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"

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

Feature	Building, single

Acronym: BUISGL Code: 12

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

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)

Attribute Bindings:

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	

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
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..."

acronym	usage	constraints
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	

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
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..."

acronym	usage	constraints
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

Data Dictionary (DD) Reference:

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).

Attribute Bindings:

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"

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

acronym	usage	constraints
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	

acronym	usage	constraints
TXTDSC	O	
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

Data Dictionary (DD) Reference:

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.

Attribute Bindings:

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	

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

Data Dictionary (DD) Reference:

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).

Attribute Bindings:

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..."

acronym	usage	constraints
NTXTDS	O	
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

Data Dictionary (DD) Reference:

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)

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	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"

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
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"

acronym	usage	constraints
PERSTA	O	format = "ccyymmdd"
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"

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

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
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"

acronym	usage	constraints
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	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	

acronym	usage	constraints
TXTDSC	O	
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"

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

Feature	Gate

Acronym: gatcon Code: 17031

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

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)

Attribute Bindings:

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"

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
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..."

acronym	usage	constraints
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..."

acronym	usage	constraints
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	

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	

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"

acronym	usage	constraints
PEREND	O	format = "ccyymmdd"
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

Data Dictionary (DD) Reference:

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).

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	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..."

acronym	usage	constraints
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

Value	Data Dictionary (DD) Reference
	drawn aside to allow ships to pass through. IHO Dictionary, S-32, 5th Edition, 546)
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

Value	Data Dictionary (DD) Reference
	approximately 16 millimetres. (adapted from IHO Dictionary, S-32, 5th Edition, 4683)
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)

Value	Data Dictionary (DD) Reference
6	DD Name: HYDRO Code: CATFOG_6 Date accepted: 2000-11-01 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)

Value	Data Dictionary (DD) Reference
6	DD Name: HYDRO Code: CATLMK_6 Date accepted: 2000-11-01 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

Value Data Dictionary (DD) Reference

Name: cross

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

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.

Value	Data Dictionary (DD) Reference
13	DD Name: HYDRO Code: CATLIT_13 Date accepted: 2000-11-01 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

Value Data Dictionary (DD) Reference

wrecks that attract fish. The reefs are constructed by dumping assorted junk in areas which may be of very 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

Value	Data Dictionary (DD) Reference
	Name: timber yard
	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

Value	Data Dictionary (DD) Reference
	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

Value	Data Dictionary (DD) Reference
	Definition: a place where fish are protected.
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

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

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

Value	Data Dictionary (DD) Reference
	Definition: a relatively large natural stream of water.
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)

Value	Data Dictionary (DD) Reference
7	DD Name: HYDRO Code: CATSLC_7 Date accepted: 2000-11-01 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

Value Data Dictionary (DD) Reference

Definition: a protective structure designed to cushion the impact of a vessel and prevent damage.

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

Value Data Dictionary (DD) Reference

Definition: a public house providing food, drink and accommodation. (The Collins Reference English Dictionary, 1992)

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.

Value	Data Dictionary (DD) Reference
16	DD Name: HYDRO Code: CATSCF_16 Date accepted: 2000-11-01 Name: showers 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

Value	Data Dictionary (DD) Reference					
	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
	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)

Value	Data Dictionary (DD) Reference
	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

Value	Data Dictionary (DD) Reference					
	Definition:					
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

Value Data Dictionary (DD) Reference

Definition: a band or stripe of colour which is displayed around the outer edge of the object, which may 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)

Value	Data Dictionary (DD) Reference
7	DD Name: HYDRO Code: FUNCTN_7 Date accepted: 2000-11-01 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.

Value	Data Dictionary (DD) Reference
15	DD Name: HYDRO Code: FUNCTN_15 Date accepted: 2000-11-01 Name: transit shed/warehouse 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)

Value	Data Dictionary (DD) Reference
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)
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

Value Data Dictionary (DD) Reference

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 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

Value	Data Dictionary (DD) Reference					
	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				
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

Data Dictionary (DD) Reference:

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

Value	Data Dictionary (DD) Reference
	less than 160 flashes per minute
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:

Value	Data Dictionary (DD) Reference					
14	DD Name:	HYDRO	Code:	LITCHR_14	Date accepted:	2000-11-01
	Name:	flash/long-flash				
	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

Value	Data Dictionary (DD) Reference					
	Name:	ultra quick-flash plus long-flash				
	Definition:					
28	DD Name:	HYDRO	Code:	LITCHR_28	Date accepted:	2000-11-01
	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

Value Data Dictionary (DD) Reference

Definition: (particles of 2.0-4.0 mm); small stones with coarse sand.

