**NIPWG6-48.1**

## Paper for Consideration by NIPWG

Proposal to amend S-101data model

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| --- | --- |
| ***Submitted by:*** | NIPWG |
| ***Executive Summary:*** | This informs NIPWG on  a) a proposal for harmonisation of the S-101 model with S-127. It amends the certain definitions of features and attributes and attributes’ values.  b) potential extension of S-127 data model components |
| ***Related Documents:*** | S-101 DCEG (version 1.0.0 December 2018)  S-127 (Version 1.0.0. December 2018) |
| ***Related Projects:*** | S-101; S-127 |

# Background

S-127 (Marine Traffic Management) provides inter alia comprehensive information on vessel traffic in ports, harbours and coastal areas. S-127 will contribute to a harmonized development and implementation on Vessel Traffic Services and support the IMO e-navigation solution 5. The Vessel Traffic Service is defined in IMO and includes information service, traffic organization and navigation assistance.

To be able to carry out this, the VTS need information specified in S-127. Consequently, the S-127 can be an important product specification for the VTS.

The S-127 development required several reviews of data model components. It is known that certain parts of the data model have been copied from S-101 to ensure harmonised data model and to support interoperability and consistency between S-101 and S-127.

# Analysis/Discussion

S-127 data model review comes up with a collection of proposals for definition correction of various data model components which have been used from S-101. These proposals are listed in Annex.

The review results also proposals which should be implemented into the next version of S-127. These proposals are listed underneath.

**actionOrActivity**

Add:

Dredging

IHO definition: To deepen (a waterway) with a machine that removes earth usually by buckets on an endless chain or a suction tube (Meriam Webster Dictionary)

Underway

IHO definition: Surface vessel following COLREG rules.

Exercising

IHO definition: An area where one or several vessels conduct training in order to develop, improve, or display a specific capability or skill. e.g. military, rescue or oil extraction. The area may be periodically closed or have limited transit.

Subsea work

IHO definition: To carry through a task requiring sustained effort or continuous repeated operations underneath the surface, such as diving operations on the sea bottom

**categoryOfVessel**

Add:

Governmental

IHO definition: Vessel owned or operated by a state authority or organization

Research

IHO definition: Vessel that is commissioned and equipped to carry out scientific research in an area.

Coastguard

IHO definition: Vessel carrying out responsibilities related to safety, security and governmental control for a specific state. This may include but is not limited to SAR, enforcement of maritime law, safety of vessels, border control, and fishery control.

Rescue tender

IHO definition: Vessel is specialized in performing man over board rescue missions. It could be a vessel designed and specialized for SAR operation in coastal areas. In some countries it is as a part of a rescue association / organization.

Escort tug

IHO definition: Tugboat performing operations related to the aid of a vessel navigating in confined water.

**categoryOfMaritimeBroadcast**

Add:

Broadcast of restrictions with limited duration

IHO definition: Announcement of various restrictions applicable for a specific period of time, such as fishery, dangers, exercises, environmental

Task/Operation/specific broadcast

Announcements on specific operations, such as fishery, exercises and ad hock operations.

# Justification and Impacts

Dependant from S-101PT response, the proposed amendments have to be implemented into the next version of S-127.

# Action Required:

NIPWG is invited to:

1. Note this paper.
2. Discuss the proposed amendments from both the section above and the annex
3. Forward the paper (Annex) to S-101PT for further consideration.

**S101PT-xx-xx**

## Paper for Consideration by S-101PT

Proposal to amend S-101 data model definitions

|  |  |
| --- | --- |
| ***Submitted by:*** | NIPWG |
| ***Executive Summary:*** | This is a proposal for harmonisation of the S-101 model with S-127. It amends the certain definitions of features and attributes and attributes’ values. |
| ***Related Documents:*** | S-101 DCEG (version 1.0.0 December 2018) |
| ***Related Projects:*** | S-101; S-127, |

# Proposal Type

|  |  |
| --- | --- |
| **Type of Change Requested** | **Mark All that Apply** |
| S-101 DCEG Change | x |
| New/Amended Feature | x |
| New/Amended Complex Attribute |  |
| New/Amended Simple Attribute | x |
| New/Amended Information Type |  |
| New/Amended Association/Aggregation/Composition | x |
| New/Amended Enumerate Value | x |
| New/Amended Code List | x |

# Justification and Impacts

Benefits:

* Harmonization of definition
  + simplifies the multiple use of data model components cross product specifications
  + simplifies the interoperability
  + enhanced the reliability of IHO Product Specifications by avoiding confusion

NIPWG’s S-127 (Marine Traffic Management) is using parts of the S-101 data model. During an intensive review process the need for amendments of certain definitions was detected.

