

IENC Feature Catalogue

Edition 2.2

2010-01-01

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://195.217.61.120/iho_registry
IENC Data Dictionary	IENC	IEHG	http://195.217.61.120/iho_registry

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	Coverage
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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,cccc,c..."

Feature	Quality of data
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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,ft" decimal digits = "2"
POSACC	O	unit = "m,ft" decimal digits = "2"
SOUACC	O	unit = "m,ft" 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,cccc,c..."

Feature	Nautical Publication Information
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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 = "ccyyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Survey reliability
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Acronym: **M_SREL**

Code: 310

Type: M

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

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

Attribute Bindings:

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

Feature	Administration Area (Named)
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Acronym: **ADMARE**

Code: 1

Type: G

Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
JRSDTN	M	value list = "1,2,3"
NATION	M	format = "cc"
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,cccc,c..."

Feature	Airport/airfield
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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"
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,cccc,c..."

Feature	Beacon, isolated danger
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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"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Beacon, lateral
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Acronym: **BCNLAT** Code: 7

Type: G

Primitive: P

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
BCNSHP	M	value list = "1,5"
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"
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"

acronym	usage	constraints
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Buoy, cardinal
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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	

acronym	usage	constraints
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Buoy, isolated danger
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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	

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

Feature	Buoy, lateral
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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	

acronym	usage	constraints
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Buoy, safe water
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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	

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

Feature	Buoy, special purpose/general
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Acronym:	BOYSPP	Code: 19
Type:	G	
Primitive:	P	

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

acronym	usage	constraints
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Built-up area
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Acronym: **BUAARE**

Code: 13

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

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

Attribute Bindings:

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

Feature	Building, single
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Acronym: **BUISGL**

Code: 12

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
CONVIS	O	value list = "1,2"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
FUNCTN	C	value list = "2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34"
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,cccc,c..."

Feature	Canal
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Acronym: **CANALS**

Code: 23

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

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

Attribute Bindings:

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

Feature	Cable area
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Acronym: **CBLARE** Code: 20

Type: G

Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
CATCBL	O	value list = "1,3,4,5,6"
STATUS	C	value list = "18"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
RESTRN	O	value list = "1"
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,cccc,c..."

Feature	Cable, submarine
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Acronym: **CBLSUB** Code: 22

Type: G

Primitive: L

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Coastline
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Acronym: **COALNE** Code: 30

Type: G

Primitive: L

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Caution area
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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,cccc,c..."

Feature	Conveyor
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Acronym: **CONVYR**

Code: 34

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Crane
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Acronym:	CRANES	Code: 35
Type:	G	
Primitive:	P,A	

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
CATCRN	O	value list = "2,3,4,5"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
VERCLR	O	unit = "m,ft" decimal digits = "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,cccc,c..."

Feature	Dam
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Acronym: **DAMCON**

Code: 38

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

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

Attribute Bindings:

acronym	usage	constraints
CATDAM	M	value list = "1,2,3"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
NATCON	O	value list = "1,2,3,4,5,6,7,8,9"
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,cccc,c..."

Feature	Daymark
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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 = "1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33"
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,cccc,c..."

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,ft" decimal digits = "2"
DRVAL2	M	unit = "m,ft" decimal digits = "2"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
INFORM	C	
NINFOM	O	
QUASOU	C	value list = "1,2,8,10,11"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Depth contour
---------	---------------

Acronym: **DEPCNT** Code: 43

Type: G

Primitive: L

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Dredged area
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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,ft" decimal digits = "2"
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,cccc,c..."

Feature	Dry dock
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Acronym: **DRYDOC** Code: 47

Type: G

Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
DRVAL1	O	unit = "m,ft" decimal digits = "2"
HORCLR	O	unit = "m,ft" decimal digits = "2"
HORLEN	O	unit = "m,ft" decimal digits = "2"
HORWID	O	unit = "m,ft" 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"

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Dyke
---------	------

Acronym: **DYKCON** Code: 49

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
HEIGHT	O	unit = "m,ft" 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,cccc,c..."

Feature	Fairway
---------	---------

Acronym: **FAIRWY** Code: 51

Type: G

Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Ferry route
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Acronym: **FERYRT**

Code: 53

Type: G

Primitive: L

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Floating dock
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Acronym: **FLODOC**

Code: 57

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

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

Attribute Bindings:

acronym	usage	constraints
DRVAL1	O	unit = "m,ft" decimal digits = "2"
HORCLR	O	unit = "m,ft" decimal digits = "2"
HORLEN	O	unit = "m,ft" decimal digits = "2"
HORWID	O	unit = "m,ft" 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"

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Fence/wall
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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"
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,cccc,c..."

Feature	Fog signal
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Acronym:	FOGSIG	Code: 58
Type:	G	
Primitive:	P	

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

Feature	Free port area
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Acronym: **FRPARE**

Code: 60

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

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

Attribute Bindings:

acronym	usage	constraints
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,cccc,c..."

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,ft" decimal digits = "2"
VERCLR	O	unit = "m,ft" decimal digits = "2"
VERDAT	O	value list = "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"

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

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"
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,cccc,c..."

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"
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,cccc,c..."

Feature	Lake
---------	------

Acronym: **LAKARE** Code: 69

Type: G

Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Light
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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	M	value list = "1,4,12,13,14,15"
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 = "1,2,3,4,7,9"
LITVIS	C	value list = "4"
MLTYLT	C	min = "2"
ORIENT	C	unit = "deg" decimal digits = "2"
SECTR1	C	unit = "deg" decimal digits = "2"
SECTR2	C	unit = "deg" decimal digits = "2"
SIGGRP	C	format = "(c)(c)..."
SIGPER	C	unit = "s" decimal digits = "2"
SIGSEQ	C	format = "l.ll+(e.ee)"
STATUS	C	value list = "2,3,4,8,9,12,14,16,17"
OBJNAM	O	
NOBJNM	O	
INFORM	C	

acronym	usage	constraints
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,cccc,c..."

Feature	Land area
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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	
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,cccc,c..."

Feature	Landmark
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Acronym: **LNDMRK** Code: 74

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
CATLMK	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22"
CONVIS	M	value list = "1,2"
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,"
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,cccc,c..."

Feature	Land region
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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
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,cccc,c..."

Feature	Mooring/Warping facility
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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 = "1,5,7"
NATCON	O	value list = "1,2,3,4,5,6,7,8,9"
WATLEV	O	value list = "1,2,3,4,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Navigation line
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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,cccc,c..."

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
CATOB	O	value list = "1,2,3,4,5,6,7,8,9,10"
NATSUR	C	value list = "9"
VALSOU	C	unit = "m,ft" decimal digits = "2"
WATLEV	C	value list = "1,2,3,4,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Oil barrier
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Acronym: **OILBAR**

Code: 89

Type: G

Primitive: L

Data Dictionary (DD) Reference:

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

Definition: A construction to dam oil flow on water.

Attribute Bindings:

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

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
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,cccc,c..."

Feature	Pipeline area
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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"
PRODC	O	value list = "1,2,3,4,5,6,7,8,14,15,17,21,22"
RESTRN	M	value list = "1"
STATUS	C	value list = "18"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXDSC	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,cccc,c..."

Feature	Pipeline, submarine/on land
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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"
PRODC	O	value list = "1,2,3,4,5,6,7,8,14,15,17,21,22"
STATUS	C	value list = "18"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"

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

Feature	Pontoon
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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
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Production/storage area
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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"
PRODC	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"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Pylon/bridge support
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Acronym: **PYLONS** Code: 98

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
CATPYL	M	value list = "1,2,3,4,5"
WATLEV	M	value list = "1,2,3,4,5"
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,cccc,c..."

Feature	Radar station
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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,cccc,c..."

Feature	Railway
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Acronym: **RAILWY** Code: 106

Type: G

Primitive: L

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
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,cccc,c..."

Feature	Recommended track
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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,ft" decimal digits = "2"
DRVAL2	O	unit = "m,ft" decimal digits = "2"
TRAFIC	M	value list = "1,2,3,4"
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"

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Restricted area
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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"
CATREA	C	value list = "12"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	River
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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	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..."

Feature	Road
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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"
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,cccc,c..."

Feature	Radar transponder beacon
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Acronym: **RTPBCN** Code: 103

Type: G

Primitive: P

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
CATRTB	M	value list = "1,2,3"
RADWAL	O	format = "xx.x-b,xx.x-b,...] xx.x = value in meter, b = band"
SIGGRP	O	format = "(c)(c)..."
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,cccc,c..."

Feature	Sea area/named water area
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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 = "13,51,53"
OBJNAM	M	
NOBJNM	O	
INFORM	C	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	C	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Silo/tank
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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"
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,cccc,c..."

Feature	Shoreline construction
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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"
INFORM	O	
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"

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Sloping ground
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Acronym: **SLOGRD** Code: 127

Type: G

Primitive: L,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Slope topline
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Acronym: **SLOTOP**

Code: 126

Type: G

Primitive: L

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
CATSLO	M	value list = "2,3,6"
NATSUR	O	value list = "1,2,3,4,5,6,7,8,9,11,14,17,18"
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,cccc,c..."

Feature	Small craft facility
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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 = "1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33"
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,cccc,c..."

Feature	Sounding
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Acronym: **SOUNDG**

Code: 129

Type: G

Primitive: P

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

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

Attribute Bindings:

acronym	usage	constraints
SCAMIN	M	min = "1"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Topmark
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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 = "1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33"
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"

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

Feature	Tunnel
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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,ft" decimal digits = "1"
HORCLR	C	unit = "m,ft" decimal digits = "2"
VERCLR	C	unit = "m,ft" 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,cccc,c..."

Feature	Two-way route part
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Acronym: **TWRTPT** Code: 152

Type: G

Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

Feature	Underwater/awash rock
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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,ft" decimal digits = "2"
WATLEV	M	value list = "1,2,3,4,5"
NATSUR	O	value list = "1,2,3,4,5,6,7,8,9,11,14,17,18"
QUASOU	O	value list = "1,2,8,10,11"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"

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

Feature	Vegetation
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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 = "6,13"
CONVIS	O	value list = "1,2"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Wreck
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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,ft" decimal digits = "2"
WATLEV	O	value list = "1,2,3,4,5"
QUASOU	O	value list = "1,2,8,10,11"
TECSOU	O	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13,14"
STATUS	O	value list = "12,16,17,18"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"

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

Feature	Aggregation
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Acronym: **C_AGGR** Code: 400

Type: O

Primitive: N

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
NOBJNM	O	
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,cccc,c..."

Feature	Accociation
---------	-------------

Acronym: **C_ASSO**

Code: 401

Type: O

Primitve: 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,cccc,c..."

Feature	Anchor berth
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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"
STATUS	O	value list = "2,3,4,8,9,12,14,16,17"
NATSUR	O	value list = "1,2,3,4,5,6,7,8,9,11,14,17,18"
unlocd	C	
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Anchorage area
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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"
STATUS	O	value list = "2,3,4,8,9,12,14,16,17"
NATSUR	O	value list = "1,2,3,4,5,6,7,8,9,11,14,17,18"
unlocd	C	
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"

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

Feature	Beacon, lateral
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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 = "1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23"
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"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyyymmdd"

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

Feature	Berth
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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"
clsdng	O	value list = "1,2,3,4,5"
DRVAL1	O	unit = "m,ft" decimal digits = "2"
QUASOU	C	value list = "1,2,8,10,11"
SOUACC	C	unit = "m,ft" decimal digits = "2"
STATUS	O	value list = "2,3,4,8,9,12,14,16,17"
trshgd	O	value list = "1,2,3,4,5,6,7,8,9,10"
unlocd	C	
verdat	C	value list = "12,31,32,33,34,35,36,37,38,39,40,41"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	

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

Feature	Bridge
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Acronym: **bridge** Code: 17011

Type: G

Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
CATBRG	M	value list = "1,3,4,5,9,12"
HORCLR	O	unit = "m,ft" decimal digits = "2"
VERCCL	C	unit = "m,ft" decimal digits = "2"
VERCLR	C	unit = "m,ft" decimal digits = "2"
VERCOP	C	unit = "m,ft" decimal digits = "2"
hunits	C	value list = "1,2,3,4,5,6"
unlocd	C	
verdat	C	value list = "12,31,32,33,34,35,36,37,38,39,40,41"
wtwdis	M	decimal digits = "3"
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,cccc,c..."

Feature	Bunker station
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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

Attribute Bindings:

acronym	usage	constraints
bunves	M	value list = "1,2"
catbun	O	value list = "1,2,3"
OBJNAM	O	
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,cccc,c..."

Feature	Buoy, lateral
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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 = "1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23"
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"
OBJNAM	C	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"

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

Feature	Cable, overhead
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Acronym: **cblohd** Code: 17012

Type: G

Primitive: L

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
catchbl	M	value list = "1,3,4,5,6,7"
VERCLR	M	unit = "m,ft" decimal digits = "2"
hunits	C	value list = "1,2,3,4,5,6"
verdat	O	value list = "12,31,32,33,34,35,36,37,38,39,40,41"
wtwdis	O	decimal digits = "3"
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,cccc,c..."

Feature	Checkpoint
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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,cccc,c..."

Feature	Communication area
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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"
COMCHA	M	format = "xxxx;xxxx;...."
STATUS	O	value list = "2,3,4,8,9,12,14,16,17"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Conveyor
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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"
PRODC	O	value list = "1,2,3,4,5,6,7,8,14,15,17,21,22"
VERCLR	O	unit = "m,ft" decimal digits = "2"
verdat	O	value list = "12,31,32,33,34,35,36,37,38,39,40,41"
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,cccc,c..."

Feature	Crane
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Acronym: **cranes** Code: 17030

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
CATCRN	O	value list = "2,3,4,5"
VERCLR	O	unit = "m,ft" decimal digits = "2"
verdat	O	value list = "12,31,32,33,34,35,36,37,38,39,40,41"
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,cccc,c..."

Feature	Current, non-gravitational
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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"

acronym	usage	constraints
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,cccc,c..."

Feature	Depth area
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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,ft" decimal digits = "2"
DRVAL2	M	unit = "m,ft" decimal digits = "2"
eleva1	C	unit = "m,ft" decimal digits = "2"
eleva2	C	unit = "m,ft" decimal digits = "2"
QUASOU	C	value list = "1,2,8,10,11"
hunits	C	value list = "1,2,3,4,5,6"
wtwdis	M	decimal digits = "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,cccc,c..."

Feature	distance mark
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Acronym: **dismar** Code: 17004

Type: G

Primitive: P

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Exceptional navigation structure
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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,ft" decimal digits = "2"
unlocd	C	
verdat	M	value list = "12,31,32,33,34,35,36,37,38,39,40,41"
hunits	C	value list = "1,2,3,4,5,6"
wtwdis	M	decimal digits = "3"
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,cccc,c..."

