IENC Feature Catalogue-DRAFT

Edition 2.5.0

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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	Accuracy of data

Acronym: M_ACCY   Code: 300

Type: M

Primitive: A

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

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

Definition: An area within which the best estimate of the overall accuracy of the data is uniform. The overall accuracy takes into account for example the source accuracy, chart scale, digitising accuracy, etc.

<u>Attribute Bindings:</u>

acronym	usage	constraints
POSACC	O	unit = "m" decimal digits = "2"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
CATTEV	M	value list = "4,5,6"
INFORM	O	
NINFOM	O	
SOUACC	O	unit = "m" decimal digits = "2"
TXTDSC	O	
NTXTDS	O	
VERACC	O	unit = "m" decimal digits = "1"
HORACC	O	unit = "m" decimal digits = "1"

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
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

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

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

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

<u>Attribute Bindings:</u>

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	
STATUS	O	value list = "5"

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, cardinal

Acronym: BCNCAR   Code: 5

Type: G

Primitive: P

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

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 for use in hydrographic survey (IHO Dictionary, S-32, 5th Edition, 420). A cardinal beacon 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)

<u>Attribute Bindings:</u>

acronym	usage	constraints
PICREP	O	
CONDTN	O	value list = "1,2,3,5"
HEIGHT	O	unit = "m" decimal digits = "2"
VERLEN	O	unit = "m" decimal digits = "1"
BCNSHP	M	value list = "1,2,3,4,5,6,7"
CATCAM	M	value list = "1,2,3,4"
COLOUR	M	value list = "2,6"
COLPAT	M	value list = "1"
MARSYS	C	value list = "1,2"
INFORM	O	
NINFOM	O	
OBJNAM	O	
NOBJNM	O	
CONRAD	O	value list = "3"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
DATSTA	O	format = "ccyymmdd"

acronym	usage	constraints
DATEND	O	format = "ccyymmdd"
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
TXTDSC	O	
NTXTDS	O	
STATUS	O	value list = "5"

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	
STATUS	O	value list = "5"

Feature	Beacon, lateral

Acronym: BCNLAT   Code: 7

Type: G

Primitive: P

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

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)

<u>Attribute Bindings:</u>

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	
STATUS	O	value list = "5"

Feature	Beacon, safe water

Acronym: BCNSAW										Code:		8

Type: G

Primitive: P

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

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

Definition: A safe water 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 safe water beacon may be used to indicate that there is navigable water around the mark. (UKHO NP735, 5th Edition)

<u>Attribute Bindings:</u>

acronym	usage	constraints
PICREP	O	
CONDTN	O	value list = "1,2,3,5"
HEIGHT	O	unit = "m" decimal digits = "2"
VERLEN	O	unit = "m" decimal digits = "1"
BCNSHP	M	value list = "1,2,3,4,5,6,7"
COLOUR	M	value list = "1,3"
COLPAT	M	value list = "2"
MARSYS	C	value list = "1,2"
CONRAD	O	value list = "3"
INFORM	O	
NINFOM	O	
OBJNAM	O	
NOBJNM	O	
TXTDSC	O	
NTXTDS	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"

acronym	usage	constraints
PEREND	O	format = "ccyymmdd"
STATUS	O	value list = "2,3,4,5,8,9,12,14,16,17,18"
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…""

Feature	Beacon, special purpose/general

Acronym: BCNSPP   Code: 9

Type: G

Primitive: P

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

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 special purpose beacon is primarily used to indicate an area or features, the nature of which is apparent from reference to a chart, Sailing Directions or Notices to Mariners. (UKHO NP 735, 5th Edition). Beacon in general: A beacon whose appearance or purpose is not adequately known.

<u>Attribute Bindings:</u>

acronym	usage	constraints
MARSYS	C	value list = "1,2"
CONDTN	O	value list = "1,2,3,5"
COLPAT	O	value list = "1,2,3,4,5,6"
HEIGHT	O	unit = "m" decimal digits = "2"
VERLEN	O	unit = "m" decimal digits = "1"
BCNSHP	M	value list = "1,2,3,4,5,6,7"
CATSPM	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56"
COLOUR	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13"
CONRAD	M	value list = "3"
OBJNAM	O	
NOBJNM	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
INFORM	O	

acronym	usage	constraints
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
NTXTDS	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
STATUS	O	value list = "5"

Feature	Building, single

Acronym: BUISGL   Code: 12

Type: G

Primitive: P,A

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

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

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

<u>Attribute Bindings:</u>

acronym	usage	constraints
CONVIS	O	value list = "1,2"
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

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

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

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

<u>Attribute Bindings:</u>

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

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	
mmsico	O	format = "xxxxxxxxx"
STATUS	O	value list = "5"

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	
mmsico	O	format = "xxxxxxxxx"
STATUS	O	value list = "5"

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	
typatn	O	value list = "1,2,3"
mmsico	O	format = "xxxxxxxxx"
STATUS	O	value list = "5"

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	
mmsico	O	format = "xxxxxxxxx"
STATUS	O	value list = "5"

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 = "1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56"
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	

acronym	usage	constraints
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
typatn	O	value list = "1,2,3"
mmsico	O	format = "xxxxxxxxx"
STATUS	O	value list = "5"

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 = "5,18"
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	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"

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 = "5,18"
DATSTA	O	format = "ccyymmdd"
DATEND	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"
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	Cargo Transhipment Area

Acronym: CTSARE   Code: 25

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

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

Definition: An area designated for the transfer of cargo from one vessel to another. (adapted from IHO Dictionary, S-32, 5th Edition, 5593).

Attribute Bindings:

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

Feature	Causeway

Acronym: CAUSWY   Code: 26

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

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

Definition: A raised way across low or wet ground or water. (IHO Dictionary, S-32, 5th Edition, 662)

Attribute Bindings:

acronym	usage	constraints
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
CONDTN	O	value list = "1,2,3,5"
WATLEV	M	value list = "2,4"
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
TXTDSC	O	
NTXTDS	O	
PICREP	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	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"
STATUS	O	value list = "5"

Feature	Coastguard station

Acronym: CGUSTA   Code: 29

Type: G

Primitive: P

Data Dictionary (DD) Reference:

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

Definition: Watch keeping stations at which a watch is kept either continuously, or at certain times only. (IHO Chart Specifications, M-4)

Attribute Bindings:

acronym	usage	constraints
COMCHA	M	format = "[[XXXX];[XXXX];....]"
OBJNAM	O	
NOBJNM	O	
STATUS	C	value list = "1,2,3,4,5,6,7,8,9,11,12,13,14,15,16,17,18"
INFORM	O	
NINFOM	O	
TXTDSC	O	
NTXTDS	O	
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
PICREP	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"
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	
HORACC	O	decimal digits = "2" unit = "m"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

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"
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	
vcrlev	O	
vcrval	O	unit = "m" decimal digits = "2"
HORACC	O	unit = "m" decimal digits = "2"

acronym	usage	constraints
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"
STATUS	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"
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	
vcrlev	O	
vcrval	O	unit = "m" decimal digits = "2"
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

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"
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	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

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	
STATUS	O	value list = "5"

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..."
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

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 = "2"
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
PICREP	O	
INFORM	O	
NINFOM	O	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

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	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

Feature	Dry dock

Acronym: DRYDOC

Code: 47

Type: G

Primitive: A

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

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)

<u>Attribute Bindings:</u>

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	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

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

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

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)

<u>Attribute Bindings:</u>

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"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

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"
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	
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 = "2,3,4,5,8,9,12,14,16,17"
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	
unlocd	C	

Feature	Fishing facility

Acronym: FSHFAC

Code: 55

Type: G

Primitive: P,L,A

Data Dictionary (DD) Reference:

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

Definition: A structure in shallow water for fishing purposes which can be an obstruction to ships in general. The position of these structures may vary frequently over time.

Attribute Bindings:

acronym	usage	constraints
CATFIF	O	value list = "1,2,3,4"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
STATUS	C	value list = "2,4,5"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
VERLEN	O	unit = "m" decimal digits = "1"
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
TXTDSC	O	
NTXTDS	O	
PICREP	O	

Feature	Floating dock

Acronym: FLODOC   Code: 57

Type: G

Primitive: A

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

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)

<u>Attribute Bindings:</u>

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	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
sdrlev	O	
sdrval	O	unit = "m" decimal digits = "2"

acronym	usage	constraints
vcrlev	O	
vcrval	O	unit = "m" decimal digits = "2"
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"
STATUS	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 = "LL.L + (EE.E)"
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	
STATUS	O	value list = "5"

Feature	Fortified Structure

Acronym: FORSTC   Code: 59

Type: G

Primitive: P,L,A

Data Dictionary (DD) Reference:

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

Definition: A structure for the military defence of a site.

Attribute Bindings:

acronym	usage	constraints
CATFOR	M	value list = "1,2,3,4,5,6"
CONDTN	O	value list = "2"
CONVIS	O	value list = "1,2"
NATCON	O	value list = "1,2,6,7"
OBJNAM	O	
NOBJNM	O	
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
TXTDSC	O	
NTXTDS	O	
PICREP	O	

Feature	Free port area

Acronym: FRPARE   Code: 60

Type: G

Primitive: A

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

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)

<u>Attribute Bindings:</u>

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	
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 = "4,23,30"
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	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
vcrlev	O	
vcrval	O	unit = "m" decimal digits = "2"
HORACC	O	unit = "m" decimal digits = "2"

acronym	usage	constraints
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

Feature	Gridiron

Acronym: GRIDRN   Code: 62

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

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

Definition: A structure in the intertidal zone serving as a support for vessels at low stages of the tide to permit work on the exposed portion of the vessel's hull. Also called careening grid. (adapted from IHO Dictionary, S-32, 5th Edition, 649)

Attribute Bindings:

acronym	usage	constraints
HORLEN	O	unit = "m" decimal digits = "1"
HORWID	O	unit = "m" decimal digits = "1"
VERLEN	O	unit = "m" decimal digits = "1"
NATCON	O	value list = "2,6"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
STATUS	O	value list = "4,8,14"
CONDTN	O	value list = "1,2,5"
WATLEV	O	value list = "3,4"
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
PICREP	O	
TXTDSC	O	
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	
STATUS	O	value list = "5"

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	
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

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	
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	
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

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

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).

<u>Attribute Bindings:</u>

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	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
VERLEN	O	unit = "defined in hunits" decimal digits = "1"
COLOUR	O	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13"

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 = "3,4,7,8"
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 = "LL.L + (EE.E)"
STATUS	C	value list = "2,3,4,5.8,9,12,14,16,17"
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	unit = "defined in hunits" decimal digits = "1"
VALNMR	O	

Feature	Magnetic Variation

Acronym: MAGVAR								Code: 81

Type: G

Primitive: P,L,A

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

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

Definition: The angle between the magnetic and geographic (true) north at a location, expressed in degrees east or west from the direction of true north

<u>Attribute Bindings:</u>

acronym	usage	constraints
NTXTDS	O	
VALMAG	M	format = "sxx.xx"
VALACM	M	format = "sxx.xx"
RYRMGV	M	format = "ccyy"
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…"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"

Feature	Marine farm/culture

Acronym: MARCUL

Code: 82

Type: G

Primitive: P,L,A

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

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.

<u>Attribute Bindings:</u>

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	unit = "m" decimal digits = "2"
WATLEV	C	value list = "1,2,3,4,5,7"
STATUS	C	value list = "2,4,5"
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	Military practice area

Acronym: MIPARE   Code: 83

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

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

Definition: An area within which naval, military or aerial exercises are carried out. Also called an exercise area.

Attribute Bindings:

acronym	usage	constraints
RESTRN	O	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13,14,,2715,16,17,18,19,20,21,22,23,24,25,26"
CATMPA	O	value list = "2,3,4,5,6"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
NTXTDS	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…"
STATUS	O	value list = "2,4,5"

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 = "1,2,3,4,5,7"
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	
COLOUR	O	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13"
BOYSHP	C	value list = "2,3,7"

acronym	usage	constraints
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"
STATUS	O	value list = "5"

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	
STATUS	O	value list = "5"

Feature	New Object

Acronym: NEWOBJ

Code: 163

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	
mmsico	O	format = "xxxxxxxxx"
STATUS	O	value list = "5"

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	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
EXPSOU	C	value list = "1,2,3"
NATCON	O	value list = "1,2,3,4,6,7,8"
QUASOU	O	value list = "2,6,7,8"
HORACC	O	unit = "m" decimal digits = "2"

acronym	usage	constraints
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

Feature	Offshore platform

Acronym: OFSPLF   Code: 87

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

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

Definition: A permanent offshore structure, either fixed or floating, used in the production of oil or natural gas. (IHO Dictionary, S-32, 5th Edition, 3895)

Attribute Bindings:

acronym	usage	constraints
INFORM	O	
NINFOM	O	
CATOFP	M	value list = "1,2,3,4,5,6,7,9"
COLOUR	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13"
COLPAT	O	value list = "1,2,3,4,5,6"
CONDTN	O	value list = "1,2,5"
CONRAD	O	value list = "1,2,3"
CONVIS	O	value list = "1,2"
HEIGHT	O	unit = "m" decimal digits = "2"
NATCON	O	value list = "2,7,8"
OBJNAM	O	
NOBJNM	O	
PRODCT	O	value list = "1,2,18,19"
STATUS	O	value list = "2,4,7,12,16,17"
VERLEN	O	unit = "m" decimal digits = "1"
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
DATSTA	O	format = "ccyymmdd"

acronym	usage	constraints
DATEND	O	format = "ccyymmdd"
PICREP	O	
TXTDSC	O	
NTXTDS	O	

Feature	Offshore production area

Acronym: OSPARE   Code: 88

Type: G

Primitive: A

Data Dictionary (DD) Reference:

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

Definition: An area off or away from the shore within which there are production facilities.

Attribute Bindings:

acronym	usage	constraints
INFORM	O	
NINFOM	O	
CATPRA	M	value list = "4,9"
CONDTN	O	value list = "1,2,3,4,5"
CONRAD	O	value list = "1,2,3"
CONVIS	O	value list = "1,2"
NATCON	O	value list = "2,7,8"
OBJNAM	O	
NOBJNM	O	
RESTRN	M	value list = "1,2,7,8,14"
STATUS	O	value list = "2,4,7,12,16,17"
VERLEN	O	unit = "m" decimal digits = "1"
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PICREP	O	
TXTDSC	O	
NTXTDS	O	

acronym	usage	constraints
HEIGHT	O	unit = "m" decimal digits = "2"

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"
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"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
VERLEN	O	unit = "defined in hunits" decimal digits = "1"
HEIGHT	O	unit = "defined in hunits" decimal digits = "1"
COLOUR	O	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"
HORACC	O	unit = "m" decimal digits = "2"

acronym	usage	constraints
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"
STATUS	O	

Feature	Pilot boarding place

Acronym: 		PILBOP										Code: 		91

Type: 		G

Primitive: 		P,A

Data Dictionary (DD) Reference:

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

Definition: 	The meeting place to which the pilot comes out. (IHO Chart Specifications, M-4)

Attribute Bindings:

acronym	usage	constraints
CATPIL	O	value list = "1,2,3"
COMCHA	O	format = "[[XXXX];[XXXX];….]"
PILDST	O	
NPLDST	O	
OBJNAM	O	
NOBJNM	O	
STATUS	C	value list = "1,2,3,4,5,6,7,8,9,11,12,13,14,15,16,17,18"
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	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"

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"
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"
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	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"
STATUS	O	value list = "5"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"

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"
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

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

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.

<u>Attribute Bindings:</u>

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"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

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 line

Acronym: RADLNE   Code: 99

Type: G

Primitive: L

Data Dictionary (DD) Reference:

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

Definition: A track along which ships may be guided by coastal radar stations in the event of bad visibility. Also known as a radar guided track. (IHO Dictionary, S-32, 5th Edition, 4146).

