

IENC Feature Catalogue

Edition 2.4 (Corr.2)

2015-10-30

Introduction

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

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

Used Abbreviations

Feature Types

G	Geo
M	Meta
C	Cartographic
O	Collection
I	Information

Feature Primitives

P	Point
L	Line
A	Area
N	None

Use of Feature Attribute Bindings

O	Optional
M	Mandatory
C	Conditional mandatory

Type of Attribute Use

F	Feature
N	National
S	Spatial
C	Cartographic

Type of Attribute Value

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

Feature	Administration Area (Named)
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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"
CONDTN	C	value list = "3"
OBJNAM	M	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."
NTXTDS	O	

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

Feature	Association
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Acronym: C_ASSO Code: 401
 Type: O
 Primitive: N

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Beacon, isolated danger
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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"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

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

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

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

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

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	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	

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

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

acronym	usage	constraints
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NTXTDS	O	
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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	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"

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

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

acronym	usage	constraints
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NTXTDS	O	
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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	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	

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

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 = "1,38"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."
NTXTDS	O	

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..."
NTXTDS	O	

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..."
NTXTDS	O	

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..."
NTXTDS	O	

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..."
NTXTDS	O	

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

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	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" decimal digits = "2"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."
NTXTDS	O	

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

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 = "1-33"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."

acronym	usage	constraints
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NTXTDS	O	
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Feature	Depth contour
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Acronym: DEPCNT Code: 43
 Type: G
 Primitive: L

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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" decimal digits = "2"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
TXTDSC	O	
NTXTDS	O	
PICREP	O	

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

Feature	Dumping ground
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Acronym: DMPGRD Code: 48
 Type: G
 Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Dyke
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Acronym: DYKCON Code: 49
 Type: G
 Primitive: L,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Fairway
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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..."
NTXTDS	O	

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

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..."
NTXTDS	O	

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

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 = "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..."
NTXTDS	O	

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

Feature	Gate
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Acronym: GATCON Code: 61
 Type: G
 Primitive: L,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

acronym	usage	constraints
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NTXTDS	O	
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Feature	Harbour facility
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Acronym: HRBFAC Code: 64
 Type: G
 Primitive: P,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Hulk
---------	------

Acronym: HULKES Code: 65
 Type: G
 Primitive: A

Data Dictionary (DD) Reference:

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

Definition: A permanently moored ship.

Attribute Bindings:

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

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

Acronym: LAKARE Code: 69
 Type: G
 Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."
NTXTDS	O	

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

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"
FUNCTN	C	value list = "2-42"
CONDTN	O	value list = "1,2,3,4,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,ccccc,c..."
NTXTDS	O	

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

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

Feature	Marine farm/culture
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Acronym: MARCUL Code: 82
 Type: G
 Primitive: P,L,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

acronym	usage	constraints
TXTDSC	O	
NTXTDS	O	

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

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 = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."
NTXTDS	O	

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..."
NTXTDS	O	

Feature	New Object
---------	------------

Acronym: NEWOBJ

Code: 18005

Type: G

Primitive: P

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Obstruction
---------	-------------

Acronym: OBSTRN Code: 86
 Type: G
 Primitive: P,L,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

Feature	Oil barrier
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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..."
NTXTDS	O	

Feature	Pile
---------	------

Acronym: PILPNT Code: 90
 Type: G
 Primitive: P

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

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

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

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

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

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

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

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

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

Feature	Rescue Station
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Acronym: RSCSTA Code: 111
 Type: G
 Primitive: P

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

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	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..."
NTXTDS	O	

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

Feature	Runway
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Acronym: RUNWAY

Code: 117

Type: G

Primitive: P,L,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

Feature	Seabed Area
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Acronym: SBDARE

Code: 121

Type: G

Primitive: P,L,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Shoreline construction
---------	------------------------

Acronym: SLCONS Code: 122
 Type: G
 Primitive: P,L,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

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

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..."
NTXTDS	O	

Feature	Small craft facility
---------	----------------------

Acronym: SMCFAC

Code: 128

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Sounding
---------	----------

Acronym: SOUNDG

Code: 129

Type: G

Primitive: P

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Survey reliability
---------	--------------------

Acronym: M_SREL

Code: 310

Type: M

Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Topmark
---------	---------

Acronym: TOPMAR Code: 144
 Type: G
 Primitive: P

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Traffic separation zone
---------	-------------------------

Acronym: TSEZNE Code: 150
 Type: G
 Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Tunnel
---------	--------

Acronym: TUNNEL Code: 151
 Type: G
 Primitive: L,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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"
SORIND	C	format = "cc,cc,cccc,c..."
NTXTDS	O	

Feature	Underwater/awash rock
---------	-----------------------

Acronym: UWTROC

Code: 153

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Unsurveyed area
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Acronym: UNSARE

Code: 154

Type: G

Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

Feature	Vegetation
---------	------------

Acronym: VEGATN Code: 155
 Type: G
 Primitive: P,A

Data Dictionary (DD) Reference:

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

Definition: Collections of, or individual plants.

Attribute Bindings:

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

Feature	Water turbulence
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Acronym: WATTUR Code: 156
 Type: G
 Primitive: P,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

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

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

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

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

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

acronym	usage	constraints
SORDAT	C	format = "ccymmdd"
SORIND	C	format = "cc,cc,cccc,c..."
NTXTDS	O	

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

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

Feature	Bridge Arch Aggregation
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Acronym: c_brga

Code: 18003

Type: O

Primitive: N

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

acronym	usage	constraints
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
PICREP	O	
TXTDSC	O	
NTXTDS	O	
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,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 or to obtain electrical power supply.

Attribute Bindings:

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

acronym	usage	constraints
amoamp	C	
allcon	O	
catplg	O	
shrnum	O	

Feature	Buoy, lateral
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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 = "1-27"
COLOUR	M	value list = "1,2,3,4,5,6,7,8,9,10,11,12,13"
COLPAT	C	value list = "1,2,3,4,5,6"
CONRAD	O	value list = "3"
marsys	C	value list = "1,2,9,10,11,12,13,14,15"
OBJNAM	C	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"

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

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

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

Feature	Checkpoint
---------	------------

Acronym: chkpnt

Code: 17027

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

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

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

Feature	Current, non-gravitational
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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"
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..."
NTXTDS	O	

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"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	

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

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

Feature	Distance mark
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Acronym: disarm

Code: 17004

Type: G

Primitive: P

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

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

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

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

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

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

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

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

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

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

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

acronym	usage	constraints
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NTXTDS	O	
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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" decimal digits = "2"
lg_lgs	O	unit = "m" decimal digits = "2"
lg_drt	O	unit = "m" decimal digits = "2"
lg_wdp	O	decimal digits = "1"
lg_wdu	O	value list = "1,2,3"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"

acronym	usage	constraints
SORIND	C	format = "cc,cc,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_asi	O	value list = "1,2,3,5,6,7,8,9,10"
lc_ase	O	value list = "1,2,3,5,6,7,8,9,10"
lc_cci	O	value list = "1,2,4,5,6,7,8,9"
lc_cce	O	value list = "1,2,4,5,6,7,8,9"
lg_wdu	O	value list = "1,2,3"
lg_spd	O	unit = "km/h" decimal digits = "2"
lg_spr	O	value list = "1,2,3"
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,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 = "1,2,9,10,11,12,13,14,15"
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 - 122"
dirimp	O	value list = "1,2,3,4,5"
disipd	O	unit = "m" decimal digits = "1"
disipu	O	unit = "m" decimal digits = "1"
disbk1	O	unit = "m" decimal digits = "1"
disbk2	O	unit = "m" decimal digits = "1"
fnctnm	M	value list = "1,2,3,4,5"
marsys	O	value list = "1,2,9,10,11,12,13,14,15"
ORIENT	C	unit = "deg" decimal digits = "2"
STATUS	O	value list = "2,3,4,8,9,12,14,16,17"
bnkwtw	O	value list = "1,2"
CONDTN	O	value list = "1,2,3,5"
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	

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

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

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

Feature	Pontoon
---------	---------

Acronym: ponton

Code: 17021

Type: G

Primitive: A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

Feature	Radio calling-in point
---------	------------------------

Acronym: rdocal

Code: 17017

Type: G

Primitive: P,L

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

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

Feature	Sensor
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Acronym: sensor

Code: 18004

Type: G

Primitive: P

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

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

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

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 = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
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 transfer of cargo or passengers from and to ships.

Attribute Bindings:

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

Feature	Time Schedule - in general
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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" 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..."
NTXTDS	O	

Feature	Underwater rock / awash rock
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Acronym: uwtrroc

Code: 17033

Type: G

Primitive: P,A

Data Dictionary (DD) Reference:

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

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

Attribute Bindings:

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

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

Feature	Vertical datum
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Acronym: m_vdat

Code: 17023

Type: M

Primitive: A

Data Dictionary (DD) Reference:

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

Definition: An area of uniform vertical datum.

Attribute Bindings:

acronym	usage	constraints
verdat	M	value list = "12,31,32,33,34,35,36,37,38,39,40,41,42,43,44"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,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 = "1,2,3,4,5,6,7,8,9,10,11,12"
dirimp	M	value list = "1,2,3,4"
unlocd	C	
OBJNAM	O	
NOBJNM	O	
INFORM	O	
NINFOM	O	
SCAMIN	M	min = "1"
PICREP	O	
TXTDSC	O	
DATSTA	O	format = "ccyymmdd"
DATEND	O	format = "ccyymmdd"
PERSTA	O	format = "ccyymmdd"
PEREND	O	format = "ccyymmdd"
SORDAT	C	format = "ccyymmdd"
SORIND	C	format = "cc,cc,cccc,c..."
NTXTDS	O	

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

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

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

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 an imaginary (i.e., physically non-existent) line across the waterway.

Attribute Bindings:

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

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	DD Name: HYDRO Code: BCNSHP_1 Date accepted: 2000-11-01 Name: stake, pole, perch, post Definition: an elongated wood or metal pole, embedded in the bottom to serve as a navigational aid or a support for a navigational aid. (adapted from IHO Dictionary S-32, 5th Edition, 4960)
2	DD Name: HYDRO Code: BCNSHP_2 Date accepted: 2000-11-01 Name: withy Definition: a tree without roots stuck or spoiled into the bottom of the sea to serve as a navigational aid.
3	DD Name: HYDRO Code: BCNSHP_3 Date accepted: 2000-11-01 Name: beacon tower Definition: a solid structure of the order of 10 metres in height used as a navigational aid.
4	DD Name: HYDRO Code: BCNSHP_4 Date accepted: 2000-11-01 Name: lattice beacon Definition: a structure consisting of strips of metal or wood crossed or interlaced to form a structure to serve as an aid to navigation or as a support for an aid to navigation.
5	DD Name: HYDRO Code: BCNSHP_5 Date accepted: 2000-11-01 Name: pile beacon Definition: a long heavy timber(s) or section(s) of steel, wood, concrete, etc., forced into the seabed to serve as an aid to navigation or as a support for an aid to navigation.(Adapted from IHO Dictionary, S-32, 5th Edition, 3840 and Navigation Dictionary, US National Oceanic and Atmospheric Administration - NOAA, 1969)

Attribute	Buoy shape
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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	DD Name: HYDRO Code: BOYSHP_1 Date accepted: 2000-11-01 Name: conical (nun, ogival) Definition: the upper part of the body above the water-line, or the greater part of the superstructure, has approximately the shape or the appearance of a pointed cone with the point upwards.
2	DD Name: HYDRO Code: BOYSHP_2 Date accepted: 2000-11-01 Name: can (cylindrical) Definition: the upper part of the body above the water-line, or the greater part of the superstructure, has the shape of a cylinder, or a truncated cone that approximates to a cylinder, with a flat end uppermost.
3	DD Name: HYDRO Code: BOYSHP_3 Date accepted: 2000-11-01 Name: spherical Definition: the upper part of the body above the water-line, or the greater part of the superstructure, has the shape of a part of a sphere.
4	DD Name: HYDRO Code: BOYSHP_4 Date accepted: 2000-11-01 Name: pillar Definition: the upper part of the body above the water-line, or the greater part of the superstructure is a narrow vertical structure, pillar or lattice tower.
5	DD Name: HYDRO Code: BOYSHP_5 Date accepted: 2000-11-01 Name: spar (spindle) Definition: the upper part of the body above the water-line, or the greater part of the superstructure, has the form of a pole, or of a very long cylinder, floating upright.

Value Data Dictionary (DD) Reference

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

Name: barrel (tun)

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

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

Name: ice buoy

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

Attribute	Buried depth
-----------	--------------

Acronym: BURDEP

Code: 5

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

Attribute	Category of airport/airfield
-----------	------------------------------

Acronym: CATAIR Code: 7
 Use Type: F
 Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value	Data Dictionary (DD) Reference
1	DD Name: HYDRO Code: CATAIR_1 Date accepted: 2000-11-01 Name: military aeroplane airport Definition: a large military airfield usually equipped with a control tower, hangars and accommodation for the receiving and discharging of passengers or cargo. (adapted from The Macquarie Dictionary, 1988)
2	DD Name: HYDRO Code: CATAIR_2 Date accepted: 2000-11-01 Name: civil aeroplane airport Definition: a large airfield usually equipped with a control tower, hangars and accommodation for the receiving and discharging of passengers or cargo. (The Macquarie Dictionary, 1988)
4	DD Name: HYDRO Code: CATAIR_4 Date accepted: 2000-11-01 Name: civil heliport Definition: a landing place for helicopters, often the roof of a building. (The Macquarie Dictionary, 1988)
6	DD Name: HYDRO Code: CATAIR_6 Date accepted: 2000-11-01 Name: small planes airfield Definition: an area of land set aside for the take-off and landing of small aeroplanes.

Attribute	Category of bridge
-----------	--------------------

Acronym: CATBRG Code: 9
 Use Type: F
 Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: fixed bridge

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

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

Name: swing bridge

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

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

Name: lifting bridge

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

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

Name: bascule bridge

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

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

Name: draw bridge

Definition: a general name for bridges of which part or the entire span of the bridge may be raised or

Value	Data Dictionary (DD) Reference
	drawn aside to allow ships to pass through. IHO Dictionary, S-32, 5th Edition, 546)
9	DD Name: HYDRO Code: CATBRG_9 Date accepted: 2000-11-01 Name: footbridge Definition: a bridge structure used only for pedestrian traffic. (McGraw-Hill Dictionary of Scientific and Technical Terms, 3rd Edition, 1984)
12	DD Name: HYDRO Code: CATBRG_12 Date accepted: 2000-11-01 Name: suspension bridge Definition: a fixed bridge consisting of either a roadway or a truss suspended from two or more cables which pass over towers and are anchored by backstays to a firm foundation. (McGraw-Hill Encyclopaedia of Science and Technology, 7th Edition, 1992)
13	DD Name: IENC Code: CATBRG_13 Date accepted: 2012-08-03 Name: bridge arch Definition: an arched bridge with known clearances

Attribute	Category of built-up area
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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
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
-----------	---------------------------

Acronym: CATCAM Code: 13
 Use Type: F
 Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: north cardinal mark

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

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

Name: east cardinal mark

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

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

Name: south cardinal mark

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

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

Name: west cardinal mark

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

Attribute	Category of coastline
-----------	-----------------------

Acronym: CATCOA Code: 15
 Use Type: F
 Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

- | | |
|---|--|
| 1 | DD Name: HYDRO Code: CATCOA_1 Date accepted: 2000-11-01
Name: steep coast
Definition: a coast backed by rock or earth cliffs, gives a good radar return and is useful for visual identification from a considerable distance off, where cliffs alternate with low lying coast along the shoreline. (IHO Chart Specifications, M-4) |
| 2 | DD Name: HYDRO Code: CATCOA_2 Date accepted: 2000-11-01
Name: flat coast
Definition: a level coast with no obvious topographic features. |
| 3 | DD Name: HYDRO Code: CATCOA_3 Date accepted: 2000-11-01
Name: sandy shore
Definition: a shoreline area made up of sand, i.e. loose material consisting of small but easily distinguishable, separate grains, between 0.0625 and 2.000 millimetres in diameter. (adapted from IHO Dictionary, S-32, 5th Edition, 4497) |
| 4 | DD Name: HYDRO Code: CATCOA_4 Date accepted: 2000-11-01
Name: stony shore
Definition: a shoreline area made up of rock and rock fragments ranging in size from pebbles and gravel to boulders or large rock masses. (adapted from IHO Dictionary, S-32, 5th Edition, 5059) |
| 5 | DD Name: HYDRO Code: CATCOA_5 Date accepted: 2000-11-01
Name: shingly shore
Definition: a shoreline area made up of rounded, often flat waterworn rock fragments larger than |

Value	Data Dictionary (DD) Reference		
	approximately 16 millimetres. (adapted from IHO Dictionary, S-32, 5th Edition, 4683)		
6	DD Name: HYDRO	Code: CATCOA_6	Date accepted: 2000-11-01
	Name: glacier (seaward end)		
	Definition: projecting seaward extension of glacier, usually afloat. Also called glacier tongue. (IHO Hydrographic Dictionary, S-32, 5th Edition, 2043)		
7	DD Name: HYDRO	Code: CATCOA_7	Date accepted: 2000-11-01
	Name: mangrove		
	Definition: one of several genera of tropical trees or shrubs which produce many prop roots and grow along low lying coasts into shallow water. (IHO Hydrographic Dictionary, S-32, 5th Edition, 3064)		
8	DD Name: HYDRO	Code: CATCOA_8	Date accepted: 2000-11-01
	Name: marshy shore		
	Definition: a shoreline area made up of spongy land saturated with water. It may have a shallow covering of water, usually with a considerable amount of vegetation appearing above the surface. (adapted from IHO Dictionary, S-32, 5th Edition, 5240)		
9	DD Name: HYDRO	Code: CATCOA_9	Date accepted: 2000-11-01
	Name: coral reef		
	Definition: a reef, often of large extent, composed chiefly of coral and its derivatives. (IHO Dictionary, S-32, 5th Edition, 1063)		
10	DD Name: HYDRO	Code: CATCOA_10	Date accepted: 2000-11-01
	Name: ice coast		
	Definition: a vertical cliff forming the seaward edge of an ice shelf, ranging in height from 2m to 50m or more above sea level.		
11	DD Name: HYDRO	Code: CATCOA_11	Date accepted: 2000-11-01
	Name: shelly shore		
	Definition: a shoreline area made up of shells i.e. made up of the hard outside covering of marine animals.		

Attribute	Category of conveyor
-----------	----------------------

Acronym: CATCON

Code: 17

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: belt conveyor

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

Attribute	Category of coverage
-----------	----------------------

Acronym: CATCOV

Code: 18

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: coverage available

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

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

Name: no coverage available

Definition: an area containing no spatial objects.

Attribute	Category of crane
-----------	-------------------

Acronym: CATCRN Code: 19
 Use Type: F
 Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: container crane/gantry

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

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

Name: sheerlegs

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

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

Name: travelling crane

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

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

Name: A-frame

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

Attribute	Category of dam
-----------	-----------------

Acronym: CATDAM Code: 20
 Use Type: F
 Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: weir

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

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

Name: dam

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

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

Name: flood barrage

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

Attribute	Category of distance mark
-----------	---------------------------

Acronym: CATDIS Code: 21
 Use Type: F
 Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

- | | |
|---|--|
| 1 | DD Name: HYDRO Code: CATDIS_1 Date accepted: 2000-11-01
Name: distance mark not physically installed
Definition: a point at which a distance from an origin along a feature is given for information, but at which no specific marker exists. |
| 2 | DD Name: HYDRO Code: CATDIS_2 Date accepted: 2000-11-01
Name: visible mark, pole
Definition: a point at which a distance from an origin along a feature is given for information and which is marked by a pole. |
| 3 | DD Name: HYDRO Code: CATDIS_3 Date accepted: 2000-11-01
Name: visible mark, board
Definition: a point at which a distance from an origin along a feature is given for information and which is marked by a board. |
| 4 | DD Name: HYDRO Code: CATDIS_4 Date accepted: 2000-11-01
Name: visible mark, unknown shape
Definition: a point at which a distance from an origin along a feature is given for information and which is physically marked, but the shape of the mark is not known or not given. |

Attribute	Category of dumping ground
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Acronym: CATDPG Code: 23
 Use Type: F
 Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: chemical waste dumping ground

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

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

Name: explosives dumping ground

Definition: an area at sea where explosives are dumped.

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

Name: spoil ground

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

Attribute	Category of fence/wall
-----------	------------------------

Acronym: CATFNC

Code: 24

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: fence

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

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

Name: wall

Definition: a fence constructed from masonry or stone.

Attribute	Category of ferry
-----------	-------------------

Acronym: CATFRY Code: 25
 Use Type: F
 Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: 'free-moving' ferry

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

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

Name: cable ferry

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

Attribute	Category of fog signal
-----------	------------------------

Acronym: CATFOG Code: 27
 Use Type: F
 Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value	Data Dictionary (DD) Reference
1	DD Name: HYDRO Code: CATFOG_1 Date accepted: 2000-11-01 Name: explosive Definition: a signal produced by the firing of explosive charges. (Admiralty List of Lights and Fog Signals)
2	DD Name: HYDRO Code: CATFOG_2 Date accepted: 2000-11-01 Name: diaphone Definition: a diaphone uses compressed air and generally emits a powerful low-pitched sound, which often concludes with a brief sound of suddenly lowered pitch, termed the 'grunt'. (Admiralty List of Lights and Fog Signals)
3	DD Name: HYDRO Code: CATFOG_3 Date accepted: 2000-11-01 Name: siren Definition: a siren uses compressed air and exists in a variety of types which differ considerably in their sound and power. (Admiralty List of Lights and Fog Signals)
4	DD Name: HYDRO Code: CATFOG_4 Date accepted: 2000-11-01 Name: nautophone Definition: a horn having a diaphragm oscillated by electricity (IHO Dictionary, S-32, 5th Edition, 3371).
5	DD Name: HYDRO Code: CATFOG_5 Date accepted: 2000-11-01 Name: reed Definition: a reed uses compressed air and emits a weak, high pitched sound. (Admiralty List of Lights and Fog Signals)

Value	Data Dictionary (DD) Reference		
6	DD Name: HYDRO	Code: CATFOG_6	Date accepted: 2000-11-01
	Name: tyfon		
	Definition: a diaphragm horn which operates under the influence of compressed air or steam (IHO Dictionary, S-32, 5th Edition, 5717).		
7	DD Name: HYDRO	Code: CATFOG_7	Date accepted: 2000-11-01
	Name: bell		
	Definition: a ringing sound with a short range. The apparatus may be operated automatically, by hand or by wave action. (IHO Chart Specifications, M-4, 452.5)		
8	DD Name: HYDRO	Code: CATFOG_8	Date accepted: 2000-11-01
	Name: whistle		
	Definition: a distinctive sound made by a jet of air passing through an orifice. The apparatus may be operated automatically, by hand or by air being forced up a tube by waves acting on a buoy. (IHO Chart Specifications, M-4, 452.6)		
9	DD Name: HYDRO	Code: CATFOG_9	Date accepted: 2000-11-01
	Name: gong		
	Definition: a sound produced by vibration of a disc when struck. The apparatus may be operated automatically, by hand or by wave action. (IHO Chart Specifications, M-4, 452.7)		
10	DD Name: HYDRO	Code: CATFOG_10	Date accepted: 2000-11-01
	Name: horn		
	Definition: a horn uses compressed air or electricity to vibrate a diaphragm and exists in a variety of types which differ greatly in their sound and power. (Admiralty List of Lights and Fog Signals)		

Attribute	Category of gate
-----------	------------------

Acronym: CATGAT

Code: 29

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: flood barrage gate

Definition: an opening gate used to control flood water.