Feature	Ferry route
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Acronym: **feryrt** Code: 17013

Type: G

Primitive: L

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Floating dock
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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,ft" decimal digits = "2"
HORCLR	O	unit = "m,ft" decimal digits = "2"
HORLEN	O	unit = "m,ft" decimal digits = "2"
horcll	O	unit = "m,ft" decimal digits = "2"
horclw	O	unit = "m,ft" decimal digits = "2"
HORWID	O	unit = "m,ft" decimal digits = "2"
verdat	O	value list = "12,31,32,33,34,35,36,37,38,39,40,41"
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,cccc,c..."

Feature	Gate
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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,ft" decimal digits = "2"
VERCLR	O	unit = "m,ft" decimal digits = "2"
hunits	C	value list = "1,2,3,4,5,6"
wtwdis	O	decimal digits = "3"
verdat	O	value list = "12,31,32,33,34,35,36,37,38,39,40,41"
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,cccc,c..."

Feature	Harbour area (administrative)
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Acronym: **hrbare** Code: 17014
 Type: G
 Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
cathbr	O	value list = "1,2,3,4,5"
unlocd	C	
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,cccc,c..."

Feature	Harbour basin
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Acronym: **hrbbsn** Code: 17056

Type: G

Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
HORLEN	O	unit = "m,ft" decimal digits = "2"
HORWID	O	unit = "m,ft" 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,cccc,c..."

Feature	Harbour facility
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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"
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,cccc,c..."

Feature	Hulk
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Acronym: **hulkes**

Code: 17020

Type: G

Primitive: A

Data Dictionary (DD) Reference:

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

Definition: A permanently moored ship.

Attribute Bindings:

acronym	usage	constraints
cathlk	O	value list = "1,2,3,4,5,6"
unlocd	C	
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,cccc,c..."

Feature	Lock basin
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Acronym: **lokbsn**

Code: 17016

Type: G

Primitive: A

Data Dictionary (DD) Reference:

DD Name: IENC

Date accepted: 2001-05-31

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

Attribute Bindings:

acronym	usage	constraints
horcll	M	unit = "m,ft" decimal digits = "2"
horclw	M	unit = "m,ft" decimal digits = "2"
HORLEN	O	unit = "m,ft" decimal digits = "2"
HORWID	O	unit = "m,ft" 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"

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Lock basin part
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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,ft" decimal digits = "2"
horclw	M	unit = "m,ft" decimal digits = "2"
HORLEN	O	unit = "m,ft" decimal digits = "2"
HORWID	O	unit = "m,ft" 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"

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Maximum permitted ship dimensions
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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,ft" decimal digits = "2"
lg_lgs	O	unit = "m,ft" decimal digits = "2"
lg_drt	O	unit = "m,ft" 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"

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

Feature	Maximum permitted vessel speed
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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_asl	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"
lc_wd1	O	decimal digits = "1"
lc_wd2	O	decimal digits = "1"
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"
lc_bm1	O	unit = "m,ft" decimal digits = "2"
lc_bm2	O	unit = "m,ft" decimal digits = "2"

acronym	usage	constraints
lc_lg1	O	unit = "m,ft" decimal digits = "2"
lc_lg2	O	unit = "m,ft" decimal digits = "2"
lc_dr1	O	unit = "m,ft" decimal digits = "2"
lc_dr2	O	unit = "m,ft" decimal digits = "2"
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,cccc,c..."
lg_pbr	O	

Feature	Navigational system of marks
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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"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Notice mark
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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 = "1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35"
dirimp	O	value list = "1,2,3,4"
disipd	O	unit = "m,ft" decimal digits = "1"
disipu	O	unit = "m,ft" decimal digits = "1"
disbk1	O	unit = "m,ft" decimal digits = "1"
disbk2	O	unit = "m,ft" decimal digits = "1"
fnctnm	M	value list = "1,2,3,4,5"
marsys	O	value list = "1,2,9,10,11,12"
ORIENT	C	unit = "deg" decimal digits = "2"
STATUS	O	value list = "2,3,4,8,9,12,14,16,17"
bnkwtw	O	value list = "1,2"
OBJNAM	O	
NOBJNM	O	
INFORM	O	

acronym	usage	constraints
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,cccc,c..."

Feature	Pipeline, overhead
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Acronym: **pipohd** Code: 17024

Type: G

Primitive: L

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

Feature	Pontoon
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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	
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,cccc,c..."

Feature	port area
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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	
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,cccc,c..."

Feature	Radio calling-in point
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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	O	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	
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"

acronym	usage	constraints
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	refuse dump
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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	
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,cccc,c..."

Feature	Restricted area
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Acronym: **resare** Code: 17005

Type: G

Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

Feature	Shoreline Construction
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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 = "7,18,19"
NATCON	O	value list = "1,2,3,4,5,6,7,8,9"
watlev	C	value list = "1,2,3,4,8,9"
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,cccc,c..."

Feature	Signal station, traffic
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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"
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,cccc,c..."

Feature	Signal station, warning
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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"
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,cccc,c..."

Feature	Sounding datum
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Acronym: **m_sdat**

Code: 17022

Type: M

Primitive: A

Data Dictionary (DD) Reference:

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

Definition: An area of uniform sounding datum.

Attribute Bindings:

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

Feature	terminal
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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 trans-fer of cargos 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	
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,cccc,c..."

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,cccc,c..."

Feature	turning basin
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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,ft" 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,cccc,c..."

Feature	Underwater rock / awash rock
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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,ft" decimal digits = "2"
watlev	M	value list = "1,2,3,4,8,9"
NATSUR	O	value list = "1,2,3,4,5,6,7,8,9,11,14,17,18"
QUASOU	O	value list = "1,2,8,10,11"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"

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

Feature	Vehicle transfer
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Acronym: **vehtrf** Code: 17069

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
catvtr	M	value list = "1,2,3,4,5,6"
HEIGHT	M	unit = "m,ft" decimal digits = "2"
unlocd	C	
verdat	O	value list = "12,31,32,33,34,35,36,37,38,39,40,41"
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,cccc,c..."

Feature	Vertical datum
---------	----------------

Acronym: **m_vdat**

Code: 17023

Type: M

Primitive: A

Data Dictionary (DD) Reference:

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

Definition: An area of uniform vertical datum.

Attribute Bindings:

acronym	usage	constraints
verdat	M	value list = "12,31,32,33,34,35,36,37,38,39,40,41"
INFORM	O	
NINFOM	O	
NTXTDS	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Feature	Waterway area
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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"
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,cccc,c..."

Feature	waterway axis
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Acronym: **wtwaxs** Code: 17051

Type: G

Primitive: L

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
catccl	O	value list = "1,2,3,4,5,6,7,8,9,10,11"
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"

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

Feature	Waterway gauge
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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,ft" decimal digits = "1"
disipu	O	unit = "m,ft" decimal digits = "1"
ELEVAT	O	unit = "m,ft" decimal digits = "2"
higwat	O	unit = "m,ft" decimal digits = "2"
hignam	O	
lowwat	O	unit = "m,ft" decimal digits = "2"
lownam	O	
meawat	O	unit = "m,ft" decimal digits = "2"
meanam	O	
othwat	O	unit = "m,ft" decimal digits = "2"
othnam	O	
reflev	O	value list = "1,2,3,4,5,6,7,8,9"
sdrlev	O	
unlocd	C	
vcrlev	O	
verdat	O	value list = "12,31,32,33,34,35,36,37,38,39,40,41"

acronym	usage	constraints
hunits	C	value list = "1,2,3,4,5,6"
wtwdis	O	decimal digits = "3"
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,cccc,c..."

Feature	waterway profile
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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 a physically non-existent line which is normally the connection of two op-posite distance marks. Waterway profiles can be used to define a special water level.

Attribute Bindings:

acronym	usage	constraints
hunits	C	value list = "1,2,3,5,6"
wtwdis	M	decimal digits = "3"
HEIGHT	C	unit = "m,ft" decimal digits = "2"
reflev	C	value list = "1,2,3,4,5,6,7,8,9"
verdat	C	value list = "12,31,32,33,34,35,36,37,38,39,40,41"
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,cccc,c..."

Feature	Daymark
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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"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	

acronym	usage	constraints
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

Attribute	Beacon shape
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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 | <p>DD Name: HYDRO Code: BCNSHP_1 Date accepted: 2000-11-01</p> <p>Name: stake, pole, perch, post</p> <p>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)</p> |
| 2 | <p>DD Name: HYDRO Code: BCNSHP_2 Date accepted: 2000-11-01</p> <p>Name: withy</p> <p>Definition: a tree without roots stuck or spoiled into the bottom of the sea to serve as a navigational aid.</p> |
| 3 | <p>DD Name: HYDRO Code: BCNSHP_3 Date accepted: 2000-11-01</p> <p>Name: beacon tower</p> <p>Definition: a solid structure of the order of 10 metres in height used as a navigational aid.</p> |
| 4 | <p>DD Name: HYDRO Code: BCNSHP_4 Date accepted: 2000-11-01</p> <p>Name: lattice beacon</p> <p>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.</p> |
| 5 | <p>DD Name: HYDRO Code: BCNSHP_5 Date accepted: 2000-11-01</p> |

Value Data Dictionary (DD) Reference

Name: pile beacon

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

Attribute	Buoy shape
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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 | <p>DD Name: HYDRO Code: BOYSHP_1 Date accepted: 2000-11-01</p> <p>Name: conical (nun, ogival)</p> <p>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.</p> |
| 2 | <p>DD Name: HYDRO Code: BOYSHP_2 Date accepted: 2000-11-01</p> <p>Name: can (cylindrical)</p> <p>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.</p> |
| 3 | <p>DD Name: HYDRO Code: BOYSHP_3 Date accepted: 2000-11-01</p> <p>Name: spherical</p> <p>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.</p> |
| 4 | <p>DD Name: HYDRO Code: BOYSHP_4 Date accepted: 2000-11-01</p> <p>Name: pillar</p> <p>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.</p> |

Value	Data Dictionary (DD) Reference		
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.		
6	DD Name: HYDRO	Code: BOYSHP_6	Date accepted: 2000-11-01
	Name: barrel (tun)		
	Definition: the upper part of the body above the water-line, or the greater part of the superstructure, has the form of a barrel or cylinder floating horizontally.		
8	DD Name: HYDRO	Code: BOYSHP_8	Date accepted: 2000-11-01
	Name: ice buoy		
	Definition: a specially constructed shuttle shaped buoy which is used in ice conditions.		

Attribute	Buried depth
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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
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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
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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)

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

Value Data Dictionary (DD) Reference

Name: footbridge

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

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

Name: suspension bridge

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

Attribute	Category of built-up area
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Acronym: **CATBUA**

Code: 10

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

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

Name: urban area

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

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

Name: settlement

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

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

Name: village

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

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

Name: town

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

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

Name: city

Value	Data Dictionary (DD) Reference
	Definition: a major town inhabited by a large permanent community with all essential services.

Attribute	Category of cable
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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
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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
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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)

Value	Data Dictionary (DD) Reference		
5	DD Name: HYDRO	Code: CATCOA_5	Date accepted: 2000-11-01
	Name: shingly shore		
	Definition: a shoreline area made up of rounded, often flat waterworn rock fragments larger than approximately 16 millimetres. (adapted from IHO Dictionary, S-32, 5th Edition, 4683)		
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
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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
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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
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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
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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
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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 fence/wall
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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 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

Value	Data Dictionary (DD) Reference		
	Name:	reed	
	Definition:	a reed uses compressed air and emits a weak, high pitched sound. (Admiralty List of Lights and Fog Signals)	
6	DD Name: HYDRO	Code: CATFOG_6	Date accepted: 2000-11-01
	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 ferry
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Acronym: **CATFRY**

Code: 25

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

- | | |
|---|--|
| 1 | <p>DD Name: HYDRO Code: CATFRY_1 Date accepted: 2000-11-01</p> <p>Name: 'free-moving' ferry</p> <p>Definition: a ferry which may have routes that vary with weather, tide and traffic. (adapted from M-4)</p> |
| 2 | <p>DD Name: HYDRO Code: CATFRY_2 Date accepted: 2000-11-01</p> <p>Name: cable ferry</p> <p>Definition: a ferry that follows a fixed route guided by a cable. (adapted from IHO Specifications, M-4)</p> |

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

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
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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
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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

Value Data Dictionary (DD) Reference

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

Attribute	Category of lateral mark
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Acronym: **CATLAM**

Code: 36

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

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

Name: port-hand lateral mark

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

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

Name: starboard-hand lateral mark

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

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

Name: preferred channel to starboard lateral mark

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

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

Name: preferred channel to port lateral mark

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

Attribute	Category of landmark
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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)

Value	Data Dictionary (DD) Reference		
	Definition: a staff or pole on which flags are raised. (Digital Geographic Information Standard - DIGEST 1.28)		
6	DD Name: HYDRO	Code: CATLMK_6	Date accepted: 2000-11-01
	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		

Value	Data Dictionary (DD) Reference		
	Definition: a tapering shaft usually of stone or concrete, square or rectangular in section, with a pyramidal apex. (Adapted from Oxford English Dictionary)		
13	DD Name: HYDRO	Code: CATLMK_13	Date accepted: 2000-11-01
	Name: statue		
	Definition: a representation of a human, animal or fantasy figure in marble, bronze, etc.		
14	DD Name: HYDRO	Code: CATLMK_14	Date accepted: 2000-11-01
	Name: cross		
	Definition: a monument, or other structure in form of a cross. (Funk and Wagnalls Dictionary)		
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

Value Data Dictionary (DD) Reference

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 lights
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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)

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

Name: front

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

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

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

Value Data Dictionary (DD) Reference

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 mooring/warping facility
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Acronym: **CATMOR**

Code: 40

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

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

Name: dolphin

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

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

Name: post or pile

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

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

Name: mooring buoy

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

Attribute	Category of navigation line
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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
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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 | <p>DD Name: HYDRO Code: CATOBS_1 Date accepted: 2000-11-01</p> <p>Name: snag/stump</p> <p>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)</p> |
| 2 | <p>DD Name: HYDRO Code: CATOBS_2 Date accepted: 2000-11-01</p> <p>Name: wellhead</p> <p>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)</p> |
| 3 | <p>DD Name: HYDRO Code: CATOBS_3 Date accepted: 2000-11-01</p> <p>Name: diffuser</p> <p>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.</p> |
| 4 | <p>DD Name: HYDRO Code: CATOBS_4 Date accepted: 2000-11-01</p> <p>Name: crib</p> <p>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.</p> |

Value	Data Dictionary (DD) Reference		
5	DD Name: HYDRO	Code: CATOBS_5	Date accepted: 2000-11-01
	Name: fish haven		
	Definition: areas established by private interests, usually sport fishermen, to simulate natural reefs and wrecks that attract fish. The reefs are constructed by dumping assorted junk in areas which may be of very 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).		