Attribute Bindings:

acronym	usage	constraints
ORIENT	M	unit = "deg" decimal digits = "2"
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	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	
STATUS	O	value list = "5"

Feature	Radar transponder beacon

Acronym: RTPBCN   Code: 103

Type: G

Primitive: P

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

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)

<u>Attribute Bindings:</u>

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	

acronym	usage	constraints
STATUS	O	value list = "5"

Feature	Railway

Acronym: RAILWY

Code: 106

Type: G

Primitive: L

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

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)

<u>Attribute Bindings:</u>

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	
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	
STATUS	O	value list = "5"

Feature	Recommended traffic lane part

Acronym: RCTLPT

Code: 110

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

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

Definition: A recommended traffic lane part is an area of a recommended direction of traffic control area within which traffic flow is generally along one bearing. (IHO Definition)

Attribute Bindings:

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

Feature	Rescue Station

Acronym: RSCSTA

Code: 111

Type: G

Primitive: P

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

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

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

<u>Attribute Bindings:</u>

acronym	usage	constraints
catrsc	M	value list = "1,2,4,5,6,7,8,9"
STATUS	O	value list = "2,4,5"
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 = "1,12"
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..."
CATTEV	O	value list = "4,5,6"
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
NTXTDS	O	

acronym   usage   constraints

STATUS   O   value list = "5"

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	
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	
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…"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
INFORM	O	
NINFOM	O	
TXTDSC	O	
NTXTDS	O	
PICREP	O	
STATUS	O	value list = "5"

Feature	Sand waves

Acronym: SNDWAV

Code: 118

Type: G

Primitive: P,L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: A large mobile wave-like sediment feature in shallow water and composed of sand. The wavelength may reach 100 metres, the amplitude may be up to 20 metres.

Attribute Bindings:

acronym	usage	constraints
VERLEN	O	unit = "m" decimal digits = "1"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
SORDAT	O	format = "ccyymmdd"
SORIND	O	format = "cc,cc,ccccc,c…"
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	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"
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"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

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	
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 = "1,2,3,6"
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	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"
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 = "1,2,3,6"
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	
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	
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
STATUS	O	value list = "5"

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"
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	
TECSOU	O	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13,14"
SOUACC	O	unit = "m" decimal digits = "2"

Feature	Survey reliability

Acronym: M_SREL

Code: 310

Type: M

Primitive: A

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

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

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

<u>Attribute Bindings:</u>

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	Tidal stream - flood/ebb

Acronym: TS_FEB

Type: G

Primitive: P,A

Code: 160

Data Dictionary (DD) Reference:

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

Definition: The tidal stream (or tidal current) is a horizontal movement of water associated with the rise and fall of the tide caused by tide-producing forces. (Adapted from IHO Dictionary, S-32, 5th Edition)

Attribute Bindings:

acronym	usage	constraints
CAT_TS	M	value list = "1,2,3"
CURVEL	O	unit = "knot (kt)" decimal digits = "1"
ORIENT	O	unit = "deg" decimal digits = "2"
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
OBJNAM	O	
NOBJNM	O	
TXTDSC	O	
NTXTDS	O	
PICREP	O	

Feature	Tideway

Acronym: TIDEWY

Code: 143

Type: G

Primitive: L,A

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

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

Definition: A natural course in intertidal areas where water flows during the ebb or flow. A channel through which a tidal current runs. (IHO Dictionary, S-32, 5th Edition, 5502)

<u>Attribute Bindings:</u>

acronym	usage	constraints
PICREP	O	
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	

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	
STATUS	O	value list = "5"

Feature	Traffic separation scheme boundary

Acronym: TSSBND

Code: 146

Type: G

Primitive: L

Data Dictionary (DD) Reference:

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

Definition: The outer limit of a traffic lane part or a traffic separation scheme roundabout. (S-57 Edition 3.1, Appendix A – Chapter 1, Page 1.185, November 2000).

Attribute Bindings:

acronym	usage	constraints
CATTSS	O	value list = "1,2,"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
TXTDSC	O	
NTXTDS	O	
PICREP	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
SCAMIN	M	min = "1"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c…"
STATUS	O	value list = "1,2,3,4,6,7,8,9,11,12,13,14,15,16,17,18"

Feature	Traffic separation scheme crossing

Acronym: TSSCRS

Code: 147

Type: G

Primitive: A

Data Dictionary (DD) Reference:

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

Definition: A defined area where traffic lanes cross. (S- 57 Edition 3.1, Appendix A – Chapter 1, Page 1.186, November 2000).

Attribute Bindings:

acronym	usage	constraints
CATTSS	O	value list = "1,2"
RESTRN	C	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13,16,17,18,19,20,21,22,23,24,25,27"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
TXTDSC	O	
NTXTDS	O	
PICREP	O	
STATUS	C	value list = "1,3,6,9"
SCAMIN	M	min = "1"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
SORDAT	O	format = "ccyymmdd"
SORIND	O	format = "cc,cc,ccccc,c…"

Feature	Traffic separation scheme lane part

Acronym: TSSLPT

Code: 148

Type: G

Primitive: A

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

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

Definition: A traffic separation scheme lane part is an area of a traffic lane in which the direction of flow of traffic is generally along one bearing. (Adapted from S-57 Edition 3.1, Appendix A – Chapter 1, Page 1.187, November 2000).

<u>Attribute Bindings:</u>

acronym	usage	constraints
CATTSS	O	value list = "1,2"
ORIENT	C	unit = "deg" decimal digits = "2"
RESTRN	C	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13,16,17,18,19,20,21,22,23,24,25,27"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
TXTDSC	O	
NTXTDS	O	
PICREP	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
SCAMIN	M	min = "1"
SORDAT	O	format = "ccyymmdd"
SORIND	O	format = "cc,cc,ccccc,c…"

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	
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	
PEREND	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
vcrlev	O	
vcrval	O	unit = "m" decimal digits = "2"
NTXTDS	O	
unlocd	O	
HORACC	O	unit = "m" decimal digits = "2"

acronym	usage	constraints
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

Feature	Two-way route part

Acronym: TWRTPT

Code: 152

Type: G

Primitive: A

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

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).

<u>Attribute Bindings:</u>

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"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
STATUS	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	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
EXPSOU	C	value list = "1,2,3"
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

Feature	Unsurveyed area

Acronym: UNSARE

Code: 154

Type: G

Primitive: A

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

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

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

<u>Attribute Bindings:</u>

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	
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	Weed/Kelp

Acronym: WEDKLP   Code: 158

Type: G

Primitive: P,A

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

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

Definition: Seaweed is the general name for marine plants of the Algae class which grow in long narrow ribbons.
              (International Maritime Dictionary, 2nd Ed.)
              Kelp is one of an order (laminariales) of usually large, blade-shaped or vine-like brown algae. (IHO
              Dictionary, S-32, 5th Edition, 2611)

<u>Attribute Bindings:</u>

acronym	usage	constraints
CATWED	M	value list = "1,2,3,4"
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	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	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
EXPSOU	C	value list = "1,2,3"
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"

acronym	usage	constraints
CATTEV	O	value list = "4,5,6"

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 = "2,3,4,5,8,9,12,14,16,17"
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 = "2,3,4,5,8,9,12,14,16,17"
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	
typatn	O	value list = "1,2,3"
mmsico	O	format = "xxxxxxxxx"
STATUS	O	value list = "5"

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 = "2,3,4,5,8,9,12,14,16,17"
trshgd	O	value list = "1,2,3,4,5,6,7,8,9,10"
unlocd	C	
verdat	C	value list = "12,23,24,30,31,32,33,34,35,36,37,38,39,40,41,42,43,45"
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

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

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)

<u>Attribute Bindings:</u>

acronym	usage	constraints
CATBRG	M	value list = "1,3,4,5,7,9,10,11,12,13"
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 = "12,23,24,30,31,32,33,34,35,36,37,38,39,40,41,42,43,45"
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	
vcrlev	O	
vcrval	O	unit = "m" decimal digits = "2"
elevwl	O	unit = "m" decimal digits = "2"
reflev	O	value list = "1,2,3,4,5,6,7,8,9,10"
refgag	C	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"
STATUS	O	value list = "5"

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	
HORACC	O	unit = "m" decimal digits = "1"
VERACC	O	unit = "m" decimal digits = "1"
CATTEV	O	value list = "4,5,6"
STATUS	O	value list = "5"

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	
typatn	O	value list = "1,2,3"
mmsico	O	format = "xxxxxxxxx"
STATUS	O	value list = "5"

Feature	Cable, overhead

Acronym: cblohd   Code: 17012

Type: G

Primitive: L

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

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).

<u>Attribute Bindings:</u>

acronym	usage	constraints
catcbl	M	value list = "1,3,4,5,6,7"
VERCLR	M	unit = "m" decimal digits = "1"
hunits	O	value list = "1,2,3,4,5,6"
verdat	O	value list = "12,23,24,30,31,32,33,34,35,36,37,38,39,40,41,42,43,45"
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"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."

acronym	usage	constraints
NTXTDS	O	
vcrlev	O	
vcrval	O	unit = "m" decimal digits = "2"
refgag	C	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"
STATUS	O	value list = "5"

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	
STATUS	O	value list = "5"

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 = "2,3,4,5,8,9,12,14,16,17"
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 = "12,23,24,30,31,32,33,34,35,36,37,38,39,40,41,42,43,45"
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"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
vcrlev	O	
vcrval	O	unit = "m" decimal digits = "2"

acronym	usage	constraints
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

Feature	Crane

Acronym: cranes   Code: 17030

Type: G

Primitive: P,A

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

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)

<u>Attribute Bindings:</u>

acronym	usage	constraints
CATCRN	O	value list = "2,3,4,5"
VERCLR	O	unit = "m" decimal digits = "2"
verdat	O	value list = "12,23,24,30,31,32,33,34,35,36,37,38,39,40,41,42,43,45"
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	
vcrlev	O	
vcrval	O	unit = "m" decimal digits = "2"
unlocd	C	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"

acronym	usage	constraints
CATTEV	O	value list = "4,5,6"

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	
STATUS	O	value list = "5"

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	
STATUS	O	value list = "5"

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..."
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

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 a distinct location without special installation, used to serve as a reference along the waterway. (Adapted from S-57 Standard). Due to the natural or historic changes in the waterway the distance can deviate from the real distance to the origin.

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"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
STATUS	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 = "12,23,24,30,31,32,33,34,35,36,37,38,39,40,41,42,43,45"
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	
sdrlev	O	

acronym	usage	constraints
sdrval	O	unit = "m" decimal digits = "2"
OBJNAM	O	
NOBJNM	O	
horclw	C	unit = "m" decimal digits = "2"
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"
STATUS	O	value list = "5"

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 = "2,3,4,5,8,9,12,14,16,17"
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..."
unlocd	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 = "12,23,24,30,31,32,33,34,35,36,37,38,39,40,41,42,43,45"
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	
sdrlev	O	
sdrval	O	unit = "m" decimal digits = "2"
vcrlev	O	
vcrval	O	unit = "m" decimal digits = "2"
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"
STATUS	O	value list = "5"

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 = "12,23,24,30,31,32,33,34,35,36,37,38,39,40,41,42,43,45"
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	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
vcrlev	O	

acronym	usage	constraints
vcrval	O	unit = "m" decimal digits = "2"
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

Feature	Harbour area (administrative)

Acronym: hrbare   Code: 17014

Type: G

Primitive: A

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

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.

<u>Attribute Bindings:</u>

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	
STATUS	O	value list = "5"

Feature	Harbour basin

Acronym: hrbbsn

Code: 17056

Type: G

Primitive: A

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

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. Edition).

<u>Attribute Bindings:</u>

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	
STATUS	O	value list = "5"

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	
STATUS	O	value list = "5"

Feature	Hulk

Acronym: hulkes   Code: 17020

Type: G

Primitive: A

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

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

Definition: A permanently moored ship.

<u>Attribute Bindings:</u>

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	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

acronym	usage	constraints
STATUS	O	value list = "5"

Feature	Lock basin

Acronym: lokbsn

Code: 17016

Type: G

Primitive: A

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

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)

<u>Attribute Bindings:</u>

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	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"
STATUS	O	value list = "5"

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	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"
STATUS	O	value list = "5"

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..."
ORIENT	C	unit = "deg" decimal digits = "2"

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 - 123"
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 = "2,3,4,5,8,9,12,14,16,17"
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	
mmsico	O	format = "xxxxxxxxx"

Feature	Pipeline, overhead

Acronym: pipohd   Code: 17024

Type: G

Primitive: L

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

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.

<u>Attribute Bindings:</u>

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 = "12,23,24,30,31,32,33,34,35,36,37,38,39,40,41,42,43,45"
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"
SORDAT	C	format = "ccyymmdd"

acronym	usage	constraints
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
vcrlev	O	
vcrval	O	unit = "m" decimal digits = "2"
refgag	C	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

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	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

acronym	usage	constraints
STATUS	O	value list = "5"

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 passengers 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	
STATUS	O	value list = "5"

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	
STATUS	O	value list = "5"

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	
STATUS	O	value list = "5"

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 = "1,4,5,9,12,19,22,23,25,26,33"
restrn	M	value list = "1,2,7,8,13,14,27,28,29,30,31,32,33,34,35,36,37,38,40,41"
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	
STATUS	O	value list = "5"

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
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
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	
STATUS	O	value list = "5"

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"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

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	
STATUS	O	value list = "5"

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	
STATUS	O	value list = "5"

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 = "12,23,24,30,31,32,33,34,35,36,37,38,39,40,41,42,43,45"
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	
STATUS	O	value list = "5"

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..."
STATUS	O	value list = "5"

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	
STATUS	O	value list = "5"

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	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	
EXPSOU	C	value list = "1,2,3"
HORACC	O	unit = "m" decimal digits = "1"
VERACC	O	unit = "m" decimal digits = "1"
CATTEV	O	value list = "4,5,6"

Feature	Vehicle transfer

Acronym: vehtrf

Code: 17069

Type: G

Primitive: P,A

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

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.

<u>Attribute Bindings:</u>

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 = "12,23,24,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,45"
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..."
vcrlev	O	

acronym	usage	constraints
vcrval	O	unit = "m" decimal digits = "2"
NTXTDS	O	
STATUS	O	value list = "5"

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 = "12,23,30,31,32,33,34,35,36,37,38,39,40,41,42,43,45"

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..."
STATUS	O	value list = "5"
NTXTDS	O	

Feature	Waterway axis

Acronym: wtwaxs

Code: 17051

Type: G

Primitive: L

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

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 waterway (Definition of waterway: The waterway covers the entire area of a river or canal).

<u>Attribute Bindings:</u>

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..."
STATUS	O	value list = "5"
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 = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,45"
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..."
STATUS	O	value list = "5"
sdrval	O	unit = "m" decimal digits = "2"
vcrval	O	unit = "m" decimal digits = "2"
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 = "12,23,30,31,32,33,34,35,36,37,38,39,40,41,42,43,45"
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..."
STATUS	O	value list = "5"
sdrlev	O	

acronym	usage	constraints
sdrval	O	unit = "m" decimal digits = "2"
NTXTDS	O	
HORACC	O	unit = "m" decimal digits = "2"
VERACC	O	unit = "m" decimal digits = "2"
CATTEV	O	value list = "4,5,6"

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)

Value   Data Dictionary (DD) Reference

6   DD Name: HYDRO   Code: BCNSHP_6   Date accepted: 2000-11-01

             Name: cairn

             Definition: a mound of stones, usually conical or pyramidal, raised specifically for maritime navigation.
             (adapted from IHO Dictionary, S-32, 5th Edition, 601).

7   DD Name: HYDRO   Code: BCNSHP_7   Date accepted: 2000-11-01

             Name: buoyant beacon

             Definition: a tall spar-like beacon fitted with a permanently submerged buoyancy chamber, the lower end
             of the body is secured to seabed sinker either by a flexible joint or by a cable under tension. (IHO
             Specifications, M-4, 459.1)

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.