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

Name: lock gate

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

Attribute	Category of harbour facility
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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
-----------	------------------

Acronym: CATHLK Code: 31
 Use Type: F
 Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

- | | |
|---|--|
| 1 | DD Name: HYDRO Code: CATHLK_1 Date accepted: 2000-11-01
Name: floating restaurant
Definition: a permanently moored floating structure, such as an old ship, used as a restaurant. |
| 2 | DD Name: HYDRO Code: CATHLK_2 Date accepted: 2000-11-01
Name: historic ship
Definition: a ship of historical interest permanently moored as a tourist attraction. |
| 3 | DD Name: HYDRO Code: CATHLK_3 Date accepted: 2000-11-01
Name: museum
Definition: a permanently moored floating structure, such as an old ship, used as a museum. |
| 4 | DD Name: HYDRO Code: CATHLK_4 Date accepted: 2000-11-01
Name: accommodation
Definition: a permanently moored floating structure, such as an old ship, used for accommodation. |
| 5 | DD Name: HYDRO Code: CATHLK_5 Date accepted: 2000-11-01
Name: floating breakwater
Definition: a permanently moored floating structure, often constructed from old ships, used as a breakwater. |

Attribute	Category of land region
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Acronym: CATLND Code: 34
 Use Type: F
 Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of land region

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: marsh

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

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

Name: agricultural land

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

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

Name: parkland

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

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

Name: swamp

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

Attribute	Category of landmark
-----------	----------------------

Acronym: CATLMK Code: 35
 Use Type: F
 Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

- | | |
|---|--|
| 1 | DD Name: HYDRO Code: CATLMK_1 Date accepted: 2000-11-01
Name: cairn
Definition: a mound of stones, usually conical or pyramidal, raised as a landmark or to designate a point of importance in surveying. (IHO Dictionary, S-32, 5th Edition, 601) |
| 2 | DD Name: HYDRO Code: CATLMK_2 Date accepted: 2000-11-01
Name: cemetery
Definition: an area of land for burying the dead. |
| 3 | DD Name: HYDRO Code: CATLMK_3 Date accepted: 2000-11-01
Name: chimney
Definition: a vertical structure containing a passage or flue for discharging smoke and gases. (Digital Geographic Information Standard - DIGEST) |
| 4 | DD Name: HYDRO Code: CATLMK_4 Date accepted: 2000-11-01
Name: dish aerial
Definition: a parabolic aerial for the receipt and transmission of high frequency radio signals. (IHO Dictionary, S-32, 5th Edition, 1400) |
| 5 | DD Name: HYDRO Code: CATLMK_5 Date accepted: 2000-11-01
Name: flagstaff (flagpole)
Definition: a staff or pole on which flags are raised. (Digital Geographic Information Standard - DIGEST 1.28) |

Value	Data Dictionary (DD) Reference		
6	DD Name: HYDRO	Code: CATLMK_6	Date accepted: 2000-11-01
	Name: flare stack		
	Definition: a tall structure used for burning-off waste oil or gas. (IHO Dictionary, S-32, 5th Edition, 1836). Normally showing a flame and located at refineries (IHO Chart specifications, M-4).		
7	DD Name: HYDRO	Code: CATLMK_7	Date accepted: 2000-11-01
	Name: mast		
	Definition: a straight vertical piece of timber or a hollow cylinder. (adapted from Digital Geographic Information Standard - DIGEST)		
8	DD Name: HYDRO	Code: CATLMK_8	Date accepted: 2000-11-01
	Name: wind sock		
	Definition: a tapered fabric sleeve mounted so as to catch and swing with the wind, thus indicating the wind direction. (Navigation dictionary, US National Oceanic and Atmospheric Administration - NOAA, 1969)		
9	DD Name: HYDRO	Code: CATLMK_9	Date accepted: 2000-11-01
	Name: monument		
	Definition: a structure erected or maintained as a memorial to a person or event. (Digital Geographic Information Standard - DIGEST)		
10	DD Name: HYDRO	Code: CATLMK_10	Date accepted: 2000-11-01
	Name: column (pillar)		
	Definition: a cylindrical or slightly tapering body of considerably greater length than diameter erected vertically. (Oxford English Dictionary)		
11	DD Name: HYDRO	Code: CATLMK_11	Date accepted: 2000-11-01
	Name: memorial plaque		
	Definition: a slab of metal, usually ornamented, erected as a memorial to a person or event.		
12	DD Name: HYDRO	Code: CATLMK_12	Date accepted: 2000-11-01
	Name: obelisk		
	Definition: a tapering shaft usually of stone or concrete, square or rectangular in section, with a pyramidal apex. (Adapted from Oxford English Dictionary)		
13	DD Name: HYDRO	Code: CATLMK_13	Date accepted: 2000-11-01
	Name: statue		
	Definition: a representation of a human, animal or fantasy figure in marble, bronze, etc.		
14	DD Name: HYDRO	Code: CATLMK_14	Date accepted: 2000-11-01

Value	Data Dictionary (DD) Reference		
	Name:	cross	
	Definition:	a monument, or other structure in form of a cross. (Funk and Wagnalls Dictionary)	
15	DD Name: HYDRO	Code: CATLMK_15	Date accepted: 2000-11-01
	Name:	dome	
	Definition:	a landmark comprising a hemispherical or spheroidal shaped structure (adapted from the Macquarie Dictionary).	
16	DD Name: HYDRO	Code: CATLMK_16	Date accepted: 2000-11-01
	Name:	radar scanner	
	Definition:	a device used for directing a radar beam through a search pattern (adapted from Navigation Dictionary, US National Oceanic and Atmospheric Administration - NOAA, 1969)	
17	DD Name: HYDRO	Code: CATLMK_17	Date accepted: 2000-11-01
	Name:	tower	
	Definition:	a relatively tall structure which may be used for observation, support, storage or communication etc. (Digital Geographic Information Working Group -DGIWG, Oct. 1987)	
18	DD Name: HYDRO	Code: CATLMK_18	Date accepted: 2000-11-01
	Name:	windmill	
	Definition:	a wind driven system of vanes attached to a tower like structure (excluding wind-generated power plants). (Digital Geographic Information Standard - DIGEST)	
19	DD Name: HYDRO	Code: CATLMK_19	Date accepted: 2000-11-01
	Name:	windmotor	
	Definition:	a modern structure for the use of windpower. (IHO Chart Specifications, M-4)	
20	DD Name: HYDRO	Code: CATLMK_20	Date accepted: 2000-11-01
	Name:	spire/minaret	
	Definition:	a tall conical or pyramid-shaped structure often built on the roof or tower of a building, especially a church or mosque. (adapted from The New Shorter Oxford English Dictionary, 1993)	
21	DD Name: HYDRO	Code: CATLMK_21	Date accepted: 2000-11-01
	Name:	large rock or boulder on land	
	Definition:	an isolated rocky formation or a single large stone (IHO Dictionary, S-32, 5th Edition).	

Attribute	Category of lateral mark
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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 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) |
| 5 | DD Name: HYDRO Code: CATLIT_5 Date accepted: 2000-11-01
Name: aero light
Definition: an aero light is established for aeronautical navigation and may be of higher power than marine lights and visible from well offshore |
| 6 | DD Name: HYDRO Code: CATLIT_6 Date accepted: 2000-11-01
Name: air obstruction light
Definition: a light marking an obstacle which constitutes a danger to air navigation |
| 12 | DD Name: HYDRO Code: CATLIT_12 Date accepted: 2000-11-01
Name: front
Definition: terms used with leading lights to describe the position of the light on the lead as viewed from seaward. |

Value	Data Dictionary (DD) Reference		
13	DD Name: HYDRO	Code: CATLIT_13	Date accepted: 2000-11-01
	Name: rear		
	Definition: terms used with leading lights to describe the position of the light on the lead as viewed from seaward.		
14	DD Name: HYDRO	Code: CATLIT_14	Date accepted: 2000-11-01
	Name: lower		
	Definition: terms used with leading lights to describe the position of the light on the lead as viewed from seaward.		
15	DD Name: HYDRO	Code: CATLIT_15	Date accepted: 2000-11-01
	Name: upper		
	Definition: terms used with leading lights to describe the position of the light on the lead as viewed from seaward.		

Attribute	Category of marine farm/culture
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Acronym: CATMFA Code: 38
 Use Type: F
 Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

1 DD Name: HYDRO Code: CATMFA_1 Date accepted: 2010-08-12

Name: crustaceans

Definition: hard shelled animals, for example crabs or lobsters

2 DD Name: HYDRO Code: CATMFA_2 Date accepted: 2010-08-12

Name: oysters/mussels

Definition: edible bivalve molluscs

3 DD Name: HYDRO Code: CATMFA_3 Date accepted: 2010-08-12

Name: fish

Definition: vertebrate cold blooded animal with gills, living in water.

4 DD Name: HYDRO Code: CATMFA_4 Date accepted: 2010-08-12

Name: seaweed

Definition: the general name for marine plants of the Algae class which grow in long narrow ribbons.
 (International Maritime Dictionary, 2nd Ed.)

Attribute	Category of mooring/warping facility
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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) |
| 3 | DD Name: HYDRO Code: CATMOR_3 Date accepted: 2000-11-01
Name: bollard
Definition: small shaped post, mounted on a wharf or dolphin used to secure ship=s lines. |
| 4 | DD Name: HYDRO Code: CATMOR_4 Date accepted: 2000-11-01
Name: tie-up wall
Definition: a tie-up wall is a section of wall designated for tying-up vessels awaiting transit. Bollards and mooring devices are available for both large and small ships. |
| 5 | DD Name: HYDRO Code: CATMOR_5 Date accepted: 2000-11-01
Name: post or pile
Definition: a long heavy timber or section of steel, wood, concrete, etc., forced into the seabed to serve as a mooring facility. (IHO Dictionary, S-32, 5th Edition, 3840) |
| 7 | DD Name: HYDRO Code: CATMOR_7 Date accepted: 2000-11-01
Name: mooring buoy
Definition: a buoy secured to the bottom by permanent moorings with means for mooring a vessel by use of its anchor chain or mooring lines. (IHO Dictionary, S-32, 5th Edition, 575) |

Attribute	Category of navigation line
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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 | DD Name: HYDRO Code: CATOBS_1 Date accepted: 2000-11-01
Name: snag/stump
Definition: a tree, branch or broken pile embedded in the ocean floor, river or lake bottom and not visible on the surface, forming thereby a hazard to vessels. (IHO Dictionary, S-32, 5th Edition, 4794) |
| 2 | DD Name: HYDRO Code: CATOBS_2 Date accepted: 2000-11-01
Name: wellhead
Definition: a submarine structure projecting some distance above the seabed and capping a temporarily abandoned or suspended oil or gas well. (IHO Dictionary, S-32, 5th Edition, 5976) |
| 3 | DD Name: HYDRO Code: CATOBS_3 Date accepted: 2000-11-01
Name: diffuser
Definition: a structure on an outfall through which liquids are discharged. The structure will usually project above the level of the outfall and can be an obstruction to navigation. |
| 4 | DD Name: HYDRO Code: CATOBS_4 Date accepted: 2000-11-01
Name: crib
Definition: a permanent structure set in the water, framed with wooden beams and filled with rocks or boulders. They are used to anchor log booms or support other constructions, e.g. submerged outfalls, diffusers etc.. They may always be dry, submerged or cover and uncover. |
| 5 | DD Name: HYDRO Code: CATOBS_5 Date accepted: 2000-11-01
Name: fish haven
Definition: areas established by private interests, usually sport fishermen, to simulate natural reefs and |

Value	Data Dictionary (DD) Reference
	wrecks that attract fish. The reefs are constructed by dumping assorted junk in areas which may be of very small extent or may stretch a considerable distance along a depth contour. Also called fishery reefs.
6	DD Name: HYDRO Code: CATOBS_6 Date accepted: 2000-11-01 Name: foul area Definition: an area of numerous unidentified dangers to navigation. The area serves as a warning to the mariner that all dangers are not identified individually and that navigation through the area may be hazardous. Commonly used to encode areas behind danger lines on navigation charts. (adapted from IHO Dictionary, S-32, 5th Edition, 1915)
7	DD Name: HYDRO Code: CATOBS_7 Date accepted: 2000-11-01 Name: foul ground Definition: areas over which it is safe to navigate but which should be avoided for anchoring, taking the ground or ground fishing. (IHO Chart Specifications, M-4, 442.8)
8	DD Name: HYDRO Code: CATOBS_8 Date accepted: 2000-11-01 Name: ice boom Definition: floating barriers, anchored to the bottom, used to deflect the path of floating ice in order to prevent the obstruction of locks, intakes, etc., and to prevent damage to bridge piers and other structures. (Canadian Hydrographic Service, Chart specifications).
9	DD Name: HYDRO Code: CATOBS_9 Date accepted: 2000-11-01 Name: ground tackle Definition: equipment such as anchors, concrete blocks, chains and cables, etc., used to position floating structures such as trot and mooring buoys etc.
10	DD Name: HYDRO Code: CATOBS_10 Date accepted: 2000-11-01 Name: boom Definition: a floating barrier used to protect a river or harbour mouth or to create a sheltered area for storage purposes. (IHO Dictionary, S-32, 5th Edition, 505).
11	DD Name: HYDRO Code: CATOBS_11 Date accepted: 2011-02-23 Name: fishing net Definition: a piece of open-meshed material made of twine, cord, or something similar, used for catching fish

Attribute	Category of oil barrier
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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. |
| 6 | DD Name: HYDRO Code: CATPRA_6 Date accepted: 2000-11-01 |

Value	Data Dictionary (DD) Reference
	Name: timber yard Definition: a storage area for wood used for building, carpentry or joinery.
7	DD Name: HYDRO Code: CATPRA_7 Date accepted: 2000-11-01 Name: factory area Definition: a group of buildings where goods are manufactured.
8	DD Name: HYDRO Code: CATPRA_8 Date accepted: 2000-11-01 Name: tank farm Definition: an area in which a number of large-capacity storage tanks are located, generally used for crude oil or petroleum products.
9	DD Name: HYDRO Code: CATPRA_9 Date accepted: 2000-11-01 Name: wind farm Definition: an area in which numerous wind motors are located.
10	DD Name: HYDRO Code: CATPRA_10 Date accepted: 2000-11-01 Name: slag heap/spoil heap Definition: hill of refuse from a mine, industrial plant etc. on land (adapted from Concise Oxford Dictionary).

Attribute	Category of pylon
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Acronym: CATPYL Code: 49
 Use Type: F
 Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

- | | |
|---|--|
| 1 | DD Name: HYDRO Code: CATPYL_1 Date accepted: 2000-11-01
Name: power transmission pylon/pole
Definition: a vertical construction consisting, for example, of a steel framework or of pre-stressed concrete, to support a power transmission cable or line. (adapted from Digital Geographic Information Standard - DIGEST FACC 1.2) |
| 2 | DD Name: HYDRO Code: CATPYL_2 Date accepted: 2000-11-01
Name: telephone/telegraph pylon/pole
Definition: a pylon or pole used to support a telephone or telegraph line. (Digital Geographic Information Standard - DIGEST FACC 1.2) |
| 3 | DD Name: HYDRO Code: CATPYL_3 Date accepted: 2000-11-01
Name: aerial cableway/sky pylon
Definition: a tower or pylon supporting steel cables which convey cars, buckets, or other suspended carrier units. (adapted from Digital Geographic Information Standard - DIGEST FACC 1.2) |
| 4 | DD Name: HYDRO Code: CATPYL_4 Date accepted: 2000-11-01
Name: bridge pylon/tower
Definition: a tower, abutment or pylon from which a bridge deck is suspended. (adapted from Digital Geographic Information Standard - DIGEST FACC 1.2) |
| 5 | DD Name: HYDRO Code: CATPYL_5 Date accepted: 2000-11-01
Name: bridge pier
Definition: a support in the form of a pillar or pier for the spans of a bridge. (adapted from Digital |

Value Data Dictionary (DD) Reference
 Geographic Information Standard - DIGEST FACC 1.2)

Attribute	Category of radar station
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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 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. Remarks are intended primarily for marine use. The name 'ramark' is derived from the words radar marker. (IHO Dictionary, S-32, 5th Edition, 4208) |
| 2 | DD Name: HYDRO Code: CATRTB_2 Date accepted: 2000-11-01
Name: racon, radar transponder beacon
Definition: a radar beacon which returns a coded signal which provides identification of the beacon, as well as range and bearing. The range and bearing are indicated by the location of the first character received on the radar screen. The name 'racon' is derived from the words radar beacon. (IHO Dictionary, S-32, 5th Edition, 4132) |
| 3 | DD Name: HYDRO Code: CATRTB_3 Date accepted: 2000-11-01
Name: leading racon/radar transponder beacon
Definition: a radar beacon that may be used (in conjunction with at least one other radar beacon) to indicate a leading line. |

Attribute	Category of recommended track
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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 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.
22	DD Name: HYDRO Code: CATREA_22 Date accepted: 2000-11-01 Name: fish sanctuary

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

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

Attribute	Category of runway
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Acronym: CATRUN

Code: 58

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of runway

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: aeroplane runway

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

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

Name: helicopter landing pad

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

Attribute	Category of sea area
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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
5	DD Name: HYDRO Code: CATSEA_5 Date accepted: 2000-11-01 Name: bay Definition: an indentation in the coastline
12	DD Name: HYDRO Code: CATSEA_12 Date accepted: 2000-11-01 Name: narrows Definition: a navigable narrow part of a bay, strait, river, etc.
13	DD Name: HYDRO Code: CATSEA_13 Date accepted: 2000-11-01 Name: shoal Definition: an offshore hazard to surface navigation that is composed of unconsolidated material.
51	DD Name: HYDRO Code: CATSEA_51 Date accepted: 2000-11-01 Name: canal Definition: an artificial water course used for navigation.
52	DD Name: HYDRO Code: CATSEA_52 Date accepted: 2000-11-01 Name: lake Definition: a large body of water entirely surrounded by land.
53	DD Name: HYDRO Code: CATSEA_53 Date accepted: 2000-11-01 Name: river

Value	Data Dictionary (DD) Reference
	Definition: a relatively large natural stream of water.
54	DD Name: HYDRO Code: CATSEA_54 Date accepted: 2000-11-01 Name: reach Definition: a straight section of a river, specially a navigable river between two bends or an arm of the sea extending into the land
57	DD Name: IENC Code: CATSEA_57 Date accepted: 2014-12-10 Name: chute Definition: an inclined plane, sloping channel, or passage down or through which things may pass
58	DD Name: IENC Code: CATSEA_58 Date accepted: 2014-12-10 Name: backwater/slough Definition: a body of water (as an inlet or tributary) that is out of the main current of a larger body
59	DD Name: IENC Code: CATSEA_59 Date accepted: 2014-12-10 Name: bend Definition: a curve or change in direction of a watercourse or river

Attribute	Category of shoreline construction
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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
Name: wharf (quay)
Definition: a structure serving as a berthing place for vessels. (IHO Dictionary, S-32, 5th Edition, 5985) |

Value	Data Dictionary (DD) Reference		
7	DD Name: HYDRO Code: CATSLC_7 Date accepted: 2000-11-01	Name: training wall	Definition: a wall or bank, often submerged, built to direct or confine the flow of a river or tidal current, or to promote a scour action. (Adapted from IHO Dictionary, S-32, 5th Edition, 5586 and IHO Chart Specifications, M-4).
8	DD Name: HYDRO Code: CATSLC_8 Date accepted: 2000-11-01	Name: rip rap	Definition: A layer of broken rock, cobbles, boulders, or fragments of sufficient size to resist the erosive forces of flowing water and wave action. (Adapted from Marine Chart Manual, US National Oceanic and Atmospheric Administration - NOAA, 1992)
9	DD Name: HYDRO Code: CATSLC_9 Date accepted: 2000-11-01	Name: revetment	Definition: facing of stone or other material, either permanent or temporary, placed along the edge of a stream, river or canal to stabilize the bank and to protect it from the erosive action of the stream. (Adapted from IHO Dictionary, S-32, 5th Edition, 4379)
10	DD Name: HYDRO Code: CATSLC_10 Date accepted: 2000-11-01	Name: sea wall	Definition: an embankment or wall for protection against waves or tidal action along a shore or water front. (IHO Dictionary, S-32, 5th Edition, 4584)
11	DD Name: HYDRO Code: CATSLC_11 Date accepted: 2000-11-01	Name: landing steps	Definition: steps at the shoreline as the connection between land and water on different levels.
12	DD Name: HYDRO Code: CATSLC_12 Date accepted: 2000-11-01	Name: ramp	Definition: a sloping structure that can either be used, as a landing place, at variable water levels, for small vessels, landing ships, or a ferry boat, or for hauling a cradle carrying a vessel, which may include rails. (Adapted from IHO Dictionary, S-32, 5th Edition, 4209)
13	DD Name: HYDRO Code: CATSLC_13 Date accepted: 2000-11-01	Name: slipway	Definition: the prepared and usually reinforced inclined surface on which keel- and bilge-blocks are laid for supporting a vessel under construction. (IHO Dictionary, S-32, 5th Edition, 4775)
14	DD Name: HYDRO Code: CATSLC_14 Date accepted: 2000-11-01	Name: fender	

Value Data Dictionary (DD) Reference

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

15 DD Name: HYDRO Code: CATSLC_15 Date accepted: 2000-11-01

Name: solid face wharf

Definition: a wharf consisting of a solid wall of concrete, masonry, wood etc., such that the water cannot circulate freely under the wharf. The type of construction affects ship-handling; for example, a solid face wharf may give shelter from tidal streams, but under certain circumstances a cushion of water may build up between such a wharf and a ship attempting to berth at it, causing difficulties in ship handling. (Capt. A. Rae, pilot, Port of Halifax and Mr. R. Morash, wharf building engineer, Transport Canada)

16 DD Name: HYDRO Code: CATSLC_16 Date accepted: 2000-11-01

Name: open face wharf

Definition: a wharf supported on piles or other structures which allow free circulation of water under the wharf. (Capt. A. Rae, pilot, Port of Halifax and Mr. R. Morash, wharf building engineer, Transport Canada)

Attribute	Category of silo/tank
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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 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 Name: public inn

Value	Data Dictionary (DD) Reference		
	Definition: a public house providing food, drink and accommodation. (The Collins Reference English Dictionary, 1992)		
7	DD Name: HYDRO	Code: CATSCF_7	Date accepted: 2000-11-01
	Name: restaurant		
	Definition: a commercial establishment serving food. (The Collins Reference Dictionary, 1992)		
8	DD Name: HYDRO	Code: CATSCF_8	Date accepted: 2000-11-01
	Name: chandler		
	Definition: a dealer in ships' supplies. (The Collins Reference Dictionary, 1992)		
9	DD Name: HYDRO	Code: CATSCF_9	Date accepted: 2000-11-01
	Name: provisions		
	Definition: a place where food and other such supplies are available.		
10	DD Name: HYDRO	Code: CATSCF_10	Date accepted: 2000-11-01
	Name: doctor		
	Definition: a place where a doctor is available to provide medical attention.		
11	DD Name: HYDRO	Code: CATSCF_11	Date accepted: 2000-11-01
	Name: pharmacy		
	Definition: a place where medical drugs are dispensed.		
12	DD Name: HYDRO	Code: CATSCF_12	Date accepted: 2000-11-01
	Name: water tap		
	Definition: a place where fresh water is available.		
13	DD Name: HYDRO	Code: CATSCF_13	Date accepted: 2000-11-01
	Name: fuel station		
	Definition: a place where fuel is available.		
14	DD Name: HYDRO	Code: CATSCF_14	Date accepted: 2000-11-01
	Name: electricity		
	Definition: a place where a connection to an electrical supply is available.		
15	DD Name: HYDRO	Code: CATSCF_15	Date accepted: 2000-11-01
	Name: bottle gas		
	Definition: a place where bottled gas is available.		

