigation, not being a vessel or floating equipment or establishment

Attribute	Category of shoreline construction

Acronym: catslc   Code: 17012

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2007-10-12

Definition: Category of shoreline construction

Enumerations:

Value   Data Dictionary (DD) Reference

2   DD Name: IENC   Code: catslc_2   Date accepted: 2011-05-31

             Name: groyne (groin)

             Definition: a low artificial wall-like structure of durable material extending from the land to seaward for a
             particular purpose, such as to prevent coast erosion (adapted from IHO Dictionary, S-32, 5th Edition, 2525
             and IHO Chart Specifications, M-4)

7   DD Name: IENC   Code: catslc_7   Date accepted: 2007-10-12

             Name: training wall

             Definition: a wall or bank, often submerged, built to direct or confine the flow of a river or tidal current, or to
             promote a scour action. (Adapted from IHO Dictionary, S-32, 5th Edition, 5586 and IHO Chart
             Specifications, M-4).

8   DD Name: IENC   Code: catslc_8   Date accepted: 2013-01-23

             Name: rip rap

             Definition: A layer of broken rock, cobbles, boulders, or fragments of sufficient size to resist the erosive
             forces of flowing water and wave action. (Adapted from Marine Chart Manual, US National Oceanic and
             Atmospheric Administration - NOAA, 1992)

9   DD Name: IENC   Code: catslc_9   Date accepted: 2013-01-23

             Name: revetment

             Definition: facing of stone or other material, either permanent or temporary, placed along the edge of a
             stream, river or canal to stabilize the bank and to protect it from the erosive action of the stream. (Adapted
             from IHO Dictionary, S-32, 5th Edition, 4379)

18   DD Name: IENC   Code: catslc_18   Date accepted: 2007-10-12

             Name: lock/guide wall

Value   Data Dictionary (DD) Reference

             Definition: permanent structure bounding a lock and including guide walls (USACE)

19   DD Name: IENC   Code: catslc_19   Date accepted: 2009-09-11

             Name: ice breaker

             Definition: an often wedge-like structure used for protecting a bridge pier, dock, facility, etc. from floating
             ice or other debris.

20   DD Name: IENC   Code: catslc_20   Date accepted: 2013-09-23

             Name: water intake structure

             Definition: a structure designed to divert water from a river or channel for the purpose of water supply,
             hydroelectric power or irrigation.

Attribute	Category of signal station, traffic

Acronym: catsit   Code: 17002

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of signal station, traffic

Enumerations:

Value   Data Dictionary (DD) Reference

2   DD Name: IENC   Code: catsit_2   Date accepted: 2001-05-31
             Name: port entry and departure
             Definition: a signal station for the control of vessels entering or leaving a port.

6   DD Name: IENC   Code: catsit_6   Date accepted: 2001-05-31
             Name: lock
             Definition: a signal station for the control of vessels entering or leaving a lock.

8   DD Name: IENC   Code: catsit_8   Date accepted: 2001-05-31
             Name: bridge passage
             Definition: a signal station for the control of vessels wishing to pass under a bridge.

10   DD Name: IENC   Code: catsit_10   Date accepted: 2001-05-31
             Name: oncoming traffic indication
             Definition: indicates the oncoming traffic on an inland waterway

Attribute	Category of signal station, warning

Acronym: catsiw   Code: 17003

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of signal station, warning

Enumerations:

Value   Data Dictionary (DD) Reference

15   DD Name: IENC   Code: catsiw_15   Date accepted: 2001-05-31
             Name: high water mark
             Definition: An indication of the official high water level.

16   DD Name: IENC   Code: catsiw_16   Date accepted: 2001-05-31
             Name: vertical clearance indication
             Definition: An indication of the vertical clearance of a bridge, overhead cable, etc.

18   DD Name: IENC   Code: catsiw_18   Date accepted: 2001-05-31
             Name: depth indication
             Definition: An indication of the local depth.

Attribute	Category of time and behaviour

Acronym: cattab   Code: 17092

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of time and behaviour

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: cattab_1   Date accepted: 2001-05-31

           Name: operational period

           Definition: being in a position or adjustment to permit passage or to perform an operation

2   DD Name: IENC   Code: cattab_2   Date accepted: 2001-05-31

           Name: non-operational period

           Definition: being in a position or adjustment to prevent passage

Attribute	Category of vehicle transfer

Acronym: catvtr   Code: 17091

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of vehicle transfer

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catvtr_1   Date accepted: 2001-05-31
            Name: official
            Definition: Of or relating to an office or a post of authority

2   DD Name: IENC   Code: catvtr_2   Date accepted: 2001-05-31
            Name: private
            Definition: Belonging to a particular person or persons, as opposed to the public or the government

3   DD Name: IENC   Code: catvtr_3   Date accepted: 2001-05-31
            Name: suitable for car cranes
            Definition: Vehicle transfer location is suitable for car cranes

4   DD Name: IENC   Code: catvtr_4   Date accepted: 2001-05-31
            Name: suitable for car planks
            Definition: Vehicle transfer location is suitable for car planks

5   DD Name: IENC   Code: catvtr_5   Date accepted: 2001-05-31
            Name: permission required
            Definition: The transfer of a vehicle requires permission.