7   DD Name: HYDRO   Code: BOYSHP_7   Date accepted: 2000-11-01

             Name: super-buoy

             Definition: a very large buoy, generally more than 5m in diameter

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)

11   DD Name: HYDRO   Code: CATBRG_11   Date accepted: 2000-11-01

           Name: aqueduct

           Definition: a bridge supporting an artificially elevated channel, for the conveyance of water. (adapted from
           The New Shorter English Dictionary, 1993)

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 Encylopaedia of
           Science and Technologu, 7th Edition, 1992)

13   DD Name: IENC   Code: CATBRG_13   Date accepted: 2000-11-01

           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

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

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

Definition:

<u>Enumerations:</u>

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

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

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

Definition:

<u>Enumerations:</u>

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 fishing facility

Acronym: CATFIF   Code: 26

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of fishing facility

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATFIF_1   Date accepted: 2000-11-01

             Name: fishing stake

             Definition: a pole or stake placed in shallow water to outline a fishing ground or to catch fish

2   DD Name: HYDRO   Code: CATFIF_2   Date accepted: 2000-11-01

             Name: fish trap

             Definition: a structure (usually portable) for catching fish

3   DD Name: HYDRO   Code: CATFIF_3   Date accepted: 2000-11-01

             Name: fish weir

             Definition: a fence of stakes or stones set in a river or along the shore to trap fish

4   DD Name: HYDRO   Code: CATFIF_4   Date accepted: 2000-11-01

             Name: tunny net

             Definition: a net built at sea for catching tunny.

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 fortified structure

Acronym: CATFOR   Code: 28

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of fortified structure

Enumerations:

Value	Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATFOR_1   Date accepted: 2000-11-01

           Name: castle

           Definition: a large fortified building or structure

2   DD Name: HYDRO   Code: CATFOR_2   Date accepted: 2000-11-01

           Name: fort

           Definition: a fortified enclosure, building, or position able to be defended against an enemy

3   DD Name: HYDRO   Code: CATFOR_3   Date accepted: 2000-11-01

           Name: battery

           Definition: a fortified structure on which artillery is mounted

4   DD Name: HYDRO   Code: CATFOR_4   Date accepted: 2000-11-01

           Name: blockhouse

           Definition: a concrete structure strengthened to give protection against enemy fire, with apertures to allow
           defensive gunfire

5   DD Name: HYDRO   Code: CATFOR_5   Date accepted: 2000-11-01

           Name: martello tower

           Definition: a round fort for coastal defence

6   DD Name: HYDRO   Code: CATFOR_6   Date accepted: 2000-11-01

           Name: redoubt

Value   Data Dictionary (DD) Reference

Definition: an outwork or fieldwork usually square or polygonal and without flanking defences.

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

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

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

Definition:

<u>Enumerations:</u>

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 military practice area

Acronym: CATMPA   Code: 39

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of military practice area

Enumerations:

Value   Data Dictionary (DD) Reference

2   DD Name: HYDRO   Code: CATMPA_2   Date accepted: 2000-11-01

Name: torpedo exercise area

Definition: an area within which exercises are carried out with torpedos

3   DD Name: HYDRO   Code: CATMPA_3   Date accepted: 2000-11-01

Name: submarine exercise area

Definition: an area within which submarine exercises are carried out.

4   DD Name: HYDRO   Code: CATMPA_4   Date accepted: 2000-11-01

Name: firing danger area

Definition: areas for bombing and missile exercises.

5   DD Name: HYDRO   Code: CATMPA_5   Date accepted: 2000-11-01

Name: mine-laying practice area

Definition: an area within which mine laying exercises are carried out.

6   DD Name: HYDRO   Code: CATMPA_6   Date accepted: 2000-11-01

Name: small arms firing range

Definition: an area for shooting pistols, rifles and machine guns etc. at a target.

Attribute	Category of mooring/warping facility

Acronym: CATMOR   Code: 40

Use Type: F

Value Type: E

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

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

Definition:

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

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.

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)

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.

Value   Data Dictionary (DD) Reference

2   DD Name: HYDRO   Code: CATMOR_2   Date accepted: 2000-11-01

             Name: deviation dolphin

             Definition: a post or group of posts, which a vessel may swing around for compass adjustment.

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 offshore platform

Acronym: CATOFP

Code: 43

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: Category of offshore platform

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATOFP_1   Date accepted: 2000-11-01

Name: oil derrick/rig

Definition: a temporary mobile structure, either fixed or floating, used in the exploration stages of oil and gas fields. (IHO Dictionary, S-32, 5th Edition)

2   DD Name: HYDRO   Code: CATOFP_2   Date accepted: 2000-11-01

Name: production platform

Definition: a term used to indicate a permanent offshore structure equipped to control the flow of oil or gas. It does not include entirely submarine structures. (IHO Dictionary, S-32, 5th Edition, 4037)

3   DD Name: HYDRO   Code: CATOFP_3   Date accepted: 2000-11-01

Name: observation/research platform

Definition: a platform from which one=s surroundings or events can be observed, noted or recorded such as for scientific study. (adapted from IHO Dictionary, S-32, 5th Edition, 3493/3500)

4   DD Name: HYDRO   Code: CATOFP_4   Date accepted: 2000-11-01

Name: articulated loading platform (ALP)

Definition: a metal lattice tower, buoyant at one end and attached at the other by a universal joint to a concrete filled base on the sea bed. The platform may be fitted with a helicopter platform, emergency accommodation and hawser/hose retrieval. (adapted from United Kingdom Hydrographic Office CSDO 607.2 (12), May 1994)

5   DD Name: HYDRO   Code: CATOFP_5   Date accepted: 2000-11-01

Name: single anchor leg mooring

Value		Data Dictionary (DD) Reference

Definition:	a rigid frame or tube with a buoyancy device at its upper end , secured at its lower end to a universal joint on a large steel or concrete base resting on the sea bed, and at its upper end to a mooring buoy by a chain or wire. (adapted from United Kingdom Hydrographic Office CSDO 607.2 (12), May 1994)

6		DD Name:	HYDRO		Code:	CATOFP_6		Date accepted:	2000-11-01

Name:		mooring tower

Definition:	a platform secured to the sea bed and surmounted by a turntable to which ships moor. (adapted from United Kingdom Hydrographic Office CSDO 607.2 (12), May 1994)

7		DD Name:	HYDRO		Code:	CATOFP_7		Date accepted:	2000-11-01

Name:		artificial island

Definition:	a man-made structure usually built for the exploration or exploitation of marine resources, marine scientific research, tidal observations, etc. (adapted from IHO Dictionary, S-32, 5th Edition, 240)

9		DD Name:	HYDRO		Code:	CATOFP_9		Date accepted:	2000-11-01

Name:		accommodation platform

Definition:	a platform used primarily for eating, sleeping and recreation purposes.

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 pilot boarding place

Acronym: CATPIL

Code: 46

Use Type: F

Value Type: L

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

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

Definition: Category of pilot boarding place.

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATPIL_1   Date accepted: 2000-11-01

          Name: boarding by pilot-cruising vessel

          Definition: pilot boards from a cruising vessel.

2   DD Name: HYDRO   Code: CATPIL_2   Date accepted: 2000-11-01

          Name: boarding by helicopter

          Definition: pilot boards by helicopter which comes out from the shore.

3   DD Name: HYDRO   Code: CATPIL_3   Date accepted: 2000-11-01

          Name: pilot comes out from shore

          Definition: pilot boards from a vessel which comes out from the shore on request.

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.

1   DD Name: HYDRO   Code: CATREA_1   Date accepted: 2000-11-01

           Name: offshore safety zone

           Definition: the area around an offshore installation within which vessels are prohibited from entering
           without permission; special regulations protect installations within a safety zone and vessels of all
           nationalities are required to respect the zone

33   DD Name: IENC   Code: CATREA_33   Date accepted: 2017-11-06

           Name: ship pollution emission control

           Definition: an area set up to regulate ship pollution emissions

Attribute	Category of road

Acronym: CATROD

Code: 57

Use Type: F

Value Type: E

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

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

Definition:

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

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

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

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

Definition: Category of runway

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATRUN_1   Date accepted: 2000-11-01

        Name: aeroplane runway

        Definition: a level stretch of land where aeroplanes take off and land

2   DD Name: HYDRO   Code: CATRUN_2   Date accepted: 2000-11-01

        Name: helicopter landing pad

        Definition: a site on which helicopters may land and take off

Attribute	Category of sea area

Acronym: CATSEA

Code: 59

Use Type: F

Value Type: E

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

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

Definition:

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

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.

53   DD Name: HYDRO   Code: CATSEA_53   Date accepted: 2000-11-01

Name: river

Definition: a relatively large natural stream of water.

52   DD Name: HYDRO   Code: CATSEA_52   Date accepted: 2000-11-01

Name: lake

Definition: a large body of water entirely surrounded by land.

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.

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

Value	Data Dictionary (DD) Reference

sea extending into the land

5	DD Name: HYDRO	Code: CATSEA_5	Date accepted: 2000-11-01

Name: bay

Definition: an indentation in the coastline

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

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

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

Definition:

<u>Enumerations:</u>

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)

1   DD Name: HYDRO   Code: CATSLO_1   Date accepted: 2000-11-01

             Name: cutting

             Definition: an excavation through high ground for a road, canal, etc.

Attribute	Category of small craft facility

Acronym: CATSCF   Code: 65

Use Type: F

Value Type: L

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

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

Definition:

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATSCF_1   Date accepted: 2000-11-01

          Name: visitor's berth

          Definition: a berth set aside for the use of visiting vessels.

2   DD Name: HYDRO   Code: CATSCF_2   Date accepted: 2000-11-01

          Name: nautical club

          Definition: a club for mariners generally associated with other small craft facilities.

3   DD Name: HYDRO   Code: CATSCF_3   Date accepted: 2000-11-01

          Name: boat hoist

          Definition: a hoist for lifting boats out of the water.

4   DD Name: HYDRO   Code: CATSCF_4   Date accepted: 2000-11-01

          Name: sailmaker

          Definition: a place where sails are made or may be taken for repair.

5   DD Name: HYDRO   Code: CATSCF_5   Date accepted: 2000-11-01

          Name: boatyard

          Definition: a place on shore where boats may be built, stored and repaired.

6   DD Name: HYDRO   Code: CATSCF_6   Date accepted: 2000-11-01

          Name: public inn

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

Value	Data Dictionary (DD) Reference

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

9   DD Name: HYDRO   Code: CATSPM_9   Date accepted: 2000-11-01

               Name: ODAS (Ocean-Data-Acqusition-System)

               Definition: Ocean Data Acqusition System (IHO Dictionary, S-32, 5th Edition, 5953

15   DD Name: HYDRO   Code: CATSPM_15   Date accepted: 2000-11-01

               Name: LANBY (Large Automatic Navigational Buoy)

               Definition: a large buoy designed to take the place of a lightship where construction of an offshore light
               station is not feasible. (IHO Dictionary, S-32, 5th Edition, 2656)

53   DD Name: HYDRO   Code: CATSPM_53   Date accepted: 2000-11-01

               Name: wellhead mark

               Definition: a mark indicating a borehole that produces or is capable of producing oil or natural gas.
               (adapted from IHO Dictionary, S-32, 5th Edition, 5971)

56   DD Name: HYDRO   Code: CATSPM_56   Date accepted: 2000-11-01

               Name: artificial reef mark

               Definition: a mark indicating the existence or the extent of an artificial reef.

1   DD Name: HYDRO   Code: CATSPM_1   Date accepted: 2000-11-01

               Name: firing danger area mark

               Definition: a mark used to indicate a firing danger area, usually at sea.

2   DD Name: HYDRO   Code: CATSPM_2   Date accepted: 2000-11-01

Value	Data Dictionary (DD) Reference

Name: target mark

Definition: any object toward which something is directed. The distinctive marking or instrumentation of a ground point to aid its identification on a photograph.

| 3 | DD Name: HYDRO   Code: CATSPM_3   Date accepted: 2000-11-01 |

Name: marker ship mark

Definition: a mark marking the position of a ship which is used as a target during some military exercise.

| 4 | DD Name: HYDRO   Code: CATSPM_4   Date accepted: 2000-11-01 |

Name: degaussing range mark

Definition: a mark used to indicate a degaussing range,

| 5 | DD Name: HYDRO   Code: CATSPM_5   Date accepted: 2000-11-01 |

Name: barge mark

Definition: a mark of relevance to barges.

| 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 land.

| 7 | DD Name: HYDRO   Code: CATSPM_7   Date accepted: 2000-11-01 |

Name: spoil ground mark

Definition: a mark used to indicate the limit of a spoil ground.

| 8 | DD Name: HYDRO   Code: CATSPM_8   Date accepted: 2000-11-01 |

Name: outfall mark

Definition: a mark used to indicate the position of an outfall or the point at which it leaves 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.

| 11 | DD Name: HYDRO   Code: CATSPM_11   Date accepted: 2000-11-01 |

Name: seaplane anchorage mark

Definition: a mark used to indicate a seaplane anchorage.

| 12 | DD Name: HYDRO   Code: CATSPM_12   Date accepted: 2000-11-01 |

Name: recreation zone mark

Value   Data Dictionary (DD) Reference

               Definition: a mark used to indicate a recreation zone.

13   DD Name: HYDRO   Code: CATSPM_13   Date accepted: 2000-11-01

               Name: private mark

               Definition: a privately maintained mark

14   DD Name: HYDRO   Code: CATSPM_14   Date accepted: 2000-11-01

               Name: mooring mark

               Definition: a mark indicating a mooring or moorings.

16   DD Name: HYDRO   Code: CATSPM_16   Date accepted: 2000-11-01

               Name: leading mark

               Definition: aids to navigation or other indicators so located as to indicate the path to be followed. Leading
               marks identify a leading line when they are in transit

17   DD Name: HYDRO   Code: CATSPM_17   Date accepted: 2000-11-01

               Name: measured distance mark

               Definition: a mark forming part of a transit indicating one end of a measured distance.

18   DD Name: HYDRO   Code: CATSPM_18   Date accepted: 2000-11-01

               Name: notice mark

               Definition: a notice board or sign indicating information to the mariner.

19   DD Name: HYDRO   Code: CATSPM_19   Date accepted: 2000-11-01

               Name: TSS mark

               Definition: a mark indicating a traffic separation scheme

20   DD Name: HYDRO   Code: CATSPM_20   Date accepted: 2000-11-01

               Name: anchoring prohibited mark

               Definition: a mark indicating an anchoring prohibited area.

21   DD Name: HYDRO   Code: CATSPM_21   Date accepted: 2000-11-01

               Name: berthing prohibited mark

               Definition: a mark indicating that berthing is prohibited.

22   DD Name: HYDRO   Code: CATSPM_22   Date accepted: 2000-11-01

               Name: overtaking prohibited mark

               Definition: a mark indicating that overtaking is prohibited.

Value	Data Dictionary (DD) Reference				

23	DD Name: HYDRO	Code: CATSPM_23	Date accepted: 2000-11-01

Name: two-way traffic prohibited mark

Definition: a mark indicating a one-way route.

24	DD Name: HYDRO	Code: CATSPM_24	Date accepted: 2000-11-01

Name: 'reduced wake' mark

Definition: a mark indicating that vessels must not generate excessive wake.

25	DD Name: HYDRO	Code: CATSPM_25	Date accepted: 2000-11-01

Name: speed limit mark

Definition: a mark indicating that a speed limit applies.

26	DD Name: HYDRO	Code: CATSPM_26	Date accepted: 2000-11-01

Name: stop mark

Definition: a mark indicating the place where the bow of a ship must stop when traffic lights show red.

27	DD Name: HYDRO	Code: CATSPM_27	Date accepted: 2000-11-01

Name: general warning mark

Definition: a mark indicating that special caution must be exercised in the vicinity of the mark.

28	DD Name: HYDRO	Code: CATSPM_28	Date accepted: 2000-11-01

Name: 'sound ship's siren' mark

Definition: a mark indicating that a ship should sound its siren or horn.

29	DD Name: HYDRO	Code: CATSPM_29	Date accepted: 2000-11-01

Name: restricted vertical clearance mark

Definition: a mark indicating the minimum vertical space available for passage.

