

**Paper for Consideration by ENCWG4
Actions from HSSC 11 for ENCWG**

Submitted by:	Thomas Mellor (UK)
Executive Summary:	Using the current S-57 standard to encode MARPOL areas on ENCs
Related Documents:	S-4 and S-57 UOC

Background

HSSC action 11/42, based on the submission made by the US (Doc. HSSC11-05.1G), the ENCWG, in liaison with NCWG are to consider the possibility of developing S-57 UOC guidance covering MARPOL regulations, and its applicability to different scale bands.

Analysis/Discussion

Emission Control Areas (ECAs) are defined in IMO MARPOL Annex VI, they aim to reduce global emissions of SO_x, NO_x and particulate matter. Under the revised MARPOL Annex VI, the global sulphur cap will be reduced from current 3.50% to 0.50%, effective from 1 January 2020, subject to a feasibility review to be completed no later than 2018. MEPC 70 (October 2016) considered an assessment of fuel oil availability to inform the decision to be taken by the Parties to MARPOL Annex VI, and decided that the fuel oil standard (0.50% sulphur limit) shall become effective on 1 January 2020. The limits applicable in ECAs for Sox, NO_x and particulate matter were reduced to 0.10%, from 1 January 2015.

As you can see from the above text there now exists an IMO requirement for shipping to identify where these areas are to be able to comply with these new IMO regulations, ECAs are not shown on ENCs. There are other MAPOL areas which cover the discharge of waste etc and none of these are shown on ENCs either. All of this information is required in passage planning and vessels will be required to demonstrate to PSC inspectors in their passage plans that considerations have been made regarding MARPOL.

Currently IHO S-4 covers MARPOL in the following sections;

S-4 B-437.4

ESSA specifically designated in response to wider environmental considerations, potentially 'the total environment'. The basic reason for the establishment of most of these areas is the coincidence of environmental sensitivity and some degree of risk from shipping. One of the main reasons for charting them is to alert mariners to their existence and to inform them of the reasons for their sensitivity. They may cover extensive sea areas and may be established under state, national or international legislation. They include:

- a. Environmental areas defined or designated by IMO:
- b. • Special Areas (SA) - see B-437.5;
- c. • Particularly Sensitive Sea Areas (PSSA) - see B-437.6;

B-437.5 Special Area

A Special Area is an IMO-adopted measure designated under the International Convention for the Prevention of Pollution from Ships 1973, modified by the Protocol of 1978 (MARPOL 73/78). It is defined in IMO Resolution A.927(22) as:

'a sea area where for recognized technical reasons in relation to its oceanographical and ecological conditions and to the particular character of its traffic, the adoption of special mandatory methods for the prevention of sea pollution by oil, noxious liquid substances, or garbage, as applicable, is required'. IMO Resolution A.720(17) states:

'Sea can be seen as an oceanographical or geographical term; in both cases a sea will, by definition, be a rather large area. Every existing "special area", is a (semi)-enclosed sea in an oceanographical sense and pursuant to the methods of protection a special area has to be rather large.'

A Special Area may encompass the maritime zones of several States, or even an entire enclosed or semi-enclosed area.

Special Areas are defined in terms of the pollution types covered in each of the Annexes to MARPOL 73/78 (Annex I - oil; Annex II - noxious liquid substances; Annex V - garbage; Annex VI - SOx emission control areas). They are designated by IMO's Marine Environment Protection Committee (MEPC) and include: the Mediterranean Sea area; Baltic Sea area; Black Sea area; Red Sea area; Gulfs area; Gulf of Aden; Antarctic area; North Sea; Wider Caribbean; North West European waters. Given the wide extent of the area covered by individual designated Special Areas, and the fact that they are not directly related to safety of navigation, their limits should not normally be inserted on navigation charts. It is more appropriate to include details in associated publications, such as Sailing Directions, Annual Notices to Mariners or special charts depicting MARPOL 73/78 limits. If necessary, a note may be inserted (in green or magenta) on appropriate charts referring to the fact that the chart (or a specified part of it) lies within an IMO-designated Special Area:

MARPOL 73/78 SPECIAL AREA

This chart lies within a Special Area designated by IMO under MARPOL 73/78. For details, see[name of chart or publication].....

While the use of an ESSA to define MARPOL limits has not in the past been considered safety related the call from industry to include the information in our ENCs is growing. We now need to consider the use of

Possible encoding solutions;

Restricted Areas (RESARE)

M - Category of restricted area (CATREA): Environmentally Sensitive Sea Area (ESSA)

M - Information (INFORM): MARPOL IMO-designated Special Area

M - Textual Description (TXTDSC): IMO regulation to be reproduced and attached as TXTDSC

O - Picture Reference (PICREP): Image of geographic area covered by IMO regulation

Alternative or additional encoding;

Nautical publication information (M_NPUB)

M - Publication Reference (PUBREF): specific reference to MARPOL regulation from a nautical publication

M - Information (INFORM): MARPOL IMO-designated Special Area

M - Textual Description (TXTDSC): IMO regulation to be reproduced and attached as TXTDSC

O - Picture Reference (PICREP): Image of geographic area covered by IMO regulation

As MARPOL areas cover large geographic extents and the regulations are to be taken into account when voyage planning, it is suggested that we limit their encoding to the Overview and General Navigational Purpose only.

Action Required of ENCWG

Review the possible encoding and agree to a new section in the S-57 UOC

Consider adding a FAQWhen and how should I encode a MARPOL 'Special area'