Attribute	Category of oil barrier
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Acronym: **CATOLB**

Code: 44

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

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

Name: oil retention (high pressure pipe)

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

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

Name: floating oil barrier

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

Attribute	Category of pipeline/pipe
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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
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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. | | |

Value	Data Dictionary (DD) Reference		
6	DD Name: HYDRO	Code: CATPRA_6	Date accepted: 2000-11-01
	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)

Value Data Dictionary (DD) Reference

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

Name: bridge pier

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

Attribute	Category of radar station
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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 restricted area
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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. |

Value	Data Dictionary (DD) Reference		
22	DD Name: HYDRO	Code: CATREA_22	Date accepted: 2000-11-01
	Name: fish sanctuary		
	Definition: a place where fish are protected.		
23	DD Name: HYDRO	Code: CATREA_23	Date accepted: 2000-11-01
	Name: ecological reserve		
	Definition: a tract of land managed so as to preserve the relation of plants and living creatures to each other and to their surroundings.		
25	DD Name: HYDRO	Code: CATREA_25	Date accepted: 2000-11-01
	Name: swinging area		
	Definition: an area where vessels turn. (Service Hydrographique et Océanographique de la Marine, France).		
26	DD Name: HYDRO	Code: CATREA_26	Date accepted: 2000-11-01
	Name: water skiing area		
	Definition: an area within which people may water ski and therefore vessel movement may be restricted.		

Attribute	Category of road
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Acronym: **CATROD**

Code: 57

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

- | | |
|---|---|
| 1 | <p>DD Name: HYDRO Code: CATROD_1 Date accepted: 2000-11-01</p> <p>Name: motorway</p> <p>Definition: a main road with separate carriageways and limited access, specially constructed and controlled for fast motor traffic.</p> |
| 2 | <p>DD Name: HYDRO Code: CATROD_2 Date accepted: 2000-11-01</p> <p>Name: major road</p> <p>Definition: a hard surfaced (metalled) road; a main through route.</p> |
| 3 | <p>DD Name: HYDRO Code: CATROD_3 Date accepted: 2000-11-01</p> <p>Name: minor road</p> <p>Definition: a secondary road for local traffic.</p> |
| 4 | <p>DD Name: HYDRO Code: CATROD_4 Date accepted: 2000-11-01</p> <p>Name: track/path</p> <p>Definition: track - a rough path or way formed by use. path - a way or track laid down for walking or made by continual treading.</p> |

Attribute	Category of radar transponder beacon
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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 small craft facility
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Acronym: **CATSCF**

Code: 65

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

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

Name: visitor's berth

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

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

Name: nautical club

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

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

Name: boat hoist

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

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

Name: sailmaker

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

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

Name: boatyard

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

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

Value	Data Dictionary (DD) Reference		
	Name: public inn		
	Definition: a public house providing food, drink and accommodation. (The Collins Reference English Dictionary, 1992)		
7	DD Name: HYDRO	Code: CATSCF_7	Date accepted: 2000-11-01
	Name: restaurant		
	Definition: a commercial establishment serving food. (The Collins Reference Dictionary, 1992)		
8	DD Name: HYDRO	Code: CATSCF_8	Date accepted: 2000-11-01
	Name: chandler		
	Definition: a dealer in ships' supplies. (The Collins Reference Dictionary, 1992)		
9	DD Name: HYDRO	Code: CATSCF_9	Date accepted: 2000-11-01
	Name: provisions		
	Definition: a place where food and other such supplies are available.		
10	DD Name: HYDRO	Code: CATSCF_10	Date accepted: 2000-11-01
	Name: doctor		
	Definition: a place where a doctor is available to provide medical attention.		
11	DD Name: HYDRO	Code: CATSCF_11	Date accepted: 2000-11-01
	Name: pharmacy		
	Definition: a place where medical drugs are dispensed.		
12	DD Name: HYDRO	Code: CATSCF_12	Date accepted: 2000-11-01
	Name: water tap		
	Definition: a place where fresh water is available.		
13	DD Name: HYDRO	Code: CATSCF_13	Date accepted: 2000-11-01
	Name: fuel station		
	Definition: a place where fuel is available.		
14	DD Name: HYDRO	Code: CATSCF_14	Date accepted: 2000-11-01
	Name: electricity		

Value	Data Dictionary (DD) Reference		
	Definition: a place where a connection to an electrical supply is available.		
15	DD Name: HYDRO	Code: CATSCF_15	Date accepted: 2000-11-01
	Name: bottle gas		
	Definition: a place where bottled gas is available.		
16	DD Name: HYDRO	Code: CATSCF_16	Date accepted: 2000-11-01
	Name: showers		
	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

Value	Data Dictionary (DD) Reference		
	Name:	parking for boats and trailers	
	Definition:	a place on shore where boats and/or trailers may be parked.	
24	DD Name: HYDRO	Code: CATSCF_24	Date accepted: 2000-11-01
	Name:	caravan site	
	Definition:	a place where caravans may be parked or where caravan accommodation is provided.	
25	DD Name: HYDRO	Code: CATSCF_25	Date accepted: 2000-11-01
	Name:	camping site	
	Definition:	a place where visitors may pitch tents and camp.	
26	DD Name: HYDRO	Code: CATSCF_26	Date accepted: 2000-11-01
	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.	

Value	Data Dictionary (DD) Reference		
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 sea area
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Acronym: **CATSEA**

Code: 59

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

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. (adapted from IHO-IOC Publication B-6, Standardization of Undersea Feature Names, 2nd Edition)

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.

Attribute	Category of shoreline construction
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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 |

Value	Data Dictionary (DD) Reference		
	Name:	wharf (quay)	
	Definition:	a structure serving as a berthing place for vessels. (IHO Dictionary, S-32, 5th Edition, 5985)	
7	DD Name: HYDRO	Code: CATSLC_7	Date accepted: 2000-11-01
	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)	

Value	Data Dictionary (DD) Reference		
13	DD Name: HYDRO	Code: CATSLC_13	Date accepted: 2000-11-01
	Name: slipway		
	Definition: the prepared and usually reinforced inclined surface on which keel- and bilge-blocks are laid for supporting a vessel under construction. (IHO Dictionary, S-32, 5th Edition, 4775)		
14	DD Name: HYDRO	Code: CATSLC_14	Date accepted: 2000-11-01
	Name: fender		
	Definition: a protective structure designed to cushion the impact of a vessel and prevent damage.		
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
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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
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Acronym: **CATSLO**

Code: 64

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

2 DD Name: HYDRO Code: CATSLO_2 Date accepted: 2000-11-01

Name: embankment

Definition: an artificial elevation constructed from earth, stone, etc. carrying a road, railway or similar or serving to dam water.

3 DD Name: HYDRO Code: CATSLO_3 Date accepted: 2000-11-01

Name: dune

Definition: a mound, ridge or hill of drifted material on the sea coast or in a desert. (adapted from IHO Dictionary, S-32, 5th Edition, 1496)

6 DD Name: HYDRO Code: CATSLO_6 Date accepted: 2000-11-01

Name: cliff

Definition: land rising abruptly for a considerable distance above the water or surrounding land. (IHO Dictionary, S-32, 5th Edition, 829)

Attribute	Category of special purpose mark
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Acronym: **CATSPM**

Code: 66

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

6 DD Name: HYDRO Code: CATSPM_6 Date accepted: 2000-11-01

Name: cable mark

Definition: a mark used to indicate the position of submarine cables or the point at which they run on to the land.

10 DD Name: HYDRO Code: CATSPM_10 Date accepted: 2000-11-01

Name: recording mark

Definition: a mark used to record data for scientific purposes.

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

Name: recreation zone mark

Definition: a mark used to indicate a recreation zone.

37 DD Name: HYDRO Code: CATSPM_37 Date accepted: 2000-11-01

Name: ferry crossing mark

Definition: a mark indicating that a ferry route crosses the ship route; often used with a 'sound ship's siren' mark.

39 DD Name: HYDRO Code: CATSPM_39 Date accepted: 2000-11-01

Name: pipeline mark

Value	Data Dictionary (DD) Reference		
	Definition: a mark used to indicate the position of submarine pipelines or the point at which they run on to the land.		
41	DD Name: HYDRO	Code: CATSPM_41	Date accepted: 2000-11-01
	Name: clearing mark		
	Definition: a mark used to indicate a clearing line.		
45	DD Name: HYDRO	Code: CATSPM_45	Date accepted: 2000-11-01
	Name: foul ground mark		
	Definition: a mark indicating a foul ground.		
50	DD Name: HYDRO	Code: CATSPM_50	Date accepted: 2000-11-01
	Name: entry prohibited mark		
	Definition: a mark indicating that entry is prohibited.		
54	DD Name: HYDRO	Code: CATSPM_54	Date accepted: 2000-11-01
	Name: channel separation mark		
	Definition: a mark indicating the point at which a channel divides separately into two channels.		
55	DD Name: HYDRO	Code: CATSPM_55	Date accepted: 2000-11-01
	Name: marine farm mark		
	Definition: a mark indicating the existence of a fish, mussel, oyster or pearl farm/ culture.		

Attribute	Category of recommended track
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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 vegetation
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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.

Attribute	Category of wreck
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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
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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

Value	Data Dictionary (DD) Reference
	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

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

Attribute	Colour pattern
-----------	----------------

Acronym: **COLPAT**

Code: 76

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

1 DD Name: HYDRO Code: COLPAT_1 Date accepted: 2000-11-01

Name: horizontal stripes

Definition: straight bands or stripes of differing colours painted horizontally.

2 DD Name: HYDRO Code: COLPAT_2 Date accepted: 2000-11-01

Name: vertical stripes

Definition: straight bands or stripes of differing colours painted vertically.

3 DD Name: HYDRO Code: COLPAT_3 Date accepted: 2000-11-01

Name: diagonal stripes

Definition: straight bands or stripes of differing colours painted diagonally (ie not horizontally or vertically).

4 DD Name: HYDRO Code: COLPAT_4 Date accepted: 2000-11-01

Name: squared

Definition: often referred to as checker plate, where alternate colours are used to create squares similar to a chess or draught board. The pattern may be straight or diagonal.

5 DD Name: HYDRO Code: COLPAT_5 Date accepted: 2000-11-01

Name: stripes (direction unknown)

Definition: straight bands or stripes of differing colours painted in an unknown direction.

Value Data Dictionary (DD) Reference

6 DD Name: HYDRO Code: COLPAT_6 Date accepted: 2000-11-01

Name: border stripe

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

Acronym: **CONRAD**

Code: 82

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

3 DD Name: HYDRO Code: CONRAD_3 Date accepted: 2000-11-01

Name: radar conspicuous (has radar reflector)

Definition: an object which returns a strong radar echo, having a radar reflector.

Attribute	Conspicuous, visually
-----------	-----------------------

Acronym: **CONVIS**

Code: 83

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

1 DD Name: HYDRO Code: CONVIS_1 Date accepted: 2000-11-01

Name: visually conspicuous

Definition: term applied to an object either natural or artificial which is distinctly and notably visible from seaward. (IHO Dictionary, S-32, 5th Edition, 984)

2 DD Name: HYDRO Code: CONVIS_2 Date accepted: 2000-11-01

Name: not visually conspicuous

Definition: an object which is visible from seaward, but is not conspicuous.

Attribute	Date end
-----------	----------

Acronym: **DATEND**

Code: 85

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: The latest date on which an object (e.g., a buoy) will be present.

Attribute	Date start
-----------	------------

Acronym: **DATSTA**

Code: 86

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: The earliest date on which an object (e.g., a buoy) will be present.

Attribute	Depth range value 1
-----------	---------------------

Acronym: **DRVAL1**

Code: 87

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The minimum (shoalest) value of a depth range.

Attribute	Depth range value 2
-----------	---------------------

Acronym: **DRVAL2**

Code: 88

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The maximum (deepest) value of a depth range.

Attribute	Elevation
-----------	-----------

Acronym: **ELEVAT**

Code: 90

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: The altitude of the ground level of an object, measured from a specified vertical datum.

Attribute	Exhibition condition of light
-----------	-------------------------------

Acronym: **EXCLIT**

Code: 92

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

1 DD Name: HYDRO Code: EXCLIT_1 Date accepted: 2000-11-01

Name: light shown without change of character

Definition: a light shown throughout the 24 hours without change of character. IHO Chart specifications, M-4

2 DD Name: HYDRO Code: EXCLIT_2 Date accepted: 2000-11-01

Name: daytime light

Definition: a light which is only exhibited by day.

3 DD Name: HYDRO Code: EXCLIT_3 Date accepted: 2000-11-01

Name: fog light

Definition: a light which is exhibited in fog or conditions of reduced visibility.

4 DD Name: HYDRO Code: EXCLIT_4 Date accepted: 2000-11-01

Name: night light

Definition: a light which is only exhibited at night.

Attribute	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

Value	Data Dictionary (DD) Reference		
	Definition: the public department, agency or organisation responsible primarily for the collection, transmission and distribution of mail. (The New Shorter Oxford English Dictionary, 1993)		
7	DD Name: HYDRO	Code: FUNCTN_7	Date accepted: 2000-11-01
	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)		

Value	Data Dictionary (DD) Reference		
14	DD Name: HYDRO	Code: FUNCTN_14	Date accepted: 2000-11-01
	Name: headquarters for district control		
	Definition: the quarters of an executive officer (director, manager, etc.) with responsibility for an administrative area.		
15	DD Name: HYDRO	Code: FUNCTN_15	Date accepted: 2000-11-01
	Name: transit shed/warehouse		
	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

Value	Data Dictionary (DD) Reference		
	Name:	chapel	
	Definition:	a place for Christian worship other than a parish, cathedral or church, especially one attached to a private house or institution. (The New Shorter Oxford English Dictionary, 1993)	
22	DD Name: HYDRO	Code: FUNCTN_22	Date accepted: 2000-11-01
	Name:	temple	
	Definition:	a building for public Jewish worship. (adapted from The New Shorter Oxford English Dictionary, 1993)	
23	DD Name: HYDRO	Code: FUNCTN_23	Date accepted: 2000-11-01
	Name:	pagoda	
	Definition:	a Hindu or Buddhist temple or sacred building. (The New Shorter Oxford English Dictionary, 1993)	
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	

Value	Data Dictionary (DD) Reference		
	Definition: keeping a watch upon events at sea or along the coast. (adapted from IHO Dictionary, S-32,5th Edition,2917)		
29	DD Name: HYDRO	Code: FUNCTN_29	Date accepted: 2000-11-01
	Name: communication		
	Definition: transmitting and/or receiving electronic communication signals. (adapted from Digital Geographic Information Standard - DIGEST)		
30	DD Name: HYDRO	Code: FUNCTN_30	Date accepted: 2000-11-01
	Name: television		
	Definition: broadcast of television signals.		
31	DD Name: HYDRO	Code: FUNCTN_31	Date accepted: 2000-11-01
	Name: radio		
	Definition: broadcast of radio signals.		
32	DD Name: HYDRO	Code: FUNCTN_32	Date accepted: 2000-11-01
	Name: radar		
	Definition: a method, system or technique of using beamed, reflected, and timed radio waves for 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		

Value	Data Dictionary (DD) Reference		
	Definition: a place from which the surroundings can be observed but at which a watch is not habitually maintained. (adapted from IHO Dictionary, S-32, 5th Edition,2917)		
37	DD Name: HYDRO	Code: FUNCTN_37	Date accepted: 2000-11-01
	Name: time ball		
	Definition: a visual time signal in form of a ball		
38	DD Name: HYDRO	Code: FUNCTN_38	Date accepted: 2000-11-01
	Name: clock		
	Definition: visual time signal. (adapted from S-32, 5th Edition, 5536)		
39	DD Name: HYDRO	Code: FUNCTN_39	Date accepted: 2000-11-01
	Name: control		
	Definition: used to control the flow of air, rail, or marine traffic. (Digital Geographic Information Standard - DIGEST)		
40	DD Name: HYDRO	Code: FUNCTN_40	Date accepted: 2000-11-01
	Name: airship mooring		
	Definition: a facility to secure an airship. (adapted from Digital Geographic Information Standard - DIGEST)		
41	DD Name: HYDRO	Code: FUNCTN_41	Date accepted: 2000-11-01
	Name: stadium		
	Definition: a large usually unroofed building with tiers of seats for spectators		
42	DD Name: HYDRO	Code: FUNCTN_42	Date accepted: 2000-11-01
	Name: bus station		
	Definition: a location at which buses arrive and from which they depart.		