30	DD Name: HYDRO	Code: CATSPM_30	Date accepted: 2000-11-01

Name: maximum vessel's draught mark

Definition: a mark indicating the maximum draught of vessel permitted.

31	DD Name: HYDRO	Code: CATSPM_31	Date accepted: 2000-11-01

Name: restricted horizontal clearance mark

Definition: a mark indicating the minimum horizontal space available for passage.

32	DD Name: HYDRO	Code: CATSPM_32	Date accepted: 2000-11-01

Value	Data Dictionary (DD) Reference				

Name: strong current warning mark

Definition: a mark warning of strong currents.

33	DD Name: HYDRO	Code: CATSPM_33	Date accepted:	2000-11-01

Name: berthing permitted mark

Definition: a mark indicating that berthing is allowed.

34	DD Name: HYDRO	Code: CATSPM_34	Date accepted:	2000-11-01

Name: overhead power cable mark

Definition: a mark indicating an overhead power cable.

35	DD Name: HYDRO	Code: CATSPM_35	Date accepted:	2000-11-01

Name: 'channel edge gradient' mark

Definition: a mark indicating the gradient of the slope of a dredge channel edge.

36	DD Name: HYDRO	Code: CATSPM_36	Date accepted:	2000-11-01

Name: telephone mark

Definition: a mark indicating the presence of a telephone.

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.

40	DD Name: HYDRO	Code: CATSPM_40	Date accepted:	2000-11-01

Name: anchorage mark

Definition: a mark indicating an anchorage area.

41	DD Name: HYDRO	Code: CATSPM_41	Date accepted:	2000-11-01

Name: clearing mark

Definition: a mark used to indicate a clearing line.

42	DD Name: HYDRO	Code: CATSPM_42	Date accepted:	2000-11-01

Value	Data Dictionary (DD) Reference
	Name: control mark
	Definition: a mark indicating the location at which a restriction or requirement exists.

43	DD Name: HYDRO Code: CATSPM_43 Date accepted: 2000-11-01
	Name: diving mark
	Definition: a mark indicating that diving may take place in the vicinity.

44	DD Name: HYDRO Code: CATSPM_44 Date accepted: 2000-11-01
	Name: refuge beacon
	Definition: a mark providing or indicating a place of safety.

45	DD Name: HYDRO Code: CATSPM_45 Date accepted: 2000-11-01
	Name: foul ground mark
	Definition: a mark indicating a foul ground.

46	DD Name: HYDRO Code: CATSPM_46 Date accepted: 2000-11-01
	Name: yachting mark
	Definition: a mark installed for use by yachtsmen.

47	DD Name: HYDRO Code: CATSPM_47 Date accepted: 2000-11-01
	Name: heliport mark
	Definition: a mark indicating an area where helicopters may land.

48	DD Name: HYDRO Code: CATSPM_48 Date accepted: 2000-11-01
	Name: GPS mark
	Definition: a mark indicating a location at which a GPS position has been accurately determined.

49	DD Name: HYDRO Code: CATSPM_49 Date accepted: 2000-11-01
	Name: seaplane landing mark
	Definition: a mark indicating an area where sea-planes land.

50	DD Name: HYDRO Code: CATSPM_50 Date accepted: 2000-11-01
	Name: entry prohibited mark
	Definition: a mark indicating that entry is prohibited.

51	DD Name: HYDRO Code: CATSPM_51 Date accepted: 2000-11-01
	Name: work in progress mark
	Definition: a mark indicating that work (generally construction) is in progress.

Value	Data Dictionary (DD) Reference

52   DD Name: HYDRO   Code: CATSPM_52   Date accepted: 2000-11-01

Name: mark with unknown purpose

Definition: a mark whose detailed characteristics are unknown.

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 temporal variation

Acronym: CATTEV

Code: 19000

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2019-05-13

Definition: An assessment of the likelihood of change over time.

Enumerations:

Value   Data Dictionary (DD) Reference

4   DD Name: HYDRO   Code: CATTEV_4   Date accepted: 2019-05-13

          Name: likely to change

          Definition:

5   DD Name: HYDRO   Code: CATTEV_5   Date accepted: 2019-05-13

          Name: unlikely to change

          Definition:

6   DD Name: HYDRO   Code: CATTEV_6   Date accepted: 2019-05-13

          Name: unassessed

          Definition:

Attribute	Category of Tidal stream

Acronym: CAT_TS   Code: 188

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of Tidal stream

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CAT_TS_1   Date accepted: 2000-11-01

             Name: flood stream

             Definition: the horizontal movement of water associated with the rising tide. Flood streams generally set towards the shore, or in the direction of the tide progression. Also called flood, flood current or ingoing stream. (Adapted from IHO Dictionary, S-32, 5th Edition)

2   DD Name: HYDRO   Code: CAT_TS_2   Date accepted: 2000-11-01

             Name: ebb stream

             Definition: the horizontal movement of water associated with falling tide. Ebb streams generally set seaward, or in the opposite direction to the tide progression. Also called ebb, ebb current or outgoing stream. (Adapted from IHO Dictionary, S-32, 5th Edition)

3   DD Name: HYDRO   Code: CAT_TS_3   Date accepted: 2000-11-01

             Name: other tidal flow

             Definition: any other horizontal movement of water associated with tides, eg. rotary flow.

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)

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.

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

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 weed/kelp

Acronym: CATWED   Code: 70

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of week/kelp

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATWED_1   Date accepted: 2000-11-01

               Name: kelp

               Definition: a giant plant sometimes 60 metres long with no roots, it is anchored by hold-fasts or tendrils up
               to 10 metres long, that cling to rock. Gas filled bubbles on fronds act as floats keeping the kelp just below
               the surface. (Earth Sciences References, Mary McNeil)

2   DD Name: HYDRO   Code: CATWED_2   Date accepted: 2000-11-01

               Name: sea weed

               Definition: general name for marine plants of the algae class which grow in long narrow ribbons. Also
               called sea grass. (International Maritime Dictionary, 2nd Edition)

3   DD Name: HYDRO   Code: CATWED_3   Date accepted: 2000-11-01

               Name: sea grass

               Definition: any grasslike marine alga. Eelgrass is one of the best known seagrasses. (IHO Dictionary, S-
               32, 5th Edition, 4565)

4   DD Name: HYDRO   Code: CATWED_4   Date accepted: 2000-11-01

               Name: sargasso

               Definition: a certain type of sea weed, or more generally, a large floating mass of this sea weed. (IHO
               Dictionary, S-32, 5th Edition, 4501)

Attribute	Category of wreck

Acronym: CATWRK   Code: 71

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATWRK_1   Date accepted: 2000-11-01

          Name: non-dangerous wreck

          Definition: a wreck which is not considered to be dangerous to surface navigation.

2   DD Name: HYDRO   Code: CATWRK_2   Date accepted: 2000-11-01

          Name: dangerous wreck

          Definition: a wreck which is considered to be dangerous to surface navigation.

3   DD Name: HYDRO   Code: CATWRK_3   Date accepted: 2000-11-01

          Name: distributed remains of wreck

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

4   DD Name: HYDRO   Code: CATWRK_4   Date accepted: 2000-11-01

          Name: wreck showing mast/masts

          Definition: wreck of which only the mast(s) is visible at the sounding datum indicated.

5   DD Name: HYDRO   Code: CATWRK_5   Date accepted: 2000-11-01

          Name: wreck showing any portion of hull or superstructure

          Definition: wreck of which any portion of the hull or superstructure is visible at the sounding datum indicated.

Attribute	Category of zone of confidence in data

Acronym: CATZOC

Code: 72

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: CATZOC_1   Date accepted: 2000-11-01

Name: zone of confidence A1

Definition:

2   DD Name: HYDRO   Code: CATZOC_2   Date accepted: 2000-11-01

Name: zone of confidence A2

Definition:

3   DD Name: HYDRO   Code: CATZOC_3   Date accepted: 2000-11-01

Name: zone of confidence B

Definition:

4   DD Name: HYDRO   Code: CATZOC_4   Date accepted: 2000-11-01

Name: zone of confidence C

Definition:

5   DD Name: HYDRO   Code: CATZOC_5   Date accepted: 2000-11-01

Name: zone of confidence D

Definition:

6   DD Name: HYDRO   Code: CATZOC_6   Date accepted: 2000-11-01

Name: zone of confidence U (data not assessed)

Definition:

Attribute	Colour

Acronym: COLOUR   Code: 75

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: COLOUR_1   Date accepted: 2000-11-01
             Name: white
             Definition:

2   DD Name: HYDRO   Code: COLOUR_2   Date accepted: 2000-11-01
             Name: black
             Definition:

3   DD Name: HYDRO   Code: COLOUR_3   Date accepted: 2000-11-01
             Name: red
             Definition:

4   DD Name: HYDRO   Code: COLOUR_4   Date accepted: 2000-11-01
             Name: green
             Definition:

5   DD Name: HYDRO   Code: COLOUR_5   Date accepted: 2000-11-01
             Name: blue
             Definition:

6   DD Name: HYDRO   Code: COLOUR_6   Date accepted: 2000-11-01
             Name: yellow
             Definition:

Value	Data Dictionary (DD) Reference						
7	DD Name:	HYDRO	Code:	COLOUR_7	Date accepted:	2000-11-01
	Name:	grey				
	Definition:					
8	DD Name:	HYDRO	Code:	COLOUR_8	Date accepted:	2000-11-01
	Name:	brown				
	Definition:					
9	DD Name:	HYDRO	Code:	COLOUR_9	Date accepted:	2000-11-01
	Name:	amber				
	Definition:					
10	DD Name:	HYDRO	Code:	COLOUR_10	Date accepted:	2000-11-01
	Name:	violet				
	Definition:					
11	DD Name:	HYDRO	Code:	COLOUR_11	Date accepted:	2000-11-01
	Name:	orange				
	Definition:					
12	DD Name:	HYDRO	Code:	COLOUR_12	Date accepted:	2000-11-01
	Name:	magenta				
	Definition:					
13	DD Name:	HYDRO	Code:	COLOUR_13	Date accepted:	2000-11-01
	Name:	pink				
	Definition:					

Attribute	Colour pattern

Acronym: COLPAT   Code: 76

Use Type: F

Value Type: L

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

1   DD Name: HYDRO   Code: CONRAD_1   Date accepted: 2000-11-01

           Name: radar conspicuous

           Definition: an object which returns a strong radar echo. (IHO Dictionary, S-32, 5th Edition, 4142)

2   DD Name: HYDRO   Code: CONRAD_2   Date accepted: 2000-11-01

           Name: not radar conspicuous

           Definition: an object which does not return a particularly strong radar echo.

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

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

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

Definition:

<u>Enumerations:</u>

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	Current velocity

Acronym: CURVEL   Code: 84

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: Current velocity

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 |

Name: radio

Value	Data Dictionary (DD) Reference

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

Name: airship mooring

Value	Data Dictionary (DD) Reference

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 Accuracy

Acronym: HORACC   Code: 97

Use Type: F

Value Type: F

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

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

Definition: The best estimate of the horizontal accuracy of horizontal clearance and distances.

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

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

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)

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)

Value　　　Data Dictionary (DD) Reference

| 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)

| 5 | DD Name: HYDRO | Code: LITCHR_5 | Date accepted: 2000-11-01 |

Name:　　　very quick-flashing

Definition:　a flashing light in which flashes are repeated at a rate of not less than 80 flashes per minute but less than 160 flashes per minute

| 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

| 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

| 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:

| 28 | DD Name: HYDRO | Code: LITCHR_28 | Date accepted: 2000-11-01 |

Value   Data Dictionary (DD) Reference

             Name: alternating

             Definition: a signal light that shows, in any given direction, two or more colours in a regularly repeated
             sequence with a regular periodicity

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

Value   Data Dictionary (DD) Reference

             Definition:

27   DD Name: HYDRO   Code: LITCHR_27   Date accepted: 2000-11-01

             Name: ultra quick-flash plus long-flash

             Definition:

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

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

DD Name: HYDRO   Date accepted: 2008-01-31

Definition:

<u>Enumerations:</u>

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)

7   DD Name: HYDRO   Code: LITVIS_7   Date accepted: 2000-11-01

             Name: obscured

             Definition: said of the arc of a light sector designated by its limiting bearings in which the light is not visible from seaward. (IHO Dictionary, S-32, 5th Edition, 3492)

8   DD Name: HYDRO   Code: LITVIS_8   Date accepted: 2000-11-01

             Name: partially obscured

             Definition: this value specifies that parts of the sector are obscured.

3   DD Name: HYDRO   Code: LITVIS_3   Date accepted: 2000-11-01

             Name: faint

             Definition: a decrease in the apparent intensity of a light which may occur in the case of partial obstructions.

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	Pilot district

Acronym: PILDST

Code: 121

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

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

Definition: The area within which a particular pilotage service operates.

Attribute	Pilot district in national language

Acronym: NPLDST   Code: 302

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

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

Definition: Pilot district (c…): string of national language characters

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

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

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

Definition:

<u>Enumerations:</u>

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)

Value   Data Dictionary (DD) Reference

18   DD Name: HYDRO   Code: PRODCT_18   Date accepted: 2000-11-01

            Name: liquified natural gas (LNG)

            Definition: a compressed gas consisting of flammable light hydrocarbons and derived from natural gas.

19   DD Name: HYDRO   Code: PRODCT_19   Date accepted: 2000-11-01

            Name: liquified petroleum gas (LPG)

            Definition: a compressed gas consisting of flammable light hydrocarbons and derived from petroleum.
            (adapted from Websters Third New)

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

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

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	Reference year for magnetic variation

Acronym: RYRMGV

Code: 130

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

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

Definition: The reference calendar year for magnetic variation values.

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.

2   DD Name: HYDRO   Code: RESTRN_2   Date accepted: 2000-11-01

               Name: anchoring restricted

               Definition: a specified area designated by appropriate authority, within which anchoring is restricted in
               accordance with certain specified conditions.

3   DD Name: HYDRO   Code: RESTRN_3   Date accepted: 2000-11-01

               Name: fishing prohibited

               Definition: an area within which fishing is not permitted.

4   DD Name: HYDRO   Code: RESTRN_4   Date accepted: 2000-11-01

               Name: fishing restricted

               Definition: a specified area designated by appropriate authority, within which fishing is restricted in
               accordance with certain specified conditions.

5   DD Name: HYDRO   Code: RESTRN_5   Date accepted: 2000-11-01

               Name: trawling prohibited

               Definition: an area within which trawling is not permitted.

6   DD Name: HYDRO   Code: RESTRN_6   Date accepted: 2000-11-01

Value	Data Dictionary (DD) Reference

Name: trawling restricted

Definition: a specified area designated by appropriate authority, within which trawling is restricted in accordance with certain specified conditions.

7	DD Name: HYDRO	Code: RESTRN_7	Date accepted: 2000-11-01

Name: entry prohibited

Definition: an area within which navigation and/or anchoring is prohibited.

8	DD Name: HYDRO	Code: RESTRN_8	Date accepted: 2000-11-01

Name: entry restricted

Definition: a specified area designated by appropriate authority, within which navigation is restricted in accordance with certain specified conditions.

9	DD Name: HYDRO	Code: RESTRN_9	Date accepted: 2000-11-01

Name: dredging prohibited

Definition: an area within which dredging is not permitted.

10	DD Name: HYDRO	Code: RESTRN_10	Date accepted: 2000-11-01

Name: dredging restricted

Definition: a specified area designated by appropriate authority, within which dredging is restricted in accordance with certain specified conditions.

11	DD Name: HYDRO	Code: RESTRN_11	Date accepted: 2000-11-01

Name: diving prohibited

Definition: an area within which diving is not permitted.

12	DD Name: HYDRO	Code: RESTRN_12	Date accepted: 2000-11-01

Name: diving restricted

Definition: a specified area designated by appropriate authority, within which diving is restricted in accordance with certain specified conditions.

13	DD Name: HYDRO	Code: RESTRN_13	Date accepted: 2000-11-01

Name: no wake

Definition: mariners must adjust the speed of their vessels to reduce the wave or wash which may cause erosion or disturb moored vessels.