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)

Value	Data Dictionary (DD) Reference
6	DD Name: HYDRO Code: PRODCT_6 Date accepted: 2000-11-01 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

Value	Data Dictionary (DD) Reference
	Definition: the least depth over a feature is unknown, but there is considered to be safe clearance at this 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

Value	Data Dictionary (DD) Reference				
	Name:	dragging prohibited			
	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

Value	Data Dictionary (DD) Reference
	Definition: lit by floodlights, strip lights, etc.
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

Value Data Dictionary (DD) Reference

Definition: the depth was determined by using a line, graduated with attached marks and fastened to a 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

Value Data Dictionary (DD) Reference

Name: swept by side-scan-sonar

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

Value Data Dictionary (DD) Reference

International Association of Lighthouse Authorities - IALA topmarks (lateral).

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

Value	Data Dictionary (DD) Reference
14	DD Name: HYDRO Code: TOPSHP_14 Date accepted: 2000-11-01 Name: 2 cones (points downward) 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

Value Data Dictionary (DD) Reference

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

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.

Value	Data Dictionary (DD) Reference
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 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

Value	Data Dictionary (DD) Reference
	Definition: a pushed convoy or breasted up formation
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

Value	Data Dictionary (DD) Reference
	Definition: a pushed convoy or breasted up formation
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

Value	Data Dictionary (DD) Reference					
	Name:	sea-plane anchorage				
	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

Value	Data Dictionary (DD) Reference
	Definition: A legally permitted area in or near the waterway designated for temporary barge mooring.
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

Value Data Dictionary (DD) Reference

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)

Value	Data Dictionary (DD) Reference					
	Definition:					
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)

Value	Data Dictionary (DD) Reference					
	Definition:					
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

Value	Data Dictionary (DD) Reference
	Definition: a terminal for the loading and unloading of passengers.
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

Value	Data Dictionary (DD) Reference	
	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

Value	Data Dictionary (DD) Reference
6	DD Name: IENC Code: catlam_6 Date accepted: 2001-05-31 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

Value	Data Dictionary (DD) Reference					
	Name:	danger point or obstacles at the right-hand side				
	Definition:	indicates a danger point or obstacles at the right-hand side				
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				

Value	Data Dictionary (DD) Reference
	waterway which is narrower
25	DD Name: IENC Code: catlam_25 Date accepted: 2013-01-01
	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

Value Data Dictionary (DD) Reference

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

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

Value	Data Dictionary (DD) Reference
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
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

Value	Data Dictionary (DD) Reference
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 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

Value Data Dictionary (DD) Reference

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

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

Value	Data Dictionary (DD) Reference
	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 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

Value Data Dictionary (DD) Reference

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

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

Value Data Dictionary (DD) Reference

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

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

Value Data Dictionary (DD) Reference

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

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

Value	Data Dictionary (DD) Reference
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 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

Value Data Dictionary (DD) Reference

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

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

Value Data Dictionary (DD) Reference

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

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

Value Data Dictionary (DD) Reference

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

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

Value Data Dictionary (DD) Reference

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

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

Value Data Dictionary (DD) Reference

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

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

Data Dictionary (DD) Reference:

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

Definition: Category of rescue station

Enumerations:

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

Data Dictionary (DD) Reference:

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

Definition: Category of sensor

Enumerations:

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

Value	Data Dictionary (DD) Reference
	Definition: a vessel intended solely or mainly for navigation on inland waterways
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

Value Data Dictionary (DD) Reference

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

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

Value	Data Dictionary (DD) Reference
	Definition: a passenger vessel without overnight passenger cabins
25	DD Name: IENC Code: lc_cse_25 Date accepted: 2001-05-31
	Name: cabin vessel
	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

Value Data Dictionary (DD) Reference

Definition: a vessel intended solely or mainly for navigation on inland waterways

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

Value Data Dictionary (DD) Reference

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

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

Value Data Dictionary (DD) Reference

Definition: a passenger vessel without overnight passenger cabins

25 DD Name: IENC Code: lc_csi_25 Date accepted: 2001-05-31

Name: cabin vessel

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

Value	Data Dictionary (DD) Reference
	Name: lock/guide wall
	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

Value Data Dictionary (DD) Reference

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

Value	Data Dictionary (DD) Reference	
	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

Data Dictionary (DD) Reference:

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

Data Dictionary (DD) Reference:

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.

Value	Data Dictionary (DD) Reference
14	DD Name: IENC Code: restrn_14 Date accepted: 2001-05-31 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

Value	Data Dictionary (DD) Reference					
	Name:	making fast restricted				
	Definition:	a specified area designated by appropriate authority, within which making fast to the bank is 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

Value	Data Dictionary (DD) Reference
	Definition: fluids whose shape is usually determined by the container it fills.
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.

Value	Data Dictionary (DD) Reference
	Definition: a vessel that fulfills special purposes e.g. hovercrafts, pilot boats
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 GlW) 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

Value Data Dictionary (DD) Reference

Name: Highest Shipping Height of Water (German HSW)

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

Value Data Dictionary (DD) Reference

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