# 3<sup>rd</sup> NCWG MEETING ESRI HQ, Redlands, California, USA 16-19 May 2017

#### Paper for Consideration by NCWG

### Rocks which do not cover: do we need a new point symbol?

**Submitted by:** Italian Hydrographic Office

**Executive Summary:** Assess a need for inserting a new point symbol for rocks which

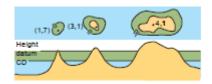
do not cover.

Related Documents: S-4; INT1

Related Projects:

#### Introduction / Background

S-4 at point B-421.1 quoted that: "...omissis...rocks which do not cover must be shown as islets (that is: using the coastline symbol and, where the size permits, land tint)."



K40

"Islets too small to be shown in their true (scale) size, must not be reduced to a width less than the width of the coastline symbol (to avoid confusion with printing imperfections)."

Moreover, S-4 at point B-310.2 quoted that: "The coastline must be generalized as necessary according to chart scale... omissis... An islet too small to be shown true to scale must not be reduced to a width less than the width of the coastline symbol to ensure visibility".

## **Analysis / Discussion**

We would like to highlight a deficiency in the point symbols used to depict rocks.

S-4 defines point symbols aimed at representing:

- underwater rock (K 13-14);
- rock awash at the level of chart datum (K 12);
- rock which covers and uncovers (K11).

A rock (islet) which does not cover is depicted using the portrayal shown at K10. Although the picture helps users to correctly read and understand a chart, it makes the cartographer's work harder for 2 reasons:

- the cartographer needs to pay attention to a very small islet portrayal and to the width of the coastline symbol, in order to guarantee visibility and to avoid confusion with printing imperfections;
- 2. the cartographer cannot simply refer to K10 in order to issue an effective NtM.

To avoid a subjective choice and, above all, to quickly and accurately provide an NtM aimed at informing mariners about a possible danger, we suggest adding a point symbol for a land area which is too small for being shown in its true size.

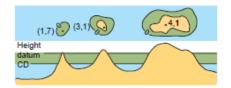
This suggestion is consistent with the S-57 Appendix B.1 - Use of the Object Catalogue for ENC.

In fact, at point 4.1 it was established that islets and rocks that do not cover must be encoded using the object class LNDARE usually of type area but also of type point.

#### Conclusions

We suggest modifying the point B-421.1 and consequently updating the item K 10 of the INT1 as follows (red color):

B-421.1 Rocks (or large boulders) which do not cover must be shown as islets (that is: using the coastline symbol and, where the size permits, land tint). Where the height is shown, it must be in metres, or metres and decimetres for heights of less than 5m, above the height datum for the chart as stated in the explanatory notes. The same style of numeral as used for land spot heights must be used (see B-352.2). If there is not sufficient space to insert the numeral within the rock it must be inserted adjacent to it, in brackets (see also B-302.3). Islets too small to be shown in their true (scale) size, must not be reduced to a width less than the width of the coastline symbol (to avoid confusion with printing imperfections). Islets may be landmarks; for the charting of landmarks and conspicuous objects, see B-340.



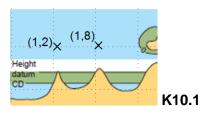
K10

#### **B-421.1** ... omissis...

If there is ...omissis...it must be inserted adjacent to it, in brackets (see also B-302.3). Islets too small to be shown in their true (scale) size, should be depicted using point symbol K10.1. The height may be shown in brackets adjacent to the symbol (space permitting).

Islets may be landmarks; for the charting of landmarks and conspicuous objects, see B-340.

The land area of type point could be depicted with the following symbol, added to the existing INT1 K10 item:



#### **Impacts**

The proposed modification impacts on the portrayal of rocks in the INT1. Cartographic software with symbol libraries based on INT1 should be also updated.

## **Action required of NCWG**

The NCWG is invited:

- to note and assess this document.
- to amend point B-421.1 where and if appropriate, accordingly.