14	DD Name: HYDRO	Code: RESTRN_14	Date accepted: 2000-11-01

Name: area to be avoided

Definition: an IMO designated area to be avoided, defined as a routeing measure.

Value	Data Dictionary (DD) Reference

15	DD Name: HYDRO	Code: RESTRN_15	Date accepted: 2000-11-01

Name: construction prohibited

Definition: the erection of permanent or temporary fixed structures or artificial islands is prohibited.

16	DD Name: HYDRO	Code: RESTRN_16	Date accepted: 2000-11-01

Name: discharging prohibited

Definition: an area within which discharging or dumping is prohibited

17	DD Name: HYDRO	Code: RESTRN_17	Date accepted: 2000-11-01

Name: discharging restricted

Definition: a specified area designated by an appropriate authority, within which discharging or dumping is restricted in accordance with specified conditions.

18	DD Name: HYDRO	Code: RESTRN_18	Date accepted: 2000-11-01

Name: industrial or mineral exploration/development prohibited

Definition: an area within which industrial or mineral exploration and development are prohibited.

19	DD Name: HYDRO	Code: RESTRN_19	Date accepted: 2000-11-01

Name: industrial or mineral exploration/development restricted

Definition: a specified area designated by an appropriate authority, within which industrial or mineral exploration and development is restricted in accordance with certain specified conditions.

20	DD Name: HYDRO	Code: RESTRN_20	Date accepted: 2000-11-01

Name: drilling prohibited

Definition: an area within which excavating a hole on the sea-bottom with a drill is prohibited.

21	DD Name: HYDRO	Code: RESTRN_21	Date accepted: 2000-11-01

Name: drilling restricted

Definition: a specified area designated by an appropriate authority, within which excavating a hole on the sea-bottom with a drill is restricted in accordance with certain specified conditions.

22	DD Name: HYDRO	Code: RESTRN_22	Date accepted: 2000-11-01

Name: removal of historical artifacts prohibited

Definition: an area within which the removal of historical artifacts is prohibited.

23	DD Name: HYDRO	Code: RESTRN_23	Date accepted: 2000-11-01

Name: cargo transhipment (lightering) prohibited

Definition: an area in which cargo transhipment (lightering) is prohibited.

Value	Data Dictionary (DD) Reference

24 DD Name: HYDRO   Code: RESTRN_24   Date accepted: 2000-11-01

Name: dragging prohibited

Definition: an area in which the dragging of anything along the bottom, e.g. bottom trawling, is prohibited.

25 DD Name: HYDRO   Code: RESTRN_25   Date accepted: 2000-11-01

Name: stopping prohibited

Definition: an area in which a vessel is prohibited from stopping.

26 DD Name: HYDRO   Code: RESTRN_26   Date accepted: 2000-11-01

Name: landing prohibited

Definition: an area in which landing is prohibited.

27 DD Name: HYDRO   Code: RESTRN_27   Date accepted: 2000-11-01

Name: speed restricted

Definition: an area within which speed is restricted.

38 DD Name: IENC   Code: restrn_38   Date accepted: 2000-11-01

Name: use of spuds prohibited

Definition: The use of anchoring spuds (telescopic piles) is prohibited

Attribute	Scale minimum

Acronym: SCAMIN   Code: 133

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

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

Definition: The minimum scale at which the object may be used e.g. for ECDIS presentation.

Attribute	Sector limit one

Acronym: SECTR1   Code: 136

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2008-01-31

Definition: A sector is the part of a circle between two straight lines drawn from the centre to the circumference.
                (Advanced Learner=s Dictionary, 2nd Edition) Sector limit 1 specifies the first limit of the sector. The order
                of sector limit 1 and sector limit 2 is clockwise around the central object (e.g. a light).

Attribute	Sector limit two

Acronym: SECTR2   Code: 137

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO   Date accepted: 2008-01-31

Definition: A sector is the part of a circle between two straight lines drawn from the centre to the circumference.
              (Advanced Learner=s Dictionary, 2nd Edition) The sector limit 2 specifies the second limit of the sector.
              The order of sector limit 1 and sector limit 2 is clockwise around the central object (e.g. a light).

Attribute	Signal frequency

Acronym: SIGFRQ

Code: 139

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

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

Definition: The frequency of a signal.

Attribute	Signal generation

Acronym: SIGGEN

Code: 140

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: HYDRO   Code: SIGGEN_1   Date accepted: 2000-11-01

Name: automatically

Definition: signal generation is initiated by a self regulating mechanism such as a timer or light sensor.

2   DD Name: HYDRO   Code: SIGGEN_2   Date accepted: 2000-11-01

Name: by wave action

Definition: the signal is generated by the motion of the sea surface such as a bell in a buoy.

Attribute	Signal group

Acronym: SIGGRP   Code: 141

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

Definition: The number of signals, the combination of signals or the morse character(s) within one period of full
             sequence.

Attribute	Signal period

Acronym: SIGPER   Code: 142

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The time occupied by an entire cycle of intervals of light and eclipse.

Attribute	Signal sequence

Acronym: SIGSEQ   Code: 143

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

Definition: The sequence of times occupied by intervals of light and eclipse for all 'light characteristics' except for occulting where the sequence of times is occupied by intervals of eclipse and light.

Attribute	Sounding accuracy

Acronym: SOUACC   Code: 144

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The best estimate of the accuracy of the sounding data. The maximum of the one-dimensional error. The
                error is assumed to be positive and negative. The plus/minus character shall not be encoded.

Attribute	Source date

Acronym: SORDAT   Code: 147

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

Definition: The production date of the source, e.g. the date of measurement.

Attribute	Source indication

Acronym: SORIND   Code: 148

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

Definition: Information about the source of the object.

Attribute	Status

Acronym: STATUS   Code: 149

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value   Data Dictionary (DD) Reference

2   DD Name: HYDRO   Code: STATUS_2   Date accepted: 2000-11-01

        Name: occasional

        Definition: acting on special occasions; happening irregularly. (The Concise Oxford Dictionary, 7th Edition)

3   DD Name: HYDRO   Code: STATUS_3   Date accepted: 2000-11-01

        Name: recommended

        Definition: presented as worthy of confidence, acceptance, use, etc. (The Macquarie Dictionary, 1988)

4   DD Name: HYDRO   Code: STATUS_4   Date accepted: 2000-11-01

        Name: not in use

        Definition: no longer used for the purpose intended; disused.

8   DD Name: HYDRO   Code: STATUS_8   Date accepted: 2000-11-01

        Name: private

        Definition: not in public ownership or operation.

9   DD Name: HYDRO   Code: STATUS_9   Date accepted: 2000-11-01

        Name: mandatory

        Definition: compulsory; enforced. (The Concise Oxford Dictionary, 7th Edition)

12   DD Name: HYDRO   Code: STATUS_12   Date accepted: 2000-11-01

        Name: illuminated

        Definition: lit by floodlights, strip lights, etc.

Value   Data Dictionary (DD) Reference

14   DD Name: HYDRO   Code: STATUS_14   Date accepted: 2000-11-01

          Name: public

          Definition: belonging to, available to, used or shared by, the community as a whole and not restricted to private use. (adapted from The New Shorter Oxford English Dictionary, 1993)

16   DD Name: HYDRO   Code: STATUS_16   Date accepted: 2000-11-01

          Name: watched

          Definition: looked at or observed over a period of time especially so as to be aware of any movement or change. (adapted from The New Shorter Oxford English Dictionary, 1993)

17   DD Name: HYDRO   Code: STATUS_17   Date accepted: 2000-11-01

          Name: un-watched

          Definition: usually automatic in operation, without any permanently-stationed personnel to superintend it. (adapted from IHO Dictionary, S-32, 5th Edition, 2814)

18   DD Name: HYDRO   Code: STATUS_18   Date accepted: 2000-11-01

          Name: existence doubtful

          Definition: an object that has been reported but has not been definitely determined to exist.

7   DD Name: HYDRO   Code: STATUS_7   Date accepted: 2000-11-01

          Name: temporary

          Definition: meant to last only for a time. (The Concise Oxford Dictionary)

1   DD Name: HYDRO   Code: STATUS_1   Date accepted: 2000-11-01

          Name: permanent

          Definition: intended to last or function indefinitely

5   DD Name: HYDRO   Code: STATUS_5   Date accepted: 2000-11-01

          Name: periodic/intermittent

          Definition: recurring at intervals

6   DD Name: HYDRO   Code: STATUS_6   Date accepted: 2000-11-01

          Name: reserved

          Definition: set apart for some specific use.

11   DD Name: HYDRO   Code: STATUS_11   Date accepted: 2000-11-01

          Name: extinguished

          Definition: no longer lit

Value	Data Dictionary (DD) Reference

13   DD Name: HYDRO   Code: STATUS_13   Date accepted: 2000-11-01

Name: historic

Definition: famous in history; of historical interest

15   DD Name: HYDRO   Code: STATUS_15   Date accepted: 2000-11-01

Name: synchronized

Definition: occur at a time, coincide in point of time, be contemporary or simultaneous

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

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

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

Definition:

<u>Enumerations:</u>

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

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

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

Name: trapezium, up

Value   Data Dictionary (DD) Reference

      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.

31   DD Name: HYDRO   Code: TOPSHP_31   Date accepted: 2000-11-01

Value	Data Dictionary (DD) Reference

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 annual change in magnetic variation

Acronym: VALACM

Code: 173

Use Type: F

Value Type: F

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

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

Definition: The annual change in magnetic variation values.

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 magnetic variation

Acronym: VALMAG   Code: 176

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The magnetic variation value.

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 Accuracy

Acronym: VERACC

Code: 180

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The one-dimensional error. The error is assumed to be positive and negative. The plus/minus character shall not be encoded.

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.

24   DD Name: HYDRO   Code: VERDAT_24   Date accepted: 2000-11-01

             Name: Local datum

             Definition: an arbitrary datum defined by a local harbour authority, from which levels and tidal heights are measured by this authority.

23   DD Name: HYDRO   Code: VERDAT_23   Date accepted: 2000-11-01

             Name: Lowest astronomical tide

             Definition: (LAT) - the lowest tide level which can be predicted to occur under average meterological conditions and under any combination of astronomical conditions. (IHO Dictionary, S-32, 5th Edition, 2936)

30   DD Name: HYDRO   Code: VERDAT_29   Date accepted: 2000-11-01

             Name: Highest astronomical tide

             Definition: (HAT) - the highest tidal level which can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions. (IHO Dictionary, S-32, 5th Edition, 2244).

Attribute	Vertical length

Acronym: VERLEN Code: 186

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: Vertical length

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

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

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

Definition: Shape and position of an additional board on a notice mark

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: addmrk_1   Date accepted: 2001-05-31

Name: top (board)

Definition: a rectangular board at the top of the main sign

2   DD Name: IENC   Code: addmrk_2   Date accepted: 2001-05-31

Name: bottom (board)

Definition: a rectangular board at the bottom of the main sign

3   DD Name: IENC   Code: addmrk_3   Date accepted: 2001-05-31

Name: right (triangle to the right)

Definition: a triangular board at the right side of the main sign

4   DD Name: IENC   Code: addmrk_4   Date accepted: 2001-05-31

Name: left (triangle to the left)

Definition: a triangular board at the left side of the main sign

5   DD Name: IENC   Code: addmrk_5   Date accepted: 2001-05-31

Name: bottom (triangle to the bottom)

Definition: a triangular board at the bottom of the main sign

Attribute	Allowed consumption

Acronym: allcon   Code: 18033

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2014-11-26

Definition: The maximum allowed power that may be used by the vessel

Attribute	Amount of amperage

Acronym: amoamp

Code: 18032

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2014-11-26

Definition: The maximum electric amperage possible

Attribute	Assemblies of ship (excluding)

Acronym: lc_ase

Code: 18015

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Excluding list of assemblies of ships for the applicability of a feature

Enumerations:

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: lc_ase_1 Date accepted: 2001-05-31
Name: all types
Definition:

2 DD Name: IENC Code: lc_ase_2 Date accepted: 2001-05-31
Name: other
Definition:

3 DD Name: IENC Code: lc_ase_3 Date accepted: 2001-05-31
Name: single vessel
Definition:

5 DD Name: IENC Code: lc_ase_5 Date accepted: 2001-05-31
Name: convoy
Definition: a rigid or towed convoy of craft

6 DD Name: IENC Code: lc_ase_6 Date accepted: 2001-05-31
Name: formation
Definition: the manner in which a convoy is assembled

7 DD Name: IENC Code: lc_ase_7 Date accepted: 2001-05-31
Name: rigid convoy
Definition: a pushed convoy or breasted up formation

Value	Data Dictionary (DD) Reference

8   DD Name: IENC   Code: lc_ase_8   Date accepted: 2001-05-31

     Name: pushed convoy

     Definition: a rigid assembly of craft of which at least one is positioned in front of the craft providing the power for propelling the convoy, known as the "pusher(s)"; a convoy composed of a pusher craft and a pushed craft coupled so as to permit guided articulation is also considered as rigid

9   DD Name: IENC   Code: lc_ase_9   Date accepted: 2001-05-31

     Name: breasted up formation

     Definition: an assembly of craft coupled rigidly side by side, none of which is positioned in front of the craft propelling the assembly

10   DD Name: IENC   Code: lc_ase_10   Date accepted: 2001-05-31

     Name: towed convoy

     Definition: an assembly of one or more craft, floating establishments or floating installations towed by one or more self-propelled craft forming part of the convoy

Attribute	Assemblies of ship (including)

Acronym: lc_asi   Code: 18014

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Including list of assemblies of ships for the applicability of a feature

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: lc_asi_1   Date accepted: 2001-05-31
             Name: all types
             Definition:

2   DD Name: IENC   Code: lc_asi_2   Date accepted: 2001-05-31
             Name: other
             Definition:

3   DD Name: IENC   Code: lc_asi_3   Date accepted: 2001-05-31
             Name: single vessel
             Definition:

5   DD Name: IENC   Code: lc_asi_5   Date accepted: 2001-05-31
             Name: convoy
             Definition: a rigid or towed convoy of craft

6   DD Name: IENC   Code: lc_asi_6   Date accepted: 2001-05-31
             Name: formation
             Definition: the manner in which a convoy is assembled

7   DD Name: IENC   Code: lc_asi_7   Date accepted: 2001-05-31
             Name: rigid convoy
             Definition: a pushed convoy or breasted up formation

Value   Data Dictionary (DD) Reference

8   DD Name: IENC   Code: lc_asi_8   Date accepted: 2001-05-31

             Name: pushed convoy

             Definition: a rigid assembly of craft of which at least one is positioned in front of the craft providing the
             power for propelling the convoy, known as the "pusher(s)"; a convoy composed of a pusher craft and a
             pushed craft coupled so as to permit guided articulation is also considered as rigid

9   DD Name: IENC   Code: lc_asi_9   Date accepted: 2001-05-31

             Name: breasted up formation

             Definition: an assembly of craft coupled rigidly side by side, none of which is positioned in front of the craft
             propelling the assembly

10   DD Name: IENC   Code: lc_asi_10   Date accepted: 2001-05-31

             Name: towed convoy

             Definition: an assembly of one or more craft, floating establishments or floating installations towed by one
             or more self-propelled craft forming part of the convoy

Attribute	Average Passing Time Reference

Acronym: aptref

Code: 17099

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

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

Definition: The string encodes the file name of an external file

Attribute	Bank of the waterway

Acronym: bnkwtw

Code: 17105

Use Type: F

Value Type: E

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

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

Definition: Bank of the river (waterway)

<u>Enumerations:</u>

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

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

DD Name: IENC

Date accepted: 2001-05-31

Definition: Category of anchorage

<u>Enumerations:</u>

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

Definition: A legally permitted area in or near the waterway designated for temporary barge mooring.

Value   Data Dictionary (DD) Reference

7   DD Name: IENC   Code: catbrt_7   Date accepted: 2001-05-31

             Name: first class landing

             Definition: A federally designated area that provides tie-ups and at least 9 feet (2.7m) of water depth
             during low water level.