6   DD Name: IENC   Code: catvtr_6   Date accepted: 2001-05-31
            Name: locked gate
            Definition: The access to the public road is locked.

Attribute	Category of voltage

Acronym: catvol   Code: 18031

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2014-11-26

Definition: The electrical voltage provided by the power supply station

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catvol_1   Date accepted: 2014-11-26
            Name: 230V
            Definition: 230 Volts

2   DD Name: IENC   Code: catvol_2   Date accepted: 2014-11-26
            Name: 400V
            Definition: 400 Volts

Attribute	Category of waterway gauge

Acronym: catgag   Code: 17078

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Category of waterway gauge

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catgag_1   Date accepted: 2001-05-31

             Name: water level staff / pole

             Definition: level indicator consisting of a calibrated staff/pole and the associated bench mark. (DIN 4049
             Section 3, Oct. 1994)

2   DD Name: IENC   Code: catgag_2   Date accepted: 2001-05-31

             Name: recording water level gauge

             Definition: analog or digital water level measuring and recording device. (adopted from DIN 4049 –
             Section 3, Oct. 1994)

3   DD Name: IENC   Code: catgag_3   Date accepted: 2001-05-31

             Name: recording water level gauge with remote access

             Definition: recording water level gauge providing information remotely by any method (adopted from DIN
             4049 – Section 3, Oct. 1994)

4   DD Name: IENC   Code: catgag_4   Date accepted: 2001-05-31

             Name: recording water level gauge with external indicator

             Definition: recording gauge providing information of the water level via a large external indicator (adopted
             from DIN 4049 – Section 3, Oct. 1994)

5   DD Name: IENC   Code: catgag_5   Date accepted: 2001-05-31

             Name: recording water level gauge with remote access and remote indicator

             Definition: recording gauge providing information remotely by any method and providing information of the
             water level via a large external indicator. (adopted from DIN 4049 – Section 3, Oct. 1994)

Attribute	Class of dangerous cargo

Acronym: clsdng   Code: 17055

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Class of dangerous cargo

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: clsdng_1   Date accepted: 2001-05-31

             Name: one blue light / cone

             Definition: Vessels carrying out transport operations involving certain flammable substances

2   DD Name: IENC   Code: clsdng_2   Date accepted: 2001-05-31

             Name: two blue lights / cones

             Definition: Vessels carrying out transport operations involving certain substances constituting health
             hazards

3   DD Name: IENC   Code: clsdng_3   Date accepted: 2001-05-31

             Name: three blue lights / cones

             Definition: Vessels carrying out transport operations involving certain explosives

4   DD Name: IENC   Code: clsdng_4   Date accepted: 2001-05-31

             Name: no blue light / cone

             Definition: Vessels carrying out transport operations for which no blue light or blue cone is
             required

5   DD Name: IENC   Code: clsdng_5   Date accepted: 2009-12-09

             Name: one red light / red cone top down

             Definition: Russian inland waterway regulations: vessels with one red light / red cone top down

Attribute	Current velocity at high water level

Acronym: curvhw   Code: 17095

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The rate of travel of a current at a high water level

Attribute	Current velocity at low water level

Acronym: curvlw   Code: 17096

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The rate of travel of a current at a low water level

Attribute	Current velocity at mean water level

Acronym: curvmw   Code: 17097

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The rate of travel of a current at a mean water level

Attribute	Current velocity at other water level

Acronym: curvow   Code: 17098

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The rate of travel of a current at an other water level

Attribute	Description of legal conditions

Acronym: lg_des   Code: 18010

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Additional textual information which is related to the numerical description of the particular arti-cle/clause of the applicable law/regulation

Attribute	Direction of impact

Acronym: dirimp   Code: 17056

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Direction of impact

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: dirimp_1   Date accepted: 2001-05-31
             Name: upstream
             Definition: toward the source of a stream

2   DD Name: IENC   Code: dirimp_2   Date accepted: 2001-05-31
             Name: downstream
             Definition: in the direction of flow of a current or stream