Value	Data Dictionary (DD) Reference		
16	DD Name: HYDRO	Code: CATSCF_16	Date accepted: 2000-11-01
	Name: showers		
	Definition: a place where showers are available.		
17	DD Name: HYDRO	Code: CATSCF_17	Date accepted: 2000-11-01
	Name: launderette		
	Definition: a place where there are facilities for washing clothes.		
18	DD Name: HYDRO	Code: CATSCF_18	Date accepted: 2000-11-01
	Name: public toilets		
	Definition: a place where toilets are available for public use.		
19	DD Name: HYDRO	Code: CATSCF_19	Date accepted: 2000-11-01
	Name: post box		
	Definition: a place where mail may be posted.		
20	DD Name: HYDRO	Code: CATSCF_20	Date accepted: 2000-11-01
	Name: public telephone		
	Definition: a place where a telephone is available for public use.		
21	DD Name: HYDRO	Code: CATSCF_21	Date accepted: 2000-11-01
	Name: refuse bin		
	Definition: a place where refuse may be dumped.		
22	DD Name: HYDRO	Code: CATSCF_22	Date accepted: 2000-11-01
	Name: car park		
	Definition: a place where cars may be parked.		
23	DD Name: HYDRO	Code: CATSCF_23	Date accepted: 2000-11-01
	Name: parking for boats and trailers		
	Definition: a place on shore where boats and/or trailers may be parked.		
24	DD Name: HYDRO	Code: CATSCF_24	Date accepted: 2000-11-01
	Name: caravan site		
	Definition: a place where caravans may be parked or where caravan accommodation is provided.		
25	DD Name: HYDRO	Code: CATSCF_25	Date accepted: 2000-11-01

Value	Data Dictionary (DD) Reference
	Name: camping site Definition: a place where visitors may pitch tents and camp.
26	DD Name: HYDRO Code: CATSCF_26 Date accepted: 2000-11-01 Name: sewerage pump-out station Definition: a place where sewerage may be pumped off a vessel.
27	DD Name: HYDRO Code: CATSCF_27 Date accepted: 2000-11-01 Name: emergency telephone Definition: a place where a telephone is available for emergency use only.
28	DD Name: HYDRO Code: CATSCF_28 Date accepted: 2000-11-01 Name: landing/launching place for boats Definition: a place where boats may be landed or launched.
29	DD Name: HYDRO Code: CATSCF_29 Date accepted: 2000-11-01 Name: visitors mooring Definition: a mooring set aside for the use of visiting vessels.
30	DD Name: HYDRO Code: CATSCF_30 Date accepted: 2000-11-01 Name: scrubbing berth Definition: a place where vessels may berth for the purpose of careening.
31	DD Name: HYDRO Code: CATSCF_31 Date accepted: 2000-11-01 Name: picnic area Definition: a place where people may go to eat a picnic.
32	DD Name: HYDRO Code: CATSCF_32 Date accepted: 2000-11-01 Name: mechanics workshop Definition: a place where mechanical repairs can be undertaken to engines or other vessel equipment.
33	DD Name: HYDRO Code: CATSCF_33 Date accepted: 2000-11-01 Name: guard and/or security service Definition: a place where a vessel is patrolled by a security service or stored in a secure lockup.

Attribute	Category of special purpose mark
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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 Definition: a mark used to indicate the position of submarine pipelines or the point at which they run on to the land.
41	DD Name: HYDRO Code: CATSPM_41 Date accepted: 2000-11-01

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

Attribute	Category of traffic separation scheme
-----------	---------------------------------------

Acronym: CATTSS Code: 67
 Use Type: F
 Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

- | | | | |
|---|--|----------------|---------------------------|
| 1 | DD Name: HYDRO | Code: CATTSS_1 | Date accepted: 2010-08-11 |
| | Name: IMO - adopted | | |
| | Definition: a defined Traffic Separation Scheme that has been adopted as an IMO routing measure. | | |
| 2 | DD Name: HYDRO | Code: CATTSS_2 | Date accepted: 2010-08-11 |
| | Name: not IMO - adopted | | |
| | Definition: a defined Traffic Separation Scheme that has not been adopted as an IMO routing measure. | | |

Attribute	Category of vegetation
-----------	------------------------

Acronym: CATVEG Code: 68
 Use Type: F
 Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value	Data Dictionary (DD) Reference
6	DD Name: HYDRO Code: CATVEG_6 Date accepted: 2000-11-01 Name: wood in general (inc mixed wood) Definition: growing trees densely occupying a tract of land. (The Concise Oxford Dictionary)
11	DD Name: HYDRO Code: CATVEG_11 Date accepted: 2000-11-01 Name: reed Definition: any of various water or marsh plants with a firm stem
13	DD Name: HYDRO Code: CATVEG_13 Date accepted: 2000-11-01 Name: tree in general Definition: a woody perennial plant, having a self supporting main stem or trunk.

Attribute	Category of water turbulence
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Acronym: CATWAT

Code: 69

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of water turbulence

Enumerations:

Value Data Dictionary (DD) Reference

6 DD Name: IENC Code: CATWAT_6 Date accepted: 2014-07-11

Name: under water turbulence

Definition:

Attribute	Category of wreck
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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 Name: zone of confidence U (data not assessed)

Value Data Dictionary (DD) Reference

Definition:

Attribute	Colour
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Acronym: COLOUR

Code: 75

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: white

Definition:

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

Name: black

Definition:

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

Name: red

Definition:

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

Name: green

Definition:

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

Name: blue

Definition:

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

Name: yellow

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

Attribute	Colour pattern
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Acronym: COLPAT Code: 76
 Use Type: F
 Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value	Data Dictionary (DD) Reference
1	DD Name: HYDRO Code: COLPAT_1 Date accepted: 2000-11-01 Name: horizontal stripes Definition: straight bands or stripes of differing colours painted horizontally.
2	DD Name: HYDRO Code: COLPAT_2 Date accepted: 2000-11-01 Name: vertical stripes Definition: straight bands or stripes of differing colours painted vertically.
3	DD Name: HYDRO Code: COLPAT_3 Date accepted: 2000-11-01 Name: diagonal stripes Definition: straight bands or stripes of differing colours painted diagonally (ie not horizontally or vertically).
4	DD Name: HYDRO Code: COLPAT_4 Date accepted: 2000-11-01 Name: squared Definition: often referred to as checker plate, where alternate colours are used to create squares similar to a chess or draught board. The pattern may be straight or diagonal.
5	DD Name: HYDRO Code: COLPAT_5 Date accepted: 2000-11-01 Name: stripes (direction unknown) Definition: straight bands or stripes of differing colours painted in an unknown direction.
6	DD Name: HYDRO Code: COLPAT_6 Date accepted: 2000-11-01 Name: border stripe

Value Data Dictionary (DD) Reference

Definition: a band or stripe of colour which is displayed around the outer edge of the object, which may also form a border to an inner pattern or plain colour.

Attribute	Communication channel
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Acronym: COMCHA

Code: 77

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

Definition: A channel number assigned to a specific radio frequency, frequencies or frequency band.

Attribute	Condition
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Acronym: CONDTN Code: 81
 Use Type: F
 Value Type: E

Data Dictionary (DD) Reference:

DD Name: HYDRO Date accepted: 2010-11-16

Definition:

Enumerations:

Value	Data Dictionary (DD) Reference
1	DD Name: HYDRO Code: CONDTN_1 Date accepted: 2010-11-16 Name: under construction Definition: a structure that is in the process of being built.
2	DD Name: HYDRO Code: CONDTN_2 Date accepted: 2010-11-16 Name: ruined Definition: a structure in a decayed or deteriorated condition resulting from neglect or disuse, or a damaged structure in need of repair.(IHO Dictionary, S-32, 5th Edition, 4456)
3	DD Name: HYDRO Code: CONDTN_3 Date accepted: 2010-11-16 Name: under reclamation Definition: an area of the sea that is being reclaimed as land, usually by the dumping of earth and other material.
4	DD Name: HYDRO Code: CONDTN_4 Date accepted: 2010-11-16 Name: wingless Definition: a windmill or windmotor from which the turbine blades are missing.
5	DD Name: HYDRO Code: CONDTN_5 Date accepted: 2010-11-16 Name: planned construction Definition: an area where a future construction is planned

Attribute	Conspicuous, radar
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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
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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
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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
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Acronym: EXCLIT Code: 92
 Use Type: F
 Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value	Data Dictionary (DD) Reference
1	DD Name: HYDRO Code: EXCLIT_1 Date accepted: 2000-11-01 Name: light shown without change of character Definition: a light shown throughout the 24 hours without change of character. IHO Chart Specifications, M-4
2	DD Name: HYDRO Code: EXCLIT_2 Date accepted: 2000-11-01 Name: daytime light Definition: a light which is only exhibited by day.
3	DD Name: HYDRO Code: EXCLIT_3 Date accepted: 2000-11-01 Name: fog light Definition: a light which is exhibited in fog or conditions of reduced visibility.
4	DD Name: HYDRO Code: EXCLIT_4 Date accepted: 2000-11-01 Name: night light Definition: a light which is only exhibited at night.

Attribute	Exposition of sounding
-----------	------------------------

Acronym: EXPSOU Code: 93
 Use Type: F
 Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Indicates objects with a 'value of sounding' not within the range of depth of the surrounding depth area.

Enumerations:

Value Data Dictionary (DD) Reference

1 DD Name: HYDRO Code: EXPSOU_1 Date accepted: 2010-08-12

Name: within the range of depth of the surrounding depth area

Definition: the depth corresponds to the depth range of the surrounding depth area. i.e. the depth is not shoaler than the minimum depth of the surrounding depth area or deeper than the maximum depth of the surrounding depth area.

2 DD Name: HYDRO Code: EXPSOU_2 Date accepted: 2010-08-12

Name: shoaler than the range of depth of the surrounding depth area

Definition: the depth is shoaler than the minimum depth of the surrounding depth area.

3 DD Name: HYDRO Code: EXPSOU_3 Date accepted: 2010-08-12

Name: deeper than the range of depth of the surrounding depth area

Definition: the depth is deeper than the maximum depth of the surrounding depth area.

Attribute	Function
-----------	----------

Acronym: FUNCTN Code: 94
 Use Type: F
 Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

2 DD Name: HYDRO Code: FUNCTN_2 Date accepted: 2000-11-01

Name: harbour-master's office

Definition: the office of the local official who has charge of mooring and berthing of vessels, collecting harbour fees, etc. (adapted from IHO Dictionary, S-32, 5th Edition, 2191)

3 DD Name: HYDRO Code: FUNCTN_3 Date accepted: 2000-11-01

Name: custom office

Definition: an office which is charged with enforcing customs regulations.

4 DD Name: HYDRO Code: FUNCTN_4 Date accepted: 2000-11-01

Name: health office

Definition: the office which is charged with the administration of health laws and sanitary inspections. (adapted from The New Shorter Oxford English Dictionary, 1993)

5 DD Name: HYDRO Code: FUNCTN_5 Date accepted: 2000-11-01

Name: hospital

Definition: an institution or establishment providing medical or surgical treatment for the ill or wounded. (The New Shorter Oxford English Dictionary, 1993)

6 DD Name: HYDRO Code: FUNCTN_6 Date accepted: 2000-11-01

Name: post office

Definition: the public department, agency or organisation responsible primarily for the collection, transmission and distribution of mail. (The New Shorter Oxford English Dictionary, 1993)

Value	Data Dictionary (DD) Reference		
7	DD Name: HYDRO	Code: FUNCTN_7	Date accepted: 2000-11-01
	Name: hotel		
	Definition: an establishment, especially of a comfortable or luxurious kind, where paying visitors are provided with accommodation, meals and other services. (The New Shorter Oxford English Dictionary, 1993)		
8	DD Name: HYDRO	Code: FUNCTN_8	Date accepted: 2000-11-01
	Name: railway station		
	Definition: a building with platforms where trains arrive, load, discharge and depart. (The New Shorter Oxford English Dictionary, 1993)		
9	DD Name: HYDRO	Code: FUNCTN_9	Date accepted: 2000-11-01
	Name: police station		
	Definition: the office of the local police force.		
10	DD Name: HYDRO	Code: FUNCTN_10	Date accepted: 2000-11-01
	Name: water-police station		
	Definition: the headquarters of a local water-police force.		
11	DD Name: HYDRO	Code: FUNCTN_11	Date accepted: 2000-11-01
	Name: pilot office		
	Definition: the office or headquarters of pilots; the place where the services of a pilot may be obtained. (IHO Dictionary, S-32, 5th Edition, 3845)		
12	DD Name: HYDRO	Code: FUNCTN_12	Date accepted: 2000-11-01
	Name: pilot lookout		
	Definition: a distinctive structure on shore from which personnel keep watch upon events at sea or along the coast. (IHO Dictionary, S-32, 5th Edition, 2917)		
13	DD Name: HYDRO	Code: FUNCTN_13	Date accepted: 2000-11-01
	Name: bank office		
	Definition: an office for custody, deposit, loan, exchange or issue of money. (adapted from The New Shorter Oxford English Dictionary, 1993)		
14	DD Name: HYDRO	Code: FUNCTN_14	Date accepted: 2000-11-01
	Name: headquarters for district control		
	Definition: the quarters of an executive officer (director, manager, etc.) with responsibility for an administrative area.		

Value	Data Dictionary (DD) Reference		
15	DD Name: HYDRO	Code: FUNCTN_15	Date accepted: 2000-11-01
	Name: transit shed/warehouse		
	Definition: a building or part of a building for storage of wares or goods. (adapted from The New Shorter Oxford English Dictionary, 1993)		
16	DD Name: HYDRO	Code: FUNCTN_16	Date accepted: 2000-11-01
	Name: factory		
	Definition: a building or buildings with equipment for manufacturing; a workshop. (The New Shorter Oxford English Dictionary, 1993)		
17	DD Name: HYDRO	Code: FUNCTN_17	Date accepted: 2000-11-01
	Name: power station		
	Definition: a stationary plant containing apparatus for large scale conversion of some form of energy (such as hydraulic, steam, chemical or nuclear energy) into electrical energy. (McGraw-Hill Dictionary of Scientific and Technical Terms, 3rd Edition, 1984)		
18	DD Name: HYDRO	Code: FUNCTN_18	Date accepted: 2000-11-01
	Name: administrative		
	Definition: a building for the management of affairs. (adapted from The New Shorter Oxford English Dictionary, 1993)		
19	DD Name: HYDRO	Code: FUNCTN_19	Date accepted: 2000-11-01
	Name: educational facility		
	Definition: a building concerned with education (eg. school, college, university, etc.)		
20	DD Name: HYDRO	Code: FUNCTN_20	Date accepted: 2000-11-01
	Name: church		
	Definition: a building for public Christian worship. (The New Shorter Oxford English Dictionary, 1993)		
21	DD Name: HYDRO	Code: FUNCTN_21	Date accepted: 2000-11-01
	Name: chapel		
	Definition: a place for Christian worship other than a parish, cathedral or church, especially one attached to a private house or institution. (The New Shorter Oxford English Dictionary, 1993)		
22	DD Name: HYDRO	Code: FUNCTN_22	Date accepted: 2000-11-01
	Name: temple		
	Definition: a building for public Jewish worship. (adapted from The New Shorter Oxford English Dictionary, 1993)		

Value	Data Dictionary (DD) Reference		
23	DD Name: HYDRO	Code: FUNCTN_23	Date accepted: 2000-11-01
	Name: pagoda		
	Definition: a Hindu or Buddhist temple or sacred building. (The New Shorter Oxford English Dictionary, 1993)		
24	DD Name: HYDRO	Code: FUNCTN_24	Date accepted: 2000-11-01
	Name: shinto shrine		
	Definition: a building for public Shinto worship. (adapted from The New Shorter Oxford English Dictionary, 1993)		
25	DD Name: HYDRO	Code: FUNCTN_25	Date accepted: 2000-11-01
	Name: buddhist temple		
	Definition: see pagoda.		
26	DD Name: HYDRO	Code: FUNCTN_26	Date accepted: 2000-11-01
	Name: mosque		
	Definition: a Muslim place of worship. (The New Shorter Oxford English Dictionary, 1993)		
27	DD Name: HYDRO	Code: FUNCTN_27	Date accepted: 2000-11-01
	Name: marabout		
	Definition: a shrine marking the burial place of a Muslim holy man. (The New Shorter Oxford English Dictionary, 1993)		
28	DD Name: HYDRO	Code: FUNCTN_28	Date accepted: 2000-11-01
	Name: lookout		
	Definition: keeping a watch upon events at sea or along the coast. (adapted from IHO Dictionary, S-32,5th Edition,2917)		
29	DD Name: HYDRO	Code: FUNCTN_29	Date accepted: 2000-11-01
	Name: communication		
	Definition: transmitting and/or receiving electronic communication signals. (adapted from Digital Geographic Information Standard - DIGEST)		
30	DD Name: HYDRO	Code: FUNCTN_30	Date accepted: 2000-11-01
	Name: television		
	Definition: broadcast of television signals.		
31	DD Name: HYDRO	Code: FUNCTN_31	Date accepted: 2000-11-01

Value	Data Dictionary (DD) Reference		
	Name:	radio	
	Definition:	broadcast of radio signals.	
32	DD Name:	HYDRO	Code: FUNCTN_32 Date accepted: 2000-11-01
	Name:	radar	
	Definition:	a method, system or technique of using beamed, reflected, and timed radio waves for detecting, locating, or tracking objects, and for measuring altitudes. (IHO Dictionary, S-32, 5th Edition,4158)	
33	DD Name:	HYDRO	Code: FUNCTN_33 Date accepted: 2000-11-01
	Name:	light support	
	Definition:	supporting a light	
34	DD Name:	HYDRO	Code: FUNCTN_34 Date accepted: 2000-11-01
	Name:	microwave	
	Definition:	broadcasting and receiving signals using microwaves.	
35	DD Name:	HYDRO	Code: FUNCTN_35 Date accepted: 2000-11-01
	Name:	cooling	
	Definition:	dissipating heat.	
36	DD Name:	HYDRO	Code: FUNCTN_36 Date accepted: 2000-11-01
	Name:	observation	
	Definition:	a place from which the surroundings can be observed but at which a watch is not habitually maintained. (adapted from IHO Dictionary, S-32, 5th Edition,2917)	
37	DD Name:	HYDRO	Code: FUNCTN_37 Date accepted: 2000-11-01
	Name:	time ball	
	Definition:	a visual time signal in form of a ball	
38	DD Name:	HYDRO	Code: FUNCTN_38 Date accepted: 2000-11-01
	Name:	clock	
	Definition:	visual time signal. (adapted from S-32, 5th Edition, 5536)	
39	DD Name:	HYDRO	Code: FUNCTN_39 Date accepted: 2000-11-01
	Name:	control	
	Definition:	used to control the flow of air, rail, or marine traffic. (Digital Geographic Information Standard - DIGEST)	
40	DD Name:	HYDRO	Code: FUNCTN_40 Date accepted: 2000-11-01

Value	Data Dictionary (DD) Reference
	Name: airship mooring Definition: a facility to secure an airship. (adapted from Digital Geographic Information Standard - DIGEST)
41	DD Name: HYDRO Code: FUNCTN_41 Date accepted: 2000-11-01 Name: stadium Definition: a large usually unroofed building with tiers of seats for spectators
42	DD Name: HYDRO Code: FUNCTN_42 Date accepted: 2000-11-01 Name: bus station Definition: a location at which buses arrive and from which they depart.

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

Acronym: HEIGHT

Code: 95

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

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

Acronym: HORCLR

Code: 98

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

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

Acronym: HORLEN

Code: 99

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

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

Acronym: HORWID

Code: 100

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

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

Acronym: INFORM

Code: 102

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

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

Definition: Textual information about the object.