Attribute	Height
-----------	--------

Acronym: **HEIGHT**

Code: 95

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: The value of the vertical distance to the highest point of the object, measured from a specified vertical datum.

Attribute	Horizontal clearance
-----------	----------------------

Acronym: **HORCLR**

Code: 98

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: The width of an object, such as a canal or a tunnel, which is available for safe navigation. This may, or may not, be the same as the total physical width of the object.

Attribute	Horizontal length
-----------	-------------------

Acronym: **HORLEN**

Code: 99

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: A measurement of the longer of two linear axis. (Digital Geographic Information Working Group -DGIWG, Oct.87)

Attribute	Horizontal width
-----------	------------------

Acronym: **HORWID**

Code: 100

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: A measurement of the shorter of two linear axis. (Digital Geographic Information Working Group -DGIWG, Oct.87)

Attribute	Information
-----------	-------------

Acronym: **INFORM**

Code: 102

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

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

Definition: Textual information about the object.

Attribute	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 | <p>DD Name: HYDRO Code: LITCHR_1 Date accepted: 2000-11-01</p> <p>Name: fixed</p> <p>Definition: a signal light that shows continuously, in any given direction, with constant luminous intensity and colour. (IHO Dictionary, S-32, 5th Edition, 2780)</p> |
| 2 | <p>DD Name: HYDRO Code: LITCHR_2 Date accepted: 2000-11-01</p> <p>Name: flashing</p> <p>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)</p> |
| 3 | <p>DD Name: HYDRO Code: LITCHR_3 Date accepted: 2000-11-01</p> <p>Name: long-flashing</p> <p>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)</p> |
| 4 | <p>DD Name: HYDRO Code: LITCHR_4 Date accepted: 2000-11-01</p> <p>Name: quick-flashing</p> <p>Definition: a light exhibiting without interruption very rapid regular alternations of light and darkness. (IHO Dictionary, S-32, 5th Edition, 2803)</p> |
| 7 | <p>DD Name: HYDRO Code: LITCHR_7 Date accepted: 2000-11-01</p> |

Value Data Dictionary (DD) Reference

Name: isophased

Definition: a light with all durations of light and darkness equal. (IHO Dictionary, S-32, 5th Edition, 2779)

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)

Attribute	Light visibility
-----------	------------------

Acronym: **LITVIS**

Code: 108

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2008-01-31

Definition:

Enumerations

Value Data Dictionary (DD) Reference

4 DD Name: HYDRO Code: LITVIS_4 Date accepted: 2000-11-01

Name: intensified

Definition: a light in a sector is intensified (i.e. has longer range than other sectors).
(Bundesamt für Seeschifffahrt und Hydrographie, Germany)

Attribute	Marks navigational - System of
-----------	--------------------------------

Acronym: **MARSYS**

Code: 109

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

- | | |
|---|---|
| 1 | DD Name: HYDRO Code: MARSYS_1 Date accepted: 2000-11-01
Name: IALA A

Definition: navigational aids conform to the International Association of Lighthouse Authorities - IALA A system. |
| 2 | DD Name: HYDRO Code: MARSYS_2 Date accepted: 2000-11-01
Name: IALA B

Definition: navigational aids conform to the International Association of Lighthouse Authorities - IALA B system. |

Attribute	Multiplicity of lights
-----------	------------------------

Acronym: **MLTYLT**

Code: 110

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: The number of lights of identical character that exist as a co-located group.

Attribute	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

Value	Data Dictionary (DD) Reference		
	Name: unsurfaced		
	Definition: constructed with no extra protection, usually a term applied to roads not surfaced with a hard material.		
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	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 objec

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) |

Value	Data Dictionary (DD) Reference		
6	DD Name: HYDRO Name: gravel Definition: (particles of 2.0-4.0 mm); small stones with coarse sand.	Code: NATSUR_6	Date accepted: 2000-11-01
7	DD Name: HYDRO Name: pebbles Definition: (particles of 4.0-64.0 mm); small stones made smooth and round by being rolled in water.	Code: NATSUR_7	Date accepted: 2000-11-01
8	DD Name: HYDRO Name: cobbles Definition: (particles of 64.0-256.0 mm); stones worn round and smooth by water and used for paving.	Code: NATSUR_8	Date accepted: 2000-11-01
9	DD Name: HYDRO 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)	Code: NATSUR_9	Date accepted: 2000-11-01
11	DD Name: HYDRO 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)	Code: NATSUR_11	Date accepted: 2000-11-01
14	DD Name: HYDRO Name: coral Definition: hard calcareous skeletons of many tribes of marine polyps. (IHO Dictionary, S-32, 5th Edition, 1061)	Code: NATSUR_14	Date accepted: 2000-11-01
17	DD Name: HYDRO Name: shells Definition: exoskeletons of various water dwelling animals. (adapted from IHO Dictionary, S-32, 5th Edition, 4680)	Code: NATSUR_17	Date accepted: 2000-11-01

Value Data Dictionary (DD) Reference

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	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	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	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	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	Orientation
-----------	-------------

Acronym: **ORIENT**

Code: 117

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: The angular distance measured from true north to the major axis of the object. (Digital Geographic Information Working Group -DGIWG, Oct.87)

Attribute	Periodic date end
-----------	-------------------

Acronym: **PEREND**

Code: 118

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: The end of the active period for a seasonal object (e.g. a buoy).

Attribute	Periodic date start
-----------	---------------------

Acronym: **PERSTA**

Code: 119

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: The start of the active period for a seasonal object (e.g. a buoy).

Attribute	Pictorial representation
-----------	--------------------------

Acronym: **PICREP**

Code: 120

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: Indicates whether a pictorial representation of the object is available.

Attribute	Positional Accuracy
-----------	---------------------

Acronym: **POSACC**

Code: 401

Use Type: F,S

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: The best estimate of the accuracy of a position. The expected input is the maximum of the two-dimensional error. The error is assumed to be positive and negative. The plus/minus character shall not be encoded.

Attribute	Product
-----------	---------

Acronym: **PRODCT**

Code: 123

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

- | | |
|---|--|
| 1 | <p>DD Name: HYDRO Code: PRODCT_1 Date accepted: 2000-11-01</p> <p>Name: oil</p> <p>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)</p> |
| 2 | <p>DD Name: HYDRO Code: PRODCT_2 Date accepted: 2000-11-01</p> <p>Name: gas</p> <p>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)</p> |
| 3 | <p>DD Name: HYDRO Code: PRODCT_3 Date accepted: 2000-11-01</p> <p>Name: water</p> <p>Definition: a colourless, odourless, tasteless liquid that is a compound of hydrogen and oxygen. (adapted from the Oxford Minidictionary, Third Edition)</p> |
| 4 | <p>DD Name: HYDRO Code: PRODCT_4 Date accepted: 2000-11-01</p> <p>Name: stone</p> <p>Definition: a general term for rock fragments. (IHO Dictionary, S-32, 5th Edition, 5059)</p> |
| 5 | <p>DD Name: HYDRO Code: PRODCT_5 Date accepted: 2000-11-01</p> <p>Name: coal</p> |

Value	Data Dictionary (DD) Reference		
	Definition: a hard black mineral that is burned as fuel. (adapted from the Oxford Minidictionary, Third Edition)		
6	DD Name: HYDRO	Code: PRODCCT_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: PRODCCT_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: PRODCCT_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: PRODCCT_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: PRODCCT_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: PRODCCT_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: PRODCCT_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)		

Value Data Dictionary (DD) Reference

22 DD Name: HYDRO Code: PRODCCT_22 Date accepted: 2000-11-01

Name: grain

Definition: a small hard seed, especially that of any cereal plant such as wheat, rice, corn, rye etc. (adapted from the Websters New World Dictionary)

Attribute	Quality of position
-----------	---------------------

Acronym: **QUAPOS**

Code: 402

Use Type: F,S

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

4 DD Name: HYDRO Code: QUAPOS_4 Date accepted: 2000-11-01

Name: approximate

Definition: a position that is considered to be less than third-order accuracy, but is generally considered to be within 30.5 metres of its correct geographic location. Also may apply to an object whose position does not remain fixed. (adapted from IHO Dictionary, S-32, 213, 3967, and IHO Specifications, M-4, 424.1)

10 DD Name: HYDRO Code: QUAPOS_10 Date accepted: 2000-11-01

Name: precisely known

Definition: a position that is of a known value, such as the position of an anchor berth or other defined object.

Attribute	Quality of sounding measurement
-----------	---------------------------------

Acronym: **QUASOU**

Code: 125

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

1 DD Name: HYDRO Code: QUASOU_1 Date accepted: 2000-11-01

Name: depth known

Definition: the depth from chart datum to the bottom is a known value.

2 DD Name: HYDRO Code: QUASOU_2 Date accepted: 2000-11-01

Name: depth unknown

Definition: the depth from chart datum to the bottom is unknown.

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.

10 DD Name: HYDRO Code: QUASOU_10 Date accepted: 2000-11-01

Name: maintained depth

Definition: the depth at which a channel is kept by human influence, usually by dredging.
(IHO Dictionary, S-32, 5th Edition, 3057)

11 DD Name: HYDRO Code: QUASOU_11 Date accepted: 2000-11-01

Name: not regularly maintained

Definition: depths may be altered by human influence, but will not be routinely maintained.

Attribute	Radar wave length
-----------	-------------------

Acronym: **RADWAL**

Code: 126

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: The distance between two successive peaks (or other points of identical phase) on an electromagnetic wave in the radar band of the electromagnetic spectrum.

Attribute	Restriction
-----------	-------------

Acronym: **RESTRN**

Code: 131

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: The official legal statute of each kind of restricted area.

Enumerations

Value Data Dictionary (DD) Reference

1 DD Name: HYDRO Code: RESTRN_1 Date accepted: 2000-11-01

Name: anchoring prohibited

Definition: an area within which anchoring is not permitted.

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	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	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	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)

Value	Data Dictionary (DD) Reference		
12	DD Name: HYDRO	Code: STATUS_12	Date accepted: 2000-11-01
	Name: illuminated		
	Definition: lit by floodlights, strip lights, etc.		
14	DD Name: HYDRO	Code: STATUS_14	Date accepted: 2000-11-01
	Name: public		
	Definition: belonging to, available to, used or shared by, the community as a whole and not restricted to private use. (adapted from The New Shorter Oxford English Dictionary, 1993)		
16	DD Name: HYDRO	Code: STATUS_16	Date accepted: 2000-11-01
	Name: watched		
	Definition: looked at or observed over a period of time especially so as to be aware of any movement or change. (adapted from The New Shorter Oxford English Dictionary, 1993)		
17	DD Name: HYDRO	Code: STATUS_17	Date accepted: 2000-11-01
	Name: un-watched		
	Definition: usually automatic in operation, without any permanently-stationed personnel to superintend it. (adapted from IHO Dictionary, S-32, 5th Edition, 2814)		
18	DD Name: HYDRO	Code: STATUS_18	Date accepted: 2000-11-01
	Name: existence doubtful		
	Definition: an object that has been reported but has not been definitely determined to exist.		

Attribute	Survey authority
-----------	------------------

Acronym: **SURATH**

Code: 150

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

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

Definition: The authority which was responsible for the survey.

Attribute	Survey date - end
-----------	-------------------

Acronym: **SUREND**

Code: 151

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

Definition: The end date of the survey.

Attribute	Survey date - start
-----------	---------------------

Acronym: **SURSTA**

Code: 152

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

Definition: The start date of the survey.

Attribute	Survey type
-----------	-------------

Acronym: **SURTYP**

Code: 153

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition:

Enumerations

Value Data Dictionary (DD) Reference

2 DD Name: HYDRO Code: SURTYP_2 Date accepted: 2000-11-01

Name: controlled survey

Definition: a thorough survey usually conducted with reference to guidelines.