3   DD Name: IENC   Code: dirimp_3   Date accepted: 2001-05-31
             Name: to the left bank
             Definition: toward the left side of the bank

4   DD Name: IENC   Code: dirimp_4   Date accepted: 2001-05-31
             Name: to the right bank
             Definition: toward the right side of the bank

5   DD Name: IENC   Code: dirimp_5   Date accepted: 2010-08-12
             Name: to harbor
             Definition: to an harbor

Attribute	Distance from notice mark, first

Acronym: disbk1   Code: 17057

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Minimum distance of the impact of an area, which is signed by notice marks. The distance is measured
              from the notice mark rectangular to the bank

Attribute	Distance from notice mark, second

Acronym: disbk2   Code: 17058

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Maximum distance of the impact of an area, which is signed by notice marks. The distance is measured from the notice mark rectangular to the bank

Attribute	Distance of impact, downstream

Acronym: disipd   Code: 17060

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Downstream distance of the impact of an area, which is signed by notice marks. The distance is normally given on an additional mark left and/or right of the notice mark

Attribute	Distance of impact, upstream

Acronym: disipu   Code: 17059

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Upstream distance of the impact of an area, which is signed by notice marks. The distance is normally given on an additional mark left and/or right of the notice mark

Attribute	Elevation 1 of surface (m)

Acronym: eleva1   Code: 17061

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The maximum elevation of the bottom of a river within a depth contour and referred to a gravitational reference level.

Attribute	Elevation 2 of surface (m)

Acronym: eleva2   Code: 17062

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The minimum elevation of the bottom of a river within a depth contour and referred to a gravitational
                reference level.

Attribute	Function of notice mark

Acronym: fnctnm   Code: 17063

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Function of a notice mark

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: fnctnm_1   Date accepted: 2001-05-31
             Name: prohibition mark
             Definition: marks which indicate a prohibition

2   DD Name: IENC   Code: fnctnm_2   Date accepted: 2001-05-31
             Name: regulation mark
             Definition: marks which indicate a regulation

3   DD Name: IENC   Code: fnctnm_3   Date accepted: 2001-05-31
             Name: restriction mark
             Definition: marks which indicate a restriction

4   DD Name: IENC   Code: fnctnm_4   Date accepted: 2001-05-31
             Name: recommendation mark
             Definition: marks which indicate a recommendation

5   DD Name: IENC   Code: fnctnm_5   Date accepted: 2001-05-31
             Name: information mark
             Definition: marks with general information

Attribute	Function of sensor

Acronym: fnctsn   Code: 18020

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2011-12-19

Definition: Function of sensor

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: fnctsn_1   Date accepted: 2011-12-19

             Name: reduce bridge lighting

             Definition:

Attribute	Height/length units

Acronym: hunits   Code: 17103

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Units of measure of waterway distances

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: hunits_1   Date accepted: 2001-05-31
             Name: metres
             Definition: heights/lengths are specified in metres (SI units of length)

2   DD Name: IENC   Code: hunits_2   Date accepted: 2001-05-31
             Name: feet
             Definition: heights/lengths are specified in feet (imperial units of length)

3   DD Name: IENC   Code: hunits_3   Date accepted: 2001-05-31
             Name: kilometres
             Definition: heights/lengths are specified in kilometres (1000 metres)

4   DD Name: IENC   Code: hunits_4   Date accepted: 2001-05-31
             Name: hectometres
             Definition: heights/lengths are specified in hectometres (100 metres)

5   DD Name: IENC   Code: hunits_5   Date accepted: 2001-05-31
             Name: statute miles
             Definition: heights/lengths are specified in statue (land) miles

6   DD Name: IENC   Code: hunits_6   Date accepted: 2001-05-31
             Name: nautical miles
             Definition: heights/lengths are specified in nautical (sea) miles

Attribute	Horizontal clearance length

Acronym: horcll   Code: 17074

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The length of an object, such as a lock or basin, which is available for safe navigation. This may, or may not, be the same as the total physical length (HORLEN) of the object

Attribute	Horizontal clearance width

Acronym: horclw   Code: 17075

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The width of an object, such as a lock or basin, which is available for safe navigation. This may, or may not, be the same as the total physical width (HORWID) of the object

Attribute	Marks navigational - System of

Acronym: marsys   Code: 17009

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: System of navigational marks

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: marsys_1   Date accepted: 2001-05-31

         Name: IALA A

         Definition: navigational aids conform to the International Association of Lighthouse Authorities - IALA A
         system.

2   DD Name: IENC   Code: marsys_2   Date accepted: 2001-05-31

         Name: IALA B

         Definition: navigational aids conform to the International Association of Lighthouse Authorities - IALA B
         system.