Attribute	Information in national language
-----------	----------------------------------

Acronym: NINFOM

Code: 300

Use Type: N

Value Type: T

Data Dictionary (DD) Reference:

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

Definition: Textual information in national language characters

Attribute	Jurisdiction
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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
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Acronym: LITCHR Code: 107
 Use Type: F
 Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value	Data Dictionary (DD) Reference
1	DD Name: HYDRO Code: LITCHR_1 Date accepted: 2000-11-01 Name: fixed Definition: a signal light that shows continuously, in any given direction, with constant luminous intensity and colour. (IHO Dictionary, S-32, 5th Edition, 2780)
2	DD Name: HYDRO Code: LITCHR_2 Date accepted: 2000-11-01 Name: flashing Definition: a rhythmic light in which the total duration of light in a period is clearly shorter than the total duration of darkness and all the appearances of light are of equal duration. (IHO Dictionary, S-32, 5th Edition, 2783)
3	DD Name: HYDRO Code: LITCHR_3 Date accepted: 2000-11-01 Name: long-flashing Definition: a flashing light in which a single flash of not less than two seconds duration is regularly repeated. (IHO Dictionary, S-32, 5th Edition, 2796)
4	DD Name: HYDRO Code: LITCHR_4 Date accepted: 2000-11-01 Name: quick-flashing Definition: a light exhibiting without interruption very rapid regular alternations of light and darkness. (IHO Dictionary, S-32, 5th Edition, 2803)
5	DD Name: HYDRO Code: LITCHR_5 Date accepted: 2000-11-01 Name: very quick-flashing Definition: a flashing light in which flashes are repeated at a rate of not less than 80 flashes per minute but

Value	Data Dictionary (DD) Reference
	less than 160 flashes per minute
6	DD Name: HYDRO Code: LITCHR_6 Date accepted: 2000-11-01 Name: ultra quick flashing Definition: a flashing light in which flashes are repeated at a rate of not less than 160 flashes per minute
7	DD Name: HYDRO Code: LITCHR_7 Date accepted: 2000-11-01 Name: isophased Definition: a light with all durations of light and darkness equal. (IHO Dictionary, S-32, 5th Edition, 2779)
8	DD Name: HYDRO Code: LITCHR_8 Date accepted: 2000-11-01 Name: occulting Definition: a rhythmic light in which the total duration of light in a period is clearly longer than the total duration of darkness and all the eclipses are of equal duration
9	DD Name: HYDRO Code: LITCHR_9 Date accepted: 2000-11-01 Name: interrupted quick-flashing Definition: a quick light in which the sequence of flashes is interrupted by regularly repeated eclipses of constant and long duration. (IHO Dictionary, S-32, 5th Edition, 2790)
10	DD Name: HYDRO Code: LITCHR_10 Date accepted: 2000-11-01 Name: interrupted very quick-flashing Definition: a light in which the very rapid alterations of light and darkness are interrupted at regular intervals by eclipses of long duration
11	DD Name: HYDRO Code: LITCHR_11 Date accepted: 2000-11-01 Name: interrupted ultra quick-flashing Definition: a light in which the ultra quick flashes (160 or more per minute) are interrupted at regular intervals by eclipses of long duration
12	DD Name: HYDRO Code: LITCHR_12 Date accepted: 2000-11-01 Name: morse Definition: a rhythmic light in which appearances of light of two clearly different durations are grouped to represent a character or characters in the Morse code
13	DD Name: HYDRO Code: LITCHR_13 Date accepted: 2000-11-01 Name: fixed/flash Definition:

Value	Data Dictionary (DD) Reference		
14	DD Name: HYDRO Code: LITCHR_14 Name: flash/long-flash Definition:	Date accepted: 2000-11-01	
15	DD Name: HYDRO Code: LITCHR_15 Name: occulting/flash Definition:	Date accepted: 2000-11-01	
16	DD Name: HYDRO Code: LITCHR_16 Name: fixed/long-flash Definition:	Date accepted: 2000-11-01	
17	DD Name: HYDRO Code: LITCHR_17 Name: occulting alternating Definition:	Date accepted: 2000-11-01	
18	DD Name: HYDRO Code: LITCHR_18 Name: long-flash alternating Definition:	Date accepted: 2000-11-01	
19	DD Name: HYDRO Code: LITCHR_19 Name: flash alternating Definition:	Date accepted: 2000-11-01	
20	DD Name: HYDRO Code: LITCHR_20 Name: group alternating Definition:	Date accepted: 2000-11-01	
25	DD Name: HYDRO Code: LITCHR_25 Name: very quick-flash plus long-flash Definition:	Date accepted: 2000-11-01	
26	DD Name: HYDRO Code: LITCHR_26 Name: very quick-flash plus long-flash Definition:	Date accepted: 2000-11-01	
27	DD Name: HYDRO Code: LITCHR_27 Name: Definition:	Date accepted: 2000-11-01	

Value	Data Dictionary (DD) Reference		
	Name:	ultra quick-flash plus long-flash	
	Definition:		
28	DD Name: HYDRO	Code: LITCHR_28	Date accepted: 2000-11-01
	Name:	alternating	
	Definition:	a signal light that shows, in any given direction, two or more colours in a regularly repeated sequence with a regular periodicity	
29	DD Name: HYDRO	Code: LITCHR_29	Date accepted: 2000-11-01
	Name:	fixed and alternating flashing	
	Definition:		

Attribute	Light visibility
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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
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Acronym: MARSYS

Code: 109

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: IALA A

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

2 DD Name: HYDRO Code: MARSYS_2 Date accepted: 2000-11-01

Name: IALA B

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

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

Acronym: MLTYLT

Code: 110

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

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

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

Attribute	Nationality
-----------	-------------

Acronym: NATION

Code: 111

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

Definition: The nationality of the specific object.

Attribute	Natural surface
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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 Name: mud Definition: soft, wet earth	Code: NATSUR_1	Date accepted: 2000-11-01
2	DD Name: HYDRO Name: clay Definition: (particles of less than 0.002 mm); stiff, sticky earth that becomes hard when baked.	Code: NATSUR_2	Date accepted: 2000-11-01
3	DD Name: HYDRO Name: silt Definition: (particles of 0.002-0.0625 mm); when dried on hand will rub off easily.	Code: NATSUR_3	Date accepted: 2000-11-01
4	DD Name: HYDRO Name: sand Definition: (particles of 0.0625-2.0 mm); tiny grains of crushed or worn rock.	Code: NATSUR_4	Date accepted: 2000-11-01
5	DD Name: HYDRO 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)	Code: NATSUR_5	Date accepted: 2000-11-01
6	DD Name: HYDRO Name: gravel	Code: NATSUR_6	Date accepted: 2000-11-01

Value	Data Dictionary (DD) Reference		
	Definition: (particles of 2.0-4.0 mm); small stones with coarse sand.		
7	DD Name: HYDRO	Code: NATSUR_7	Date accepted: 2000-11-01
	Name: pebbles		
	Definition: (particles of 4.0-64.0 mm); small stones made smooth and round by being rolled in water.		
8	DD Name: HYDRO	Code: NATSUR_8	Date accepted: 2000-11-01
	Name: cobbles		
	Definition: (particles of 64.0-256.0 mm); stones worn round and smooth by water and used for paving.		
9	DD Name: HYDRO	Code: NATSUR_9	Date accepted: 2000-11-01
	Name: rock		
	Definition: any formation of natural origin that constitutes an integral part of the lithosphere. The natural occurring material that forms firm, hard, and solid masses. (adapted from IHO Dictionary, S-32, 5th Edition, 4415)		
11	DD Name: HYDRO	Code: NATSUR_11	Date accepted: 2000-11-01
	Name: lava		
	Definition: the fluid or semi-fluid matter flowing from a volcano. The substance that results from the cooling of the molten rock. Part of the ocean bed is composed of lava. (IHO Dictionary, S-32, 5th Edition, 2680)		
14	DD Name: HYDRO	Code: NATSUR_14	Date accepted: 2000-11-01
	Name: coral		
	Definition: hard calcareous skeletons of many tribes of marine polyps. (IHO Dictionary, S-32, 5th Edition, 1061)		
17	DD Name: HYDRO	Code: NATSUR_17	Date accepted: 2000-11-01
	Name: shells		
	Definition: exoskeletons of various water dwelling animals. (adapted from IHO Dictionary, S-32, 5th Edition, 4680)		
18	DD Name: HYDRO	Code: NATSUR_18	Date accepted: 2000-11-01
	Name: boulder		
	Definition: a rounded rock with diameter of 256 mm or larger. (adapted from IHO Dictionary, S-32, 5th Edition, 527)		

Attribute	Nature of construction
-----------	------------------------

Acronym: NATCON Code: 112
 Use Type: F
 Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value	Data Dictionary (DD) Reference
1	DD Name: HYDRO Code: NATCON_1 Date accepted: 2000-11-01 Name: masonry Definition: constructed of brick or stone.
2	DD Name: HYDRO Code: NATCON_2 Date accepted: 2000-11-01 Name: concreted Definition: constructed of concrete, a material made of sand and gravel that is united by cement into a hardened mass used for roads, foundations, etc. (adapted from the Illustrated Contemporary Dictionary, Encyclopaedic Edition, 1978)
3	DD Name: HYDRO Code: NATCON_3 Date accepted: 2000-11-01 Name: loose boulders Definition: constructed from large stones or blocks of concrete, often placed loosely for protection against waves or water turbulence.
4	DD Name: HYDRO Code: NATCON_4 Date accepted: 2000-11-01 Name: hard surfaced Definition: constructed with a surface of hard material, usually a term applied to roads surfaced with asphalt or concrete.
5	DD Name: HYDRO Code: NATCON_5 Date accepted: 2000-11-01 Name: unsurfaced Definition: constructed with no extra protection, usually a term applied to roads not surfaced with a hard material.

Value	Data Dictionary (DD) Reference		
6	DD Name: HYDRO	Code: NATCON_6	Date accepted: 2000-11-01
	Name: wooden		
	Definition: constructed from wood.		
7	DD Name: HYDRO	Code: NATCON_7	Date accepted: 2000-11-01
	Name: metal		
	Definition: constructed from metal.		
8	DD Name: HYDRO	Code: NATCON_8	Date accepted: 2000-11-01
	Name: glass reinforced plastic (GRP)		
	Definition: constructed from a plastic material strengthened with fibres of glass.		
9	DD Name: HYDRO	Code: NATCON_9	Date accepted: 2000-11-01
	Name: painted		
	Definition: the application of paint to some other construction or natural feature.		

Attribute	Nature of surface - qualifying terms
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Acronym: NATQUA

Code: 114

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Nature of surface - qualifying terms

Enumerations:

Value Data Dictionary (DD) Reference

1 DD Name: HYDRO Code: NATQUA_1 Date accepted: 2000-11-01

Name: Fine

Definition: falls within the smallest size continuum for a particular nature of surface term

2 DD Name: HYDRO Code: NATQUA_2 Date accepted: 2000-11-01

Name: Medium

Definition: falls within the moderate size continuum for a particular nature of surface term

3 DD Name: HYDRO Code: NATQUA_3 Date accepted: 2000-11-01

Name: Coarse

Definition: falls within the largest size continuum for a particular nature of surface term

4 DD Name: HYDRO Code: NATQUA_4 Date accepted: 2000-11-01

Name: Broken

Definition: fractured or in pieces

Attribute	Object class definition
-----------	-------------------------

Acronym: CLSDEF

Code: 18027

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: HYDRO Date accepted: 2015-01-01

Definition: Specifies the defining characteristics of a 'new object'.

Attribute	Object class name
-----------	-------------------

Acronym: CLSNAM

Code: 18028

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: HYDRO Date accepted: 2015-01-01

Definition: Specifies the descriptive name of a 'new object' feature object class.

Attribute	Object name
-----------	-------------

Acronym: OBJNAM

Code: 116

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

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

Definition: The individual name of an object.

Attribute	Object name in national language
-----------	----------------------------------

Acronym: NOBJNM

Code: 301

Use Type: N

Value Type: T

Data Dictionary (DD) Reference:

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

Definition: Name of object in national language characters

Attribute	Orientation
-----------	-------------

Acronym: ORIENT

Code: 117

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

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

Acronym: PEREND

Code: 118

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

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

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

Acronym: PERSTA

Code: 119

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

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

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

Acronym: PICREP

Code: 120

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

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

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

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

Acronym: POSACC

Code: 401

Use Type: F,S

Value Type: F

Data Dictionary (DD) Reference:

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

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

Value	Data Dictionary (DD) Reference		
6	DD Name: HYDRO	Code: PRODCT_6	Date accepted: 2000-11-01
	Name: ore		
	Definition: a solid rock or mineral from which metal is obtained. (adapted from the Oxford Minidictionary, Third Edition)		
7	DD Name: HYDRO	Code: PRODCT_7	Date accepted: 2000-11-01
	Name: chemicals		
	Definition: any substance obtained by or used in a chemical process. (adapted from the Oxford Minidictionary, Third Edition)		
8	DD Name: HYDRO	Code: PRODCT_8	Date accepted: 2000-11-01
	Name: drinking water		
	Definition: water that is suitable for human consumption. (adapted from the Oxford Minidictionary, Third Edition)		
14	DD Name: HYDRO	Code: PRODCT_14	Date accepted: 2000-11-01
	Name: sand		
	Definition: tiny grains of crushed or worn rock. (adapted from the Oxford Minidictionary, Third Edition)		
15	DD Name: HYDRO	Code: PRODCT_15	Date accepted: 2000-11-01
	Name: timber		
	Definition: wood prepared for use in building or carpentry. (adapted from the Oxford Minidictionary, Third Edition)		
17	DD Name: HYDRO	Code: PRODCT_17	Date accepted: 2000-11-01
	Name: scrap metal		
	Definition: discarded metal suitable for being reprocessed. (adapted from the Oxford Minidictionary, Third Edition)		
21	DD Name: HYDRO	Code: PRODCT_21	Date accepted: 2000-11-01
	Name: cement		
	Definition: a substance made of powdered lime and clay, mixed with water. (adapted from the Websters New World Dictionary)		
22	DD Name: HYDRO	Code: PRODCT_22	Date accepted: 2000-11-01
	Name: grain		
	Definition: a small hard seed, especially that of any cereal plant such as wheat, rice, corn, rye etc. (adapted from the Websters New World Dictionary)		

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

Acronym: QUAPOS

Code: 402

Use Type: F,S

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: approximate

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

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

Name: precisely known

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

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

Acronym: QUASOU

Code: 125

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

- | | |
|---|---|
| 1 | DD Name: HYDRO Code: QUASOU_1 Date accepted: 2000-11-01
Name: depth known
Definition: the depth from chart datum to the bottom is a known value. |
| 2 | DD Name: HYDRO Code: QUASOU_2 Date accepted: 2000-11-01
Name: depth unknown
Definition: the depth from chart datum to the bottom is unknown. |
| 3 | DD Name: HYDRO Code: QUASOU_3 Date accepted: 2000-11-01
Name: doubtful sounding
Definition: a depth that may be less than indicated. (adapted from IHO Dictionary, S-32, 5th Edition, 4840) |
| 4 | DD Name: HYDRO Code: QUASOU_4 Date accepted: 2000-11-01
Name: unreliable sounding
Definition: a depth that is considered to be an unreliable value. |
| 6 | DD Name: HYDRO Code: QUASOU_6 Date accepted: 2000-11-01
Name: least depth known
Definition: the shoalest depth over a feature is of known value. (adapted from IHO Dictionary, S-32, 5th Edition, 2705) |
| 7 | DD Name: HYDRO Code: QUASOU_7 Date accepted: 2000-11-01
Name: least depth unknown, safe clearance at depth shown |

Value	Data Dictionary (DD) Reference
	Definition: the least depth over a feature is unknown, but there is considered to be safe clearance at this depth.
8	DD Name: HYDRO Code: QUASOU_8 Date accepted: 2000-11-01 Name: value reported (not surveyed) Definition: depth value obtained from a report, but not fully surveyed.
9	DD Name: HYDRO Code: QUASOU_9 Date accepted: 2000-11-01 Name: value reported (not confirmed) Definition: depth value obtained from a report, which it has not been possible to confirm.
10	DD Name: HYDRO Code: QUASOU_10 Date accepted: 2000-11-01 Name: maintained depth Definition: the depth at which a channel is kept by human influence, usually by dredging. (IHO Dictionary, S-32, 5th Edition, 3057)
11	DD Name: HYDRO Code: QUASOU_11 Date accepted: 2000-11-01 Name: not regularly maintained Definition: depths may be altered by human influence, but will not be routinely maintained.

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

Acronym: RADWAL

Code: 126

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

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

Value	Data Dictionary (DD) Reference		
	Name:	dragging prohibited	
	Definition:	an area in which the dragging of anything along the bottom, e.g. bottom trawling, is prohibited.	
38	DD Name: IENC	Code: restrn_38	Date accepted: 2014-11-26
	Name:	use of spuds prohibited	
	Definition:	The use of anchoring spuds (telescopic piles) is prohibited	

Attribute	Scale minimum
-----------	---------------

Acronym: SCAMIN

Code: 133

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

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

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

Attribute	Sector limit one
-----------	------------------

Acronym: SECTR1

Code: 136

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

Attribute	Sector limit two
-----------	------------------

Acronym: SECTR2

Code: 137

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

Attribute	Signal frequency
-----------	------------------

Acronym: SIGFRQ

Code: 139

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

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

Definition: The frequency of a signal.

Attribute	Signal generation
-----------	-------------------

Acronym: SIGGEN

Code: 140

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: automatically

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

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

Name: by wave action

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

Attribute	Signal group
-----------	--------------

Acronym: SIGGRP

Code: 141

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

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

Attribute	Signal period
-----------	---------------

Acronym: SIGPER

Code: 142

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

Attribute	Signal sequence
-----------	-----------------

Acronym: SIGSEQ

Code: 143

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

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

Attribute	Sounding accuracy
-----------	-------------------

Acronym: SOUACC

Code: 144

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

Attribute	Source date
-----------	-------------

Acronym: SORDAT

Code: 147

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

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

Attribute	Source indication
-----------	-------------------

Acronym: SORIND

Code: 148

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

Definition: Information about the source of the object.

Attribute	Status
-----------	--------

Acronym: STATUS Code: 149
 Use Type: F
 Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value	Data Dictionary (DD) Reference
2	DD Name: HYDRO Code: STATUS_2 Date accepted: 2000-11-01 Name: occasional Definition: acting on special occasions; happening irregularly. (The Concise Oxford Dictionary, 7th Edition)
3	DD Name: HYDRO Code: STATUS_3 Date accepted: 2000-11-01 Name: recommended Definition: presented as worthy of confidence, acceptance, use, etc. (The Macquarie Dictionary, 1988)
4	DD Name: HYDRO Code: STATUS_4 Date accepted: 2000-11-01 Name: not in use Definition: no longer used for the purpose intended; disused.
8	DD Name: HYDRO Code: STATUS_8 Date accepted: 2000-11-01 Name: private Definition: not in public ownership or operation.
9	DD Name: HYDRO Code: STATUS_9 Date accepted: 2000-11-01 Name: mandatory Definition: compulsory; enforced. (The Concise Oxford Dictionary, 7th Edition)
12	DD Name: HYDRO Code: STATUS_12 Date accepted: 2000-11-01 Name: illuminated

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

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

Acronym: SURATH

Code: 150

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

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

Definition: The authority which was responsible for the survey.

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

Acronym: SUREND

Code: 151

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

Definition: The end date of the survey.

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

Acronym: SURSTA

Code: 152

Use Type: F

Value Type: S

Data Dictionary (DD) Reference:

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

Definition: The start date of the survey.

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

Acronym: SURTYP

Code: 153

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: controlled survey

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

Attribute	Symbol instruction
-----------	--------------------

Acronym: SYMINS

Code: 18029

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: HYDRO Date accepted: 2015-01-01

Definition: This specifies the S-52 Presentation Library symbol instruction to be adopted in ECDIS for the new object class (as specified in the S-52 Symbol Library - Addendum to S-52 Presentation Library).

Attribute	Technique of sounding measurement
-----------	-----------------------------------

Acronym: TECSOU Code: 156
 Use Type: F
 Value Type: L

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value	Data Dictionary (DD) Reference
1	<p>DD Name: HYDRO Code: TECSOU_1 Date accepted: 2000-11-01</p> <p>Name: found by echo-sounder</p> <p>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)</p>
2	<p>DD Name: HYDRO Code: TECSOU_2 Date accepted: 2000-11-01</p> <p>Name: found by side-scan-sonar</p> <p>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)</p>
3	<p>DD Name: HYDRO Code: TECSOU_3 Date accepted: 2000-11-01</p> <p>Name: found by multi-beam</p> <p>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)</p>
4	<p>DD Name: HYDRO Code: TECSOU_4 Date accepted: 2000-11-01</p> <p>Name: found by diver</p> <p>Definition: the depth was determined by a person skilled in the practice of diving. (adapted from IHO Dictionary, S-32, 1422)</p>
5	<p>DD Name: HYDRO Code: TECSOU_5 Date accepted: 2000-11-01</p> <p>Name: found by lead-line</p>

Value	Data Dictionary (DD) Reference		
	Definition: the depth was determined by using a line, graduated with attached marks and fastened to a sounding lead. (adapted from IHO Dictionary, S-32, 2698)		
6	DD Name: HYDRO	Code: TECSOU_6	Date accepted: 2000-11-01
	Name: swept by wire-drag		
	Definition: the given area was determined to be free from navigational dangers to a certain depth by towing a buoyed wire at the desired depth by two launches, or a least depth was identified using the same technique. (adapted from IHO Dictionary, S-32, 5248, 6013)		
7	DD Name: HYDRO	Code: TECSOU_7	Date accepted: 2000-11-01
	Name: found by laser		
	Definition: the depth was determined by using an instrument that measures distance by emitting timed pulses of laser light and measuring the time between emission and reception of the reflected pulses. (adapted from IHO Dictionary, S-32, 2763)		
8	DD Name: HYDRO	Code: TECSOU_8	Date accepted: 2000-11-01
	Name: swept by vertical acoustic system		
	Definition: the given area has been swept using a system comprised of multiple echo sounder transducers attached to booms deployed from the survey vessel.		
9	DD Name: HYDRO	Code: TECSOU_9	Date accepted: 2000-11-01
	Name: found by electromagnetic sensor		
	Definition: the depth was determined by using an instrument that compares electromagnetic signals. (adapted from IHO Dictionary, S-32, 1571)		
10	DD Name: HYDRO	Code: TECSOU_10	Date accepted: 2000-11-01
	Name: photogrammetry		
	Definition: the depth was determined by applying mathematical techniques to photographs. (adapted from IHO Dictionary, S-32, 3791)		
11	DD Name: HYDRO	Code: TECSOU_11	Date accepted: 2000-11-01
	Name: satellite imagery		
	Definition: the depth was determined by using instruments placed aboard an artificial satellite. (adapted from IHO Dictionary, S-32, 4509)		
12	DD Name: HYDRO	Code: TECSOU_12	Date accepted: 2000-11-01
	Name: found by levelling		
	Definition: the depth was determined by using levelling techniques to find the elevation of the point relative to a datum. (adapted from IHO Dictionary, S-32, 2741)		
13	DD Name: HYDRO	Code: TECSOU_13	Date accepted: 2000-11-01

Value	Data Dictionary (DD) Reference
	Name: swept by side-scan-sonar
	Definition: the given area was determined to be free from navigational dangers to a certain depth by towing a side-scan-sonar. (adapted from IHO Dictionary, S-32, 5248, 4710) [415.2]
14	DD Name: HYDRO Code: TECSOU_14 Date accepted: 2000-11-01
	Name: computer generated
	Definition: the sounding was determined from a bottom model constructed using a computer.