8   DD Name: IENC   Code: catbrt_8   Date accepted: 2001-05-31

             Name: second class landing

             Definition: A federally designated area that provides tie-ups and at least 9 feet (2.7m) of water depth
             normal pool level.

9   DD Name: IENC   Code: catbrt_9   Date accepted: 2012-12-19

             Name: berth for passenger vessels

             Definition:

Attribute	Category of bunker station

Acronym: catbun

Code: 17067

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of bunker station

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catbun_1   Date accepted: 2001-05-31
         Name: diesel oil
         Definition: diesel oil available

2   DD Name: IENC   Code: catbun_2   Date accepted: 2001-05-31
         Name: water
         Definition: water available

3   DD Name: IENC   Code: catbun_3   Date accepted: 2001-05-31
         Name: ballast
         Definition: ballast available

4   DD Name: IENC   Code: catbun_4   Date accepted: 2001-05-31
         Name: power
         Definition: power supply available

Attribute	Category of cable

Acronym: catcbl   Code: 17101

Use Type: F

Value Type: E

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

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

Definition: Category of cable

<u>Enumerations:</u>

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)
         Definition:

Value	Data Dictionary (DD) Reference					
8	DD Name:	IENC	Code:	lc_cce_8	Date accepted:	2001-05-31
	Name:	liquid cargo (type C)				
	Definition:					
9	DD Name:	IENC	Code:	lc_cce_9	Date accepted:	2001-05-31
	Name:	gas				
	Definition:					

Attribute	Category of cargo (including)

Acronym: lc_cci   Code: 18016

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Including list of categories of cargo for the applicability of a feature

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: lc_cci_1   Date accepted: 2001-05-31
             Name: all types
             Definition:

2   DD Name: IENC   Code: lc_cci_2   Date accepted: 2001-05-31
             Name: other
             Definition:

4   DD Name: IENC   Code: lc_cci_4   Date accepted: 2001-05-31
             Name: bulk
             Definition: unpacked homogenous cargo poured loose in a certain space of a vessel e.g. oil or grain

5   DD Name: IENC   Code: lc_cci_5   Date accepted: 2001-05-31
             Name: dry cargo
             Definition:

6   DD Name: IENC   Code: lc_cci_6   Date accepted: 2001-05-31
             Name: liquid cargo
             Definition:

7   DD Name: IENC   Code: lc_cci_7   Date accepted: 2001-05-31
             Name: liquid cargo (type N)
             Definition:

Value	Data Dictionary (DD) Reference					
8	DD Name:	IENC	Code:	lc_cci_8	Date accepted:	2001-05-31
	Name:	liquid cargo (type C)				
	Definition:					
9	DD Name:	IENC	Code:	lc_cci_9	Date accepted:	2001-05-31
	Name:	gas				
	Definition:					

Attribute	Category of CEMT class

Acronym: catccl   Code: 17068

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of CEMT class

Enumerations:

Value	Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catccl_1   Date accepted: 2001-05-31

           Name: 0 small vessels and pleasure craft

           Definition: designated for small vessels and pleasure crafts only

2   DD Name: IENC   Code: catccl_2   Date accepted: 2001-05-31

           Name: I peniche

           Definition: designated for barges of type "Péniche" (west of river Elbe) or of type "Gross Finow" (east of river Elbe)

3   DD Name: IENC   Code: catccl_3   Date accepted: 2001-05-31

           Name: II campine barge

           Definition: designated for barges of type "Kempenaar" (west of river Elbe) or of type "BM-500" (east of river Elbe)

4   DD Name: IENC   Code: catccl_4   Date accepted: 2001-05-31

           Name: III Dortmund-Ems barge

           Definition: designated for barges of type "Gustav Koenigs" (west of river Elbe) or of a similar type concerning the dimensions (east of river Elbe)

5   DD Name: IENC   Code: catccl_5   Date accepted: 2001-05-31

           Name: IV Rhine-Herne barge

           Definition: designated for barges of type "Johann Welker"

6   DD Name: IENC   Code: catccl_6   Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference				
	Name:	Va Large Rhine barge; 1-barge push-tow unit			
	Definition:	designated for barges of type "Large Rhine barge" or pushed convoys with one barge			
7	DD Name: IENC	Code: catccl_7		Date accepted:	2001-05-31
	Name:	Vb 2-barge push-tow unit; long formation			
	Definition:	designated for pushed convoys with two barges, long formation			
8	DD Name: IENC	Code: catccl_8		Date accepted:	2001-05-31
	Name:	VIa 2-barge push-tow unit; wide formation			
	Definition:	designated for pushed convoys with two barges, wide formation			
9	DD Name: IENC	Code: catccl_9		Date accepted:	2001-05-31
	Name:	VIb 4-barge push-tow unit			
	Definition:	designated for pushed convoys with four barges			
10	DD Name: IENC	Code: catccl_10		Date accepted:	2001-05-31
	Name:	VIc 6-barge push-tow unit			
	Definition:	designated for pushed convoys with six barges			
11	DD Name: IENC	Code: catccl_11		Date accepted:	2001-05-31
	Name:	No CEMT class			
	Definition:				
12	DD Name: IENC	Code: catccl_12		Date accepted:	2011-10-04
	Name:	VII 9-barge push-town unit			
	Definition:				

Attribute	Category of checkpoint

Acronym: catchp

Code: 17010

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of checkpoint

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catchp_1   Date accepted: 2001-05-31

           Name: custom

           Definition: an office, especially in ports, at which customs dues are collected or administrated. (adapted from The New Shorter Oxford English Dictionary, 1993)

2   DD Name: IENC   Code: catchp_2   Date accepted: 2001-05-31

           Name: border

           Definition: an office, at which immigration control takes place

Attribute	Category of communication

Acronym: catcom   Code: 17069

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of communication

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catcom_1   Date accepted: 2001-05-31

               Name: VTS centre

               Definition: The centre from which Vessel Traffic Services are operated. A VTS is a service implemented by a competent authority, designed to improve the safety and efficiency of vessel traffic and to protect the environment. The services should have the capability to interact with the traffic and to respond to traffic situations developing in the area.

2   DD Name: IENC   Code: catcom_2   Date accepted: 2001-05-31

               Name: VTS sector

               Definition: The service area of a VTS centre.

3   DD Name: IENC   Code: catcom_3   Date accepted: 2001-05-31

               Name: IVS point

               Definition: A reporting point of the "Informatie en Volgsysteem voor de Scheepvaart" in the Netherlands.

4   DD Name: IENC   Code: catcom_4   Date accepted: 2001-05-31

               Name: MIB

               Definition: A reporting point of the "Melde- und Informationssystem Binnenschifffahrt" in Germany.

5   DD Name: IENC   Code: catcom_5   Date accepted: 2001-05-31

               Name: lock

               Definition: A reporting point for vessels at a lock.

6   DD Name: IENC   Code: catcom_6   Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference				
	Name:	bridge			
	Definition:	A reporting point for vessels at a movable bridge.			
7	DD Name: IENC		Code: catcom_7	Date accepted:	2001-05-31
	Name:	custom			
	Definition:	A reporting point of the customs services for vessels.			
8	DD Name: IENC		Code: catcom_8	Date accepted:	2001-05-31
	Name:	harbour			
	Definition:	A reporting point of a harbour.			
9	DD Name: IENC		Code: catcom_9	Date accepted:	2011-12-09
	Name:	WLAN area			
	Definition:	An area where free wireless network is available			

Attribute	Category of exceptional structure

Acronym: catexs

Code: 17100

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Category of exceptional navigational structure

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catexs_1   Date accepted: 2001-05-31

           Name: Lift-Lock

           Definition: A lock of which the lock chamber itself is lifted vertically to level with the next waterway section

2   DD Name: IENC   Code: catexs_2   Date accepted: 2001-05-31

           Name: Aqueduct

           Definition: A structure (similar to the ancient aqueducts), for conveying a canal over a river or hollow; more properly called an aqueduct bridge. (From Webster's Revised Unabridged Dictionary, 1913)

3   DD Name: IENC   Code: catexs_3   Date accepted: 2001-05-31

           Name: Sloping plane lock

           Definition: A lock of which the lock chamber itself travels over a sloping plane to level with the next waterway section

4   DD Name: IENC   Code: catexs_4   Date accepted: 2001-05-31

           Name: Water slope lock (Pente d'Eau)

           Definition: In French "Pente d'Eau". A lock of which the lock chamber is formed by a sloping plane and moving gate, which is pushing a triangular section of water up along the slope to level with the next waterway section

5   DD Name: IENC   Code: catexs_5   Date accepted: 2001-05-31

           Name: Other

           Definition: other categories of an exceptional structure

Attribute	Category of ferry

Acronym: catfry   Code: 17007

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Category of ferry

Enumerations:

Value   Data Dictionary (DD) Reference

4   DD Name: IENC   Code: catfry_4   Date accepted: 2001-05-31

Name: swinging wire ferry

Definition: ferry connected to a fixed point (e.g., an anchor in the middle of the waterway) and swings around this point from shore to shore via a cable to an anchor. The cable runs more or less parallel to the current

Attribute	Category of frequency

Acronym: catfrq   Code: 18030

Use Type: F

Value Type: L

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

DD Name: IENC   Date accepted: 2014-11-26

Definition: The electrical frequency provided by the power supply station

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catfrq_1   Date accepted: 2014-11-26

             Name: 50Hz

             Definition: 50 Hertz

2   DD Name: IENC   Code: catfrq_2   Date accepted: 2014-11-26

             Name: 60Hz

             Definition: 60 Hertz

Attribute	Category of harbour area

Acronym: cathbr   Code: 17070

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of harbour

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: cathbr_1   Date accepted: 2001-05-31

Name: custom harbour

Definition: A harbour that is administered by the customs. It may be a free harbour.

2   DD Name: IENC   Code: cathbr_2   Date accepted: 2001-05-31

Name: port of refuge

Definition: A harbour that can be used to find shelter for bad environmental conditions or where efforts to mitigate larger damage or threat(s) of damage to either the vessel, her crew or the environment can be rendered.

3   DD Name: IENC   Code: cathbr_3   Date accepted: 2001-05-31

Name: yacht harbour/marina

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

4   DD Name: IENC   Code: cathbr_4   Date accepted: 2001-05-31

Name: fishing harbour

Definition: a harbour with facilities for fishing boats.

5   DD Name: IENC   Code: cathbr_5   Date accepted: 2001-05-31

Name: private harbour

Definition: a harbour operated by a private body.

Attribute	Category of harbour facility

Acronym: cathaf   Code: 17008

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of harbour facility

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: cathaf_1   Date accepted: 2001-05-31

             Name: RoRo-terminal

             Definition: a terminal for roll-on roll-off ferries.

3   DD Name: IENC   Code: cathaf_3   Date accepted: 2001-05-31

             Name: ferry terminal

             Definition: a terminal for passenger and vehicle ferries.

4   DD Name: IENC   Code: cathaf_4   Date accepted: 2001-05-31

             Name: fishing harbour

             Definition: a harbour with facilities for fishing boats.

6   DD Name: IENC   Code: cathaf_6   Date accepted: 2001-05-31

             Name: naval base

             Definition: a centre of operations for naval vessels (adapted from The Collins Dictionary).

7   DD Name: IENC   Code: cathaf_7   Date accepted: 2001-05-31

             Name: tanker terminal

             Definition: a terminal for the bulk handling of liquid cargoes.

8   DD Name: IENC   Code: cathaf_8   Date accepted: 2001-05-31

             Name: passenger terminal

             Definition: a terminal for the loading and unloading of passengers.

Value	Data Dictionary (DD) Reference

9   DD Name: IENC   Code: cathaf_9   Date accepted: 2001-05-31

           Name: shipyard

           Definition: a place where ships are built or repaired (IHO Dictionary, S-32, 5th Edition, 4686).

10   DD Name: IENC   Code: cathaf_10   Date accepted: 2001-05-31

           Name: container terminal

           Definition: a terminal for container ships.

11   DD Name: IENC   Code: cathaf_11   Date accepted: 2001-05-31

           Name: bulk terminal

           Definition: a terminal for the handling of bulk materials such as iron ore, coal, etc.

12   DD Name: IENC   Code: cathaf_12   Date accepted: 2001-05-31

           Name: syncrolift

           Definition: a platform powered by synchronous electric motors used to lift vessels (larger than boats) in and out of the water.

13   DD Name: IENC   Code: cathaf_13   Date accepted: 2001-05-31

           Name: straddle carrier

           Definition: a wheeled vehicle designed to lift and carry containers or vessels within its own framework. It is used for moving, and sometimes stacking, shipping containers and vessels.

16   DD Name: IENC   Code: cathaf_16   Date accepted: 2001-05-31

           Name: service and repair

           Definition: a place where mechanical services or repairs can be undertaken to engines or other vessel equipment.

17   DD Name: IENC   Code: cathaf_17   Date accepted: 2001-05-31

           Name: quarantine station

           Definition: A medical control center located in an isolated spot ashore where patients with contagious diseases from vessel in quarantine are taken.

Attribute	Category of hulk

Acronym: cathlk   Code: 17102

Use Type: F

Value Type: L

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

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

Definition: Category of hulk

<u>Enumerations:</u>

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 (general sign)

            Definition: Prohibition mark A.1: no entry (general sign) (Source: CEVNI)

2   DD Name: IENC   Code: catnmk_2   Date accepted: 2001-05-31

            Name: (A.1.1) sections closed to use, no entry except for non-motorized small craft

            Definition: Prohibition mark A.1.1: sections closed to use, no entry except for non-motorized small craft (Source: CEVNI)

3   DD Name: IENC   Code: catnmk_3   Date accepted: 2001-05-31

            Name: (A.2) no overtaking

            Definition: Prohibition mark A.2: no overtaking (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

10   DD Name: IENC   Code: catnmk_10   Date accepted: 2001-05-31

Name: (A.8) no turning

Definition: Prohibition mark A.8: no turning (Source: CEVNI)

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 (Source: CEVNI)

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) (Source: CEVNI)

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) (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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) (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

39   DD Name: IENC   Code: catnmk_39   Date accepted: 2001-05-31

               Name: (C.2) headroom limited

               Definition: Restriction mark C.2: headroom limited (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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; the figure shown on the
             sign indicates the distance in metres, measured from the sign, to which vessels should keep. (Source:
             CEVNI)

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; ; the figure shown on
             the sign indicates the distance in metres, measured from the sign, to which vessels should keep. (Source:
             CEVNI)

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 (Source: CEVNI)

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) (Source: CEVNI)

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) (Source: CEVNI)

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) (Source: CEVNI)

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 (Source:
             CEVNI)

49   DD Name: IENC   Code: catnmk_49   Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference

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 (Source: CEVNI)

50   DD Name: IENC   Code: catnmk_50   Date accepted: 2001-05-31

Name: (E.1) entry permitted (general sign)

Definition: Information mark E.1: entry permitted (general sign) (Source: CEVNI)

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 (Source: CEVNI)

52   DD Name: IENC   Code: catnmk_52   Date accepted: 2001-05-31

Name: (E.3) weir

Definition: Information mark E.3: weir (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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

Value   Data Dictionary (DD) Reference

measured from, and shown on the board in meters (Source: CEVNI)

58   DD Name: IENC   Code: catnmk_58   Date accepted: 2001-05-31

             Name: (E.5.3) maximum number of vessels permitted to berth abreast

             Definition: Information mark E.5.3: maximum number of vessels permitted to berth abreast on the side of
             the waterway on which the sign is placed (Source: CEVNI)

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 (Source:
             CEVNI)

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 (Source:
             CEVNI)

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 (Source:
             CEVNI)

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
             (Source: CEVNI)

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 (Source: CEVNI)

Value	Data Dictionary (DD) Reference

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 (Source: CEVNI)

65 DD Name: IENC   Code: catnmk_65   Date accepted: 2001-05-31

Name: (E.5.10) berthing area reserved for vessels other than for pushing-navigation vessels that are required to carry two blue lights or two blue cones