9   DD Name: IENC   Code: marsys_9   Date accepted: 2001-05-31

         Name: no system

         Definition: navigational aids do not conform to any defined system.

10   DD Name: IENC   Code: marsys_10   Date accepted: 2001-05-31

         Name: other system

         Definition: navigational aids conform to a defined system other than International Association of
         Lighthouse Authorities -IALA.

11   DD Name: IENC   Code: marsys_11   Date accepted: 2001-05-31

         Name: CEVNI

         Definition: navigational aids conform to the European Code for Inland Waterways of UN/ECE.

12   DD Name: IENC   Code: marsys_12   Date accepted: 2001-05-31

Value   Data Dictionary (DD) Reference

            Name: Russian inland waterway regulations

            Definition: navigational aids conform to the Russian inland waterway regulations.

13   DD Name: IENC   Code: marsys_13   Date accepted: 2009-09-11

            Name: Brazilian national inland waterway regulations - two sides

            Definition: navigational aids conform to the Brazilian national inland waterway regulations for two sides.

14   DD Name: IENC   Code: marsys_14   Date accepted: 2009-09-11

            Name: Brazilian national inland waterway regulations - side independent

            Definition: navigational aids conform to the side independent Brazilian national inland waterway
            regulations.

15   DD Name: IENC   Code: marsys_15   Date accepted: 2009-09-11

            Name: Paraguay-Parana waterway - Brazilian complementary aids

            Definition: Brazilian complementary navigational aids on the Paraguay-Parana waterway.

Attribute	Maximal permitted beam

Acronym: lg_bme   Code: 18003

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The maximal permitted beam (width of a ship's hull) of a vessel or convoy according to the particular
                article/clause of the applicable law/regulation

Attribute	Maximal permitted draught

Acronym: lg_drt   Code: 18005

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The maximal permitted draught of a vessel or convoy according to the particular article/clause of the
               applicable law/regulation

Attribute	Maximal permitted length

Acronym: lg_lgs   Code: 18004

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The maximal permitted length of a vessel or convoy according to the particular article/clause of the applicable law/regulation

Attribute	Maximal permitted speed

Acronym: lg_spd   Code: 18001

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The maximal permitted vessel speed according to the particular article/clause of the applicable
              law/regulation

Attribute	Maximal permitted water displacement

Acronym: lg_wdp   Code: 18006

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The maximal permitted water displacement of a vessel or convoy according to the particular article/clause of the applicable law/regulation

Attribute	Name of other locally relevant water level

Acronym: othnam   Code: 17087

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Name of the water level, which is used for the attribute othwat (value at other locally relevant water level) including version identification, for example year of issue or period

Attribute	Name of relevant high water level

Acronym: hignam   Code: 17081

Use Type: F

Value Type: T

<u>Data Dictionary (DD) Reference:</u>

DD Name: IENC   Date accepted: 2001-05-31

Definition: Name of the water level, which is used for the attribute higwat (value at relevant high water level) including version identification, for example year of issue or period

Attribute	Name of relevant low water level

Acronym: lownam   Code: 17083

Use Type: F

Value Type: T

<u>Data Dictionary (DD) Reference:</u>

DD Name: IENC   Date accepted: 2001-05-31

Definition: Name of the water level, which is used for the attribute lowwat (value at relevant low water level) including
version identification, for example year of issue or period

Attribute	Name of relevant mean water level

Acronym: meanam   Code: 17085

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Name of the water level, which is used for the attribute mawat (value at relevant mean water level) including version identification, for example year of issue or period

Attribute	Name of Sounding datum reference level

Acronym: sdrlev   Code: 17089

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Name of the water level depth values are referred to

Attribute	Name of vertical river datum reference level

Acronym: vcrlev   Code: 17090

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Name of the water level vertical clearance values are referred to

Attribute	Number of shore connectors

Acronym: shrnum   Code: 18035

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2014-11-26

Definition: The number of shore connectors available at the power supply station.

Attribute	Publication reference

Acronym: lg_pbr   Code: 18011

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Waterway or waterway section for which a juridical regulation with respect to the maximum permitted vessel dimensions exists

Attribute	Reference Gauge

Acronym: refgag   Code: 18018

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2013-01-11

Definition: The ISRS code of the gauge which can be used to calculate the vertical clearance

Attribute	Reference gravitational level

Acronym: reflev   Code: 17088

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Gravitational reference level

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: reflev_1   Date accepted: 2001-05-31

             Name: Baltic datum

             Definition: Baltic Datum (Baltic Heights System) - The unified State system for absolute hights reckoning from Kronshtadt Tide-gauge Datum that is accepted in Russian Federation. (Hydrographic Terminology Dictionary, HDNO, 1984)-

2   DD Name: IENC   Code: reflev_2   Date accepted: 2001-05-31

             Name: Adriatic level

             Definition: The average height of the surface of the Adriatic sea at the tide station of Trieste in Italy.