Attribute	Textual description
-----------	---------------------

Acronym: TXTDSC

Code: 158

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

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

Definition: The string encodes the file name of an external text file that contains the text in English

Attribute	Textual description in national language
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Acronym: NTXTDS

Code: 304

Use Type: N

Value Type: T

Data Dictionary (DD) Reference:

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

Definition: The file name of an external text file that contains the text in a national language.

Attribute	Topmark/daymark shape
-----------	-----------------------

Acronym: TOPSHP Code: 171
 Use Type: F
 Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value	Data Dictionary (DD) Reference
1	DD Name: HYDRO Code: TOPSHP_1 Date accepted: 2000-11-01 Name: cone, point up Definition: is where the vertex points up.
2	DD Name: HYDRO Code: TOPSHP_2 Date accepted: 2000-11-01 Name: cone, point down Definition: is where the vertex points down.
3	DD Name: HYDRO Code: TOPSHP_3 Date accepted: 2000-11-01 Name: sphere Definition: a body the surface of which is at all points equidistant from the centre. (The New Shorter Oxford English Dictionary. 1993. vol 2). Spheres are commonly used as International Association of Lighthouse Authorities - IALA topmarks (safe water).
4	DD Name: HYDRO Code: TOPSHP_4 Date accepted: 2000-11-01 Name: 2 spheres Definition: two black spheres are commonly used as an International Association of Lighthouse Authorities - IALA topmark (isolated danger).
5	DD Name: HYDRO Code: TOPSHP_5 Date accepted: 2000-11-01 Name: cylinder (can) Definition: a solid geometrical figure generated by straight lines fixed in direction and describing with one of point a closed curve, especially a circle (in which case the figure is circular cylinder, it's ends being parallel circles). (The New Shorter Oxford English Dictionary. 1993. vol 2). Cylinders are commonly used as

Value	Data Dictionary (DD) Reference
	International Association of Lighthouse Authorities - IALA topmarks (lateral).
6	DD Name: HYDRO Code: TOPSHP_6 Date accepted: 2000-11-01 Name: board Definition: usually of rectangular shape, made from timber or metal and used to provide a contrast with the natural background of a daymark. The actual daymark is often painted on to this board.
7	DD Name: HYDRO Code: TOPSHP_7 Date accepted: 2000-11-01 Name: x-shape (St. Andrew's cross) Definition: having a shape or a cross-section like the capital letter X. (The New Shorter Oxford English Dictionary. 1993. vol 2). An x-shape as an International Association of Lighthouse Authorities - IALA topmark should be 3 dimensional in shape. It is made of at least three crossed bars.
8	DD Name: HYDRO Code: TOPSHP_8 Date accepted: 2000-11-01 Name: upright cross (St George's cross) Definition: a cross with one vertical member and one horizontal member, i.e. similar in shape to the character '+'.
9	DD Name: HYDRO Code: TOPSHP_9 Date accepted: 2000-11-01 Name: cube, point up Definition: a cube standing on one of its vertexes.
10	DD Name: HYDRO Code: TOPSHP_10 Date accepted: 2000-11-01 Name: 2 cones, point to point Definition: 2 cones, one above the other, with their vertices together in the centre.
11	DD Name: HYDRO Code: TOPSHP_11 Date accepted: 2000-11-01 Name: 2 cones, base to base Definition: 2 cones, one above the other, with their bases together in the centre and their vertices pointing up and down.
12	DD Name: HYDRO Code: TOPSHP_12 Date accepted: 2000-11-01 Name: rhombus (diamond) Definition: a plane figure having four equal sides and equal opposite angles (two acute and two obtuse); an oblique equilateral parallelogram. (The New Shorter Oxford English Dictionary. 1993. vol 2)
13	DD Name: HYDRO Code: TOPSHP_13 Date accepted: 2000-11-01 Name: 2 cones (points upward) Definition: 2 cones, one above the other, with their their vertices pointing up

Value	Data Dictionary (DD) Reference		
14	DD Name: HYDRO	Code: TOPSHP_14	Date accepted: 2000-11-01
	Name: 2 cones (points downward)		
	Definition: 2 cones, one above the other, with their their vertices pointing down		
15	DD Name: HYDRO	Code: TOPSHP_15	Date accepted: 2000-11-01
	Name: besom, point up (broom or perch)		
	Definition: a bundle of rods or twigs. (The New Shorter Oxford English Dictionary. 1993. vol 1)		
16	DD Name: HYDRO	Code: TOPSHP_16	Date accepted: 2000-11-01
	Name: besom, point down (broom or perch)		
	Definition: a bundle of rods or twigs. (The New Shorter Oxford English Dictionary. 1993. vol 1)		
17	DD Name: HYDRO	Code: TOPSHP_17	Date accepted: 2000-11-01
	Name: flag		
	Definition: a flag mounted on a short pole.		
18	DD Name: HYDRO	Code: TOPSHP_18	Date accepted: 2000-11-01
	Name: sphere over rhombus		
	Definition: A sphere located above a rhombus.		
19	DD Name: HYDRO	Code: TOPSHP_19	Date accepted: 2000-11-01
	Name: square		
	Definition: a plane figure with four right angles and four equal straight sides (The New Shorter Oxford English Dictionary. 1993. vol 2)		
20	DD Name: HYDRO	Code: TOPSHP_20	Date accepted: 2000-11-01
	Name: rectangle, horizontal		
	Definition: a plane figure with four right angles and four straight sides, opposite sides being parallel and equal in length where the two longer opposite sides are standing horizontally (The New Shorter Oxford English Dictionary. 1993. vol 2).		
21	DD Name: HYDRO	Code: TOPSHP_21	Date accepted: 2000-11-01
	Name: rectangle, vertical		
	Definition: a plane figure with four right angles and four straight sides, opposite sides being parallel and equal in length where the two longer opposite sides are standing vertically (The New Shorter Oxford English Dictionary. 1993. vol 2).		
22	DD Name: HYDRO	Code: TOPSHP_22	Date accepted: 2000-11-01

Value	Data Dictionary (DD) Reference		
	Name:	trapezium, up	
	Definition:	a quadrilateral having one pair of opposite sides parallel which stands on its longer parallel side. (The New Shorter Oxford English Dictionary. 1993. vol 2).	
23	DD Name: HYDRO	Code: TOPSHP_23	Date accepted: 2000-11-01
	Name:	trapezium, down	
	Definition:	a quadrilateral having one pair of opposite sides parallel which stands on its shorter parallel side. (The New Shorter Oxford English Dictionary. 1993. vol 2).	
24	DD Name: HYDRO	Code: TOPSHP_24	Date accepted: 2000-11-01
	Name:	triangle, point up	
	Definition:	a figure having three angles and three sides with point up. (New Shorter Oxford English Dictionary. 1993. vol 2)	
25	DD Name: HYDRO	Code: TOPSHP_25	Date accepted: 2000-11-01
	Name:	triangle, point down	
	Definition:	a figure having three angles and three sides with point down. (New Shorter Oxford English Dictionary. 1993. vol 2)	
26	DD Name: HYDRO	Code: TOPSHP_26	Date accepted: 2000-11-01
	Name:	circle	
	Definition:	a perfectly round plane figure whose circumference is everywhere equidistant from its centre. (The New Shorter Oxford English Dictionary. 1993. vol 1)	
27	DD Name: HYDRO	Code: TOPSHP_27	Date accepted: 2000-11-01
	Name:	two upright crosses (one over the other)	
	Definition:	two upright crosses, generally vertically disposed one above the other.	
28	DD Name: HYDRO	Code: TOPSHP_28	Date accepted: 2000-11-01
	Name:	T-shape	
	Definition:	having a shape like the capital letter T.	
29	DD Name: HYDRO	Code: TOPSHP_29	Date accepted: 2000-11-01
	Name:	triangle pointing up over a circle	
	Definition:	a triangle, vertex uppermost, located above a circle.	
30	DD Name: HYDRO	Code: TOPSHP_30	Date accepted: 2000-11-01
	Name:	upright cross over a circle	
	Definition:	an upright cross located above a circle.	

Value	Data Dictionary (DD) Reference		
31	DD Name: HYDRO	Code: TOPSHP_31	Date accepted: 2000-11-01
	Name: rhombus over a circle		
	Definition: a rhombus located above a circle.		
32	DD Name: HYDRO	Code: TOPSHP_32	Date accepted: 2000-11-01
	Name: circle over a triangle pointing up		
	Definition: a circle located over a triangle, vertex uppermost.		
33	DD Name: HYDRO	Code: TOPSHP_33	Date accepted: 2000-11-01
	Name: other shape (see INFORM)		
	Definition:		

Attribute	Traffic flow
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Acronym: TRAFIC

Code: 172

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

1 DD Name: HYDRO Code: TRAFIC_1 Date accepted: 2000-11-01

Name: inbound

Definition: traffic flow in a general direction toward a port or similar destination.

2 DD Name: HYDRO Code: TRAFIC_2 Date accepted: 2000-11-01

Name: outbound

Definition: traffic flow in a general direction away from a port or similar point of origin.

3 DD Name: HYDRO Code: TRAFIC_3 Date accepted: 2000-11-01

Name: one-way

Definition: traffic flow in one general direction only.

4 DD Name: HYDRO Code: TRAFIC_4 Date accepted: 2000-11-01

Name: two-way

Definition: traffic flow in two generally opposite directions.

Attribute	Value of depth contour
-----------	------------------------

Acronym: VALDCO

Code: 174

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The depth of a sea bottom contour.

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

Acronym: VALMXR

Code: 177

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

Attribute	Value of nominal range
-----------	------------------------

Acronym: VALNMR

Code: 178

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The nominal range at which an object can be seen or a signal detected

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

Acronym: VALSOU

Code: 179

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

Attribute	Vertical clearance
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Acronym: VERCLR

Code: 181

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The vertical clearance measured from the plane towards the object overhead.

Attribute	Vertical clearance, closed
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Acronym: VERCCL

Code: 182

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

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

Acronym: VERCOP

Code: 183

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

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

Acronym: VERDAT

Code: 185

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Vertical datum

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: Lowest low water

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

Attribute	Water level effect
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Acronym: WATLEV

Code: 187

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition:

Enumerations:

Value Data Dictionary (DD) Reference

1 DD Name: HYDRO Code: WATLEV_1 Date accepted: 2000-11-01

Name: partly submerged at high water

Definition: partially covered and partially dry at high water.

2 DD Name: HYDRO Code: WATLEV_2 Date accepted: 2000-11-01

Name: always dry

Definition: not covered at high water under average meteorological conditions.

3 DD Name: HYDRO Code: WATLEV_3 Date accepted: 2000-11-01

Name: always under water/submerged

Definition: remains covered by water at all times under average meteorological conditions.

4 DD Name: HYDRO Code: WATLEV_4 Date accepted: 2000-11-01

Name: covers and uncovers

Definition: expression intended to indicate an area of a reef or other projection from the bottom of a body of water which periodically extends above and is submerged below the surface. Also referred to as dries or uncovers. (IHO Dictionary, S-32, 5th Edition, 1111)

5 DD Name: HYDRO Code: WATLEV_5 Date accepted: 2000-11-01

Name: awash

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

7 DD Name: HYDRO Code: WATLEV_7 Date accepted: 2000-11-01

Value Data Dictionary (DD) Reference

Name: floating

Definition: resting or moving on the surface of a liquid without sinking (Concise Oxford Dictionary)

Attribute	Additional mark
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Acronym: addmrk

Code: 17050

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

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

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: top (board)

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

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

Name: bottom (board)

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

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

Name: right (triangle to the right)

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

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

Name: left (triangle to the left)

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

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

Name: bottom (triangle to the bottom)

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

Attribute	Allowed consumption
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Acronym: allcon

Code: 18033

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

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

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

Attribute	Amount of amperage
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Acronym: amoamp

Code: 18032

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

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

Definition: The maximum electric amperage possible

Attribute	Assemblies of ship (excluding)
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Acronym: lc_ase

Code: 18015

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

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

Enumerations:

Value	Data Dictionary (DD) Reference
1	DD Name: IENC Code: lc_ase_1 Date accepted: 2001-05-31 Name: all types Definition:
2	DD Name: IENC Code: lc_ase_2 Date accepted: 2001-05-31 Name: other Definition:
3	DD Name: IENC Code: lc_ase_3 Date accepted: 2001-05-31 Name: single vessel Definition:
5	DD Name: IENC Code: lc_ase_5 Date accepted: 2001-05-31 Name: convoy Definition: a rigid or towed convoy of craft
6	DD Name: IENC Code: lc_ase_6 Date accepted: 2001-05-31 Name: formation Definition: the manner in which a convoy is assembled
7	DD Name: IENC Code: lc_ase_7 Date accepted: 2001-05-31 Name: rigid convoy

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

Attribute	Assemblies of ship (including)
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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 Name: all types Definition:	Code: lc_asi_1	Date accepted: 2001-05-31
2	DD Name: IENC Name: other Definition:	Code: lc_asi_2	Date accepted: 2001-05-31
3	DD Name: IENC Name: single vessel Definition:	Code: lc_asi_3	Date accepted: 2001-05-31
5	DD Name: IENC Name: convoy Definition: a rigid or towed convoy of craft	Code: lc_asi_5	Date accepted: 2001-05-31
6	DD Name: IENC Name: formation Definition: the manner in which a convoy is assembled	Code: lc_asi_6	Date accepted: 2001-05-31
7	DD Name: IENC Name: rigid convoy	Code: lc_asi_7	Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference
	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	Average Passing Time Reference
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Acronym: aptref

Code: 17099

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

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

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

Attribute	Bank of the waterway
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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

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

Value	Data Dictionary (DD) Reference
	Name: sea-plane anchorage Definition: an area in which sea-planes anchor or may anchor.
7	DD Name: IENC Code: catach_7 Date accepted: 2001-05-31 Name: small craft anchorage Definition: an area in which yachts and small boats anchor or may anchor.
9	DD Name: IENC Code: catach_9 Date accepted: 2001-05-31 Name: anchorage for periods up to 24 hours Definition: an area in which vessels anchor or may anchor for periods of up to 24 hours.
10	DD Name: IENC Code: catach_10 Date accepted: 2001-05-31 Name: anchorage for pushing-navigation vessels Definition: an area where pushing-navigation vessels may anchor
11	DD Name: IENC Code: catach_11 Date accepted: 2001-05-31 Name: anchorage for other vessels than pushing-navigation vessels Definition: an area where other vessels than pushing-navigation vessels may anchor
12	DD Name: IENC Code: catach_12 Date accepted: 2009-12-09 Name: anchorage for dry cargo vessels Definition: an area where dry cargo vessels may anchor
13	DD Name: IENC Code: catach_13 Date accepted: 2009-12-09 Name: anchorage for rafts Definition: an area where rafts may anchor

Attribute	Category of berth
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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

Name: fleeting area

Value	Data Dictionary (DD) Reference
	Definition: A legally permitted area in or near the waterway designated for temporary barge mooring.
7	DD Name: IENC Code: catbrt_7 Date accepted: 2001-05-31 Name: first class landing Definition: A federally designated area that provides tie-ups and at least 9 feet (2.7m) of water depth during low water level.
8	DD Name: IENC Code: catbrt_8 Date accepted: 2001-05-31 Name: second class landing Definition: A federally designated area that provides tie-ups and at least 9 feet (2.7m) of water depth normal pool level.
9	DD Name: IENC Code: catbrt_9 Date accepted: 2012-12-19 Name: berth for passenger vessels Definition:

Attribute	Category of bunker station
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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 Name: diesel oil Definition: diesel oil available	Code: catbun_1	Date accepted: 2001-05-31
2	DD Name: IENC Name: water Definition: water available	Code: catbun_2	Date accepted: 2001-05-31
3	DD Name: IENC Name: ballast Definition: ballast available	Code: catbun_3	Date accepted: 2001-05-31
4	DD Name: IENC Name: power Definition: power supply available	Code: catbun_4	Date accepted: 2014-11-26

Attribute	Category of cable
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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.

7 DD Name: IENC Code: catchbl_7 Date accepted: 2001-05-31

Name: ferry cable

Value Data Dictionary (DD) Reference

Definition: a cable where a cable ferry is connected to

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

Acronym: lc_cce

Code: 18017

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

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

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: all types

Definition:

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

Name: other

Definition:

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

Name: bulk

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

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

Name: dry cargo

Definition:

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

Name: liquid cargo

Definition:

7 DD Name: IENC Code: lc_cce_7 Date accepted: 2001-05-31

Name: liquid cargo (type N)

Value Data Dictionary (DD) Reference

Definition:

8 DD Name: IENC Code: lc_cce_8 Date accepted: 2001-05-31

Name: liquid cargo (type C)

Definition:

9 DD Name: IENC Code: lc_cce_9 Date accepted: 2001-05-31

Name: gas

Definition:

Attribute	Category of cargo (including)
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Acronym: lc_cci

Code: 18016

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

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

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: all types

Definition:

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

Name: other

Definition:

4 DD Name: IENC Code: lc_cci_4 Date accepted: 2001-05-31

Name: bulk

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

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

Name: dry cargo

Definition:

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

Name: liquid cargo

Definition:

7 DD Name: IENC Code: lc_cci_7 Date accepted: 2001-05-31

Name: liquid cargo (type N)

Value Data Dictionary (DD) Reference

Definition:

8 DD Name: IENC Code: lc_cci_8 Date accepted: 2001-05-31

Name: liquid cargo (type C)

Definition:

9 DD Name: IENC Code: lc_cci_9 Date accepted: 2001-05-31

Name: gas

Definition:

Attribute	Category of CEMT class
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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

Definition: designated for barges of type "Johann Welker"

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

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

Attribute	Category of checkpoint
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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
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Acronym: catcom

Code: 17069

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of communication

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: VTS centre

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

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

Name: VTS sector

Definition: The service area of a VTS centre.

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

Name: IVS point

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

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

Name: MIB

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

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

Name: lock

Definition: A reporting point for vessels at a lock.

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

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

Attribute	Category of exceptional structure
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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 |
| 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 frequency
-----------	-----------------------

Acronym: catfrq

Code: 18030

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: The electrical frequency provided by the power supply station

Enumerations:

Value Data Dictionary (DD) Reference

1	DD Name: IENC Name: 50Hz Definition: 50 Hertz	Code: catfrq_1	Date accepted: 2014-11-26
2	DD Name: IENC Name: 60Hz Definition: 60 Hertz	Code: catfrq_2	Date accepted: 2014-11-26

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

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 | Name: passenger terminal | |

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

Attribute	Category of hulk
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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 | | |
| | Definition: a permanently moored floating structure, often constructed from old ships, used as a breakwater. | | |
| 6 | DD Name: IENC | Code: cathlk_6 | Date accepted: 2001-05-31 |
| | Name: casino boat | | |

Value Data Dictionary (DD) Reference

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

Attribute	Category of lateral mark
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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 DD Name: IENC Code: catlam_1 Date accepted: 2001-05-31

Name: port-hand lateral mark

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

2 DD Name: IENC Code: catlam_2 Date accepted: 2001-05-31

Name: starboard-hand lateral mark

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

3 DD Name: IENC Code: catlam_3 Date accepted: 2001-05-31

Name: preferred channel to starboard lateral mark

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

4 DD Name: IENC Code: catlam_4 Date accepted: 2001-05-31

Name: preferred channel to port lateral mark

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

5 DD Name: IENC Code: catlam_5 Date accepted: 2001-05-31

Name: right-hand side of the waterway

Definition: indicates the right-hand side of the inland waterway

Value	Data Dictionary (DD) Reference
6	DD Name: IENC Code: catlam_6 Date accepted: 2001-05-31 Name: left-hand side of the waterway Definition: indicates the left-hand side of the inland waterway
7	DD Name: IENC Code: catlam_7 Date accepted: 2001-05-31 Name: right-hand side of the channel Definition: indicates the right-hand side of a channel of an inland waterway
8	DD Name: IENC Code: catlam_8 Date accepted: 2001-05-31 Name: left-hand side of the channel Definition: indicates the left-hand side of a channel of an inland waterway
9	DD Name: IENC Code: catlam_9 Date accepted: 2001-05-31 Name: bifurcation of the waterway Definition: indicates a bifurcation of the inland waterway
10	DD Name: IENC Code: catlam_10 Date accepted: 2001-05-31 Name: bifurcation of the channel Definition: indicates a bifurcation of a channel of an inland waterway
11	DD Name: IENC Code: catlam_11 Date accepted: 2001-05-31 Name: channel near the right bank Definition: indicates that the channel is near the right bank
12	DD Name: IENC Code: catlam_12 Date accepted: 2001-05-31 Name: channel near the left bank Definition: indicates that the channel is near the left bank
13	DD Name: IENC Code: catlam_13 Date accepted: 2001-05-31 Name: channel cross-over to the right bank Definition: indicates that the channel crosses from the left to the right bank
14	DD Name: IENC Code: catlam_14 Date accepted: 2001-05-31 Name: channel cross-over to the left bank Definition: indicates that the channel crosses from the right to the left bank
15	DD Name: IENC Code: catlam_15 Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference		
	Name:	danger point or obstacles at the right-hand side	
	Definition:	indicates a danger point or obstacles at the right-hand side	
16	DD Name:	IENC	Code: catlam_16
	Date accepted:	2001-05-31	
	Name:	danger point or obstacles at the left-hand side	
	Definition:	indicates a danger point or obstacles at the left-hand side	
17	DD Name:	IENC	Code: catlam_17
	Date accepted:	2001-05-31	
	Name:	turn off at the right-hand side	
	Definition:	indicates a turn off at the right-hand side	
18	DD Name:	IENC	Code: catlam_18
	Date accepted:	2001-05-31	
	Name:	turn off at the left-hand side	
	Definition:	indicates a turn off at the left-hand side	
19	DD Name:	IENC	Code: catlam_19
	Date accepted:	2001-05-31	
	Name:	junction at the right-hand side	
	Definition:	indicates a junction at the right-hand side	
20	DD Name:	IENC	Code: catlam_20
	Date accepted:	2001-05-31	
	Name:	junction at the left-hand side	
	Definition:	indicates a junction at the left-hand side	
21	DD Name:	IENC	Code: catlam_21
	Date accepted:	2001-05-31	
	Name:	harbour entry at the right-hand side	
	Definition:	indicates a harbour entry at the right-hand side	
22	DD Name:	IENC	Code: catlam_22
	Date accepted:	2001-05-31	
	Name:	harbour entry at the left-hand side	
	Definition:	indicates a harbour entry at the left-hand side	
23	DD Name:	IENC	Code: catlam_23
	Date accepted:	2001-05-31	
	Name:	bridge pier mark	
	Definition:	indicates a bridge pier in a inland waterway	
24	DD Name:	IENC	Code: catlam_24
	Date accepted:	2013-01-01	
	Name:	entry from a lake to a narrower waterway, right bank	
	Definition:	indicates the right bank of the entry from a lake or a lake-like expansion to a section of the	