Definition: Information mark E.5.10: berthing area reserved for vessels other than pushing-navigation vessels that are required to carry two blue lights or two blue cones on the side of the waterway on which the sign is placed (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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

Value	Data Dictionary (DD) Reference

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

74   DD Name: IENC   Code: catnmk_74   Date accepted: 2001-05-31

Name: (E.8) turning area

Definition: Information mark E.8: turning area (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

Value	Data Dictionary (DD) Reference

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 (Source: CEVNI)

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 (Source: CEVNI)

81   DD Name: IENC   Code: catnmk_81   Date accepted: 2001-05-31

Name: (E.9g) secondary waterway on the right, main waterway on the left

Definition: Information mark E.9g: secondary waterway on the right, main waterway on the left (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

87   DD Name: IENC   Code: catnmk_87   Date accepted: 2001-05-31

Name: (E.10d) junction with main waterway ahead and left

Value			Data Dictionary (DD) Reference

Definition:	Information mark E.10d: junction with main waterway ahead and left (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

90			DD Name: IENC			Code: catnmk_90			Date accepted: 2001-05-31

Name:		(E.11) end of prohibition or obligation applying to traffic in one direction only, or end of a restriction

Definition:	Information mark E.11: end of prohibition or obligation applying to traffic in one direction only, or end of a restriction (Source: CEVNI)

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 supply (Source: CEVNI)

92			DD Name: IENC			Code: catnmk_92			Date accepted: 2001-05-31

Name:		(E.14) telephone

Definition:	Information mark E.14: telephone (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

96			DD Name: IENC			Code: catnmk_96			Date accepted: 2001-05-31

Value   Data Dictionary (DD) Reference

Name: (E.18) sailing vessels permitted

Definition: Information mark E.18: sailing vessels permitted (Source: CEVNI)

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 (Source: CEVNI)

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 (Source: CEVNI)

99   DD Name: IENC   Code: catnmk_99   Date accepted: 2001-05-31

Name: (E.23) possibility of obtaining nautical information by radiotelephone on the channel indicated

Definition: Information mark E.23: possibility of obtaining nautical information by radiotelephone on the channel indicated (Source: CEVNI)

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 (Source: CEVNI)

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 craft

Definition: Information mark E.21: zone authorized for high speed navigation of small sport and pleasure craft (Source: CEVNI)

102   DD Name: IENC   Code: catnmk_102   Date accepted: 2001-05-31

Name: (E.22) launching or beaching of small craft permitted

Definition: Information mark E.22: launching and beaching of small craft permitted (Source: CEVNI)

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

Value	Data Dictionary (DD) Reference

Name: (BR) proceed in the middle of the river

Definition: regulation mark (BR): proceed in the middle of the river

106	DD Name: IENC	Code: catnmk_106	Date accepted: 2009-09-11

Name: (BR) cross river to port

Definition: regulation mark (BR): cross river to port

107	DD Name: IENC	Code: catnmk_107	Date accepted: 2009-09-11

Name: (BR) cross river to starboard

Definition: regulation mark (BR): cross river to starboard

108	DD Name: IENC	Code: catnmk_108	Date accepted: 2009-09-11

Name: (BR) traffic between margins

Definition: information mark (BR): traffic between margins

109	DD Name: IENC	Code: catnmk_109	Date accepted: 2009-09-11

Name: (BR) reduce speed

Definition: regulation mark (BR): reduce speed

110	DD Name: IENC	Code: catnmk_110	Date accepted: 2009-09-11

Name: wreck pontoon, passage allowed on side showing red-white sign

Definition: a red-white sign shown on a wreck pontoon to indicate the side on which passage is permitted (without wash of waves) and a red sign on the side on which passage is not permitted

111	DD Name: IENC	Code: catnmk_111	Date accepted: 2009-09-11

Name: wreck pontoon, passage allowed on both sides

Definition: red-white signs shown on a wreck pontoon to indicate that passage is permitted on both sides (without wash of waves)

112	DD Name: IENC	Code: catnmk_112	Date accepted: 2009-12-09

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

Value	Data Dictionary (DD) Reference			
	Name:	Attention! (Keep caution)		
	Definition:	Russian notice mark: 2.1, Attention! (keep caution)		
115	DD Name: IENC	Code: catnmk_115	Date accepted:	2009-12-09
	Name:	fairway crossing		
	Definition:	Russian notice mark: 2.2, fairway crossing		
116	DD Name: IENC	Code: catnmk_116	Date accepted:	2009-12-09
	Name:	shipping inspection point		
	Definition:	Russian notice mark: 3.3, shipping inspection point		
117	DD Name: IENC	Code: catnmk_117	Date accepted:	2014-10-20
	Name:	(E.25) electrical power supply point		
	Definition:	Information mark E.25: electrical power supply point (Source: CEVNI)		
118	DD Name: IENC	Code: catnmk_118	Date accepted:	2014-10-20
	Name:	(E.26) winter harbour		
	Definition:	Information mark E.26: winter harbour (Source: CEVNI)		
119	DD Name: IENC	Code: catnmk_119	Date accepted:	2014-10-20
	Name:	(E.26.1) maximum number of vessels permitted to berth in winter harbour		
	Definition:	Information mark E.26.1: maximum number of vessels permitted to berth in winter harbour (Source: CEVNI)		
120	DD Name: IENC	Code: catnmk_120	Date accepted:	2014-10-20
	Name:	(E.27) winter shelter		
	Definition:	Information mark E.27: winter shelter (Source: CEVNI)		
121	DD Name: IENC	Code: catnmk_121	Date accepted:	2014-10-20
	Name:	(E.27.1) 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.27.1: 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 (Source: CEVNI)		
122	DD Name: IENC	Code: catnmk_122	Date accepted:	2014-10-20
	Name:	(E.6.1) use of spuds permitted		
	Definition:	Information mark E.6.1: use of spuds permitted (Source: CEVNI)		

Value   Data Dictionary (DD) Reference

123   DD Name: IENC   Code: catnmk_123   Date accepted: 2019-03-12

            Name: (B.12) obligation to use onshore power supply point

            Definition: Regulation mark B.12: obligation to use onshore power supply point (all vessels are obligated to use the power supply for their electrical power needs) (Source: CEVNI)

Attribute	Category of plug

Acronym: catplg   Code: 18034

Use Type: F

Value Type: T

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

DD Name: IENC   Date accepted: 2014-11-26

Definition: The type of plug(s) available at the power supply station.

Attribute	Category of refuse dump

Acronym: catrfd   Code: 17071

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of refuse dump

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catrfd_1   Date accepted: 2001-05-31

               Name: cargo residue/slop

               Definition: A facility where vessels can dispose of cargo residues and/or slops.

2   DD Name: IENC   Code: catrfd_2   Date accepted: 2001-05-31

               Name: waste oil

               Definition: A facility where vessels can dispose of waste oil.

3   DD Name: IENC   Code: catrfd_3   Date accepted: 2001-05-31

               Name: grey/black water

               Definition: A facility where vessels can dispose of grey and/or black waste water.

4   DD Name: IENC   Code: catrfd_4   Date accepted: 2001-05-31

               Name: domestic refuse

               Definition: A facility where vessels can dispose of domestic refuse.

Attribute	Category of rescue station

Acronym: catrsc   Code: 17106

Use Type: F

Value Type: L

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

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

Definition: Category of rescue station

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catrsc_1   Date accepted: 2010-09-17

             Name: rescue station with life boat

             Definition: a place where equipment for saving life at sea is maintained; the type of lifeboat may vary from fast, long distance boats to inflatable inshore boats. (IHO Chart Specifications, M-4).

2   DD Name: IENC   Code: catrsc_2   Date accepted: 2010-09-17

             Name: rescue station with rocket

             Definition: rocket - a pyrotechnic projectile used for signalling or for life-saving purposes. (IHO Dictionary, S-32, 5th Edition, 4418).

3   DD Name: IENC   Code: catrsc_3   Date accepted: 2010-09-17

             Name: not in use

             Definition:

4   DD Name: IENC   Code: catrsc_4   Date accepted: 2010-09-17

             Name: refuge for ship-wrecked mariners

             Definition: shelter or protection from danger or distress at sea.

5   DD Name: IENC   Code: catrsc_5   Date accepted: 2010-09-17

             Name: refuge for intertidal area walkers

             Definition: shelter or protection from danger in areas exposed to extreme and sudden tides or tidal streams.

6   DD Name: IENC   Code: catrsc_6   Date accepted: 2010-09-17

Value	Data Dictionary (DD) Reference

Name: lifeboat lying at a mooring

Definition: a place where a lifeboat is moored ready for use.

7	DD Name: IENC	Code: catrsc_7	Date accepted: 2010-09-17

Name: aid radio station

Definition: a radio station reserved for emergency situations, might also be a public telephone.

8	DD Name: IENC	Code: catrsc_8	Date accepted: 2010-09-17

Name: first aid equipment

Definition: a place where first aid equipment is available.

9	DD Name: IENC	Code: catrsc_9	Date accepted: 2010-09-17

Name: lifebuoy, ring buoy, life ring, life saver

Definition: a "kisby ring" or "perry buoy" designed to be thrown to a person in the water, to provide buoyancy and to prevent drowning.

Attribute	Category of sensor

Acronym: catsen

Code: 18019

Use Type: F

Value Type: L

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

Value	Data Dictionary (DD) Reference

8   DD Name: IENC   Code: lc_cse_8   Date accepted: 2001-05-31

       Name: sea going ship

       Definition: a vessel certificated for sea-going service

9   DD Name: IENC   Code: lc_cse_9   Date accepted: 2001-05-31

       Name: motor vessel

       Definition: a motor cargo vessel or a motor tanker

10   DD Name: IENC   Code: lc_cse_10   Date accepted: 2001-05-31

       Name: motor tanker

       Definition: a vessel intended for the carriage of goods in fixed tanks and built to navigate independently under its own motive power

11   DD Name: IENC   Code: lc_cse_11   Date accepted: 2001-05-31

       Name: motor cargo vessel

       Definition: a vessel, other than a motor tanker, intended for the carriage of goods and built to navigate independently under its own motive power

12   DD Name: IENC   Code: lc_cse_12   Date accepted: 2001-05-31

       Name: canal barge

       Definition: an inland waterway vessel not exceeding 38.5 m in length and 5.05 m in breadth and usually operating on the Rhine-Rhône-Canal

13   DD Name: IENC   Code: lc_cse_13   Date accepted: 2001-05-31

       Name: tug

       Definition: a vessel specially built to perform towing operations

14   DD Name: IENC   Code: lc_cse_14   Date accepted: 2001-05-31

       Name: pusher

       Definition: a vessel specially built to propel a pushed convoy

15   DD Name: IENC   Code: lc_cse_15   Date accepted: 2001-05-31

       Name: barge

       Definition: a dumb barge or tank barge

16   DD Name: IENC   Code: lc_cse_16   Date accepted: 2001-05-31

       Name: tank barge

       Definition: a vessel intended for the carriage of goods in fixed tanks and built to be towed, either having no

Value   Data Dictionary (DD) Reference

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

Definition: a passenger vessel without overnight passenger cabins

| Value | Data Dictionary (DD) Reference |

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

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

DD Name: IENC

Date accepted: 2001-05-31

Definition:

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: lc_csi_1   Date accepted: 2001-05-31
      Name: all types
      Definition:

2   DD Name: IENC   Code: lc_csi_2   Date accepted: 2001-05-31
      Name: other
      Definition:

3   DD Name: IENC   Code: lc_csi_3   Date accepted: 2001-05-31
      Name: non-motorized vessel
      Definition: non-motorized vessel

5   DD Name: IENC   Code: lc_csi_5   Date accepted: 2001-05-31
      Name: craft
      Definition: a vessel or item of floating equipment

6   DD Name: IENC   Code: lc_csi_6   Date accepted: 2001-05-31
      Name: vessel
      Definition: an inland waterway vessel or sea going ship

7   DD Name: IENC   Code: lc_csi_7   Date accepted: 2001-05-31
      Name: inland waterway vessel
      Definition: a vessel intended solely or mainly for navigation on inland waterways

Value	Data Dictionary (DD) Reference

8   DD Name: IENC   Code: lc_csi_8   Date accepted: 2001-05-31

Name: sea going ship

Definition: a vessel certificated for sea-going service

9   DD Name: IENC   Code: lc_csi_9   Date accepted: 2001-05-31

Name: motor vessel

Definition: a motor cargo vessel or a motor tanker

10   DD Name: IENC   Code: lc_csi_10   Date accepted: 2001-05-31

Name: motor tanker

Definition: a vessel intended for the carriage of goods in fixed tanks and built to navigate independently under its own motive power

11   DD Name: IENC   Code: lc_csi_11   Date accepted: 2001-05-31

Name: motor cargo vessel

Definition: a vessel, other than a motor tanker, intended for the carriage of goods and built to navigate independently under its own motive power

12   DD Name: IENC   Code: lc_csi_12   Date accepted: 2001-05-31

Name: canal barge

Definition: an inland waterway vessel not exceeding 38.5 m in length and 5.05 m in breadth and usually operating on the Rhine-Rhône-Canal

13   DD Name: IENC   Code: lc_csi_13   Date accepted: 2001-05-31

Name: tug

Definition: a vessel specially built to perform towing operations

14   DD Name: IENC   Code: lc_csi_14   Date accepted: 2001-05-31

Name: pusher

Definition: a vessel specially built to propel a pushed convoy

15   DD Name: IENC   Code: lc_csi_15   Date accepted: 2001-05-31

Name: barge

Definition: a dumb barge or tank barge

16   DD Name: IENC   Code: lc_csi_16   Date accepted: 2001-05-31

Name: tank barge

Definition: a vessel intended for the carriage of goods in fixed tanks and built to be towed, either having no

Value	Data Dictionary (DD) Reference

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

Definition: a passenger vessel without overnight passenger cabins

Value	Data Dictionary (DD) Reference			

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

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

DD Name: IENC   Date accepted: 2007-10-12

Definition: Category of shoreline construction

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

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).

18   DD Name: IENC   Code: catslc_18   Date accepted: 2007-10-12

            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.

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)

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

Value   Data Dictionary (DD) Reference

           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)

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

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

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

Definition: Category of signal station, warning

<u>Enumerations:</u>

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

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

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

Definition: Category of vehicle transfer

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catvtr_1   Date accepted: 2001-05-31
               Name: official
               Definition: Of or relating to an office or a post of authority

2   DD Name: IENC   Code: catvtr_2   Date accepted: 2001-05-31
               Name: private
               Definition: Belonging to a particular person or persons, as opposed to the public or the government

3   DD Name: IENC   Code: catvtr_3   Date accepted: 2001-05-31
               Name: suitable for car cranes
               Definition: Vehicle transfer location is suitable for car cranes

4   DD Name: IENC   Code: catvtr_4   Date accepted: 2001-05-31
               Name: suitable for car planks
               Definition: Vehicle transfer location is suitable for car planks

5   DD Name: IENC   Code: catvtr_5   Date accepted: 2001-05-31
               Name: permission required
               Definition: The transfer of a vehicle requires permission.

6   DD Name: IENC   Code: catvtr_6   Date accepted: 2001-05-31
               Name: locked gate
               Definition: The access to the public road is locked.