3   DD Name: IENC   Code: reflev_3   Date accepted: 2001-05-31

             Name: Amsterdam Ordnance Datum (NAP)

             Definition: Dutch gravitational reference level that is approximately the average summer height of the North Sea.

4   DD Name: IENC   Code: reflev_4   Date accepted: 2001-05-31

             Name: Mean Sea Level

             Definition: (MSL) - the average height of the surface of the sea at a tide station for all stages of the tide over a 19-year period, usually determined from hourly height readings measured from a fixed predetermined reference level. (IHO Dictionary, S-32, 5th Edition, 3156)

5   DD Name: IENC   Code: reflev_5   Date accepted: 2001-05-31

             Name: Other datum

             Definition:

Value   Data Dictionary (DD) Reference

6   DD Name: IENC   Code: reflev_6   Date accepted: 2001-05-31

         Name: National Geodetic Vertical Datum - NGVD29

         Definition: The name, after May 10, 1973, of the Sea Level Datum of 1929.

7   DD Name: IENC   Code: reflev_7   Date accepted: 2001-05-31

         Name: North American Vertical Datum - NAVD88

         Definition: The vertical control datum established in 1991 by the minimum-constraint adjustment of geodetic leveling observations in Canada, the United States, and Mexico.

8   DD Name: IENC   Code: reflev_8   Date accepted: 2001-05-31

         Name: Mean sea level 1912

         Definition: A vertical control datum established for vertical control in the United States by the general adjustment of 1912.

9   DD Name: IENC   Code: reflev_9   Date accepted: 2001-05-31

         Name: Mean sea level 1929

         Definition: A vertical control datum established for vertical control in the United States by the general adjustment of 1929.

10   DD Name: IENC   Code: reflev_10   Date accepted: 2015-03-09

         Name: Tweede Algemene Waterpassing (TAW)

         Definition: All heights in Belgium are referenced to TAW

Attribute	Related issue

Acronym: lg_rel   Code: 18008

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Indication of the related legal issue

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: lg_rel_1   Date accepted: 2001-05-31
             Name: other
             Definition:

2   DD Name: IENC   Code: lg_rel_2   Date accepted: 2001-05-31
             Name: usage of waterway
             Definition:

3   DD Name: IENC   Code: lg_rel_3   Date accepted: 2001-05-31
             Name: carriage of equipment
             Definition:

4   DD Name: IENC   Code: lg_rel_4   Date accepted: 2001-05-31
             Name: task,operation
             Definition:

Attribute	Restriction

Acronym: restrn   Code: 17004

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Restriction

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: restrn_1   Date accepted: 2001-05-31

             Name: anchoring prohibited

             Definition: an area within which anchoring is not permitted.

2   DD Name: IENC   Code: restrn_2   Date accepted: 2001-05-31

             Name: anchoring restricted

             Definition: a specified area designated by appropriate authority, within which anchoring is restricted in
             accordance with certain specified conditions.

7   DD Name: IENC   Code: restrn_7   Date accepted: 2001-05-31

             Name: entry prohibited

             Definition: an area within which navigation and/or anchoring is prohibited. (adapted from IHO Dictionary,
             S-32, 5th Edition, 4044)

8   DD Name: IENC   Code: restrn_8   Date accepted: 2001-05-31

             Name: entry restricted

             Definition: a specified area designated by appropriate authority, within which navigation is restricted in
             accordance with certain specified conditions. (adapted from IHO Dictionary, S-32, 5th Edition, 4366)

13   DD Name: IENC   Code: restrn_13   Date accepted: 2001-05-31

             Name: no wake

             Definition: mariners must adjust the speed of their vessels to reduce the wave or wash which may cause
             erosion or disturb moored vessels.

14   DD Name: IENC   Code: restrn_14   Date accepted: 2001-05-31

Value   Data Dictionary (DD) Reference

          Name: area to be avoided

          Definition: an IMO designated area to be avoided, defined as a routeing measure. (adapted from IHO Chart Specifications, M-4, 435.7)

27   DD Name: IENC   Code: restrn_27   Date accepted: 2001-05-31

          Name: speed restricted

          Definition: an area within which speed is restricted.