Attribute	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

Value	Data Dictionary (DD) Reference		
	Definition: the depth was determined by a person skilled in the practice of diving. (adapted from IHO Dictionary, S-32, 1422)		
5	DD Name: HYDRO	Code: TECSOU_5	Date accepted: 2000-11-01
	Name: found by lead-line		
	Definition: the depth was determined by using a line, graduated with attached marks and fastened to a 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		

Value Data Dictionary (DD) Reference

Definition: the depth was determined by using instruments placed aboard an artificial satellite. (adapted from IHO Dictionary, S-32, 4509)

12 DD Name: HYDRO Code: TECSOU_12 Date accepted: 2000-11-01

Name: found by levelling

Definition: the depth was determined by using levelling techniques to find the elevation of the point relative to a datum. (adapted from IHO Dictionary, S-32, 2741)

13 DD Name: HYDRO Code: TECSOU_13 Date accepted: 2000-11-01

Name: swept by side-scan-sonar

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	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)

Value	Data Dictionary (DD) Reference		
	<p>Definition: a solid geometrical figure generated by straight lines fixed in direction and describing with one of point a closed curve, especially a circle (in which case the figure is circular cylinder, it's ends being parallel circles). (The New Shorter Oxford English Dictionary. 1993. vol 2). Cylinders are commonly used as International Association of Lighthouse Authorities - IALA topmarks (lateral).</p>		
6	DD Name: HYDRO	Code: TOPSHP_6	Date accepted: 2000-11-01
	Name: board		
	<p>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.</p>		
7	DD Name: HYDRO	Code: TOPSHP_7	Date accepted: 2000-11-01
	Name: x-shape (St. Andrew's cross)		
	<p>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.</p>		
8	DD Name: HYDRO	Code: TOPSHP_8	Date accepted: 2000-11-01
	Name: upright cross (St George's cross)		
	<p>Definition: a cross with one vertical member and one horizontal member, i.e. similar in shape to the character '+'. </p>		
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		
	<p>Definition: 2 cones, one above the other, with their bases together in the centre and their vertices pointing up and down.</p>		
12	DD Name: HYDRO	Code: TOPSHP_12	Date accepted: 2000-11-01

Value	Data Dictionary (DD) Reference		
	Name: rhombus (diamond)		
	Definition: a plane figure having four equal sides and equal opposite angles (two acute and two obtuse); an oblique equilateral parallelogram. (The New Shorter Oxford English Dictionary. 1993. vol 2)		
13	DD Name: HYDRO	Code: TOPSHP_13	Date accepted: 2000-11-01
	Name: 2 cones (points upward)		
	Definition: 2 cones, one above the other, with their their vertices pointing up		
14	DD Name: HYDRO	Code: TOPSHP_14	Date accepted: 2000-11-01
	Name: 2 cones (points downward)		
	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)		

Value	Data Dictionary (DD) Reference		
20	DD Name: HYDRO	Code: TOPSHP_20	Date accepted: 2000-11-01
	Name: rectangle, horizontal		
	Definition: a plane figure with four right angles and four straight sides, opposite sides being parallel and equal in length where the two longer opposite sides are standing horizontally (The New Shorter Oxford English Dictionary. 1993. vol 2).		
21	DD Name: HYDRO	Code: TOPSHP_21	Date accepted: 2000-11-01
	Name: rectangle, vertical		
	Definition: a plane figure with four right angles and four straight sides, opposite sides being parallel and equal in length where the two longer opposite sides are standing vertically (The New Shorter Oxford English Dictionary. 1993. vol 2).		
22	DD Name: HYDRO	Code: TOPSHP_22	Date accepted: 2000-11-01
	Name: trapezium, up		
	Definition: a quadrilateral having one pair of opposite sides parallel which stands on its longer parallel side. (The New Shorter Oxford English Dictionary. 1993. vol 2).		
23	DD Name: HYDRO	Code: TOPSHP_23	Date accepted: 2000-11-01
	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)		

Value	Data Dictionary (DD) Reference		
27	DD Name: HYDRO	Code: TOPSHP_27	Date accepted: 2000-11-01
	Name: two upright crosses (one over the other)		
	Definition: two upright crosses, generally vertically disposed one above the other.		
28	DD Name: HYDRO	Code: TOPSHP_28	Date accepted: 2000-11-01
	Name: T-shape		
	Definition: having a shape like the capital letter T.		
29	DD Name: HYDRO	Code: TOPSHP_29	Date accepted: 2000-11-01
	Name: triangle pointing up over a circle		
	Definition: a triangle, vertex uppermost, located above a circle.		
30	DD Name: HYDRO	Code: TOPSHP_30	Date accepted: 2000-11-01
	Name: upright cross over a circle		
	Definition: an upright cross located above a circle.		
31	DD Name: HYDRO	Code: TOPSHP_31	Date accepted: 2000-11-01
	Name: rhombus over a circle		
	Definition: a rhombus located above a circle.		
32	DD Name: HYDRO	Code: TOPSHP_32	Date accepted: 2000-11-01
	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	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	Value of depth contour
-----------	------------------------

Acronym: **VALDCO**

Code: 174

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The depth of a sea bottom contour.

Attribute	Value of maximum range
-----------	------------------------

Acronym: **VALMXR**

Code: 177

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: The extreme distance at which an object can be seen or a signal detected.

Attribute	Value of sounding
-----------	-------------------

Acronym: **VALSOU**

Code: 179

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The value of the measurement of a sounding relative to the chart datum.

Attribute	Vertical clearance, 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
-----------	--------------------

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, open
-----------	--------------------------

Acronym: **VERCOP**

Code: 183

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: HYDRO

Date accepted: 2000-11-01

Definition: The vertical clearance of an object in opened condition (e.g. an opened lifting bridge) measured from the plane towards the object overhead.

Attribute	Vertical datum
-----------	----------------

Acronym: **VERDAT**

Code: 185

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Vertical datum

Enumerations

Value Data Dictionary (DD) Reference

4 DD Name: HYDRO Code: VERDAT_4 Date accepted: 2001-05-31

Name: Lowest low water

Definition: an arbitrary level conforming to the lowest tide observed at a place, or some what lower.

Attribute	Water level effect
-----------	--------------------

Acronym: **WATLEV**

Code: 187

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

- | | |
|---|---|
| 1 | <p>DD Name: HYDRO Code: WATLEV_1 Date accepted: 2000-11-01</p> <p>Name: partly submerged at high water</p> <p>Definition: partially covered and partially dry at high water.</p> |
| 2 | <p>DD Name: HYDRO Code: WATLEV_2 Date accepted: 2000-11-01</p> <p>Name: always dry</p> <p>Definition: not covered at high water under average meteorological conditions.</p> |
| 3 | <p>DD Name: HYDRO Code: WATLEV_3 Date accepted: 2000-11-01</p> <p>Name: always under water/submerged</p> <p>Definition: remains covered by water at all times under average meteorological conditions.</p> |
| 4 | <p>DD Name: HYDRO Code: WATLEV_4 Date accepted: 2000-11-01</p> <p>Name: covers and uncovers</p> <p>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)</p> |
| 5 | <p>DD Name: HYDRO Code: WATLEV_5 Date accepted: 2000-11-01</p> <p>Name: awash</p> |

Value Data Dictionary (DD) Reference

Definition: flush with, or washed by the waves at low water under average meteorological conditions. (adapted from IHO Dictionary, S-32, 5th Edition, 308)

Attribute	additional mark
-----------	-----------------

Acronym: **addmrk** Code: 17050

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

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

Enumerations

Value Data Dictionary (DD) Reference

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

Name: top (board)

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

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

Name: bottom (board)

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

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

Name: right (triangle to the right)

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

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

Name: left (triangle to the left)

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

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

Name: bottom (triangle to the bottom)

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

Attribute	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

Value	Data Dictionary (DD) Reference		
	Name: rigid convoy		
	Definition: a pushed convoy or breasted up formation		
8	DD Name: IENC	Code: lc_ase_8	Date accepted: 2001-05-31
	Name: pushed convoy		
	Definition: a rigid assembly of craft of which at least one is positioned in front of the craft providing the power for propelling the convoy, known as the "pusher(s)"; a convoy composed of a pusher craft and a pushed craft coupled so as to permit guided articulation is also considered as rigid		
9	DD Name: IENC	Code: lc_ase_9	Date accepted: 2001-05-31
	Name: breasted up formation		
	Definition: an assembly of craft coupled rigidly side by side, none of which is positioned in front of the craft propelling the assembly		
10	DD Name: IENC	Code: lc_ase_10	Date accepted: 2001-05-31
	Name: towed convoy		
	Definition: an assembly of one or more craft, floating establishments or floating installations towed by one or more self-propelled craft forming part of the convoy		

Attribute	Assemblies of ship (including)
-----------	--------------------------------

Acronym: **lc_asi** Code: 18014

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

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

Enumerations

Value Data Dictionary (DD) Reference

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

Name: all types

Definition:

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

Name: other

Definition:

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

Name: single vessel

Definition:

5 DD Name: IENC Code: lc_asi_5 Date accepted: 2001-05-31

Name: convoy

Definition: a rigid or towed convoy of craft

6 DD Name: IENC Code: lc_asi_6 Date accepted: 2001-05-31

Name: formation

Definition: the manner in which a convoy is assembled

7 DD Name: IENC Code: lc_asi_7 Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference		
	Name: rigid convoy		
	Definition: a pushed convoy or breasted up formation		
8	DD Name: IENC	Code: lc_asl_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_asl_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_asl_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	Avarage 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	Beam range value 1
-----------	--------------------

Acronym: **lc_bm1**

Code: 18018

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC

Date accepted: 2001-05-31

Definition: The minimum value of the beam range the particular article/clause of the applicable law/regulation is dealing with

Attribute	Beam range value 2
-----------	--------------------

Acronym: **lc_bm2**

Code: 18019

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC

Date accepted: 2001-05-31

Definition: The maximum value of the beam range the particular article/clause of the applicable law/regulation is dealing with

Attribute	bunker vessel, availability
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Acronym: **bunves**

Code: 17065

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Indication of the availability of a bunker vessel

Enumerations

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: bunves_1 Date accepted: 2001-05-31

Name: bunker vessel available

Definition: a bunker vessel is available

2 DD Name: IENC Code: bunves_2 Date accepted: 2001-05-31

Name: no bunker vessel available

Definition: a bunker vessel is not available

Attribute	Category of anchorage
-----------	-----------------------

Acronym: **catach**

Code: 17000

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of anchorage

Enumerations

Value Data Dictionary (DD) Reference

- | | |
|---|--|
| 1 | <p>DD Name: IENC Code: catach_1 Date accepted: 2001-05-31</p> <p>Name: unrestricted anchorage</p> <p>Definition: an area in which vessels anchor or may anchor. (IHO Dictionary, S-32, 5th Edition, 130)</p> |
| 2 | <p>DD Name: IENC Code: catach_2 Date accepted: 2001-05-31</p> <p>Name: deep water anchorage</p> <p>Definition: an area in which vessels of deep draught anchor or may anchor.</p> |
| 3 | <p>DD Name: IENC Code: catach_3 Date accepted: 2001-05-31</p> <p>Name: tanker anchorage</p> <p>Definition: an area in which tankers anchor or may anchor.</p> |
| 4 | <p>DD Name: IENC Code: catach_4 Date accepted: 2001-05-31</p> <p>Name: explosives anchorage</p> <p>Definition: an area set apart for anchored ships discharging or receiving explosives. (IHO Dictionary, S-32, 5th Edition, 1732)</p> |
| 5 | <p>DD Name: IENC Code: catach_5 Date accepted: 2001-05-31</p> <p>Name: quarantine anchorage</p> |

Value	Data Dictionary (DD) Reference		
	Definition: an area where a vessel anchors when satisfying quarantine regulations. (IHO Dictionary, S-32, 5th Edition, 4117)		
6	DD Name: IENC	Code: catach_6	Date accepted: 2001-05-31
	Name: sea-plane anchorage		
	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
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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 |

Value Data Dictionary (DD) Reference

Name: fleeting area

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

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

Name: first class landing

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

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

Name: second class landing

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

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 | | |

Attribute	Category of cable
-----------	-------------------

Acronym: **catchbl**

Code: 17101

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Category of cable

Enumerations

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: catchbl_1 Date accepted: 2001-05-31

Name: power line

Definition: a cable used for the supply of electricity.

3 DD Name: IENC Code: catchbl_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: catchbl_4 Date accepted: 2001-05-31

Name: telephone

Definition: a cable used for the transmission of telephone signals.

5 DD Name: IENC Code: catchbl_5 Date accepted: 2001-05-31

Name: telegraph

Definition: a cable used for the transmission of telegraph signals.

6 DD Name: IENC Code: catchbl_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.

Value	Data Dictionary (DD) Reference		
7	DD Name: IENC	Code: catchl_7	Date accepted: 2001-05-31
	Name: ferry cable		
	Definition: a cable where a cable ferry is connected to		

Attribute	Category of cargo (excluding)
-----------	-------------------------------

Acronym: **lc_cce**

Code: 18017

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

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

Enumerations

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: lc_cce_1 Date accepted: 2001-05-31

Name: all types

Definition:

2 DD Name: IENC Code: lc_cce_2 Date accepted: 2001-05-31

Name: other

Definition:

4 DD Name: IENC Code: lc_cce_4 Date accepted: 2001-05-31

Name: bulk

Definition: unpacked homogenous cargo poured loose in a certain space of a vessel e.g. oil or grain

5 DD Name: IENC Code: lc_cce_5 Date accepted: 2001-05-31

Name: dry cargo

Definition:

6 DD Name: IENC Code: lc_cce_6 Date accepted: 2001-05-31

Name: liquid cargo

Definition:

Value	Data Dictionary (DD) Reference		
7	DD Name: IENC Name: liquid cargo (type N) Definition:	Code: lc_cce_7	Date accepted: 2001-05-31
8	DD Name: IENC Name: liquid cargo (type C) Definition:	Code: lc_cce_8	Date accepted: 2001-05-31
9	DD Name: IENC Name: gas Definition:	Code: lc_cce_9	Date accepted: 2001-05-31

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:

Value	Data Dictionary (DD) Reference		
7	DD Name: IENC Name: liquid cargo (type N) Definition:	Code: lc_cci_7	Date accepted: 2001-05-31
8	DD Name: IENC Name: liquid cargo (type C) Definition:	Code: lc_cci_8	Date accepted: 2001-05-31
9	DD Name: IENC Name: gas Definition:	Code: lc_cci_9	Date accepted: 2001-05-31

Attribute	category of CEMT class
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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

Value	Data Dictionary (DD) Reference		
	Definition: designated for barges of type "Johann Welker"		
6	DD Name: IENC	Code: catccl_6	Date accepted: 2001-05-31
	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:		

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: MID

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

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

Value Data Dictionary (DD) Reference

Name: lock

Definition: A reporting point for vessels at a lock.

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

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.

Attribute	Category of exceptional structure
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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

Value	Data Dictionary (DD) Reference		
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
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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 harbour area
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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

Value	Data Dictionary (DD) Reference
	Definition: a harbour operated by a private body.

Attribute	Category of harbour facility
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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

Value	Data Dictionary (DD) Reference		
	Name:	passenger terminal	
	Definition:	a terminal for the loading and unloading of passengers.	
9	DD Name: IENC	Code: cathaf_9	Date accepted: 2001-05-31
	Name:	shipyard	
	Definition:	a place where ships are built or repaired (IHO Dictionary, S-32, 5th Edition, 4686).	
10	DD Name: IENC	Code: cathaf_10	Date accepted: 2001-05-31
	Name:	container terminal	
	Definition:	a terminal for container ships.	
11	DD Name: IENC	Code: cathaf_11	Date accepted: 2001-05-31
	Name:	bulk terminal	
	Definition:	a terminal for the handling of bulk materials such as iron ore, coal, etc.	
12	DD Name: IENC	Code: cathaf_12	Date accepted: 2001-05-31
	Name:	syncrolift	
	Definition:	a platform powered by synchronous electric motors used to lift vessels (larger than boats) in and out of the water.	
13	DD Name: IENC	Code: cathaf_13	Date accepted: 2001-05-31
	Name:	straddle carrier	
	Definition:	a wheeled vehicle designed to lift and carry containers or vessels within its own framework. It is used for moving, and sometimes stacking, shipping containers and vessels.	
16	DD Name: IENC	Code: cathaf_16	Date accepted: 2001-05-31
	Name:	service and repair	
	Definition:	a place where mechanical services or repairs can be undertaken to engines or other vessel equipment.	
17	DD Name: IENC	Code: cathaf_17	Date accepted: 2001-05-31
	Name:	quarantine station	
	Definition:	A medical control center located in an isolated spot ashore where patients with contagious diseases from vessel in quarantine are taken.	