Attribute	Category of voltage

Acronym: catvol

Code: 18031

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2014-11-26

Definition: The electrical voltage provided by the power supply station

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catvol_1   Date accepted: 2014-11-26

          Name: 230V

          Definition: 230 Volts

2   DD Name: IENC   Code: catvol_2   Date accepted: 2014-11-26

          Name: 400V

          Definition: 400 Volts

Attribute	Category of waterway gauge

Acronym: catgag   Code: 17078

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of waterway gauge

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: catgag_1   Date accepted: 2001-05-31

               Name: water level staff / pole

               Definition: level indicator consisting of a calibrated staff/pole and the associated bench mark. (DIN 4049 Section 3, Oct. 1994)

2   DD Name: IENC   Code: catgag_2   Date accepted: 2001-05-31

               Name: recording water level gauge

               Definition: analog or digital water level measuring and recording device. (adopted from DIN 4049 – Section 3, Oct. 1994)

3   DD Name: IENC   Code: catgag_3   Date accepted: 2001-05-31

               Name: recording water level gauge with remote access

               Definition: recording water level gauge providing information remotely by any method (adopted from DIN 4049 – Section 3, Oct. 1994)

4   DD Name: IENC   Code: catgag_4   Date accepted: 2001-05-31

               Name: recording water level gauge with external indicator

               Definition: recording gauge providing information of the water level via a large external indicator (adopted from DIN 4049 – Section 3, Oct. 1994)

5   DD Name: IENC   Code: catgag_5   Date accepted: 2001-05-31

               Name: recording water level gauge with remote access and remote indicator

               Definition: recording gauge providing information remotely by any method and providing information of the water level via a large external indicator. (adopted from DIN 4049 – Section 3, Oct. 1994)

Attribute	Class of dangerous cargo

Acronym: clsdng

Code: 17055

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Class of dangerous cargo

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: clsdng_1   Date accepted: 2001-05-31

          Name: one blue light / cone

          Definition: Vessels carrying out transport operations involving certain flammable substances

2   DD Name: IENC   Code: clsdng_2   Date accepted: 2001-05-31

          Name: two blue lights / cones

          Definition: Vessels carrying out transport operations involving certain substances constituting health hazards

3   DD Name: IENC   Code: clsdng_3   Date accepted: 2001-05-31

          Name: three blue lights / cones

          Definition: Vessels carrying out transport operations involving certain explosives

4   DD Name: IENC   Code: clsdng_4   Date accepted: 2001-05-31

          Name: no blue light / cone

          Definition: Vessels carrying out transport operations for which no blue light or blue cone is required

5   DD Name: IENC   Code: clsdng_5   Date accepted: 2009-12-09

          Name: one red light / red cone top down

          Definition: Russian inland waterway regulations: vessels with one red light / red cone top down

Attribute	Current velocity at high water level

Acronym: curvhw   Code: 17095

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The rate of travel of a current at a high water level

Attribute	Current velocity at low water level

Acronym: curvlw   Code: 17096

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The rate of travel of a current at a low water level

Attribute	Current velocity at mean water level

Acronym: curvmw   Code: 17097

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The rate of travel of a current at a mean water level

Attribute	Current velocity at other water level

Acronym: curvow

Code: 17098

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The rate of travel of a current at an other water level

Attribute	Description of legal conditions

Acronym: lg_des   Code: 18010

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

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

Definition: Additional textual information which is related to the numerical description of the particular article/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

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

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	Elevation of water level

Acronym: elevwl   Code: 18050

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2020-01-24

Definition: Elevation of the water level of a specified object point measured from the reference gravitational level
defined in reflev

Attribute	Function of notice mark

Acronym: fnctnm

Code: 17063

Use Type: F

Value Type: E

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

DD Name: IENC

Date accepted: 2001-05-31

Definition: Function of a notice mark

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: fnctnm_1   Date accepted: 2001-05-31

Name: prohibition mark

Definition: marks which indicate a prohibition

2   DD Name: IENC   Code: fnctnm_2   Date accepted: 2001-05-31

Name: regulation mark

Definition: marks which indicate a regulation

3   DD Name: IENC   Code: fnctnm_3   Date accepted: 2001-05-31

Name: restriction mark

Definition: marks which indicate a restriction

4   DD Name: IENC   Code: fnctnm_4   Date accepted: 2001-05-31

Name: recommendation mark

Definition: marks which indicate a recommendation

5   DD Name: IENC   Code: fnctnm_5   Date accepted: 2001-05-31

Name: information mark

Definition: marks with general information

Attribute	Function of sensor

Acronym: fnctsn   Code: 18020

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Function of sensor

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: fnctsn_1   Date accepted: 2011-12-19

             Name: reduce bridge lighting

             Definition:

Attribute	Height/length units

Acronym: hunits

Code: 17103

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Units of measure of waterway distances

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: hunits_1   Date accepted: 2001-05-31

             Name: metres

             Definition: heights/lengths are specified in metres (SI units of length)

2   DD Name: IENC   Code: hunits_2   Date accepted: 2001-05-31

             Name: feet

             Definition: heights/lengths are specified in feet (imperial units of length)

3   DD Name: IENC   Code: hunits_3   Date accepted: 2001-05-31

             Name: kilometres

             Definition: heights/lengths are specified in kilometres (1000 metres)

4   DD Name: IENC   Code: hunits_4   Date accepted: 2001-05-31

             Name: hectometres

             Definition: heights/lengths are specified in hectometres (100 metres)

5   DD Name: IENC   Code: hunits_5   Date accepted: 2001-05-31

             Name: statute miles

             Definition: heights/lengths are specified in statue (land) miles

6   DD Name: IENC   Code: hunits_6   Date accepted: 2001-05-31

             Name: nautical miles

             Definition: heights/lengths are specified in nautical (sea) miles

Attribute	Horizontal clearance length

Acronym: horcll   Code: 17074

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The length of an object, such as a lock or basin, which is available for safe navigation. This may, or may not, be the same as the total physical length (HORLEN) of the object

Attribute	Horizontal clearance width

Acronym: horclw   Code: 17075

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The width of an object, such as a lock or basin, which is available for safe navigation. This may, or may not, be the same as the total physical width (HORWID) of the object

Attribute	Marks navigational - System of

Acronym: marsys   Code: 17009

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: System of navigational marks

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: marsys_1   Date accepted: 2001-05-31

            Name: IALA A

            Definition: navigational aids conform to the International Association of Lighthouse Authorities - IALA A system.

2   DD Name: IENC   Code: marsys_2   Date accepted: 2001-05-31

            Name: IALA B

            Definition: navigational aids conform to the International Association of Lighthouse Authorities - IALA B system.

9   DD Name: IENC   Code: marsys_9   Date accepted: 2001-05-31

            Name: no system

            Definition: navigational aids do not conform to any defined system.

10   DD Name: IENC   Code: marsys_10   Date accepted: 2001-05-31

             Name: other system

            Definition: navigational aids conform to a defined system other than International Association of Lighthouse Authorities -IALA.

11   DD Name: IENC   Code: marsys_11   Date accepted: 2001-05-31

             Name: CEVNI

            Definition: navigational aids conform to the European Code for Inland Waterways of UN/ECE.

12   DD Name: IENC   Code: marsys_12   Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference

	Name:	Russian inland waterway regulations
	Definition:	navigational aids conform to the Russian inland waterway regulations.

13	DD Name: IENC	Code: marsys_13	Date accepted: 2009-09-11
	Name:	Brazilian national inland waterway regulations - two sides	
	Definition:	navigational aids conform to the Brazilian national inland waterway regulations for two sides.	

14	DD Name: IENC	Code: marsys_14	Date accepted: 2009-09-11
	Name:	Brazilian national inland waterway regulations - side independent	
	Definition:	navigational aids conform to the side independent Brazilian national inland waterway regulations.	

15	DD Name: IENC	Code: marsys_15	Date accepted: 2009-09-11
	Name:	Paraguay-Parana waterway - Brazilian complementary aids	
	Definition:	Brazilian complementary navigational aids on the Paraguay-Parana waterway.	

Attribute	Maximal permitted beam

Acronym: lg_bme   Code: 18003

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The maximal permitted beam (width of a ship's hull) of a vessel or convoy according to the particular article/clause of the applicable law/regulation

Attribute	Maximal permitted draught

Acronym: lg_drt   Code: 18005

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The maximal permitted draught of a vessel or convoy according to the particular article/clause of the applicable law/regulation

Attribute	Maximal permitted length

Acronym: lg_lgs

Code: 18004

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The maximal permitted length of a vessel or convoy according to the particular article/clause of the applicable law/regulation

Attribute	Maximal permitted speed

Acronym: lg_spd   Code: 18001

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The maximal permitted vessel speed according to the particular article/clause of the applicable law/regulation

Attribute	Maximal permitted water displacement

Acronym: lg_wdp   Code: 18006

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The maximal permitted water displacement of a vessel or convoy according to the particular article/clause
of the applicable law/regulation

Attribute	MMSI Code

Acronym: mmsico   Code: 18046

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2017-05-30

Definition: Maritime Mobile Service Identity code

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 heights 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

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

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

Definition: Restriction

<u>Enumerations:</u>

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

| 40 | DD Name: IENC   Code: restrn_40   Date accepted: 2017-11-06 |

Name: SOx emission restricted

Definition: An area within which the emission of Sox is restricted.

| 41 | DD Name: IENC   Code: restrn_41   Date accepted: 2017-11-06 |

Name: NOx emission restricted

Definition: AN area within which the emission of Nox is restricted.

Attribute	Sounding datum reference level value

Acronym: sdrval   Code: 18049

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2019-11-13

Definition: Local value of the sounding datum reference level.

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

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

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

Definition: List of goods, which can be transshipped

<u>Enumerations:</u>

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: trshgd_1   Date accepted: 2001-05-31
             Name: containers
             Definition: boxes for cargo transport with standardized dimensions.

2   DD Name: IENC   Code: trshgd_2   Date accepted: 2001-05-31
             Name: bulk goods
             Definition: unpacked bulk cargo in the same or a similar kind of nature (homogeneous).

3   DD Name: IENC   Code: trshgd_3   Date accepted: 2001-05-31
             Name: oil
             Definition: Mineral oil or liquid petrolatum, a by-product in the distillation of petroleum to produce gasoline.

4   DD Name: IENC   Code: trshgd_4   Date accepted: 2001-05-31
             Name: fuel
             Definition: liquid fuel, e.g. gasoline, diesel.

5   DD Name: IENC   Code: trshgd_5   Date accepted: 2001-05-31
             Name: chemicals
             Definition: any material used in or obtained by a process in chemistry.

6   DD Name: IENC   Code: trshgd_6   Date accepted: 2001-05-31
             Name: liquid goods
             Definition: fluids whose shape is usually determined by the container it fills.

Value   Data Dictionary (DD) Reference

7   DD Name: IENC   Code: trshgd_7   Date accepted: 2001-05-31

             Name: explosive goods

             Definition: goods that undergoes decomposition or combustion with great rapidity, evolving much heat and
             producing a large volume of gas.

8   DD Name: IENC   Code: trshgd_8   Date accepted: 2001-05-31

             Name: fish

             Definition: marine animals

9   DD Name: IENC   Code: trshgd_9   Date accepted: 2001-05-31

             Name: cars

             Definition: wheeled vehicles

10   DD Name: IENC   Code: trshgd_10   Date accepted: 2001-05-31

             Name: general cargo

             Definition: general cargo

Attribute	Type of AtoN

Acronym: typatn   Code: 18047

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2019-10-23

Definition: The type of AtoN being referenced

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: typatn_1   Date accepted: 2019-10-23

             Name: AtoN

             Definition: Aid to Navigation

2   DD Name: IENC   Code: typatn_2   Date accepted: 2019-10-23

             Name: Real AIS AtoN

             Definition: An AIS station located on an existing physical aid to navigation

3   DD Name: IENC   Code: typatn_3   Date accepted: 2019-10-23

             Name: Virtual AIS AtoN

             Definition: An electronically charted, but non-existent as a physical aid to navigation

Attribute	Type of Ship

Acronym: shptyp

Code: 33066

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Type of ship

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: shptyp_1   Date accepted: 2001-05-31

          Name: general cargo vessel

          Definition: a vessel which is designed for carrying general cargo, e.g. boxes, sacks.

2   DD Name: IENC   Code: shptyp_2   Date accepted: 2001-05-31

          Name: container vessel

          Definition: a vessel which is designed for carrying containers.

3   DD Name: IENC   Code: shptyp_3   Date accepted: 2001-05-31

          Name: tanker

          Definition: a vessel which is designed for carrying liquid goods, e.g. oil or water.

4   DD Name: IENC   Code: shptyp_4   Date accepted: 2001-05-31

          Name: sailing vessel

          Definition: a vessel that is powered by the wind; often having several masts.

5   DD Name: IENC   Code: shptyp_5   Date accepted: 2001-05-31

          Name: fishing vessel

          Definition: a vessel that is used and equipped for the fishing of living aquatic resources.

6   DD Name: IENC   Code: shptyp_6   Date accepted: 2001-05-31

          Name: special purpose vessel.

          Definition: a vessel that fulfills special purposes e.g. hovercrafts, pilot boats

Value	Data Dictionary (DD) Reference

7   DD Name: IENC   Code: shptyp_7   Date accepted: 2001-05-31

     Name: man of War

     Definition: armed naval vessel.

8   DD Name: IENC   Code: shptyp_8   Date accepted: 2001-05-31

     Name: submarine

     Definition: a vessel that is capable of operating for an extended period of time underwater.

9   DD Name: IENC   Code: shptyp_9   Date accepted: 2001-05-31

     Name: high speed craft

     Definition:

10   DD Name: IENC   Code: shptyp_10   Date accepted: 2001-05-31

     Name: bulk carrier

     Definition: a vessel which is designed for carrying bulk goods, e.g. coal, ore or grain.

11   DD Name: IENC   Code: shptyp_11   Date accepted: 2001-05-31

     Name: seaplane

     Definition: airplane designed to take off from and alight on water.

12   DD Name: IENC   Code: shptyp_12   Date accepted: 2001-05-31

     Name: tugboat

     Definition: a powerful small boat designed to pull or push larger ships or powerless barges.

13   DD Name: IENC   Code: shptyp_13   Date accepted: 2001-05-31

     Name: passenger vessel

     Definition: a vessel which is designed for carrying passengers and which serves mainly as cruise vessel.

14   DD Name: IENC   Code: shptyp_14   Date accepted: 2001-05-31

     Name: ferry

     Definition: a vessel which is designed for carrying passengers, and sometimes their vehicles, on scheduled services.

15   DD Name: IENC   Code: shptyp_15   Date accepted: 2001-05-31

     Name: boat

     Definition: a small vessel.

Attribute	UN location code

Acronym: unlocd   Code: 17077

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

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

Definition: The attribute unlocd should be used to encode the UN Location Code
               (http://www.unece.org/cefact/locode/service/main.htm) or - in Europe - the Inland Ship Reporting Standard
               (ISRS) Code

Attribute	Use of Ship

Acronym: useshp

Code: 17094

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Indication of the way the ship is used

Enumerations:

Value   Data Dictionary (DD) Reference

1   DD Name: IENC   Code: useshp_1   Date accepted: 2001-05-31

Name: liner trade

Definition: ship is used to carry goods on a scheduled service

2   DD Name: IENC   Code: useshp_2   Date accepted: 2001-05-31

Name: occasional professional shipping

Definition: ship is occasional used for professional shipping

3   DD Name: IENC   Code: useshp_3   Date accepted: 2001-05-31

Name: leisure

Definition: ship is used for leisure activities

Attribute	Value at other locally relevant water level

Acronym: othwat

Code: 17086

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: Value at waterway gauge in case of a specific water level, which is locally of importance 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:

24   DD Name: HYDRO   Code: VERDAT_24   Date accepted: 2000-11-01

Value   Data Dictionary (DD) Reference

            Name: Local datum

            Definition: an arbitrary datum defined by a local harbour authority, from which leves and tidal heights are measured by this authority.

23   DD Name: HYDRO   Code: VERDAT_23   Date accepted: 2000-11-01

            Name: Lowest astronomical tide

            Definition: (LAT) - the lowest tide level which can be predicted to occur under average meterological conditions and under any combination of astronomical conditions. (IHO Dictionary, S-32, 5th Edition, 2936)

30   DD Name: HYDRO   Code: VERDAT_30   Date accepted: 2000-11-01

            Name: Highest astronomical tide

            Definition: (HAT) - the highest tidal level which can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions. (IHO Dictionary, S-32, 5th Edition, 2244).

45   DD Name: IENC   Code: verdat_45   Date accepted: 2019-10-08

            Name: Dutch estuary low water reference level (OLW)

            Definition:

Attribute	Vertical river datum reference level value

Acronym: vcrval   Code: 18048

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC   Date accepted: 2019-11-13

Definition: Local value of the vertical clearance reference level.

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