28   DD Name: IENC   Code: restrn_28   Date accepted: 2001-05-31

          Name: overtaking prohibited

          Definition: a specified area designated by appropriate authority, within which overtaking is generally prohibited

29   DD Name: IENC   Code: restrn_29   Date accepted: 2001-05-31

          Name: overtaking of convoys by convoys prohibited

          Definition: a specified area designated by appropriate authority, within which overtaking between convoys prohibited

30   DD Name: IENC   Code: restrn_30   Date accepted: 2001-05-31

          Name: passing or overtaking prohibited

          Definition: a specified area designated by appropriate authority, within which passing or overtaking is generally prohibited

31   DD Name: IENC   Code: restrn_31   Date accepted: 2001-05-31

          Name: berthing prohibited

          Definition: a specified area designated by appropriate authority, within which vessels, assemblies of floating material or floating establishments may not berth.

32   DD Name: IENC   Code: restrn_32   Date accepted: 2001-05-31

          Name: berthing restricted

          Definition: a specified area designated by appropriate authority, within which berthing is restricted

33   DD Name: IENC   Code: restrn_33   Date accepted: 2001-05-31

          Name: making fast prohibited

          Definition: a specified area designated by appropriate authority, within which vessels, assemblies of floating material or floating establishments may not make fast to the bank.

34   DD Name: IENC   Code: restrn_34   Date accepted: 2001-05-31

          Name: making fast restricted

          Definition: a specified area designated by appropriate authority, within which making fast to the bank is

Value	Data Dictionary (DD) Reference

restricted

35	DD Name: IENC	Code: restrn_35	Date accepted: 2001-05-31

Name: turning prohibited

Definition: a specified area designated by appropriate authority, within which all turning is generally prohibited

36	DD Name: IENC	Code: restrn_36	Date accepted: 2001-05-31

Name: restricted fairway depth

Definition: an area within which the fairway depth is restricted.

37	DD Name: IENC	Code: restrn_37	Date accepted: 2001-05-31

Name: restricted fairway width

Definition: an area within which the fairway width is restricted.

38	DD Name: IENC	Code: restrn_38	Date accepted: 2014-11-26

Name: use of spuds prohibited

Definition: the use of anchoring spuds (telescopic piles) is prohibited

Attribute	Speed reference

Acronym: lg_spr   Code: 18002

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Indicates the type of speed measurement

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: lg_spr_1   Date accepted: 2001-05-31

             Name: other

             Definition:

2   DD Name: IENC   Code: lg_spr_2   Date accepted: 2001-05-31

             Name: speed over ground

             Definition: The vessel's actual speed, determined by dividing the distance between successive fixes by the time between the fixes

3   DD Name: IENC   Code: lg_spr_3   Date accepted: 2001-05-31

             Name: speed through water

             Definition: The vessel's actual speed, determined by subtracting the speed over ground by the current speed

Attribute	Time Schedule Reference

Acronym: schref   Code: 17093

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The string encodes the file name of an external file

Attribute	Transshipping goods

Acronym: trshgd   Code: 17076

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: List of goods, which can be transshipped

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: trshgd_1   Date accepted: 2001-05-31

          Name: containers

          Definition: boxes for cargo transport with standardized dimensions.

2   DD Name: IENC   Code: trshgd_2   Date accepted: 2001-05-31

          Name: bulk goods

          Definition: unpacked bulk cargo in the same or a similar kind of nature (homogeneous).

3   DD Name: IENC   Code: trshgd_3   Date accepted: 2001-05-31

          Name: oil

          Definition: Mineral oil or liquid petrolatum, a by-product in the distillation of petroleum to produce gasoline.

4   DD Name: IENC   Code: trshgd_4   Date accepted: 2001-05-31

          Name: fuel

          Definition: liquid fuel, e.g. gasoline, diesel.

5   DD Name: IENC   Code: trshgd_5   Date accepted: 2001-05-31

          Name: chemicals

          Definition: any material used in or obtained by a process in chemistry.

6   DD Name: IENC   Code: trshgd_6   Date accepted: 2001-05-31

          Name: liquid goods

          Definition: fluids whose shape is usually determined by the container it fills.

Value   Data Dictionary (DD) Reference

7   DD Name: IENC   Code: trshgd_7   Date accepted: 2001-05-31

             Name: explosive goods

             Definition: goods that undergoes decomposition or combustion with great rapidity, evolving much heat and
             producing a large volume of gas.

8   DD Name: IENC   Code: trshgd_8   Date accepted: 2001-05-31

             Name: fish

             Definition: marine animals

9   DD Name: IENC   Code: trshgd_9   Date accepted: 2001-05-31

             Name: cars

             Definition: wheeled vehicles

10   DD Name: IENC   Code: trshgd_10   Date accepted: 2001-05-31

             Name: general cargo

             Definition: general cargo

Attribute	Type of Ship

Acronym: shptyp   Code: 33066

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Type of ship

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: shptyp_1   Date accepted: 2001-05-31
             Name: general cargo vessel
             Definition: a vessel which is designed for carrying general cargo, e.g. boxes, sacks.

