

At TSMAD24/DIPWG4, there were discussions regarding the S-57 object class **RESARE** and the possible sub-division of the attribute RESTRN to better categorise the different restrictions in terms of their importance to navigation and the alarms in ECDIS. In particular, it was identified that the value 14 (Area to be Avoided) was in some cases being populated for RESTRN for areas such as Territorial Sea areas. Discussions at the meeting indicated that it may be more suitable modelling in S-101 to define an IMO Area To Be Avoided as a separate feature.

1.1 Area to be avoided

IHO Definition: AREA TO BE AVOIDED. An IMO declared routeing measure comprising an area within defined limits in which either navigation is particularly hazardous or it is exceptionally important to avoid casualties and which should be avoided by all ships, or certain classes of ships. (Adapted from IHO Dictionary – S-32).

S-101 Geo Feature: Area to be avoided

Primitives: Surface

| <i>Real World</i> | | <i>Paper Chart Symbol</i> | <i>ECDIS Symbol</i> | |
|--------------------------|---------------------|---------------------------------|---------------------|---------------------|
| S-101 Attribute | S-57 Acronym | Allowable Encoding Value | Type | Multiplicity |
| Feature name | | | C | 0,* |
| Display name | | | (S) BO | 0,1 |
| Language | | ISO 639-3 | (S) TE | 0,1 |
| Name | (OBJNAM) | | (S) TE | 1,1 |
| Fixed date range | | | C | 0,1 |
| Date end | (DATEND) | ISO 8601:1988 | (S) DA | 0,1 |
| Date start | (DATSTA) | ISO 8601:1988 | (S) DA | 0,1 |
| Information | | | C | 0,* |
| Language | | ISO 639-3 | (S) TE | 0,1 |
| Text | (INFORM) | | (S) TE | 1,1 |
| Pictorial representation | (PICREP) | | TE | 0,1 |
| Scale minimum | (SCAMIN) | See clause 22.134 | IN | 0,1 |
| Textual description | | | C | 0,* |
| File reference | (TXTDSC) | | (S) TE | 1,1 |
| Language | | ISO 639-3 | (S) TE | 0,1 |

INT 1 Reference: M 14, 29.1-2

1.1.1 Area to be avoided (see S-4 – B-435.7)

An Area To Be Avoided (ATBA) vary in size from small circular areas, which “protect” vital buoys or major lights, to much larger areas which protect natural features, such as large coral reefs. IMO-designated ATBA are listed in *Ships’ Routeing* Part D.

If it is required to encode such areas, it must be done using the feature **Area To Be Avoided**.

Remarks:

- ATBA may be established specifically to provide additional environmental protection to the areas concerned.
- At least one of the complex attributes **information** or **textual description** must be used to encode the relevant cautionary information.

Distinction: Caution area; inshore traffic zone; precautionary area; restricted area; all traffic separation scheme elements of type area.