Attribute	Category of hulk
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Acronym: **cathlk** Code: 17102

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of hulk

Enumerations

Value Data Dictionary (DD) Reference

- | | |
|---|--|
| 1 | DD Name: IENC Code: cathlk_1 Date accepted: 2001-05-31
Name: floating restaurant
Definition: a permanently moored floating structure, such as an old ship, used as a restaurant. |
| 2 | DD Name: IENC Code: cathlk_2 Date accepted: 2001-05-31
Name: historic ship
Definition: a ship of historical interest permanently moored as a tourist attraction. |
| 3 | DD Name: IENC Code: cathlk_3 Date accepted: 2001-05-31
Name: museum
Definition: a permanently moored floating structure, such as an old ship, used as a museum. |
| 4 | DD Name: IENC Code: cathlk_4 Date accepted: 2001-05-31
Name: accommodation
Definition: a permanently moored floating structure, such as an old ship, used for accommodation. |
| 5 | DD Name: IENC Code: cathlk_5 Date accepted: 2001-05-31
Name: floating breakwater |

Value Data Dictionary (DD) Reference

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

6 DD Name: IENC Code: cathlk_6 Date accepted: 2001-05-31

Name: casino boat

Definition: a permanently moored floating structure, such as an old ship, used as a casino boat

Attribute	Category of lateral mark
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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 | <p>DD Name: IENC Code: catlam_1 Date accepted: 2001-05-31</p> <p>Name: port-hand lateral mark</p> <p>Definition: indicates the port boundary of a navigational channel or suggested route when proceeding in the 'conventional direction of buoyage'.</p> |
| 2 | <p>DD Name: IENC Code: catlam_2 Date accepted: 2001-05-31</p> <p>Name: starboard-hand lateral mark</p> <p>Definition: indicates the starboard boundary of a navigational channel or suggested route when proceeding in the 'conventional direction of buoyage'.</p> |
| 3 | <p>DD Name: IENC Code: catlam_3 Date accepted: 2001-05-31</p> <p>Name: preferred channel to starboard lateral mark</p> <p>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.</p> |
| 4 | <p>DD Name: IENC Code: catlam_4 Date accepted: 2001-05-31</p> <p>Name: preferred channel to port lateral mark</p> <p>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.</p> |

Value	Data Dictionary (DD) Reference		
5	DD Name: IENC	Code: catlam_5	Date accepted: 2001-05-31
	Name:	right-hand side of the waterway	
	Definition:	indicates the right-hand side of the inland waterway	
6	DD Name: IENC	Code: catlam_6	Date accepted: 2001-05-31
	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	

Value	Data Dictionary (DD) Reference		
14	DD Name: IENC	Code: catlam_14	Date accepted: 2001-05-31
	Name:	channel cross-over to the left bank	
	Definition:	indicates that the channel crosses from the right to the left bank	
15	DD Name: IENC	Code: catlam_15	Date accepted: 2001-05-31
	Name:	danger point or obstacles at the right-hand side	
	Definition:	indicates a danger point or obstacles at the right-hand side	
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	

Value Data Dictionary (DD) Reference

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

Attribute	Category of shoreline construction
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Acronym: **catslc** Code: 17012

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

DD Name: IENC Date accepted: 2007-10-12

Definition: Category of shoreline construction

Enumerations

Value Data Dictionary (DD) Reference

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 (Denise Ladue, 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.

Attribute	category of notice mark
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Acronym: **catnmk**

Code: 17052

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Category of notice mark

Enumerations

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: catnmk_1 Date accepted: 2001-05-31

Name: (A.1) no entry

Definition: Prohibition mark A.1: no entry

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

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

Definition: Prohibition mark A.1a: closed area, but small craft boats without engine permitted

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

Name: (A.2) no overtaking

Definition: Prohibition mark A.2: no overtaking

4 DD Name: IENC Code: catnmk_4 Date accepted: 2001-05-31

Name: (A.3) no overtaking of convoys by convoys

Definition: Prohibition mark A.3: no overtaking of convoys by convoys

5 DD Name: IENC Code: catnmk_5 Date accepted: 2001-05-31

Name: (A.4) no passing or overtaking

Definition: Prohibition mark A.4: no passing or overtaking

Value	Data Dictionary (DD) Reference		
6	DD Name: IENC	Code: catnmk_6	Date accepted: 2001-05-31
	Name: (A.5) no berthing (i.e. no anchoring or making fast to the bank)		
	Definition: Prohibition mark A.5: no berthing		
7	DD Name: IENC	Code: catnmk_7	Date accepted: 2001-05-31
	Name: (A.5.1) no berthing within the breadth indicated in meters(measured from the sign)		
	Definition: Prohibition mark A.5.1: no berthing within the breadth indicated in meters(measured from the sign)		
8	DD Name: IENC	Code: catnmk_8	Date accepted: 2001-05-31
	Name: (A.6) no anchoring or trailing of anchors, cables or chains		
	Definition: Prohibition mark A.6: no anchoring or trailing of anchors, cables or chains		
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		
10	DD Name: IENC	Code: catnmk_10	Date accepted: 2001-05-31
	Name: (A.8) no turning		
	Definition: Prohibition mark A.8: no turning		
11	DD Name: IENC	Code: catnmk_11	Date accepted: 2001-05-31
	Name: (A.9) Do not create wash		
	Definition: Prohibition mark A.9: do not create wash		
12	DD Name: IENC	Code: catnmk_12	Date accepted: 2001-05-31
	Name: (A.10) no passing on left side (in openings of bridges or weirs)		
	Definition: Prohibition mark A.10: no passing on left side (in openings of bridges or weirs)		
13	DD Name: IENC	Code: catnmk_13	Date accepted: 2001-05-31
	Name: (A.10) no passing on right side (in openings of bridges or weirs)		
	Definition: Prohibition mark A.10: no passing on right side (in openings of bridges or weirs)		
14	DD Name: IENC	Code: catnmk_14	Date accepted: 2001-05-31
	Name: (A.12) motorized craft prohibited		

Value	Data Dictionary (DD) Reference		
	Definition: Prohibition mark A.12: motorized craft prohibited		
15	DD Name: IENC	Code: catnmk_15	Date accepted: 2001-05-31
	Name: (A.13) all sports and pleasure craft prohibited		
	Definition: Prohibition mark A.13: all sports and pleasure craft prohibited		
16	DD Name: IENC	Code: catnmk_16	Date accepted: 2001-05-31
	Name: (A.14) water skiing prohibited		
	Definition: Prohibition mark A.14: water skiing prohibited		
17	DD Name: IENC	Code: catnmk_17	Date accepted: 2001-05-31
	Name: (A.15) sailing vessels prohibited		
	Definition: Prohibition mark A.15: sailing vessels prohibited		
18	DD Name: IENC	Code: catnmk_18	Date accepted: 2001-05-31
	Name: (A.16) all craft other than motorized vessels or sailing craft prohibited		
	Definition: Prohibition mark A.16: all craft other than motorized vessels or sailing craft prohibited		
19	DD Name: IENC	Code: catnmk_19	Date accepted: 2001-05-31
	Name: (A.17) use of sailboards prohibited		
	Definition: Prohibition mark A.17: use of sailboards prohibited		
20	DD Name: IENC	Code: catnmk_20	Date accepted: 2001-05-31
	Name: (A.20) water bikes prohibited		
	Definition: Prohibition mark A.20: water bikes prohibited		
21	DD Name: IENC	Code: catnmk_21	Date accepted: 2001-05-31
	Name: (A.18) end of zone authorized for high speed navigation of small sport and pleasure craft prohibited		
	Definition: Prohibition mark A.18: end of zone authorized for high speed navigation of small sport and pleasure craft prohibited		
22	DD Name: IENC	Code: catnmk_22	Date accepted: 2001-05-31
	Name: (A.19) no launching or beaching of vessels		
	Definition: Prohibition mark A.19: no launching or beaching of vessels		

Value	Data Dictionary (DD) Reference		
23	DD Name: IENC	Code: catnmk_23	Date accepted: 2001-05-31
	Name: (B.1) proceed in left direction		
	Definition: Regulation mark B.1: proceed in left direction		
24	DD Name: IENC	Code: catnmk_24	Date accepted: 2001-05-31
	Name: (B.1) proceed in right direction		
	Definition: Regulation mark B.1: proceed in right direction		
25	DD Name: IENC	Code: catnmk_25	Date accepted: 2001-05-31
	Name: (B.2a) move to the side of the channel on your port side		
	Definition: Regulation mark B.2a: move to the side of the channel on your port side		
26	DD Name: IENC	Code: catnmk_26	Date accepted: 2001-05-31
	Name: (B.2b) move to the side of the channel on your starboard side		
	Definition: Regulation mark B.2b: move to the side of the channel on your starboard side		
27	DD Name: IENC	Code: catnmk_27	Date accepted: 2001-05-31
	Name: (B.3a) keep on the side of the channel on your portside		
	Definition: Regulation mark B.3a: keep on the side of the channel on your portside		
28	DD Name: IENC	Code: catnmk_28	Date accepted: 2001-05-31
	Name: (B.3b) keep on the side of the channel on your starboard side		
	Definition: Regulation mark B.3b: keep on the side of the channel on your starboard side		
29	DD Name: IENC	Code: catnmk_29	Date accepted: 2001-05-31
	Name: (B.4a) cross channel to port		
	Definition: Regulation mark B.4a: cross channel to port		
30	DD Name: IENC	Code: catnmk_30	Date accepted: 2001-05-31
	Name: (B.4b) cross channel to starboard		
	Definition: Regulation mark B.4b: cross channel to starboard		
31	DD Name: IENC	Code: catnmk_31	Date accepted: 2001-05-31
	Name: (B.5) stop as prescribed in the regulations		

Value	Data Dictionary (DD) Reference		
	Definition: Regulation mark B.5: stop as prescribed in the regulations		
32	DD Name: IENC	Code: catnmk_32	Date accepted: 2001-05-31
	Name: (B.6) do not exceed the speed indicated (in km/h)		
	Definition: Regulation mark B.6: do not exceed the speed indicated (in km/h)		
33	DD Name: IENC	Code: catnmk_33	Date accepted: 2001-05-31
	Name: (B.7) give a sound signal		
	Definition: Regulation mark B.7: give a sound signal		
34	DD Name: IENC	Code: catnmk_34	Date accepted: 2001-05-31
	Name: (B.8) keep a particular sharp lookout		
	Definition: Regulation mark B.8: keep a particular sharp lookout		
35	DD Name: IENC	Code: catnmk_35	Date accepted: 2001-05-31
	Name: (B.9a) do not enter the main waterway until certain that this will not oblige vessels proceeding on it to change their course or speed		
	Definition: Regulation mark B.9a: do not enter the main waterway until certain that this will not oblige vessels proceeding on it to change their course or speed		
36	DD Name: IENC	Code: catnmk_36	Date accepted: 2001-05-31
	Name: (B.9b) do not cross the main waterway until certain that this will not oblige vessels proceeding on it to change their course or speed		
	Definition: Regulation mark B.9b: do not cross the main waterway until certain that this will not oblige vessels proceeding on it to change their course or speed		
37	DD Name: IENC	Code: catnmk_37	Date accepted: 2001-05-31
	Name: (B.11) obligation to enter into a radiotelephone link on the channel as indicated on the board		
	Definition: Regulation mark B.11: obligation to enter into a radiotelephone link on the channel as indicated on the board		
38	DD Name: IENC	Code: catnmk_38	Date accepted: 2001-05-31
	Name: (C.1) depth of water limited		
	Definition: Restriction mark C.1: depth of water limited		
39	DD Name: IENC	Code: catnmk_39	Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference		
	Name:	(C.2) headroom limited	
	Definition:	Restriction mark C.2: headroom limited	
40	DD Name: IENC	Code: catnmk_40	Date accepted: 2001-05-31
	Name:	(C.3) width of passage or channel limited	
	Definition:	Restriction mark C.3: width of passage or channel limited	
41	DD Name: IENC	Code: catnmk_41	Date accepted: 2001-05-31
	Name:	(C.4) there are restrictions on navigation: make inquiries (with additional sign at bottom of main sign)	
	Definition:	Restriction mark C.4: there are restrictions on navigation: make inquiries (with additional sign at bottom of main sign)	
42	DD Name: IENC	Code: catnmk_42	Date accepted: 2001-05-31
	Name:	(C.5) the channel lies at a distance from the left bank	
	Definition:	Restriction mark C.5: the channel lies at a distance from the left bank	
43	DD Name: IENC	Code: catnmk_43	Date accepted: 2001-05-31
	Name:	(C.5) the channel lies at a distance from the right bank	
	Definition:	Restriction mark C.5: the channel lies at a distance from the right bank	
44	DD Name: IENC	Code: catnmk_44	Date accepted: 2001-05-31
	Name:	(D.1a) recommended channel in both directions	
	Definition:	Recommendation mark D.1a: recommended channel in both directions	
45	DD Name: IENC	Code: catnmk_45	Date accepted: 2001-05-31
	Name:	(D.1b) recommended channel only in the direction indicated, passage in the opposite direction prohibited (at bridges)	
	Definition:	Recommendation mark D.1b: recommended channel only in the direction indicated, passage in the opposite direction prohibited (at bridges)	
46	DD Name: IENC	Code: catnmk_46	Date accepted: 2001-05-31
	Name:	(D.2) you are recommended to keep on right side (in openings of bridges and weirs)	
	Definition:	Recommendation mark D.2: you are recommended to keep on right side (in openings of bridges and weirs)	