2   DD Name: IENC   Code: shptyp_2   Date accepted: 2001-05-31
             Name: container vessel
             Definition: a vessel which is designed for carrying containers.

3   DD Name: IENC   Code: shptyp_3   Date accepted: 2001-05-31
             Name: tanker
             Definition: a vessel which is designed for carrying liquid goods, e.g. oil or water.

4   DD Name: IENC   Code: shptyp_4   Date accepted: 2001-05-31
             Name: sailing vessel
             Definition: a vessel that is powered by the wind; often having several masts.

5   DD Name: IENC   Code: shptyp_5   Date accepted: 2001-05-31
             Name: fishing vessel
             Definition: a vessel that is used and equipped for the fishing of living aquatic resources.

6   DD Name: IENC   Code: shptyp_6   Date accepted: 2001-05-31
             Name: special purpose vessel.
             Definition: a vessel that fulfills special purposes e.g. hovercrafts, pilot boats

Value	Data Dictionary (DD) Reference

7	DD Name: IENC	Code: shptyp_7	Date accepted: 2001-05-31

Name: man of War

Definition: armed naval vessel.

8	DD Name: IENC	Code: shptyp_8	Date accepted: 2001-05-31

Name: submarine

Definition: a vessel that is capable of operating for an extended period of time underwater.

9	DD Name: IENC	Code: shptyp_9	Date accepted: 2001-05-31

Name: high speed craft

Definition:

10	DD Name: IENC	Code: shptyp_10	Date accepted: 2001-05-31

Name: bulk carrier

Definition: a vessel which is designed for carrying bulk goods, e.g. coal, ore or grain.

11	DD Name: IENC	Code: shptyp_11	Date accepted: 2001-05-31

Name: seaplane

Definition: airplane designed to take off from and alight on water.

12	DD Name: IENC	Code: shptyp_12	Date accepted: 2001-05-31

Name: tugboat

Definition: a powerful small boat designed to pull or push larger ships or powerless barges.

13	DD Name: IENC	Code: shptyp_13	Date accepted: 2001-05-31

Name: passenger vessel

Definition: a vessel which is designed for carrying passengers and which serves mainly as cruise vessel.

14	DD Name: IENC	Code: shptyp_14	Date accepted: 2001-05-31

Name: ferry

Definition: a vessel which is designed for carrying passengers, and sometimes their vehicles, on scheduled services.

15	DD Name: IENC	Code: shptyp_15	Date accepted: 2001-05-31

Name: boat

Definition: a small vessel.

Attribute	UN location code

Acronym: unlocd   Code: 17077

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The attribute unlocd should be used to encode the UN Location Code
               (http://www.unece.org/cefact/locode/service/main.htm) or - in Europe - the Inland Ship Reporting Standard
               (ISRS) Code

Attribute	Use of Ship

Acronym: useshp   Code: 17094

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Indication of the way the ship is used

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: useshp_1   Date accepted: 2001-05-31

             Name: liner trade

             Definition: ship is used to carry goods on a scheduled service

2   DD Name: IENC   Code: useshp_2   Date accepted: 2001-05-31

             Name: occasional professional shipping

             Definition: ship is occasional used for professional shipping

3   DD Name: IENC   Code: useshp_3   Date accepted: 2001-05-31

             Name: leisure

             Definition: ship is used for leisure activities

Attribute	Value at other locally relevant water level

Acronym: othwat   Code: 17086

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Value at waterway gauge in case of a specific water level, which is locally of importanance or of interest for navigation

Attribute	Value at relevant high water level

Acronym: higwat

Code: 17080

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Value at waterway gauge in case of exact high water level (according to official regulations at the specific section of waterway)

Attribute	Value at relevant low water level

Acronym: lowwat   Code: 17082

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Value at waterway gauge in case of exact low water level (according to official regulations at the specific section of waterway)

Attribute	Value at relevant mean water level

Acronym: meawat   Code: 17084

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Value at waterway gauge in case of exact mean water level (according to official regulations at the specific section of waterway)

Attribute	Vertical datum

Acronym: verdat   Code: 17005

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Vertical datum

Enumerations:

Value   Data Dictionary (DD) Reference

12   DD Name: IENC   Code: verdat_12   Date accepted: 2001-05-31

               Name: Mean lower low water

               Definition: (MLLW) - the average height of the lower low waters at a place over a 19-year period. (IHO Dictionary, S-32, 5th Edition, 3145)

31   DD Name: IENC   Code: verdat_31   Date accepted: 2001-05-31

               Name: Local low water reference level

               Definition: low water reference level of the local area

32   DD Name: IENC   Code: verdat_32   Date accepted: 2001-05-31

               Name: Local high water reference level

               Definition: high water reference level of the local area

33   DD Name: IENC   Code: verdat_33   Date accepted: 2001-05-31

               Name: Local mean water reference level

               Definition: mean water reference level of the local area

34   DD Name: IENC   Code: verdat_34   Date accepted: 2001-05-31

               Name: Equivalent height of water (German GIW)

               Definition: A low water level which is the result of a defined low water discharge - called "equivalent discharge".