Value	Data Dictionary (DD) Reference
	waterway which is narrower
25	DD Name: IENC Code: catlam_25 Date accepted: 2013-01-01 Name: entry from a lake to a narrower waterway, left bank Definition: indicates the left bank of the entry from a lake or a lakelike expansion to a section of the waterway which is narrower
26	DD Name: IENC Code: catlam_26 Date accepted: 2013-12-30 Name: change bank Definition:
27	DD Name: IENC Code: catlam_27 Date accepted: 2013-12-30 Name: continue along bank Definition:

Attribute	Category of notice mark
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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) sections closed to use, no entry except for non-motorized small craft

Definition: Prohibition mark A.1a: sections closed to use, no entry except for non-motorized small craft

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

Name: (A.2) no overtaking

Definition: Prohibition mark A.2: no overtaking

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

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

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

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

Name: (A.4) no passing or overtaking

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

6 DD Name: IENC Code: catnmk_6 Date accepted: 2001-05-31

Name: (A.5) no berthing on the side of the waterway on which the sign is placed

Value	Data Dictionary (DD) Reference
	<p>Definition: Prohibition mark A.5: no berthing (i.e. no anchoring or making fast to the bank) on the side of the waterway on which the sign is placed</p>
7	<p>DD Name: IENC Code: catnmk_7 Date accepted: 2001-05-31</p> <p>Name: (A.5.1) no berthing on the stretch of water whose breadth, measured from the sign, is shown in metres on the sign</p> <p>Definition: Prohibition mark A.5.1: no berthing on the stretch of water whose breadth, measured from the sign, is shown in metres on the sign</p>
8	<p>DD Name: IENC Code: catnmk_8 Date accepted: 2001-05-31</p> <p>Name: (A.6) no anchoring or trailing of anchors, cables or chains</p> <p>Definition: Prohibition mark A.6: no anchoring or trailing of anchors, cables or chains on the side of the waterway on which the sign is placed</p>
9	<p>DD Name: IENC Code: catnmk_9 Date accepted: 2001-05-31</p> <p>Name: (A.7) no making fast to the bank</p> <p>Definition: Prohibition mark A.7: no making fast to the bank on the side of the waterway on which the sign is placed</p>
10	<p>DD Name: IENC Code: catnmk_10 Date accepted: 2001-05-31</p> <p>Name: (A.8) no turning</p> <p>Definition: Prohibition mark A.8: no turning</p>
11	<p>DD Name: IENC Code: catnmk_11 Date accepted: 2001-05-31</p> <p>Name: (A.9) Do not create wash</p> <p>Definition: Prohibition mark A.9: do not create wash likely to cause damage</p>
12	<p>DD Name: IENC Code: catnmk_12 Date accepted: 2001-05-31</p> <p>Name: (A.10) no passing on left side (in openings of bridges or weirs)</p> <p>Definition: Prohibition mark A.10: no passing on left side (in openings of bridges or weirs)</p>
13	<p>DD Name: IENC Code: catnmk_13 Date accepted: 2001-05-31</p> <p>Name: (A.10) no passing on right side (in openings of bridges or weirs)</p> <p>Definition: Prohibition mark A.10: no passing on right side (in openings of bridges or weirs)</p>
14	<p>DD Name: IENC Code: catnmk_14 Date accepted: 2001-05-31</p> <p>Name: (A.12) motorized craft prohibited</p> <p>Definition: Prohibition mark A.12: motorized craft prohibited</p>

Value	Data Dictionary (DD) Reference
15	DD Name: IENC Code: catnmk_15 Date accepted: 2001-05-31 Name: (A.13) sports and pleasure craft prohibited Definition: Prohibition mark A.13: sports and pleasure craft prohibited
16	DD Name: IENC Code: catnmk_16 Date accepted: 2001-05-31 Name: (A.14) water skiing prohibited Definition: Prohibition mark A.14: water skiing prohibited
17	DD Name: IENC Code: catnmk_17 Date accepted: 2001-05-31 Name: (A.15) sailing vessels prohibited Definition: Prohibition mark A.15: sailing vessels prohibited
18	DD Name: IENC Code: catnmk_18 Date accepted: 2001-05-31 Name: (A.16) all craft other than motorized vessels or sailing craft prohibited Definition: Prohibition mark A.16: all craft other than motorized vessels or sailing craft prohibited
19	DD Name: IENC Code: catnmk_19 Date accepted: 2001-05-31 Name: (A.17) use of sailboards prohibited Definition: Prohibition mark A.17: use of sailboards prohibited
20	DD Name: IENC Code: catnmk_20 Date accepted: 2001-05-31 Name: (A.20) water bikes prohibited Definition: Prohibition mark A.20: water bikes prohibited
21	DD Name: IENC Code: catnmk_21 Date accepted: 2001-05-31 Name: (A.18) end of zone authorized for high speed navigation of small sport and pleasure craft prohibited Definition: Prohibition mark A.18: end of zone authorized for high speed navigation of small sport and pleasure craft prohibited
22	DD Name: IENC Code: catnmk_22 Date accepted: 2001-05-31 Name: (A.19) no launching or beaching of vessels Definition: Prohibition mark A.19: no launching or beaching of vessels
23	DD Name: IENC Code: catnmk_23 Date accepted: 2001-05-31 Name: (B.1) proceed in left direction Definition: Regulation mark B.1: proceed in left direction

Value	Data Dictionary (DD) Reference
24	DD Name: IENC Code: catnmk_24 Date accepted: 2001-05-31 Name: (B.1) proceed in right direction Definition: Regulation mark B.1: proceed in right direction
25	DD Name: IENC Code: catnmk_25 Date accepted: 2001-05-31 Name: (B.2a) move to the side of the fairway on your port side Definition: Regulation mark B.2a: move to the side of the fairway on your port side
26	DD Name: IENC Code: catnmk_26 Date accepted: 2001-05-31 Name: (B.2b) move to the side of the fairway on your starboard side Definition: Regulation mark B.2b: move to the side of the fairway on your starboard side
27	DD Name: IENC Code: catnmk_27 Date accepted: 2001-05-31 Name: (B.3a) keep on the side of the fairway on your port side Definition: Regulation mark B.3a: keep on the side of the fairway on your port side
28	DD Name: IENC Code: catnmk_28 Date accepted: 2001-05-31 Name: (B.3b) keep on the side of the fairway on your starboard side Definition: Regulation mark B.3b: keep on the side of the fairway on your starboard side
29	DD Name: IENC Code: catnmk_29 Date accepted: 2001-05-31 Name: (B.4a) cross fairway to port Definition: Regulation mark B.4a: cross fairway to port
30	DD Name: IENC Code: catnmk_30 Date accepted: 2001-05-31 Name: (B.4b) cross fairway to starboard Definition: Regulation mark B.4b: cross fairway to starboard
31	DD Name: IENC Code: catnmk_31 Date accepted: 2001-05-31 Name: (B.5) stop as prescribed in the regulations Definition: Regulation mark B.5: stop as prescribed in the regulations
32	DD Name: IENC Code: catnmk_32 Date accepted: 2001-05-31 Name: (B.6) do not exceed the speed indicated (in km/h) Definition: Regulation mark B.6: do not exceed the speed indicated (in km/h)
33	DD Name: IENC Code: catnmk_33 Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference		
	Name:	(B.7) give a sound signal	
	Definition:	Regulation mark B.7: give a sound signal	
34	DD Name:	IENC	Code: catnmk_34 Date accepted: 2001-05-31
	Name:	(B.8) keep a particularly sharp lookout	
	Definition:	Regulation mark B.8: keep a particularly sharp lookout	
35	DD Name:	IENC	Code: catnmk_35 Date accepted: 2001-05-31
	Name:	(B.9a) do not enter the main waterway until certain that this will not oblige vessels proceeding on it to change their course or speed	
	Definition:	Regulation mark B.9a: do not enter the main waterway until certain that this will not oblige vessels proceeding on it to change their course or speed	
36	DD Name:	IENC	Code: catnmk_36 Date accepted: 2001-05-31
	Name:	(B.9b) do not cross the main waterway until certain that this will not oblige vessels proceeding on it to change their course or speed	
	Definition:	Regulation mark B.9b: do not cross the main waterway until certain that this will not oblige vessels proceeding on it to change their course or speed	
37	DD Name:	IENC	Code: catnmk_37 Date accepted: 2001-05-31
	Name:	(B.11) obligation to enter into a radiotelephone link on the channel as indicated on the board	
	Definition:	Regulation mark B.11: obligation to enter into a radiotelephone link on the channel as indicated on the board	
38	DD Name:	IENC	Code: catnmk_38 Date accepted: 2001-05-31
	Name:	(C.1) depth of water limited	
	Definition:	Restriction mark C.1: depth of water limited	
39	DD Name:	IENC	Code: catnmk_39 Date accepted: 2001-05-31
	Name:	(C.2) headroom limited	
	Definition:	Restriction mark C.2: headroom limited	
40	DD Name:	IENC	Code: catnmk_40 Date accepted: 2001-05-31
	Name:	(C.3) width of passage or channel limited	
	Definition:	Restriction mark C.3: width of passage or channel limited	
41	DD Name:	IENC	Code: catnmk_41 Date accepted: 2001-05-31
	Name:	(C.4) there are restrictions on navigation	
	Definition:	Restriction mark C.4: there are restrictions on navigation: see the information plate below the	

Value	Data Dictionary (DD) Reference
	sign
42	DD Name: IENC Code: catnmk_42 Date accepted: 2001-05-31 Name: (C.5) the channel lies at a distance from the left bank Definition: Restriction mark C.5: the channel lies at a distance from the left bank
43	DD Name: IENC Code: catnmk_43 Date accepted: 2001-05-31 Name: (C.5) the channel lies at a distance from the right bank Definition: Restriction mark C.5: the channel lies at a distance from the right bank
44	DD Name: IENC Code: catnmk_44 Date accepted: 2001-05-31 Name: (D.1a) recommended channel in both directions Definition: Recommendation mark D.1a: recommended channel in both directions
45	DD Name: IENC Code: catnmk_45 Date accepted: 2001-05-31 Name: (D.1b) recommended channel only in the direction indicated, passage in the opposite direction prohibited (at bridges) Definition: Recommendation mark D.1b: recommended channel only in the direction indicated, passage in the opposite direction prohibited (at bridges)
46	DD Name: IENC Code: catnmk_46 Date accepted: 2001-05-31 Name: (D.2) you are recommended to keep on right side (in openings of bridges and weirs) Definition: Recommendation mark D.2: you are recommended to keep on right side (in openings of bridges and weirs)
47	DD Name: IENC Code: catnmk_47 Date accepted: 2001-05-31 Name: (D.2) you are recommended to keep on left side (in openings of bridges and weirs) Definition: Recommendation mark D.2: you are recommended to keep on left side (in openings of bridges and weirs)
48	DD Name: IENC Code: catnmk_48 Date accepted: 2001-05-31 Name: (D.3) you are recommended to proceed in the left direction Definition: Recommendation mark D.3: you are recommended to proceed in the left direction
49	DD Name: IENC Code: catnmk_49 Date accepted: 2001-05-31 Name: (D.3) you are recommended to proceed in the right direction Definition: Recommendation mark D.3: you are recommended to proceed in the right direction
50	DD Name: IENC Code: catnmk_50 Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference
	<p>Name: (E.1) entry permitted (general sign)</p> <p>Definition: Information mark E.1: entry permitted (general sign)</p>
51	<p>DD Name: IENC Code: catnmk_51 Date accepted: 2001-05-31</p> <p>Name: (E.2) overhead cable crossing</p> <p>Definition: Information mark E.2: overhead cable crossing</p>
52	<p>DD Name: IENC Code: catnmk_52 Date accepted: 2001-05-31</p> <p>Name: (E.3) weir</p> <p>Definition: Information mark E.3: weir</p>
53	<p>DD Name: IENC Code: catnmk_53 Date accepted: 2001-05-31</p> <p>Name: (E.4a) ferry-boat not moving independently</p> <p>Definition: Information mark E.4a: ferry-boat not moving independently</p>
54	<p>DD Name: IENC Code: catnmk_54 Date accepted: 2001-05-31</p> <p>Name: (E.4b) ferry-boat moving independently</p> <p>Definition: Information mark E.4b: ferry-boat moving independently</p>
55	<p>DD Name: IENC Code: catnmk_55 Date accepted: 2001-05-31</p> <p>Name: (E.5) berthing (i.e. no anchoring or making fast to the bank) permitted</p> <p>Definition: Information mark E.5: berthing (i.e. no anchoring or making fast to the bank) permitted on the side of the waterway on which the sign is placed</p>
56	<p>DD Name: IENC Code: catnmk_56 Date accepted: 2001-05-31</p> <p>Name: (E.5.1) berthing permitted on the stretch of water of the breadth measured from, and shown on the board in meters</p> <p>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</p>
57	<p>DD Name: IENC Code: catnmk_57 Date accepted: 2001-05-31</p> <p>Name: (E.5.2) berthing permitted on the stretch of water bounded by the distances measured from, and shown on the board in meters</p> <p>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</p>
58	<p>DD Name: IENC Code: catnmk_58 Date accepted: 2001-05-31</p> <p>Name: (E.5.3) maximum number of vessels permitted to berth abreast</p> <p>Definition: Information mark E.5.3: maximum number of vessels permitted to berth abreast on the side of</p>

Value	Data Dictionary (DD) Reference
	the waterway on which the sign is placed
59	<p>DD Name: IENC Code: catnmk_59 Date accepted: 2001-05-31</p> <p>Name: (E.5.4) berthing area reserved for pushing-navigation vessels that are not required to carry blue lights or blue cones</p> <p>Definition: Information mark E.5.4: berthing area reserved for pushing-navigation vessels that are not required to carry blue lights or blue cones on the side of the waterway on which the sign is placed</p>
60	<p>DD Name: IENC Code: catnmk_60 Date accepted: 2001-05-31</p> <p>Name: (E.5.5) berthing area reserved for pushing-navigation vessels that are required to carry one blue light or one blue cone</p> <p>Definition: Information mark E.5.5: berthing area reserved for pushing-navigation vessels that are required to carry one blue light or one blue cone on the side of the waterway on which the sign is placed</p>
61	<p>DD Name: IENC Code: catnmk_61 Date accepted: 2001-05-31</p> <p>Name: (E.5.6) berthing area reserved for pushing-navigation vessels that are required to carry two blue lights or two blue cones</p> <p>Definition: Information mark E.5.6: berthing area reserved for pushing-navigation vessels that are required to carry two blue lights or two blue cones on the side of the waterway on which the sign is placed</p>
62	<p>DD Name: IENC Code: catnmk_62 Date accepted: 2001-05-31</p> <p>Name: (E.5.7) berthing area reserved for pushing-navigation vessels that are required to carry three blue lights or three blue cones</p> <p>Definition: Information mark E.5.7: berthing area reserved for pushing-navigation vessels that are required to carry three blue lights or three blue cones on the side of the waterway on which the sign is placed</p>
63	<p>DD Name: IENC Code: catnmk_63 Date accepted: 2001-05-31</p> <p>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</p> <p>Definition: Information mark E.5.8: berthing area reserved for vessels other than pushing-navigation vessels that are not required to carry blue lights or blue cones on the side of the waterway on which the sign is placed</p>
64	<p>DD Name: IENC Code: catnmk_64 Date accepted: 2001-05-31</p> <p>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</p> <p>Definition: Information mark E.5.9: berthing area reserved for vessels other than pushing-navigation vessels that are required to carry one blue light or one blue cone on the side of the waterway on which the sign is placed</p>
65	<p>DD Name: IENC Code: catnmk_65 Date accepted: 2001-05-31</p>

Value	Data Dictionary (DD) Reference
	<p>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</p> <p>Definition: Information mark E.5.10: berthing area reserved for vessels other than pushing-navigation vessels that are required to carry two blue lights or two blue cones on the side of the waterway on which the sign is placed</p>
66	<p>DD Name: IENC Code: catnmk_66 Date accepted: 2001-05-31</p> <p>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</p> <p>Definition: Information mark E.5.11: berthing area reserved for vessels other than pushing-navigation vessels that are required to carry three blue lights or three blue cones on the side of the waterway on which the sign is placed</p>
67	<p>DD Name: IENC Code: catnmk_67 Date accepted: 2001-05-31</p> <p>Name: (E.5.12) berthing area reserved for all vessels that are not required to carry blue lights or blue cones</p> <p>Definition: Information mark E.5.12: berthing area reserved for all vessels that are not required to carry blue lights or blue cones on the side of the waterway on which the sign is placed</p>
68	<p>DD Name: IENC Code: catnmk_68 Date accepted: 2001-05-31</p> <p>Name: (E.5.13) berthing area reserved for all vessels that are required to carry one blue light or one blue cone</p> <p>Definition: Information mark E.5.13: berthing area reserved for all vessels that are required to carry one blue light or one blue cone on the side of the waterway on which the sign is placed</p>
69	<p>DD Name: IENC Code: catnmk_69 Date accepted: 2001-05-31</p> <p>Name: (E.5.14) berthing area reserved for all vessels that are required to carry two blue lights or two blue cones</p> <p>Definition: Information mark E.5.14: berthing area reserved for all vessels that are required to carry two blue lights or two blue cones on the side of the waterway on which the sign is placed</p>
70	<p>DD Name: IENC Code: catnmk_70 Date accepted: 2001-05-31</p> <p>Name: (E.5.15) berthing area reserved for all vessels that are required to carry three blue lights or three blue cones</p> <p>Definition: Information mark E.5.15: berthing area reserved for all vessels that are required to carry three blue lights or three blue cones on the side of the waterway on which the sign is placed</p>
71	<p>DD Name: IENC Code: catnmk_71 Date accepted: 2001-05-31</p> <p>Name: (E.6) anchoring or trailing of anchors, cables or chains permitted</p> <p>Definition: Information mark E.6: anchoring or trailing of anchors, cables or chains permitted on the side of the waterway on which the sign is placed</p>

Value	Data Dictionary (DD) Reference
72	DD Name: IENC Code: catnmk_72 Date accepted: 2001-05-31 Name: (E.7) making fast to the bank permitted Definition: Information mark E.7: making fast to the bank permitted on the side of the waterway on which the sign is placed
73	DD Name: IENC Code: catnmk_73 Date accepted: 2001-05-31 Name: (E.7.1) berthing area reserved for loading and unloading of vehicles Definition: Information mark E.7.1: berthing area reserved for loading and unloading of vehicles
74	DD Name: IENC Code: catnmk_74 Date accepted: 2001-05-31 Name: (E.8) turning area Definition: Information mark E.8: turning area
75	DD Name: IENC Code: catnmk_75 Date accepted: 2001-05-31 Name: (E.9a) crossing with secondary waterway ahead Definition: Information mark E.9a: crossing with secondary waterway ahead
76	DD Name: IENC Code: catnmk_76 Date accepted: 2001-05-31 Name: (E.9b) secondary waterway ahead on the right Definition: Information mark E.9b: secondary waterway ahead on the right
77	DD Name: IENC Code: catnmk_77 Date accepted: 2001-05-31 Name: (E.9c) secondary waterway ahead on the left Definition: Information mark E.9c: secondary waterway ahead on the left
78	DD Name: IENC Code: catnmk_78 Date accepted: 2001-05-31 Name: (E.9d) secondary waterway ahead, main waterway on the right Definition: Information mark E.9d: secondary waterway ahead, main waterway on the right
79	DD Name: IENC Code: catnmk_79 Date accepted: 2001-05-31 Name: (E.9e) secondary waterway ahead, main waterway on the left Definition: Information mark E.9e: secondary waterway ahead, main waterway on the left
80	DD Name: IENC Code: catnmk_80 Date accepted: 2001-05-31 Name: (E.9f) secondary waterway on the left, main waterway on the right Definition: Information mark E.9f: secondary waterway on the left, main waterway on the right
81	DD Name: IENC Code: catnmk_81 Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference		
	Name:	(E.9g) secondary waterway on the right, main waterway on the left	
	Definition:	Information mark E.9g: secondary waterway on the right, main waterway on the left	
82	DD Name:	IENC	Code: catnmk_82 Date accepted: 2001-05-31
	Name:	(E.9h) secondary waterway ahead and on the left, main waterway on the right	
	Definition:	Information mark E.9h: secondary waterway ahead and on the left, main waterway on the right	
83	DD Name:	IENC	Code: catnmk_83 Date accepted: 2001-05-31
	Name:	(E.9i) secondary waterway ahead and on the right, main waterway on the left	
	Definition:	Information mark E.9i: secondary waterway ahead and on the right, main waterway on the left	
84	DD Name:	IENC	Code: catnmk_84 Date accepted: 2001-05-31
	Name:	(E.10a) crossing with main waterway ahead	
	Definition:	Information mark E.10a: crossing with main waterway ahead	
85	DD Name:	IENC	Code: catnmk_85 Date accepted: 2001-05-31
	Name:	(E.10b) main waterway ahead	
	Definition:	Information mark E.10b: main waterway ahead	
86	DD Name:	IENC	Code: catnmk_86 Date accepted: 2001-05-31
	Name:	(E.10c) junction with main waterway ahead and right	
	Definition:	Information mark E.10c: junction with main waterway ahead and right	
87	DD Name:	IENC	Code: catnmk_87 Date accepted: 2001-05-31
	Name:	(E.10d) junction with main waterway ahead and left	
	Definition:	Information mark E.10d: junction with main waterway ahead and left	
88	DD Name:	IENC	Code: catnmk_88 Date accepted: 2001-05-31
	Name:	(E.10e) junction with main waterway ahead and right, secondary waterway on the left	
	Definition:	Information mark E.10e: junction with main waterway ahead and right, secondary waterway on the left	
89	DD Name:	IENC	Code: catnmk_89 Date accepted: 2001-05-31
	Name:	(E.10f) junction with main waterway ahead and left, secondary waterway on the right	
	Definition:	Information mark E.10f: junction with main waterway ahead and left, secondary waterway on the right	
90	DD Name:	IENC	Code: catnmk_90 Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference		
	Name:	(E.11) end of prohibition or obligation applying to traffic in one direction only, or end of a restriction	
	Definition:	Information mark E.11: end of prohibition or obligation applying to traffic in one direction only, or end of a restriction	
91	DD Name:	IENC	Code: catnmk_91
	Date accepted:	2001-05-31	
	Name:	(E.13) drinking water supply	
	Definition:	Information mark E.13: drinking water	
92	DD Name:	IENC	Code: catnmk_92
	Date accepted:	2001-05-31	
	Name:	(E.14) telephone	
	Definition:	Information mark E.14: telephone	
93	DD Name:	IENC	Code: catnmk_93
	Date accepted:	2001-05-31	
	Name:	(E.15) motorized vessels permitted	
	Definition:	Information mark E.15: motorized vessels permitted	
94	DD Name:	IENC	Code: catnmk_94
	Date accepted:	2001-05-31	
	Name:	(E.16) sport and pleasure craft permitted	
	Definition:	Information mark E.16: sport and pleasure craft permitted	
95	DD Name:	IENC	Code: catnmk_95
	Date accepted:	2001-05-31	
	Name:	(E.17) water skiing permitted	
	Definition:	Information mark E.17: water skiing permitted	
96	DD Name:	IENC	Code: catnmk_96
	Date accepted:	2001-05-31	
	Name:	(E.18) sailing vessels permitted	
	Definition:	Information mark E.18: sailing vessels permitted	
97	DD Name:	IENC	Code: catnmk_97
	Date accepted:	2001-05-31	
	Name:	(E.19) craft other than motorized vessels or sailing craft permitted	
	Definition:	Information mark E.19: craft other than motorized vessels or sailing craft permitted	
98	DD Name:	IENC	Code: catnmk_98
	Date accepted:	2001-05-31	
	Name:	(E.20) use of sailboards permitted	
	Definition:	Information mark E.20: use of sailboards permitted	
99	DD Name:	IENC	Code: catnmk_99
	Date accepted:	2001-05-31	