Value	Data Dictionary (DD) Reference		
47	DD Name: IENC	Code: catnmk_47	Date accepted: 2001-05-31
	Name: (D.2) you are recommended to keep on left side (in openings of bridges and weirs)		
	Definition: Recommendation mark D.2: you are recommended to keep on left side (in openings of bridges and weirs)		
48	DD Name: IENC	Code: catnmk_48	Date accepted: 2001-05-31
	Name: (D.3) you are recommended to proceed in the left direction		
	Definition: Recommendation mark D.3: you are recommended to proceed in the left direction		
49	DD Name: IENC	Code: catnmk_49	Date accepted: 2001-05-31
	Name: (D.3) you are recommended to proceed in the right direction		
	Definition: Recommendation mark D.3: you are recommended to proceed in the right direction		
50	DD Name: IENC	Code: catnmk_50	Date accepted: 2001-05-31
	Name: (E.1) entry permitted (general sign)		
	Definition: Information mark E.1: entry permitted (general sign)		
51	DD Name: IENC	Code: catnmk_51	Date accepted: 2001-05-31
	Name: (E.2) overhead cable crossing		
	Definition: Information mark E.2: overhead cable crossing		
52	DD Name: IENC	Code: catnmk_52	Date accepted: 2001-05-31
	Name: (E.3) weir		
	Definition: Information mark E.3: weir		
53	DD Name: IENC	Code: catnmk_53	Date accepted: 2001-05-31
	Name: (E.4a) ferry-boat not moving independently		
	Definition: Information mark E.4a: ferry-boat not moving independently		
54	DD Name: IENC	Code: catnmk_54	Date accepted: 2001-05-31
	Name: (E.4b) ferry-boat moving independently		
	Definition: Information mark E.4b: ferry-boat moving independently		
55	DD Name: IENC	Code: catnmk_55	Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference		
	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		
56	DD Name: IENC	Code: catnmk_56	Date accepted: 2001-05-31
	Name: (E.5.1) berthing permitted on the stretch of water of the breadth measured from, and shown on the board in meters		
	Definition: Information mark E.5.1: berthing permitted on the stretch of water of the breadth measured from, and shown on the board in meters		
57	DD Name: IENC	Code: catnmk_57	Date accepted: 2001-05-31
	Name: (E.5.2) berthing permitted on the stretch of water bounded by the distances measured from, and shown on the board in meters		
	Definition: Information mark E.5.2: berthing permitted on the stretch of water bounded by the distances measured from, and shown on the board in meters		
58	DD Name: IENC	Code: catnmk_58	Date accepted: 2001-05-31
	Name: (E.5.3) maximum number of vessels permitted to berth abreast		
	Definition: Information mark E.5.3: maximum number of vessels permitted to berth abreast		
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		
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		
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		

Value	Data Dictionary (DD) Reference		
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		
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		
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		
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		
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		
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		
68	DD Name: IENC	Code: catnmk_68	Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference		
	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		
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		
70	DD Name: IENC	Code: catnmk_70	Date accepted: 2001-05-31
	Name: (E.5.15) berthing area reserved for all vessels that are required to carry three blue lights or three blue cones		
	Definition: Information mark E.5.15: berthing area reserved for all vessels that are required to carry three blue lights or three blue cones		
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		
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		
73	DD Name: IENC	Code: catnmk_73	Date accepted: 2001-05-31
	Name: (E.7.1) berthing area reserved for loading and unloading of vehicles		
	Definition: Information mark E.7.1: berthing area reserved for loading and unloading of vehicles		
74	DD Name: IENC	Code: catnmk_74	Date accepted: 2001-05-31
	Name: (E.8) turning area		
	Definition: Information mark E.8: turning area		
75	DD Name: IENC	Code: catnmk_75	Date accepted: 2001-05-31
	Name: (E.9a) crossing with secondary waterway ahead		

Value	Data Dictionary (DD) Reference		
	Definition: Information mark E.9a: crossing with secondary waterway ahead		
76	DD Name: IENC	Code: catnmk_76	Date accepted: 2001-05-31
	Name: (E.9b) secondary waterway ahead on the right		
	Definition: Information mark E.9b: secondary waterway ahead on the right		
77	DD Name: IENC	Code: catnmk_77	Date accepted: 2001-05-31
	Name: (E.9c) secondary waterway ahead on the left		
	Definition: Information mark E.9c: secondary waterway ahead on the left		
78	DD Name: IENC	Code: catnmk_78	Date accepted: 2001-05-31
	Name: (E.9d) secondary waterway ahead, main waterway on the right		
	Definition: Information mark E.9d: secondary waterway ahead, main waterway on the right		
79	DD Name: IENC	Code: catnmk_79	Date accepted: 2001-05-31
	Name: (E.9e) secondary waterway ahead, main waterwar on the left		
	Definition: Information mark E.9e: secondary waterway ahead, main waterway on the left		
80	DD Name: IENC	Code: catnmk_80	Date accepted: 2001-05-31
	Name: (E.9f) secondary waterway on the left, main waterway on the right		
	Definition: Information mark E.9f: secondary waterway on the left, main waterway on the right		
81	DD Name: IENC	Code: catnmk_81	Date accepted: 2001-05-31
	Name: (E.9g) secondary waterway on the right, main waterway on the left		
	Definition: Information mark E.9g: secondary waterway on the right, main waterway on the left		
82	DD Name: IENC	Code: catnmk_82	Date accepted: 2001-05-31
	Name: (E.9h) secondary waterway ahead and on the left, main waterway on the right		
	Definition: Information mark E.9h: secondary waterway ahead and on the left, main waterway on the right		
83	DD Name: IENC	Code: catnmk_83	Date accepted: 2001-05-31
	Name: (E.9i) secondary waterway ahead and on the right, main waterway on the left		

Value	Data Dictionary (DD) Reference		
	Definition: Information mark E.9i: secondary waterway ahead and on the right, main waterway on the left		
84	DD Name: IENC	Code: catnmk_84	Date accepted: 2001-05-31
	Name: (E.10a) crossing with main waterway ahead		
	Definition: Information mark E.10a: crossing with main waterway ahead		
85	DD Name: IENC	Code: catnmk_85	Date accepted: 2001-05-31
	Name: (E.10b) main waterway ahead		
	Definition: Information mark E.10b: main waterway ahead		
86	DD Name: IENC	Code: catnmk_86	Date accepted: 2001-05-31
	Name: (E.10c) junction with main waterway ahead and right		
	Definition: Information mark E.10c: junction with main waterway ahead and right		
87	DD Name: IENC	Code: catnmk_87	Date accepted: 2001-05-31
	Name: (E.10d) junction with main waterway ahead and left		
	Definition: Information mark E.10d: junction with main waterway ahead and left		
88	DD Name: IENC	Code: catnmk_88	Date accepted: 2001-05-31
	Name: (E.10e) junction with main waterway ahead and right, secondary waterway on the left		
	Definition: Information mark E.10e: junction with main waterway ahead and right, secondary waterway on the left		
89	DD Name: IENC	Code: catnmk_89	Date accepted: 2001-05-31
	Name: (E.10f) junction with main waterway ahead and left, secondary waterway on the right		
	Definition: Information mark E.10f: junction with main waterway ahead and left, secondary waterway on the right		
90	DD Name: IENC	Code: catnmk_90	Date accepted: 2001-05-31
	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		

Value	Data Dictionary (DD) Reference		
91	DD Name: IENC	Code: catnmk_91	Date accepted: 2001-05-31
	Name: (E.13) drinking water supply		
	Definition: Information mark E.13: drinking water		
92	DD Name: IENC	Code: catnmk_92	Date accepted: 2001-05-31
	Name: (E.14) telephone		
	Definition: Information mark E.14: telephone		
93	DD Name: IENC	Code: catnmk_93	Date accepted: 2001-05-31
	Name: (E.15) motorized vessels permitted		
	Definition: Information mark E.15: motorized vessels permitted		
94	DD Name: IENC	Code: catnmk_94	Date accepted: 2001-05-31
	Name: (E.16) sport and pleasure craft permitted		
	Definition: Information mark E.16: sport and pleasure craft permitted		
95	DD Name: IENC	Code: catnmk_95	Date accepted: 2001-05-31
	Name: (E.17) water skiing permitted		
	Definition: Information mark E.17: water skiing permitted		
96	DD Name: IENC	Code: catnmk_96	Date accepted: 2001-05-31
	Name: (E.18) sailing vessels permitted		
	Definition: Information mark E.18: sailing vessels permitted		
97	DD Name: IENC	Code: catnmk_97	Date accepted: 2001-05-31
	Name: (E.19) craft other than motorized vessels or sailing craft permitted		
	Definition: Information mark E.19: craft other than motorized vessels or sailing craft permitted		
98	DD Name: IENC	Code: catnmk_98	Date accepted: 2001-05-31
	Name: (E.20) use of sailboards permitted		
	Definition: Information mark E.20: use of sailboards permitted		
99	DD Name: IENC	Code: catnmk_99	Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference		
	Name: (E.23) possibility of obtaining nautical information by radiotelephone on the channel indicated		
	Definition: Information mark E.23: possibility of obtaining nautical information by radiotelephone on the channel indicated		
100	DD Name: IENC	Code: catnmk_100	Date accepted: 2001-05-31
	Name: (E.24) water bikes permitted		
	Definition: Information mark E.24: water bikes permitted		
101	DD Name: IENC	Code: catnmk_101	Date accepted: 2001-05-31
	Name: (E.21) zone authorized for high speed navigation of small sport and pleasure		
	Definition: Information mark E.21: zone authorized for high speed navigation of small sport and pleasure		
102	DD Name: IENC	Code: catnmk_102	Date accepted: 2001-05-31
	Name: (E.22) launching or beaching of vessels permitted		
	Definition: Information mark E.22: launching and beaching of vessels permitted		
103	DD Name: IENC	Code: catnmk_103	Date accepted: 2009-09-11
	Name: (BR) proceed close to the margin on your portside		
	Definition: regulation mark (BR): proceed close to the margin on your portside		
104	DD Name: IENC	Code: catnmk_104	Date accepted: 2009-09-11
	Name: (BR) proceed close to the margin on your starboard side		
	Definition: regulation mark (BR): proceed close to the margin on your starboard side		
105	DD Name: IENC	Code: catnmk_105	Date accepted: 2009-09-11
	Name: (BR) proceed in the middle of the river		
	Definition: regulation mark (BR): proceed in the middle of the river		
106	DD Name: IENC	Code: catnmk_106	Date accepted: 2009-09-11
	Name: (BR) cross river to port		
	Definition: regulation mark (BR): cross river to port		
107	DD Name: IENC	Code: catnmk_107	Date accepted: 2009-09-11
	Name: (BR) cross river to starboard		

Value	Data Dictionary (DD) Reference		
	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: passage allowed on both sides		
	Definition: red-white signs shown on a wreck pontoon to indicate that passage is permitted on both sides (without wash of waves)		
112	DD Name: IENC	Code: catnmk_112	Date accepted: 2009-12-09
	Name: no passing or overtaking of convoys		
	Definition: Russian notice mark: 1.2, no passing or overtaking of convoys		
113	DD Name: IENC	Code: catnmk_113	Date accepted: 2009-12-09
	Name: small crafts prohibited		
	Definition: Russian notice mark: 1.5, small crafts prohibited		
114	DD Name: IENC	Code: catnmk_114	Date accepted: 2009-12-09
	Name: Attention! (Keep caution)		
	Definition: Russian notice mark: 2.1, Attention! (keep caution)		
115	DD Name: IENC	Code: catnmk_115	Date accepted: 2009-12-09
	Name: fairway crossing		
	Definition: Russian notice mark: 2.2, fairway crossing		

Value Data Dictionary (DD) Reference

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

Attribute	category of refuse dump
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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 ship (excluding)
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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

Value	Data Dictionary (DD) Reference		
	Name:	inland waterway vessel	
	Definition:	a vessel intended solely or mainly for navigation on inland waterways	
8	DD Name: IENC	Code: lc_cse_8	Date accepted: 2001-05-31
	Name:	sea going ship	
	Definition:	a vessel certificated for sea-going service	
9	DD Name: IENC	Code: lc_cse_9	Date accepted: 2001-05-31
	Name:	motor vessel	
	Definition:	a motor cargo vessel or a motor tanker	
10	DD Name: IENC	Code: lc_cse_10	Date accepted: 2001-05-31
	Name:	motor tanker	
	Definition:	a vessel intended for the carriage of goods in fixed tanks and built to navigate independently under its own motive power	
11	DD Name: IENC	Code: lc_cse_11	Date accepted: 2001-05-31
	Name:	motor cargo vessel	
	Definition:	a vessel, other than a motor tanker, intended for the carriage of goods and built to navigate independently under its own motive power	
12	DD Name: IENC	Code: lc_cse_12	Date accepted: 2001-05-31
	Name:	canal barge	
	Definition:	an inland waterway vessel not exceeding 38.5 m in length and 5.05 m in breadth and usu-ally 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	

Value	Data Dictionary (DD) Reference		
	Definition: a dumb barge or tank barge		
16	DD Name: IENC	Code: lc_cse_16	Date accepted: 2001-05-31
	Name: tank barge		
	Definition: a vessel intended for the carriage of goods in fixed tanks and built to be towed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres		
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		

Value	Data Dictionary (DD) Reference		
	Definition: a day trip or cabin vessel constructed and equipped to carry more than 12 passengers		
23	DD Name: IENC	Code: lc_cse_23	Date accepted: 2001-05-31
	Name: passenger sailing vessel		
	Definition: a passenger vessel fitted out mainly with a view to propulsion under sail		
24	DD Name: IENC	Code: lc_cse_24	Date accepted: 2001-05-31
	Name: day trip vessel		
	Definition: a passenger vessel without overnight passenger cabins		
25	DD Name: IENC	Code: lc_cse_25	Date accepted: 2001-05-31
	Name: cabin vessel		
	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		

Value Data Dictionary (DD) Reference

- 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)
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Acronym: **lc_csi**

Code: 18012

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: lc_csi_1 Date accepted: 2001-05-31

Name: all types

Definition:

2 DD Name: IENC Code: lc_csi_2 Date accepted: 2001-05-31

Name: other

Definition:

3 DD Name: IENC Code: lc_csi_3 Date accepted: 2001-05-31

Name: non-motorized vessel

Definition: non-motorized vessel

5 DD Name: IENC Code: lc_csi_5 Date accepted: 2001-05-31

Name: craft

Definition: a vessel or item of floating equipment

6 DD Name: IENC Code: lc_csi_6 Date accepted: 2001-05-31

Name: vessel

Definition: an inland waterway vessel or sea going ship

7 DD Name: IENC Code: lc_csi_7 Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference		
	Name:	inland waterway vessel	
	Definition:	a vessel intended solely or mainly for navigation on inland waterways	
8	DD Name: IENC	Code: lc_csi_8	Date accepted: 2001-05-31
	Name:	sea going ship	
	Definition:	a vessel certificated for sea-going service	
9	DD Name: IENC	Code: lc_csi_9	Date accepted: 2001-05-31
	Name:	motor vessel	
	Definition:	a motor cargo vessel or a motor tanker	
10	DD Name: IENC	Code: lc_csi_10	Date accepted: 2001-05-31
	Name:	motor tanker	
	Definition:	a vessel intended for the carriage of goods in fixed tanks and built to navigate independently under its own motive power	
11	DD Name: IENC	Code: lc_csi_11	Date accepted: 2001-05-31
	Name:	motor cargo vessel	
	Definition:	a vessel, other than a motor tanker, intended for the carriage of goods and built to navigate independently under its own motive power	
12	DD Name: IENC	Code: lc_csi_12	Date accepted: 2001-05-31
	Name:	canal barge	
	Definition:	an inland waterway vessel not exceeding 38.5 m in length and 5.05 m in breadth and usu-ally 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	

Value	Data Dictionary (DD) Reference		
	Definition: a dumb barge or tank barge		
16	DD Name: IENC	Code: lc_csi_16	Date accepted: 2001-05-31
	Name: tank barge		
	Definition: a vessel intended for the carriage of goods in fixed tanks and built to be towed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres		
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		

Value	Data Dictionary (DD) Reference		
	Definition: a day trip or cabin vessel constructed and equipped to carry more than 12 passengers		
23	DD Name: IENC	Code: lc_csi_23	Date accepted: 2001-05-31
	Name: passenger sailing vessel		
	Definition: a passenger vessel fitted out mainly with a view to propulsion under sail		
24	DD Name: IENC	Code: lc_csi_24	Date accepted: 2001-05-31
	Name: day trip vessel		
	Definition: a passenger vessel without overnight passenger cabins		
25	DD Name: IENC	Code: lc_csi_25	Date accepted: 2001-05-31
	Name: cabin vessel		
	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		

Value Data Dictionary (DD) Reference

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 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: oncomig traffic indication

Definition: indicates the oncoming traffic on an inland waterway

Attribute	Category of signal station, warning
-----------	-------------------------------------

Acronym: **catsiw**

Code: 17003

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of signal station, warning

Enumerations

Value Data Dictionary (DD) Reference

15 DD Name: IENC Code: catsiw_15 Date accepted: 2001-05-31

Name: high water mark

Definition: An indication of the official high water level.