35   DD Name: IENC   Code: verdat_35   Date accepted: 2001-05-31

               Name: Highest Shipping Height of Water (German HSW)

Value	Data Dictionary (DD) Reference

Definition: upper limit of water levels where navigation is allowed

36	DD Name: IENC	Code: verdat_36	Date accepted: 2001-05-31

Name: Reference low water level according to Danube Commission

Definition: The water level at a discharge, which is exceeded 94 % of the year within a period of 30 years.

37	DD Name: IENC	Code: verdat_37	Date accepted: 2001-05-31

Name: Highest shipping height of water according to Danube Commission

Definition: The water level at a discharge, which is exceeded 1 % of the year within a period of 30 years.

38	DD Name: IENC	Code: verdat_38	Date accepted: 2001-05-31

Name: Dutch river low water reference level (OLR)

Definition: The water level at a discharge, which is exceeded 95 % of the year within a period of 20 years.

39	DD Name: IENC	Code: verdat_39	Date accepted: 2001-05-31

Name: Russian project water level

Definition: Conditional low water level with established probability (Hydrographic Terminology Dictionary, HDNO, 1984).

40	DD Name: IENC	Code: verdat_40	Date accepted: 2001-05-31

Name: Russian normal backwater level

Definition: Highest water level derived from the upper backwater stream in watercourse or reservoir under the normal operational conditions. (Hydrographic Terminology Dictionary, HDNO, 1984).

41	DD Name: IENC	Code: verdat_41	Date accepted: 2001-05-31

Name: Ohio River Datum

Definition:

42	DD Name: IENC	Code: verdat_42	Date accepted: 2015-02-23

Name: Approximate LAT

Definition:

43	DD Name: IENC	Code: verdat_43	Date accepted: 2015-02-23

Name: Dutch High Water Reference Level (MHW)

Definition:

44	DD Name: IENC	Code: verdat_44	Date accepted: 2015-02-23

Name: Tweede Algemene Waterpassing

Definition:

Attribute	Water displacement unit

Acronym: lg_wdu   Code: 18007

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Units of measure for water displacement

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: lg_wdu_1   Date accepted: 2001-05-31
             Name: other
             Definition:

2   DD Name: IENC   Code: lg_wdu_2   Date accepted: 2001-05-31
             Name: cubic meters
             Definition:

3   DD Name: IENC   Code: lg_wdu_3   Date accepted: 2001-05-31
             Name: tonnes
             Definition:

Attribute	Water level effect

Acronym: watlev   Code: 17104

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: Effect of water level

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: watlev_1   Date accepted: 2001-05-31

               Name: partly submerged at high water

               Definition: partially covered and partially dry at high water.

2   DD Name: IENC   Code: watlev_2   Date accepted: 2001-05-31

               Name: always dry

               Definition: not covered at high water under average meteorological conditions.

3   DD Name: IENC   Code: watlev_3   Date accepted: 2001-05-31

               Name: always under water/submerged

               Definition: remains covered by water at all times under average meteorological conditions.

4   DD Name: IENC   Code: watlev_4   Date accepted: 2001-05-31

               Name: covers and uncovers

               Definition: expression intended to indicate an area of a reef or other projection from the bottom of a body
               of water which periodically extends above and is submerged below the surface. Also referred to as dries or
               uncovers. (IHO Dictionary, S-32, 5th Edition, 1111)

8   DD Name: IENC   Code: watlev_8   Date accepted: 2001-05-31

               Name: above mean water level

               Definition: above a water level called "mean water" which is the arithmetic mean value of all water levels
               within a certain period of time

9   DD Name: IENC   Code: watlev_9   Date accepted: 2001-05-31

Value   Data Dictionary (DD) Reference

Name: below mean water level

Definition: below a water level called "mean water" which is the arithmetic mean value of all water levels within a certain period of time

Attribute	Waterway distance

Acronym: wtwdis   Code: 17064

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2001-05-31

Definition: The distance measured from an origin of a river or canal