Harmonization of commonly used data model components is highly desirable in order to facilitate reuse of portrayal, UI displays and controls, and application software modules.

Required Resources:

* Email exchange
* no extra funding

Involved HSSC WG

* S-101PT
* NIPWG

Due date:

* S101PT meeting

Priority:

* High

Impact on work:

* Version 2 of both S-127 and S-101 should provide definitions which have been harmonised.

Related activities:

* S-101 DCEG, S-101 Product Specification
* S-127 version 2

# Action Requested:

The S-101PT is invited to:

1. consider the proposal,

b. revise the current S-101 DCEG as appropriate.

# ANNEX A:

## Proposed change of the definitions

**15.28 Radio calling-in point**

IHO Definition: RADIO CALLING-IN POINT. A designated position at which vessels are required to report to a Vessel Traffic Service. Also called reporting point or radio reporting point. (Adapted IHO Dictionary – S-32).

INT 1 Reference: M 40.1-2

**15.28.1 Radio calling-in (reporting) points** (see S-4 – B-488.1 and B-488.2)

Radio reporting points, also called radio calling-in points, 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 Vessel Traffic Service Centre.

If it is required to encode a radio reporting point or line, it must be done using the feature Radio Calling-In Point.

Remarks:

**15.31 Radar range**

IHO Definition: RADAR RANGE. Indicates the coverage of a sea area by a radar surveillance station. Inside this area a VTS may provide shore-based radar assistance, particularly in poor visibility. (Adapted from Defence Geospatial Information Working Group; Feature Data Dictionary Register, 2010).

**16.25 Pilotage district**

IHO Definition: PILOTAGE DISTRICT. An area within which a pilotage direction exists

Such areas are regulated by regulations under a competent authority.

**22.1 Pilot meeting point**

IHO Definition: A geographical point where the pilot meet the vessel for embarking or disembarking.

**27.36 category of military practice area (CATMPA) Category of military practice area**

IHO Definition: Classification of area by military use.

Attribute Type: Enumeration

Add

Convoy exercise

IHO definition: a group of ships sailing under military command for the purpose of carrying goods and personnel

Antisubmarine

IHO definition: an exercise area used for exercise between surface and submarine warships

Gunnery exercise

IHO definition: an area used for exercise with navy gunnery

Anti-air exercise

IHO definition: an area used for exercise between navy vessels and air force unites

Amphibia exercise

IHO definition: an area where an exercise with amphibia units are taking place.

**27.44 category of pilot meeting place (CATPIL)**

Category of pilot boarding place: IHO Definition: Definition required.

Attribute Type: Enumeration

1) embarking or disembarking by pilot-cruising vessel

IHO Definition: Pilot boards from a cruising vessel. (S-57 Edition 3.1, Appendix A – Chapter 2, Page 2.62, November 2000).

2) embarking or disembarking by helicopter

IHO Definition: Pilot boards by helicopter which comes out from the shore. (S-57 Edition 3.1, Appendix A – Chapter 2, Page 2.62, November 2000).

3) pilot comes out from shore

IHO Definition: Pilot embarks from a vessel or disembarks on a vessel which comes out from the shore on request. (S-57 Edition 3.1, Appendix A – Chapter 2, Page 2.62, November 2000).

Purpose:

The term “boarding” implies that only embarking is specified. The term “meeting” covers all kind of embarking/disembarking/change

**27.60 category of signal station, traffic (CATSIT)**

Category of signal station, traffic: IHO Definition: Classification of signal station based on the traffic service provided.

**27.61 category of signal station, warning (CATSIW)**

Category of signal station, warning: IHO Definition: Classification of signal station based on the warning service provided.

**27.169 telecommunication service**

Telecommunication service: IHO Definition: Methods to communicate between involved parties over a distance.

Attribute Type: Enumeration

1) voice

IHO Definition: The transfer or exchange of information by using oral communication.