Value	Data Dictionary (DD) Reference
	<p>Name: (E.23) possibility of obtaining nautical information by radiotelephone on the channel indicated</p> <p>Definition: Information mark E.23: possibility of obtaining nautical information by radiotelephone on the channel indicated</p>
100	<p>DD Name: IENC Code: catnmk_100 Date accepted: 2001-05-31</p> <p>Name: (E.24) water bikes permitted</p> <p>Definition: Information mark E.24: water bikes permitted</p>
101	<p>DD Name: IENC Code: catnmk_101 Date accepted: 2001-05-31</p> <p>Name: (E.21) zone authorized for high speed navigation of small sport and pleasure</p> <p>Definition: Information mark E.21: zone authorized for high speed navigation of small sport and pleasure</p>
102	<p>DD Name: IENC Code: catnmk_102 Date accepted: 2001-05-31</p> <p>Name: (E.22) launching or beaching of vessels permitted</p> <p>Definition: Information mark E.22: launching and beaching of vessels permitted</p>
103	<p>DD Name: IENC Code: catnmk_103 Date accepted: 2009-09-11</p> <p>Name: (BR) proceed close to the margin on your port side</p> <p>Definition: regulation mark (BR): proceed close to the margin on your port side</p>
104	<p>DD Name: IENC Code: catnmk_104 Date accepted: 2009-09-11</p> <p>Name: (BR) proceed close to the margin on your starboard side</p> <p>Definition: regulation mark (BR): proceed close to the margin on your starboard side</p>
105	<p>DD Name: IENC Code: catnmk_105 Date accepted: 2009-09-11</p> <p>Name: (BR) proceed in the middle of the river</p> <p>Definition: regulation mark (BR): proceed in the middle of the river</p>
106	<p>DD Name: IENC Code: catnmk_106 Date accepted: 2009-09-11</p> <p>Name: (BR) cross river to port</p> <p>Definition: regulation mark (BR): cross river to port</p>
107	<p>DD Name: IENC Code: catnmk_107 Date accepted: 2009-09-11</p> <p>Name: (BR) cross river to starboard</p> <p>Definition: regulation mark (BR): cross river to starboard</p>
108	<p>DD Name: IENC Code: catnmk_108 Date accepted: 2009-09-11</p> <p>Name: (BR) traffic between margins</p>

Value	Data Dictionary (DD) Reference
	Definition: information mark (BR): traffic between margins
109	DD Name: IENC Code: catnmk_109 Date accepted: 2009-09-11 Name: (BR) reduce speed Definition: regulation mark (BR): reduce speed
110	DD Name: IENC Code: catnmk_110 Date accepted: 2009-09-11 Name: wreck pontoon, passage allowed on side showing red-white sign Definition: a red-white sign shown on a wreck pontoon to indicate the side on which passage is permitted (without wash of waves) and a red sign on the side on which passage is not permitted
111	DD Name: IENC Code: catnmk_111 Date accepted: 2009-09-11 Name: wreck pontoon, passage allowed on both sides Definition: red-white signs shown on a wreck pontoon to indicate that passage is permitted on both sides (without wash of waves)
112	DD Name: IENC Code: catnmk_112 Date accepted: 2009-12-09 Name: no passing or overtaking of convoys Definition: Russian notice mark: 1.2, no passing or overtaking of convoys
113	DD Name: IENC Code: catnmk_113 Date accepted: 2009-12-09 Name: small crafts prohibited Definition: Russian notice mark: 1.5, small crafts prohibited
114	DD Name: IENC Code: catnmk_114 Date accepted: 2009-12-09 Name: Attention! (Keep caution) Definition: Russian notice mark: 2.1, Attention! (keep caution)
115	DD Name: IENC Code: catnmk_115 Date accepted: 2009-12-09 Name: fairway crossing Definition: Russian notice mark: 2.2, fairway crossing
116	DD Name: IENC Code: catnmk_116 Date accepted: 2009-12-09 Name: shipping inspection point Definition: Russian notice mark: 3.3, shipping inspection point
117	DD Name: IENC Code: catnmk_117 Date accepted: 2014-10-20 Name: (E.25) electrical power supply point

Value	Data Dictionary (DD) Reference
	Definition: Information mark E.25: electrical power supply point
118	DD Name: IENC Code: catnmk_118 Date accepted: 2014-10-20 Name: (E.26) winter harbour Definition: Information mark E.26: winter harbour
119	DD Name: IENC Code: catnmk_119 Date accepted: 2014-10-20 Name: (E.27) maximum number of vessels permitted to berth in winter harbour Definition: Information mark E.27: maximum number of vessels permitted to berth in winter harbour
120	DD Name: IENC Code: catnmk_120 Date accepted: 2014-10-20 Name: (E.28) winter shelter Definition: Information mark E.28: winter shelter
121	DD Name: IENC Code: catnmk_121 Date accepted: 2014-10-20 Name: (E.29) maximum number of vessels permitted to berth in winter shelter; maximum number of vessels permitted to berth abreast; maximum number of rows of vessels which are berthed abreast Definition: Information mark E.29: maximum number of vessels permitted to berth in winter shelter; maximum number of vessels permitted to berth abreast; maximum number of rows of vessels which are berthed abreast
122	DD Name: IENC Code: catnmk_122 Date accepted: 2014-10-20 Name: (E.30) use of spuds permitted Definition: Information mark E.30: use of spuds permitted

Attribute	Category of plug
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Acronym: catplg

Code: 18034

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

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

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

Attribute	Category of refuse dump
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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 rescue station
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Acronym: catrsc

Code: 17106

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of rescue station

Enumerations:

Value Data Dictionary (DD) Reference

- | | |
|---|---|
| 1 | DD Name: IENC Code: catrsc_1 Date accepted: 2010-09-17
Name: rescue station with life boat
Definition: a place where equipment for saving life at sea is maintained; the type of lifeboat may vary from fast, long distance boats to inflatable inshore boats. (IHO Chart Specifications, M-4). |
| 2 | DD Name: IENC Code: catrsc_2 Date accepted: 2010-09-17
Name: rescue station with rocket
Definition: rocket - a pyrotechnic projectile used for signalling or for life-saving purposes. (IHO Dictionary, S-32, 5th Edition, 4418). |
| 3 | DD Name: IENC Code: catrsc_3 Date accepted: 2010-09-17
Name: not in use
Definition: |
| 4 | DD Name: IENC Code: catrsc_4 Date accepted: 2010-09-17
Name: refuge for ship-wrecked mariners
Definition: shelter or protection from danger or distress at sea. |
| 5 | DD Name: IENC Code: catrsc_5 Date accepted: 2010-09-17
Name: refuge for intertidal area walkers
Definition: shelter or protection from danger in areas exposed to extreme and sudden tides or tidal streams. |
| 6 | DD Name: IENC Code: catrsc_6 Date accepted: 2010-09-17 |

Value	Data Dictionary (DD) Reference
	Name: lifeboat lying at a mooring Definition: a place where a lifeboat is moored ready for use.
7	DD Name: IENC Code: catrsc_7 Date accepted: 2010-09-17 Name: aid radio station Definition: a radio station reserved for emergency situations, might also be a public telephone.
8	DD Name: IENC Code: catrsc_8 Date accepted: 2010-09-17 Name: first aid equipment Definition: a place where first aid equipment is available.
9	DD Name: IENC Code: catrsc_9 Date accepted: 2010-09-17 Name: lifebuoy, ring buoy, life ring, life saver Definition: a "kisby ring" or "perry buoy" designed to be thrown to a person in the water, to provide buoyancy and to prevent drowning.

Attribute	Category of sensor
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Acronym: catsen

Code: 18019

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of sensor

Enumerations:

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: catsen_1 Date accepted: 2011-12-19

Name: light activated

Definition: A sensor which is activated by a spotlight

2 DD Name: IENC Code: catsen_2 Date accepted: 2011-12-19

Name: telephone activated

Definition: A sensor which is activated by telephone

Attribute	Category of ship (excluding)
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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 Name: inland waterway vessel

Value	Data Dictionary (DD) Reference		
	Definition: a vessel intended solely or mainly for navigation on inland waterways		
8	DD Name: IENC	Code: lc_cse_8	Date accepted: 2001-05-31
	Name: sea going ship		
	Definition: a vessel certificated for sea-going service		
9	DD Name: IENC	Code: lc_cse_9	Date accepted: 2001-05-31
	Name: motor vessel		
	Definition: a motor cargo vessel or a motor tanker		
10	DD Name: IENC	Code: lc_cse_10	Date accepted: 2001-05-31
	Name: motor tanker		
	Definition: a vessel intended for the carriage of goods in fixed tanks and built to navigate independently under its own motive power		
11	DD Name: IENC	Code: lc_cse_11	Date accepted: 2001-05-31
	Name: motor cargo vessel		
	Definition: a vessel, other than a motor tanker, intended for the carriage of goods and built to navigate independently under its own motive power		
12	DD Name: IENC	Code: lc_cse_12	Date accepted: 2001-05-31
	Name: canal barge		
	Definition: an inland waterway vessel not exceeding 38.5 m in length and 5.05 m in breadth and usually operating on the Rhine-Rhône-Canal		
13	DD Name: IENC	Code: lc_cse_13	Date accepted: 2001-05-31
	Name: tug		
	Definition: a vessel specially built to perform towing operations		
14	DD Name: IENC	Code: lc_cse_14	Date accepted: 2001-05-31
	Name: pusher		
	Definition: a vessel specially built to propel a pushed convoy		
15	DD Name: IENC	Code: lc_cse_15	Date accepted: 2001-05-31
	Name: barge		
	Definition: a dumb barge or tank barge		
16	DD Name: IENC	Code: lc_cse_16	Date accepted: 2001-05-31
	Name: tank barge		

Value	Data Dictionary (DD) Reference		
	Definition: a vessel intended for the carriage of goods in fixed tanks and built to be towed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres		
17	DD Name: IENC	Code: lc_cse_17	Date accepted: 2001-05-31
	Name: dumb barge		
	Definition: a vessel, other than a tank barge, intended for the carriage of goods and built to be towed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres		
18	DD Name: IENC	Code: lc_cse_18	Date accepted: 2001-05-31
	Name: lighter		
	Definition: a tank lighter, cargo lighter or ship borne lighter		
19	DD Name: IENC	Code: lc_cse_19	Date accepted: 2001-05-31
	Name: tank lighter		
	Definition: a vessel intended for the carriage of goods in fixed tanks, built or specially modified to be pushed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres when not part of a pushed convoy		
20	DD Name: IENC	Code: lc_cse_20	Date accepted: 2001-05-31
	Name: cargo lighter		
	Definition: a vessel, other than a tank lighter, intended for the carriage of goods and built or specially modified to be pushed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres when not part of a pushed convoy		
21	DD Name: IENC	Code: lc_cse_21	Date accepted: 2001-05-31
	Name: ship borne lighter		
	Definition: a lighter built to be carried aboard sea going ships and to navigate on inland waterways		
22	DD Name: IENC	Code: lc_cse_22	Date accepted: 2001-05-31
	Name: passenger vessel		
	Definition: a day trip or cabin vessel constructed and equipped to carry more than 12 passengers		
23	DD Name: IENC	Code: lc_cse_23	Date accepted: 2001-05-31
	Name: passenger sailing vessel		
	Definition: a passenger vessel fitted out mainly with a view to propulsion under sail		
24	DD Name: IENC	Code: lc_cse_24	Date accepted: 2001-05-31
	Name: day trip vessel		

Value	Data Dictionary (DD) Reference
	Definition: a passenger vessel without overnight passenger cabins
25	DD Name: IENC Code: lc_cse_25 Date accepted: 2001-05-31 Name: cabin vessel Definition: a passenger vessel with overnight passenger cabins
26	DD Name: IENC Code: lc_cse_26 Date accepted: 2001-05-31 Name: High-speed vessel Definition: a motorised vessel capable of reaching speeds over 40km/h with respect to water
27	DD Name: IENC Code: lc_cse_27 Date accepted: 2001-05-31 Name: floating equipment Definition: a floating installation carrying working gear such as cranes, dredging equipment, pile drivers or elevators
28	DD Name: IENC Code: lc_cse_28 Date accepted: 2001-05-31 Name: worksite craft Definition: a vessel, appropriately built and equipped for use at worksites, such as a reclamation barge, hopper or pontoon barge, pontoon or stone-dumping vessel
29	DD Name: IENC Code: lc_cse_29 Date accepted: 2001-05-31 Name: recreational craft Definition: a vessel other than a passenger vessel, intended for sport or pleasure
30	DD Name: IENC Code: lc_cse_30 Date accepted: 2001-05-31 Name: Dinghy Definition: a boat for use in transport, rescue, salvage and work duties
31	DD Name: IENC Code: lc_cse_31 Date accepted: 2001-05-31 Name: floating establishment Definition: any floating installation not normally intended to be moved, such as a swimming bath, dock, jetty or boathouse
32	DD Name: IENC Code: lc_cse_32 Date accepted: 2001-05-31 Name: floating object Definition: a raft or other structure, object or assembly capable of navigation, not being a vessel or floating equipment or establishment

Attribute	Category of ship (including)
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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 Name: all types Definition:	Code: lc_csi_1	Date accepted: 2001-05-31
2	DD Name: IENC Name: other Definition:	Code: lc_csi_2	Date accepted: 2001-05-31
3	DD Name: IENC Name: non-motorized vessel Definition: non-motorized vessel	Code: lc_csi_3	Date accepted: 2001-05-31
5	DD Name: IENC Name: craft Definition: a vessel or item of floating equipment	Code: lc_csi_5	Date accepted: 2001-05-31
6	DD Name: IENC Name: vessel Definition: an inland waterway vessel or sea going ship	Code: lc_csi_6	Date accepted: 2001-05-31
7	DD Name: IENC Name: inland waterway vessel	Code: lc_csi_7	Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference		
	Definition: a vessel intended solely or mainly for navigation on inland waterways		
8	DD Name: IENC	Code: lc_csi_8	Date accepted: 2001-05-31
	Name: sea going ship		
	Definition: a vessel certificated for sea-going service		
9	DD Name: IENC	Code: lc_csi_9	Date accepted: 2001-05-31
	Name: motor vessel		
	Definition: a motor cargo vessel or a motor tanker		
10	DD Name: IENC	Code: lc_csi_10	Date accepted: 2001-05-31
	Name: motor tanker		
	Definition: a vessel intended for the carriage of goods in fixed tanks and built to navigate independently under its own motive power		
11	DD Name: IENC	Code: lc_csi_11	Date accepted: 2001-05-31
	Name: motor cargo vessel		
	Definition: a vessel, other than a motor tanker, intended for the carriage of goods and built to navigate independently under its own motive power		
12	DD Name: IENC	Code: lc_csi_12	Date accepted: 2001-05-31
	Name: canal barge		
	Definition: an inland waterway vessel not exceeding 38.5 m in length and 5.05 m in breadth and usually operating on the Rhine-Rhône-Canal		
13	DD Name: IENC	Code: lc_csi_13	Date accepted: 2001-05-31
	Name: tug		
	Definition: a vessel specially built to perform towing operations		
14	DD Name: IENC	Code: lc_csi_14	Date accepted: 2001-05-31
	Name: pusher		
	Definition: a vessel specially built to propel a pushed convoy		
15	DD Name: IENC	Code: lc_csi_15	Date accepted: 2001-05-31
	Name: barge		
	Definition: a dumb barge or tank barge		
16	DD Name: IENC	Code: lc_csi_16	Date accepted: 2001-05-31
	Name: tank barge		

Value	Data Dictionary (DD) Reference		
	Definition: a vessel intended for the carriage of goods in fixed tanks and built to be towed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres		
17	DD Name: IENC	Code: lc_csi_17	Date accepted: 2001-05-31
	Name: dumb barge		
	Definition: a vessel, other than a tank barge, intended for the carriage of goods and built to be towed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres		
18	DD Name: IENC	Code: lc_csi_18	Date accepted: 2001-05-31
	Name: lighter		
	Definition: a tank lighter, cargo lighter or ship borne lighter		
19	DD Name: IENC	Code: lc_csi_19	Date accepted: 2001-05-31
	Name: tank lighter		
	Definition: a vessel intended for the carriage of goods in fixed tanks, built or specially modified to be pushed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres when not part of a pushed convoy		
20	DD Name: IENC	Code: lc_csi_20	Date accepted: 2001-05-31
	Name: cargo lighter		
	Definition: a vessel, other than a tank lighter, intended for the carriage of goods and built or specially modified to be pushed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres when not part of a pushed convoy		
21	DD Name: IENC	Code: lc_csi_21	Date accepted: 2001-05-31
	Name: ship borne lighter		
	Definition: a lighter built to be carried aboard sea going ships and to navigate on inland waterways		
22	DD Name: IENC	Code: lc_csi_22	Date accepted: 2001-05-31
	Name: passenger vessel		
	Definition: a day trip or cabin vessel constructed and equipped to carry more than 12 passengers		
23	DD Name: IENC	Code: lc_csi_23	Date accepted: 2001-05-31
	Name: passenger sailing vessel		
	Definition: a passenger vessel fitted out mainly with a view to propulsion under sail		
24	DD Name: IENC	Code: lc_csi_24	Date accepted: 2001-05-31
	Name: day trip vessel		

Value	Data Dictionary (DD) Reference		
	Definition: a passenger vessel without overnight passenger cabins		
25	DD Name: IENC	Code: lc_csi_25	Date accepted: 2001-05-31
	Name: cabin vessel		
	Definition: a passenger vessel with overnight passenger cabins		
26	DD Name: IENC	Code: lc_csi_26	Date accepted: 2001-05-31
	Name: High-speed vessel		
	Definition: a motorised vessel capable of reaching speeds over 40km/h with respect to water		
27	DD Name: IENC	Code: lc_csi_27	Date accepted: 2001-05-31
	Name: floating equipment		
	Definition: a floating installation carrying working gear such as cranes, dredging equipment, pile drivers or elevators		
28	DD Name: IENC	Code: lc_csi_28	Date accepted: 2001-05-31
	Name: worksite craft		
	Definition: a vessel, appropriately built and equipped for use at worksites, such as a reclamation barge, hopper or pontoon barge, pontoon or stone-dumping vessel		
29	DD Name: IENC	Code: lc_csi_29	Date accepted: 2001-05-31
	Name: recreational craft		
	Definition: a vessel other than a passenger vessel, intended for sport or pleasure		
30	DD Name: IENC	Code: lc_csi_30	Date accepted: 2001-05-31
	Name: Dinghy		
	Definition: a boat for use in transport, rescue, salvage and work duties		
31	DD Name: IENC	Code: lc_csi_31	Date accepted: 2001-05-31
	Name: floating establishment		
	Definition: any floating installation not normally intended to be moved, such as a swimming bath, dock, jetty or boathouse		
32	DD Name: IENC	Code: lc_csi_32	Date accepted: 2001-05-31
	Name: floating object		
	Definition: a raft or other structure, object or assembly capable of navigation, not being a vessel or floating equipment or establishment		

Attribute	Category of shoreline construction
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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

2 DD Name: IENC Code: catslc_2 Date accepted: 2011-05-31

Name: groyne (groin)

Definition: a low artificial wall-like structure of durable material extending from the land to seaward for a particular purpose, such as to prevent coast erosion (adapted from IHO Dictionary, S-32, 5th Edition, 2525 and IHO Chart Specifications, M-4)

7 DD Name: IENC Code: catslc_7 Date accepted: 2007-10-12

Name: training wall

Definition: a wall or bank, often submerged, built to direct or confine the flow of a river or tidal current, or to promote a scour action. (Adapted from IHO Dictionary, S-32, 5th Edition, 5586 and IHO Chart Specifications, M-4).

8 DD Name: IENC Code: catslc_8 Date accepted: 2013-01-23

Name: rip rap

Definition: A layer of broken rock, cobbles, boulders, or fragments of sufficient size to resist the erosive forces of flowing water and wave action. (Adapted from Marine Chart Manual, US National Oceanic and Atmospheric Administration - NOAA, 1992)

9 DD Name: IENC Code: catslc_9 Date accepted: 2013-01-23

Name: revetment

Definition: facing of stone or other material, either permanent or temporary, placed along the edge of a stream, river or canal to stabilize the bank and to protect it from the erosive action of the stream. (Adapted from IHO Dictionary, S-32, 5th Edition, 4379)

18 DD Name: IENC Code: catslc_18 Date accepted: 2007-10-12

Value	Data Dictionary (DD) Reference		
	Name:	lock/guide wall	
	Definition:	permanent structure bounding a lock and including guide walls (USACE)	
19	DD Name: IENC	Code: catslc_19	Date accepted: 2009-09-11
	Name:	ice breaker	
	Definition:	an often wedge-like structure used for protecting a bridge pier, dock, facility, etc. from floating ice or other debris.	
20	DD Name: IENC	Code: catslc_20	Date accepted: 2013-09-23
	Name:	water intake structure	
	Definition:	a structure designed to divert water from a river or channel for the purpose of water supply, hydroelectric power or irrigation.	

Attribute	Category of signal station, traffic
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Acronym: catsit

Code: 17002

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of signal station, traffic

Enumerations:

Value Data Dictionary (DD) Reference

2 DD Name: IENC Code: catsit_2 Date accepted: 2001-05-31

Name: port entry and departure

Definition: a signal station for the control of vessels entering or leaving a port.

6 DD Name: IENC Code: catsit_6 Date accepted: 2001-05-31

Name: lock

Definition: a signal station for the control of vessels entering or leaving a lock.

