

Paper for Consideration by S-101PT

Proposal for a new S-101 feature “Mooring Area”

Submitted by:	France, Australia, UKHO, IHO Secretariat
Executive Summary:	Proposal to add a new Feature “Mooring Area” in S-101 Edition 1.2.0.
Related Documents:	S-101FC, S-101DCEG.
Related Projects:	S-101.

Introduction / Background

1. At the S-101PT meeting 10, France presented paper S-101PT10-07.11 proposing to create a new S-101 feature **Small Craft Mooring Area**.
2. The S-101PT agreed in principle with the proposal but decided that rework was needed in consultation with the NIPWG (Action S-101PT10-26).

Analysis/Discussion

3. The origin of paper S-101PT10-07.11 suggesting a new S-101 feature **Small Craft Mooring Area** was that:
 - Among the 12 allowable values for **category of anchorage**, 11 relate to proper anchorage, whereas value 8 is the only one that relates to mooring;
 - Many mooring areas have been created to prevent vessels from anchoring;
 - **Restriction** value 1 (anchoring prohibited) is not allowed on feature **Anchorage area**, making it impossible to encode the main restriction for most of the mooring areas.
4. After discussion within the S-101PT and in consultation with the NIPWG, it is proposed to create a more generic feature **Mooring Area**. This will allow the population of suitable attributes to enable the provision of additional information relating to these areas, rather than being limited by the data model currently used for **Anchorage Area**.
5. During the discussion with NIPWG (S-127 and S-131 leads), a reserve was made on the impacts of such a change to existing S-1XX Feature Catalogues, Portrayal Catalogues, DCEG and S-57 to S-101 Conversion Guidance.
6. Conversion from S-57 to S-101 should not be an issue. ACHARE objects with CATCH = 8 would be converted into **Mooring Area** with **category of mooring area** = 1.
7. To align the documentation with this proposal, the DCEG 16.3.1 (Anchorage) should be reviewed to delete reference to value 8 for **category of anchorage** and a new item inserted as follows:

16.4 Mooring area

IHO Definition: MOORING AREA. An area in which vessels may be secured to mooring buoys (adapted from IHO dictionary – S-32).

S-101 Geo Feature: Mooring Area (ACHARE)

Primitives: Point, Surface

Real World

Paper Chart Symbol

ECDIS Symbol

S-101 Attribute	S-57 Acronym	Allowable Encoding Value	Type	Multiplicity
category of mooring area	(CATACH)	1: small craft mooring area 2: mooring area for visitors 3: mooring for tankers	EN	0,*
feature name			C	0,*
display name			(S) BO	0,1
language		ISO 639-2/T	(S) TE	0,1
name	(OBJNAM) (NOBJNM)		(S) TE	1,1
fixed date range		See clause 2.4.8	C	0,1
date end	(DATEND)		(S) TD	0,1 †
date start	(DATSTA)		(S) TD	0,1 †
maximum permitted draught	(INFORM) (NINFOM)		RE	0,1
maximum permitted vessel length	(INFORM) (NINFOM)		RE	0,1
periodic date range		See clause 2.4.8	C	0,*
date end	(PEREND)		(S) TD	1,1
date start	(PERSTA)		(S) TD	1,1
restriction	(RESTRN)	1: anchoring prohibited 2: anchoring restricted 3: fishing prohibited 4: fishing restricted 5: trawling prohibited 6: trawling restricted 8: entry restricted 9: dredging prohibited 10: dredging restricted 11: diving prohibited 12: diving restricted 13: no wake 15: construction prohibited 16: discharging prohibited 17: discharging restricted 18: industrial or mineral exploration/development prohibited 19: industrial or mineral exploration/development restricted 20: drilling prohibited 21: drilling restricted 23: cargo transshipment (lightening) prohibited 24: dragging prohibited 25: stopping prohibited 27: speed restricted 39: swimming prohibited	EN	0,*
status	(STATUS)	1: permanent 2: occasional 3: recommended 5: periodic/intermittent 6: reserved 7: temporary 8: private 9: mandatory	EN	0,*

		14: public		
scale minimum	(SCAMIN)	See clause 2.5.9	IN	0,1
vessel speed limit			C	0,*
speed limit			(S) RE	1,1
Vessel class			(S) TE	0,1
information		See clause 2.4.6	C	0,*
file locator			(S) TE	0,1
file reference	(TXTDSC) (NXTDSC)		(S) TE	0,1 †
headline			(S) TE	0,1
language		ISO 639-2/T	(S) TE	0,1
text	(INFORM) (NINFOM)		(S) TE	0,1 †

† For each instance of **fixed date range**, at least one of the sub-attributes **date end** or **date start** must be populated.

For each instance of **information**, at least one of the sub-attributes **file reference** or **text** must be populated.

INT 1 Reference: Q 44

Mooring area (see S-4 – B-431.7)

Where the limits of a mooring area are defined by a regulatory authority (for example harbour authority) they must be shown on the largest maximum display scale ENC data. They may also be shown on other maximum display scale ENC datasets where useful, for example, for planning purposes.

If it is required to encode a mooring area, it must be done using the feature **Mooring Area**.

Remarks:

- The complex attribute **feature name**, sub-attribute **name** is used to encode the name and/or number of the **Small Craft Mooring Area**.
- The complex attribute **information** (see clause 2.4.6) may be used to provide additional information about the category of anchorage, where required.
- Areas with numerous small craft moorings may be encoded as **Mooring Area** features of type surface, with **category of mooring area** = 1 (small craft mooring area). For the encoding of mooring buoys, see clause 8.14.

Distinction: Anchorage Area; Anchor Berth; Mooring/Warping Facility.

Conclusions

The current encoding for organized areas where vessels can moor is not fully satisfying. The creation of a new feature will get rid of the inconsistency between anchoring and mooring.

Recommendations

It is recommended to:

- Create a new geographic feature **Mooring Area** in S-101, Edition 1.2.0;
- Modify the Feature Catalogue accordingly:
 - create a new Point and Area Feature, and
 - delete allowable attribute value 8 (small craft mooring area) for attribute **category of anchorage**;
- Align the IHO Registry;
- Modify the DCEG as here above;
- Review the Portrayal Catalogue to align with the new data model.

Action Required of S-101PT

The S-101PT is invited to:

- a) Discuss this paper and its recommendations;
- b) Take any further action if needed.