16 DD Name: IENC Code: catsiw_16 Date accepted: 2001-05-31

Name: vertical clearance indication

Definition: An indication of the vertical clearance of a bridge, overhead cable, etc.

18 DD Name: IENC Code: catsiw_18 Date accepted: 2001-05-31

Name: depth indication

Definition: An indication of the local depth.

Attribute	Category of time and behaviour
-----------	--------------------------------

Acronym: **cattab**

Code: 17092

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Category of time and behaviour

Enumerations

Value Data Dictionary (DD) Reference

- | | | | |
|---|--|----------------|---------------------------|
| 1 | DD Name: IENC | Code: cattab_1 | Date accepted: 2001-05-31 |
| | Name: operational period | | |
| | Definition: being in a position or adjustment to permit passage or to perform an operation | | |
| 2 | DD Name: IENC | Code: cattab_2 | Date accepted: 2001-05-31 |
| | Name: non-operational period | | |
| | Definition: being in a position or adjustment to prevent passage | | |

Attribute	Category of vehicle transfer
-----------	------------------------------

Acronym: **catvtr**

Code: 17091

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of vehicle transfer

Enumerations

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: catvtr_1 Date accepted: 2001-05-31

Name: official

Definition: Of or relating to an office or a post of authority

2 DD Name: IENC Code: catvtr_2 Date accepted: 2001-05-31

Name: private

Definition: Belonging to a particular person or persons, as opposed to the public or the government

3 DD Name: IENC Code: catvtr_3 Date accepted: 2001-05-31

Name: suitable for car cranes

Definition: Vehicle transfer location is suitable for car cranes

4 DD Name: IENC Code: catvtr_4 Date accepted: 2001-05-31

Name: suitable for car planks

Definition: Vehicle transfer location is suitable for car planks

5 DD Name: IENC Code: catvtr_5 Date accepted: 2001-05-31

Name: permission required

Definition: The transfer of a vehicle requires permission.

Value Data Dictionary (DD) Reference

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 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 |

Value **Data Dictionary (DD) Reference**

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: |
| 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
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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
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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

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
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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
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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	Draught range value 1
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Acronym: **lc_dr1**

Code: 18022

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC

Date accepted: 2001-05-31

Definition: The minimum value of the draught range the particular article/clause of the applicable law/regulation is dealing with

Attribute	Draught range value 2
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Acronym: **lc_dr2**

Code: 18023

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC

Date accepted: 2001-05-31

Definition: The maximum value of the draught range the particular article/clause of the applicable law/regulation is dealing with

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)
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Acronym: **eleva2**

Code: 17062

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC

Date accepted: 2001-05-31

Definition: The minimum elevation of the bottom of a river within a depth contour and referred to a gravitational reference level.

Attribute	Function of notice mark
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Acronym: **fnctnm**

Code: 17063

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Function of a notice mark

Enumerations

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: fnctnm_1 Date accepted: 2001-05-31

Name: prohibition mark

Definition: marks which indicate a prohibition

2 DD Name: IENC Code: fnctnm_2 Date accepted: 2001-05-31

Name: regulation mark

Definition: marks which indicate a regulation

3 DD Name: IENC Code: fnctnm_3 Date accepted: 2001-05-31

Name: restriction mark

Definition: marks which indicate a restriction

4 DD Name: IENC Code: fnctnm_4 Date accepted: 2001-05-31

Name: recommendation mark

Definition: marks which indicate a recommendation

5 DD Name: IENC Code: fnctnm_5 Date accepted: 2001-05-31

Name: information mark

Definition: marks with general information

Attribute	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 statute (land) miles

6 DD Name: IENC Code: hunits_6 Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference
	Name: nautical miles
	Definition: heights/lengths are specified in nautical (sea) miles

Attribute	Horizontal clearance length
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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	Length range value 1
-----------	----------------------

Acronym: **lc_lg1**

Code: 18020

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC

Date accepted: 2001-05-31

Definition: The minimum value of the length range the particular article/clause of the applicable law/regulation is dealing with

Attribute	Length range value 2
-----------	----------------------

Acronym: **lc_lg2**

Code: 18021

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC

Date accepted: 2001-05-31

Definition: The maximum value of the length range the particular article/clause of the applicable law/regulation is dealing with

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 sytem
 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

Value	Data Dictionary (DD) Reference		
	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
	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
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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
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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	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	Maximal permitted speed
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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
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Acronym: **lg_wdp**

Code: 18006

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC

Date accepted: 2001-05-31

Definition: The maximal permitted water displacement of a vessel or convoy according to the particular article/clause of the applicable law/regulation

Attribute	Name of other locally relevant water level
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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
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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	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 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 Hights System) - The unified State system for absolute hights reckoning from Kronshtadt Tide-gauge Datum that is accepted in Russian Federation. (Hydrographic Terminology Dictionary, HDNO, 1984)- |
| 2 | DD Name: IENC Code: reflev_2 Date accepted: 2001-05-31 |
| | Name: Adriatic level |
| | Definition: The average height of the surface of the Adriatic sea at the tide station of Trieste in Italy. |
| 3 | DD Name: IENC Code: reflev_3 Date accepted: 2001-05-31 |
| | Name: Amsterdam Ordnance Datum (NAP) |
| | Definition: Dutch gravitational reference level that is approximately the avarage 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) |

Value	Data Dictionary (DD) Reference		
5	DD Name: IENC Name: Other datum Definition:	Code: reflev_5	Date accepted: 2001-05-31
6	DD Name: IENC Name: National Geodetic Vertical Datum - NGVD29 Definition: The name, after May 10, 1973, of the Sea Level Datum of 1929.	Code: reflev_6	Date accepted: 2001-05-31
7	DD Name: IENC Name: North American Vertical Datum - NAVD88 Definition: The vertical control datum established in 1991 by the minimum-constraint adjustment of the Canadian-Mexican-U.S. leveling observations.	Code: reflev_7	Date accepted: 2001-05-31
8	DD Name: IENC Name: Mean sea level 1912 Definition: A vertical control datum established for vertical control in the United States by the general adjustment of 1912.	Code: reflev_8	Date accepted: 2001-05-31
9	DD Name: IENC Name: Mean sea level 1929 Definition: A vertical control datum established for vertical control in the United States by the general adjustment of 1929.	Code: reflev_9	Date accepted: 2001-05-31

Attribute	Restriction
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Acronym: **restrn** Code: 17004

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Restriction

Enumerations

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: restrn_1 Date accepted: 2001-05-31

Name: anchoring prohibited

Definition: an area within which anchoring is not permitted.

2 DD Name: IENC Code: restrn_2 Date accepted: 2001-05-31

Name: anchoring restricted

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

7 DD Name: IENC Code: restrn_7 Date accepted: 2001-05-31

Name: entry prohibited

Definition: an area within which navigation and/or anchoring is prohibited. (adapted from IHO Dictionary, S-32, 5th Edition, 4044)

8 DD Name: IENC Code: restrn_8 Date accepted: 2001-05-31

Name: entry restricted

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

13 DD Name: IENC Code: restrn_13 Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference		
	Name:	no wake	
	Definition:	mariners must adjust the speed of their vessels to reduce the wave or wash which may cause erosion or disturb moored vessels.	
14	DD Name: IENC	Code: restrn_14	Date accepted: 2001-05-31
	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	

Value	Data Dictionary (DD) Reference		
	Definition: a specified area designated by appropriate authority, within which berthing is restricted		
33	DD Name: IENC	Code: restrn_33	Date accepted: 2001-05-31
	Name: making fast prohibited		
	Definition: a specified area designated by appropriate authority, within which vessels, assemblies of floating material or floating establishments may not make fast to the bank.		
34	DD Name: IENC	Code: restrn_34	Date accepted: 2001-05-31
	Name: making fast restricted		
	Definition: a specified area designated by appropriate authority, within which making fast to the bank is 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.		

Attribute	Type of Ship
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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

Value	Data Dictionary (DD) Reference		
	Name: special purpose vessel.		
	Definition: a vessel that fulfills special purposes e.g. hovercrafts, pilot boats		
7	DD Name: IENC	Code: shptyp_7	Date accepted: 2001-05-31
	Name: man of War		
	Definition: armed naval vessel.		
8	DD Name: IENC	Code: shptyp_8	Date accepted: 2001-05-31
	Name: submarine		
	Definition: a vessel that is capable of operating for an extended period of time underwater.		
9	DD Name: IENC	Code: shptyp_9	Date accepted: 2001-05-31
	Name: high speed craft		
	Definition:		
10	DD Name: IENC	Code: shptyp_10	Date accepted: 2001-05-31
	Name: bulk carrier		
	Definition: a vessel which is designed for carrying bulk goods, e.g. coal, ore or grain.		
11	DD Name: IENC	Code: shptyp_11	Date accepted: 2001-05-31
	Name: seaplane		
	Definition: airplane designed to take off from and alight on water.		
12	DD Name: IENC	Code: shptyp_12	Date accepted: 2001-05-31
	Name: tugboat		
	Definition: a powerful small boat designed to pull or push larger ships or powerless barges.		
13	DD Name: IENC	Code: shptyp_13	Date accepted: 2001-05-31
	Name: passenger vessel		
	Definition: a vessel which is designed for carrying passengers and which serves mainly as cruise vessel.		
14	DD Name: IENC	Code: shptyp_14	Date accepted: 2001-05-31
	Name: ferry		

Value Data Dictionary (DD) Reference

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	speed reference
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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
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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
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Acronym: **trshgd**

Code: 17076

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: List of goods, which can be transshipped

Enumerations

Value Data Dictionary (DD) Reference

- | | |
|---|---|
| 1 | DD Name: IENC Code: trshgd_1 Date accepted: 2001-05-31
Name: containers
Definition: boxes for cargo transport with standardized dimensions. |
| 2 | DD Name: IENC Code: trshgd_2 Date accepted: 2001-05-31
Name: bulk goods
Definition: unpacked bulk cargo in the same or a similar kind of nature (homogeneous). |
| 3 | DD Name: IENC Code: trshgd_3 Date accepted: 2001-05-31
Name: oil
Definition: Mineral oil or liquid petrolatum, a by-product in the distillation of petroleum to produce gasoline. |
| 4 | DD Name: IENC Code: trshgd_4 Date accepted: 2001-05-31
Name: fuel
Definition: liquid fuel, e.g. gasoline, diesel. |
| 5 | DD Name: IENC Code: trshgd_5 Date accepted: 2001-05-31
Name: chemicals
Definition: any material used in or obtained by a process in chemistry. |

Value	Data Dictionary (DD) Reference		
6	DD Name: IENC Name: liquid goods Definition: fluids whose shape is usually determined by the container it fills.	Code: trshgd_6	Date accepted: 2001-05-31
7	DD Name: IENC Name: explosive goods Definition: goods that undergoes decomposition or combustion with great rapidity, evolving much heat and producing a large volume of gas.	Code: trshgd_7	Date accepted: 2001-05-31
8	DD Name: IENC Name: fish Definition: marine animals	Code: trshgd_8	Date accepted: 2001-05-31
9	DD Name: IENC Name: cars Definition: wheeled vehicles	Code: trshgd_9	Date accepted: 2001-05-31
10	DD Name: IENC Name: general cargo Definition: general cargo	Code: trshgd_10	Date accepted: 2001-05-31

Attribute	UN location code
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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
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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
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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
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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
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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
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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
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Acronym: **verdat**

Code: 17005

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Vertical datum

Enumerations

Value Data Dictionary (DD) Reference

- | | |
|----|---|
| 12 | DD Name: IENC Code: verdat_12 Date accepted: 2001-05-31 |
| | Name: Mean lower low water |
| | Definition: (MLLW) - the average height of the lower low waters at a place over a 19-year period. (IHO Dictionary, S-32, 5th Edition, 3145) |
| 31 | DD Name: IENC Code: verdat_31 Date accepted: 2001-05-31 |
| | Name: Local low water reference level |
| | Definition: low water reference level of the local area |
| 32 | DD Name: IENC Code: verdat_32 Date accepted: 2001-05-31 |
| | Name: Local high water reference level |
| | Definition: high water reference level of the local area |
| 33 | DD Name: IENC Code: verdat_33 Date accepted: 2001-05-31 |
| | Name: Local mean water reference level |
| | Definition: mean water reference level of the local area |
| 34 | DD Name: IENC Code: verdat_34 Date accepted: 2001-05-31 |
| | Name: Equivalent height of water (German GIW) |
| | Definition: A low water level which is the result of a defined low water discharge - called "equivalent discharge". |

Value	Data Dictionary (DD) Reference		
35	DD Name: IENC	Code: verdat_35	Date accepted: 2001-05-31
	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:		

Attribute	Water displacement range value 1
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Acronym: **lc_wd1**

Code: 18026

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC

Date accepted: 2001-05-31

Definition: The minimum value of the water displacement range the particular article/clause of the appli-cable law/regulation is dealing with

Attribute	Water displacement value 2
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Acronym: **lc_wd2**

Code: 18027

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

DD Name: IENC

Date accepted: 2001-05-31

Definition: The maximum value of the water displacement range the particular article/clause of the appli-cable law/regulation is dealing with

Attribute	water displacement unit
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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
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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

Value Data Dictionary (DD) Reference

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

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
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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

Attribute	bank of the waterway
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Acronym: **bnkwtw**

Code: 17105

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: bank of the river (waterway)

Enumerations

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: bnkwtw_1 Date accepted: 2009-09-11

Name: left

Definition: left bank of the river

2 DD Name: IENC Code: bnkwtw_2 Date accepted: 2009-09-11

Name: right

Definition: right bank of the river