8 DD Name: IENC Code: catsit_8 Date accepted: 2001-05-31

Name: bridge passage

Definition: a signal station for the control of vessels wishing to pass under a bridge.

10 DD Name: IENC Code: catsit_10 Date accepted: 2001-05-31

Name: oncoming traffic indication

Definition: indicates the oncoming traffic on an inland waterway

Attribute	Category of signal station, warning
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Acronym: catsiw

Code: 17003

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of signal station, warning

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: high water mark

Definition: An indication of the official high water level.

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

Name: vertical clearance indication

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

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

Name: depth indication

Definition: An indication of the local depth.

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

Acronym: cattab

Code: 17092

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Category of time and behaviour

Enumerations:

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: cattab_1 Date accepted: 2001-05-31

Name: operational period

Definition: being in a position or adjustment to permit passage or to perform an operation

2 DD Name: IENC Code: cattab_2 Date accepted: 2001-05-31

Name: non-operational period

Definition: being in a position or adjustment to prevent passage

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

Acronym: catvtr

Code: 17091

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of vehicle transfer

Enumerations:

Value Data Dictionary (DD) Reference

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

Name: official

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

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

Name: private

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

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

Name: suitable for car cranes

Definition: Vehicle transfer location is suitable for car cranes

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

Name: suitable for car planks

Definition: Vehicle transfer location is suitable for car planks

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

Name: permission required

Definition: The transfer of a vehicle requires permission.

6 DD Name: IENC Code: catvtr_6 Date accepted: 2001-05-31

Name: locked gate

Value Data Dictionary (DD) Reference

Definition: The access to the public road is locked.

Attribute	Category of voltage
-----------	---------------------

Acronym: catvol

Code: 18031

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: The electrical voltage provided by the power supply station

Enumerations:

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: catvol_1 Date accepted: 2014-11-26

Name: 230V

Definition: 230 Volts

2 DD Name: IENC Code: catvol_2 Date accepted: 2014-11-26

Name: 400V

Definition: 400 Volts

Attribute	Category of waterway gauge
-----------	----------------------------

Acronym: catgag

Code: 17078

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Category of waterway gauge

Enumerations:

Value Data Dictionary (DD) Reference

- | | |
|---|---|
| 1 | DD Name: IENC Code: catgag_1 Date accepted: 2001-05-31
Name: water level staff / pole
Definition: level indicator consisting of a calibrated staff/pole and the associated bench mark. (DIN 4049 Section 3, Oct. 1994) |
| 2 | DD Name: IENC Code: catgag_2 Date accepted: 2001-05-31
Name: recording water level gauge
Definition: analog or digital water level measuring and recording device. (adopted from DIN 4049 – Section 3, Oct. 1994) |
| 3 | DD Name: IENC Code: catgag_3 Date accepted: 2001-05-31
Name: recording water level gauge with remote access
Definition: recording water level gauge providing information remotely by any method (adopted from DIN 4049 – Section 3, Oct. 1994) |
| 4 | DD Name: IENC Code: catgag_4 Date accepted: 2001-05-31
Name: recording water level gauge with external indicator
Definition: recording gauge providing information of the water level via a large external indicator (adopted from DIN 4049 – Section 3, Oct. 1994) |
| 5 | DD Name: IENC Code: catgag_5 Date accepted: 2001-05-31
Name: recording water level gauge with remote access and remote indicator
Definition: recording gauge providing information remotely by any method and providing information of the water level via a large external indicator. (adopted from DIN 4049 – Section 3, Oct. 1994) |

Attribute	Class of dangerous cargo
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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 | <p>DD Name: IENC Code: clsdng_1 Date accepted: 2001-05-31</p> <p>Name: one blue light / cone</p> <p>Definition: Vessels carrying out transport operations involving certain flammable substances</p> |
| 2 | <p>DD Name: IENC Code: clsdng_2 Date accepted: 2001-05-31</p> <p>Name: two blue lights / cones</p> <p>Definition: Vessels carrying out transport operations involving certain substances constituting health hazards</p> |
| 3 | <p>DD Name: IENC Code: clsdng_3 Date accepted: 2001-05-31</p> <p>Name: three blue lights / cones</p> <p>Definition: Vessels carrying out transport operations involving certain explosives</p> |
| 4 | <p>DD Name: IENC Code: clsdng_4 Date accepted: 2001-05-31</p> <p>Name: no blue light / cone</p> <p>Definition: Vessels carrying out transport operations for which no blue light or blue cone is required</p> |
| 5 | <p>DD Name: IENC Code: clsdng_5 Date accepted: 2009-12-09</p> <p>Name: one red light / red cone top down</p> <p>Definition: Russian inland waterway regulations: vessels with one red light / red cone top down</p> |

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
-----------	---------------------

Acronym: dirimp

Code: 17056

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Direction of impact

Enumerations:

Value Data Dictionary (DD) Reference

1	DD Name: IENC Code: dirimp_1 Date accepted: 2001-05-31 Name: upstream Definition: toward the source of a stream
2	DD Name: IENC Code: dirimp_2 Date accepted: 2001-05-31 Name: downstream Definition: in the direction of flow of a current or stream
3	DD Name: IENC Code: dirimp_3 Date accepted: 2001-05-31 Name: to the left bank Definition: toward the left side of the bank
4	DD Name: IENC Code: dirimp_4 Date accepted: 2001-05-31 Name: to the right bank Definition: toward the right side of the bank
5	DD Name: IENC Code: dirimp_5 Date accepted: 2010-08-12 Name: to harbor Definition: to an harbor

Attribute	Distance from notice mark, first
-----------	----------------------------------

Acronym: disbk1

Code: 17057

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: Minimum distance of the impact of an area, which is signed by notice marks. The distance is measured from the notice mark rectangular to the bank

Attribute	Distance from notice mark, second
-----------	-----------------------------------

Acronym: disbk2

Code: 17058

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: Maximum distance of the impact of an area, which is signed by notice marks. The distance is measured from the notice mark rectangular to the bank

Attribute	Distance of impact, downstream
-----------	--------------------------------

Acronym: disipd

Code: 17060

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: Downstream distance of the impact of an area, which is signed by notice marks. The distance is normally given on an additional mark left and/or right of the notice mark

Attribute	Distance of impact, upstream
-----------	------------------------------

Acronym: disipu

Code: 17059

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: Upstream distance of the impact of an area, which is signed by notice marks. The distance is normally given on an additional mark left and/or right of the notice mark

Attribute	Elevation 1 of surface (m)
-----------	----------------------------

Acronym: eleva1

Code: 17061

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

Attribute	Elevation 2 of surface (m)
-----------	----------------------------

Acronym: eleva2

Code: 17062

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

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

Attribute	Function of notice mark
-----------	-------------------------

Acronym: fctnm

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: fctnm_1 Date accepted: 2001-05-31
Name: prohibition mark
Definition: marks which indicate a prohibition |
| 2 | DD Name: IENC Code: fctnm_2 Date accepted: 2001-05-31
Name: regulation mark
Definition: marks which indicate a regulation |
| 3 | DD Name: IENC Code: fctnm_3 Date accepted: 2001-05-31
Name: restriction mark
Definition: marks which indicate a restriction |
| 4 | DD Name: IENC Code: fctnm_4 Date accepted: 2001-05-31
Name: recommendation mark
Definition: marks which indicate a recommendation |
| 5 | DD Name: IENC Code: fctnm_5 Date accepted: 2001-05-31
Name: information mark
Definition: marks with general information |

Attribute	Function of sensor
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Acronym: fctsn

Code: 18020

Use Type: F

Value Type: L

Data Dictionary (DD) Reference:

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

Definition: Function of sensor

Enumerations:

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: fctsn_1 Date accepted: 2011-12-19

Name: reduce bridge lighting

Definition:

Attribute	Height/length units
-----------	---------------------

Acronym: hunits

Code: 17103

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Units of measure of waterway distances

Enumerations:

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: hunits_1 Date accepted: 2001-05-31

Name: metres

Definition: heights/lengths are specified in metres (SI units of length)

2 DD Name: IENC Code: hunits_2 Date accepted: 2001-05-31

Name: feet

Definition: heights/lengths are specified in feet (imperial units of length)

3 DD Name: IENC Code: hunits_3 Date accepted: 2001-05-31

Name: kilometres

Definition: heights/lengths are specified in kilometres (1000 metres)

4 DD Name: IENC Code: hunits_4 Date accepted: 2001-05-31

Name: hectometres

Definition: heights/lengths are specified in hectometres (100 metres)

5 DD Name: IENC Code: hunits_5 Date accepted: 2001-05-31

Name: statute miles

Definition: heights/lengths are specified in statute (land) miles

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

Name: nautical miles

Value Data Dictionary (DD) Reference

Definition: heights/lengths are specified in nautical (sea) miles

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

Acronym: horcll

Code: 17074

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The length of an object, such as a lock or basin, which is available for safe navigation. This may, or may not, be the same as the total physical length (HORLEN) of the object

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

Acronym: horclw

Code: 17075

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The width of an object, such as a lock or basin, which is available for safe navigation. This may, or may not, be the same as the total physical width (HORWID) of the object

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

Acronym: marsys

Code: 17009

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: System of navigational marks

Enumerations:

Value Data Dictionary (DD) Reference

- | | |
|----|--|
| 1 | DD Name: IENC
Code: marsys_1
Date accepted: 2001-05-31
Name: IALA A
Definition: navigational aids conform to the International Association of Lighthouse Authorities - IALA A system. |
| 2 | DD Name: IENC
Code: marsys_2
Date accepted: 2001-05-31
Name: IALA B
Definition: navigational aids conform to the International Association of Lighthouse Authorities - IALA B system. |
| 9 | DD Name: IENC
Code: marsys_9
Date accepted: 2001-05-31
Name: no system
Definition: navigational aids do not conform to any defined system. |
| 10 | DD Name: IENC
Code: marsys_10
Date accepted: 2001-05-31
Name: other system
Definition: navigational aids conform to a defined system other than International Association of Lighthouse Authorities -IALA. |
| 11 | DD Name: IENC
Code: marsys_11
Date accepted: 2001-05-31
Name: CEVNI
Definition: navigational aids conform to the European Code for Inland Waterways of UN/ECE. |
| 12 | DD Name: IENC
Code: marsys_12
Date accepted: 2001-05-31 |

Value	Data Dictionary (DD) Reference
	Name: Russian inland waterway regulations Definition: navigational aids conform to the Russian inland waterway regulations.
13	DD Name: IENC Code: marsys_13 Date accepted: 2009-09-11 Name: Brazilian national inland waterway regulations - two sides Definition: navigational aids conform to the Brazilian national inland waterway regulations for two sides.
14	DD Name: IENC Code: marsys_14 Date accepted: 2009-09-11 Name: Brazilian national inland waterway regulations - side independent Definition: navigational aids conform to the side independent Brazilian national inland waterway regulations.
15	DD Name: IENC Code: marsys_15 Date accepted: 2009-09-11 Name: Paraguay-Parana waterway - Brazilian complementary aids Definition: Brazilian complementary navigational aids on the Paraguay-Parana waterway.

Attribute	Maximal permitted beam
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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	Maximal permitted speed
-----------	-------------------------

Acronym: lg_spd

Code: 18001

Use Type: F

Value Type: F

Data Dictionary (DD) Reference:

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

Definition: The maximal permitted vessel speed according to the particular article/clause of the applicable law/regulation

Attribute	Maximal permitted water displacement
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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
-----------	--

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
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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
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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	Number of shore connectors
-----------	----------------------------

Acronym: shrnum

Code: 18035

Use Type: F

Value Type: I

Data Dictionary (DD) Reference:

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

Definition: The number of shore connectors available at the power supply station.

Attribute	Publication reference
-----------	-----------------------

Acronym: lg_pbr

Code: 18011

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

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

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

Attribute	Reference Gauge
-----------	-----------------

Acronym: refgag

Code: 18018

Use Type: F

Value Type: T

Data Dictionary (DD) Reference:

DD Name: IENC Date accepted: 2013-01-11

Definition: The ISRS code of the gauge which can be used to calculate the vertical clearance

Attribute	Reference gravitational level
-----------	-------------------------------

Acronym: reflev

Code: 17088

Use Type: F

Value Type: E

Data Dictionary (DD) Reference:

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

Definition: Gravitational reference level

Enumerations:

Value Data Dictionary (DD) Reference

1 DD Name: IENC Code: reflev_1 Date accepted: 2001-05-31

Name: Baltic datum

Definition: Baltic Datum (Baltic Heights System) - The unified State system for absolute heights reckoning from Kronshtadt Tide-gauge Datum that is accepted in Russian Federation. (Hydrographic Terminology Dictionary, HDNO, 1984)-

2 DD Name: IENC Code: reflev_2 Date accepted: 2001-05-31

Name: Adriatic level

Definition: The average height of the surface of the Adriatic sea at the tide station of Trieste in Italy.

3 DD Name: IENC Code: reflev_3 Date accepted: 2001-05-31

Name: Amsterdam Ordnance Datum (NAP)

Definition: Dutch gravitational reference level that is approximately the average summer height of the North Sea.

4 DD Name: IENC Code: reflev_4 Date accepted: 2001-05-31

Name: Mean Sea Level

Definition: (MSL) - the average height of the surface of the sea at a tide station for all stages of the tide over a 19-year period, usually determined from hourly height readings measured from a fixed predetermined reference level. (IHO Dictionary, S-32, 5th Edition, 3156)

5 DD Name: IENC Code: reflev_5 Date accepted: 2001-05-31

Name: Other datum

Definition:

Value	Data Dictionary (DD) Reference
6	<p>DD Name: IENC Code: reflev_6 Date accepted: 2001-05-31</p> <p>Name: National Geodetic Vertical Datum - NGVD29</p> <p>Definition: The name, after May 10, 1973, of the Sea Level Datum of 1929.</p>
7	<p>DD Name: IENC Code: reflev_7 Date accepted: 2001-05-31</p> <p>Name: North American Vertical Datum - NAVD88</p> <p>Definition: The vertical control datum established in 1991 by the minimum-constraint adjustment of geodetic leveling observations in Canada, the United States, and Mexico.</p>
8	<p>DD Name: IENC Code: reflev_8 Date accepted: 2001-05-31</p> <p>Name: Mean sea level 1912</p> <p>Definition: A vertical control datum established for vertical control in the United States by the general adjustment of 1912.</p>
9	<p>DD Name: IENC Code: reflev_9 Date accepted: 2001-05-31</p> <p>Name: Mean sea level 1929</p> <p>Definition: A vertical control datum established for vertical control in the United States by the general adjustment of 1929.</p>
10	<p>DD Name: IENC Code: reflev_10 Date accepted: 2015-03-09</p> <p>Name: Tweede Algemene Waterpassing (TAW)</p> <p>Definition: All heights in Belgium are referenced to TAW</p>

Attribute	Related issue
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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
Name: other
Definition: | Code: lg_rel_1 | Date accepted: 2001-05-31 |
| 2 | DD Name: IENC
Name: usage of waterway
Definition: | Code: lg_rel_2 | Date accepted: 2001-05-31 |
| 3 | DD Name: IENC
Name: carriage of equipment
Definition: | Code: lg_rel_3 | Date accepted: 2001-05-31 |
| 4 | DD Name: IENC
Name: task,operation
Definition: | Code: lg_rel_4 | 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

Name: no wake

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

Value	Data Dictionary (DD) Reference		
14	DD Name: IENC Code: restrn_14 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)	Date accepted: 2001-05-31	
27	DD Name: IENC Code: restrn_27 Name: speed restricted Definition: an area within which speed is restricted.	Date accepted: 2001-05-31	
28	DD Name: IENC Code: restrn_28 Name: overtaking prohibited Definition: a specified area designated by appropriate authority, within which overtaking is generally prohibited	Date accepted: 2001-05-31	
29	DD Name: IENC Code: restrn_29 Name: overtaking of convoys by convoys prohibited Definition: a specified area designated by appropriate authority, within which overtaking between convoys prohibited	Date accepted: 2001-05-31	
30	DD Name: IENC Code: restrn_30 Name: passing or overtaking prohibited Definition: a specified area designated by appropriate authority, within which passing or overtaking is generally prohibited	Date accepted: 2001-05-31	
31	DD Name: IENC Code: restrn_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.	Date accepted: 2001-05-31	
32	DD Name: IENC Code: restrn_32 Name: berthing restricted Definition: a specified area designated by appropriate authority, within which berthing is restricted	Date accepted: 2001-05-31	
33	DD Name: IENC Code: restrn_33 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.	Date accepted: 2001-05-31	
34	DD Name: IENC Code: restrn_34	Date accepted: 2001-05-31	

Value	Data Dictionary (DD) Reference
	Name: making fast restricted Definition: a specified area designated by appropriate authority, within which making fast to the bank is restricted
35	DD Name: IENC Code: restrn_35 Date accepted: 2001-05-31 Name: turning prohibited Definition: a specified area designated by appropriate authority, within which all turning is generally prohibited
36	DD Name: IENC Code: restrn_36 Date accepted: 2001-05-31 Name: restricted fairway depth Definition: an area within which the fairway depth is restricted.
37	DD Name: IENC Code: restrn_37 Date accepted: 2001-05-31 Name: restricted fairway width Definition: an area within which the fairway width is restricted.
38	DD Name: IENC Code: restrn_38 Date accepted: 2014-11-26 Name: use of spuds prohibited Definition: the use of anchoring spuds (telescopic piles) is prohibited

Attribute	Speed reference
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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
Name: containers
Definition: boxes for cargo transport with standardized dimensions. | Date accepted: 2001-05-31 |
| 2 | DD Name: IENC
Code: trshgd_2
Name: bulk goods
Definition: unpacked bulk cargo in the same or a similar kind of nature (homogeneous). | Date accepted: 2001-05-31 |
| 3 | DD Name: IENC
Code: trshgd_3
Name: oil
Definition: Mineral oil or liquid petrolatum, a by-product in the distillation of petroleum to produce gasoline. | Date accepted: 2001-05-31 |
| 4 | DD Name: IENC
Code: trshgd_4
Name: fuel
Definition: liquid fuel, e.g. gasoline, diesel. | Date accepted: 2001-05-31 |
| 5 | DD Name: IENC
Code: trshgd_5
Name: chemicals
Definition: any material used in or obtained by a process in chemistry. | Date accepted: 2001-05-31 |
| 6 | DD Name: IENC
Code: trshgd_6
Name: liquid goods | Date accepted: 2001-05-31 |

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

Attribute	Type of Ship
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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 |
| | Name: special purpose vessel. |

Value	Data Dictionary (DD) Reference		
	Definition: a vessel that fulfills special purposes e.g. hovercrafts, pilot boats		
7	DD Name: IENC	Code: shptyp_7	Date accepted: 2001-05-31
	Name: man of War		
	Definition: armed naval vessel.		
8	DD Name: IENC	Code: shptyp_8	Date accepted: 2001-05-31
	Name: submarine		
	Definition: a vessel that is capable of operating for an extended period of time underwater.		
9	DD Name: IENC	Code: shptyp_9	Date accepted: 2001-05-31
	Name: high speed craft		
	Definition:		
10	DD Name: IENC	Code: shptyp_10	Date accepted: 2001-05-31
	Name: bulk carrier		
	Definition: a vessel which is designed for carrying bulk goods, e.g. coal, ore or grain.		
11	DD Name: IENC	Code: shptyp_11	Date accepted: 2001-05-31
	Name: seaplane		
	Definition: airplane designed to take off from and alight on water.		
12	DD Name: IENC	Code: shptyp_12	Date accepted: 2001-05-31
	Name: tugboat		
	Definition: a powerful small boat designed to pull or push larger ships or powerless barges.		
13	DD Name: IENC	Code: shptyp_13	Date accepted: 2001-05-31
	Name: passenger vessel		
	Definition: a vessel which is designed for carrying passengers and which serves mainly as cruise vessel.		
14	DD Name: IENC	Code: shptyp_14	Date accepted: 2001-05-31
	Name: ferry		
	Definition: a vessel which is designed for carrying passengers, and sometimes their vehicles, on scheduled services.		
15	DD Name: IENC	Code: shptyp_15	Date accepted: 2001-05-31
	Name: boat		
	Definition: a small vessel.		

Attribute	UN location code
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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".

35 DD Name: IENC Code: verdat_35 Date accepted: 2001-05-31

Value	Data Dictionary (DD) Reference		
	Name:	Highest Shipping Height of Water (German HSW)	
	Definition:	upper limit of water levels where navigation is allowed	
36	DD Name: IENC	Code: verdat_36	Date accepted: 2001-05-31
	Name:	Reference low water level according to Danube Commission	
	Definition:	The water level at a discharge, which is exceeded 94 % of the year within a period of 30 years.	
37	DD Name: IENC	Code: verdat_37	Date accepted: 2001-05-31
	Name:	Highest shipping height of water according to Danube Commission	
	Definition:	The water level at a discharge, which is exceeded 1 % of the year within a period of 30 years.	
38	DD Name: IENC	Code: verdat_38	Date accepted: 2001-05-31
	Name:	Dutch river low water reference level (OLR)	
	Definition:	The water level at a discharge, which is exceeded 95 % of the year within a period of 20 years.	
39	DD Name: IENC	Code: verdat_39	Date accepted: 2001-05-31
	Name:	Russian project water level	
	Definition:	Conditional low water level with established probability (Hydrographic Terminology Dictionary, HDNO, 1984).	
40	DD Name: IENC	Code: verdat_40	Date accepted: 2001-05-31
	Name:	Russian normal backwater level	
	Definition:	Highest water level derived from the upper backwater stream in watercourse or reservoir under the normal operational conditions. (Hydrographic Terminology Dictionary, HDNO, 1984).	
41	DD Name: IENC	Code: verdat_41	Date accepted: 2001-05-31
	Name:	Ohio River Datum	
	Definition:		
42	DD Name: IENC	Code: verdat_42	Date accepted: 2015-02-23
	Name:	Approximate LAT	
	Definition:		
43	DD Name: IENC	Code: verdat_43	Date accepted: 2015-02-23
	Name:	Dutch High Water Reference Level (MHW)	
	Definition:		
44	DD Name: IENC	Code: verdat_44	Date accepted: 2015-02-23

Value Data Dictionary (DD) Reference
Name: Tweede Algemene Waterpassing
Definition:

Attribute	Water displacement unit
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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

Definition: above a water level called "mean water" which is the arithmetic mean value of all water levels within a certain period of time

9 DD Name: IENC Code: watlev_9 Date accepted: 2001-05-31

Value Data Dictionary (DD) Reference

Name: below mean water level

Definition: below a water level called "mean water" which is the arithmetic mean value of all water levels within a certain period of time

Attribute	Waterway distance
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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