

MARPOL DATA

Proposal to NIPWG2 for S-122 extentsion

MARPOL CHARTS

CONTENT AND DESCRIPTION



- The purpose of MARPOL areas is intended for use in combination with ENC data in a way of drawing areas where special rules for the Prevention of Pollution from Ships (MARPOL) are applied.
- It is designed to be displayed as an overlay on top of the ENC data such that the MARPOL can be toggled on and off. Primary display in BoB app in planning mode, ECDIS to indicate approaching the area, as specified in the voyage plan.
- MARPOL contains only area objects (no point or line objects) with attributes including references to text.
- The MARPOL dataset has five different object classes
 - Oil
 - Noxious liquid substances
 - Sewage
 - Garbage
 - Air pollution

OIL AREA



Acronym: oilare

Set NEW_Attributes_A:

Attribute: *Category of ship*

Acronym: catshp Attribute type: L Expected input:

Attribute: Category of Oil

Attributes from S-57 ENC Object Catalogue:

Set Attribute_A: OBJNAM, STATUS, DATEND, DATSTA, PEREND, PERSTA, STATUS

Set Attribute_B: INFORM; SCAMIN; SCAMAX; TXTDSC

Geometric primitive: Area

Definition: areas with special regulations for pollution of the sea (marine pollution)

Category of oil

	Meaning
ID	
1	Oil or oil mixtures from cargo spaces
2	Oil or oil mixtures from machinery spaces

Category of ship

ID	Meaning
1	tanker
2	Ship above 400t
3	Ship less 400t

NOXIOUS LIQUID SUBSTANCE



Area in which there is special rules for the prevention of Noxious liquid substances (NLS) pollution from ships

Acronym: nlsare

Attributes from S-57 ENC Object Catalogue:

Set Attribute_A: OBJNAM, STATUS, DATEND, DATSTA, PEREND, PERSTA, STATUS

Set Attribute_B: INFORM; SCAMIN; SCAMAX; TXTDSC

Geometric primitive: Area

Definition: areas with special regulations for pollution of the sea (marine pollution). These areas apply to chemical tankers only (oil tankers)

SEWAGE (SEWAGE AREA)



Area in which there is special rules for the prevention of Sewage pollution from ships

Acronym: seware

Set new_Attribute_A:

Attribute: *Category of sewage*

Acronym: catsew Attribute type: L Expected input:

Attributes from S-57 ENC Object Catalogue:

Set Attribute_A: OBJNAM, STATUS, DATEND, DATSTA, PEREND, PERSTA, STATUS

Set Attribute_B: INFORM; SCAMIN; SCAMAX; TXTDSC

Geometric primitive: Area

Definition: areas with special regulations for pollution of the sea (marine pollution)

These areas apply to ships engaged in international voyages of 400 gross tonnage and above or which are certified to carry more than 15 persons. Baltic sea applies to passenger ships.

Category of sewage

ID	Meaning
1	not comminuted and disinfected sewage
2	comminuted and disinfected sewage

GARBAGE (GARBAGE AREA)



Area in which there is special rules for the prevention of Garbage pollution from ships.

Acronym: gabare

Set new_Attribute_A:

Attribute: Category of garbage

Acronym: catgab Attribute type: L Expected input:

Attributes from S-57 ENC Object Catalogue:

Set Attribute_A: OBJNAM, STATUS, DATEND, DATSTA, PEREND, PERSTA, STATUS

Set Attribute B: INFORM; SCAMIN; SCAMAX; TXTDSC

Geometric primitive: Area

Definition: areas with special regulations for pollution of the sea (marine pollution)

These areas apply to all categories of vessels.

Category of garbage

ID	Meaning
1	Food wastes comminuted or ground
2	Food wastes Not comminuted or ground
3	Cargo residues not contained in wash water
4	Cargo residues contained in wash water
5	Cleaning agents and additives contained in cargo hold wash water
6	Cleaning agents and additives in deck and external surfaces wash water
7	Carcasses of animals carried on board as cargo and which died during the voyage

AIR POLLUTION (AREA)



Object class: Air pollution area

Area in which there is special rules for the prevention of Air pollution from ships

Acronym: airare

Set new_Attribute_A:

Attribute: Category of Air pollution

Acronym: catair Attribute type: L Expected input:

Attributes from S-57 ENC Object Catalogue:

Set Attribute_A: OBJNAM, STATUS, DATEND, DATSTA, PEREND, PERSTA, STATUS

Set Attribute_B: INFORM; SCAMIN; SCAMAX; TXTDSC

Geometric primitive: Area

Definition: areas with special regulations for pollution of the sea (marine pollution)

ID	Meaning
1	NOx
2	SOx

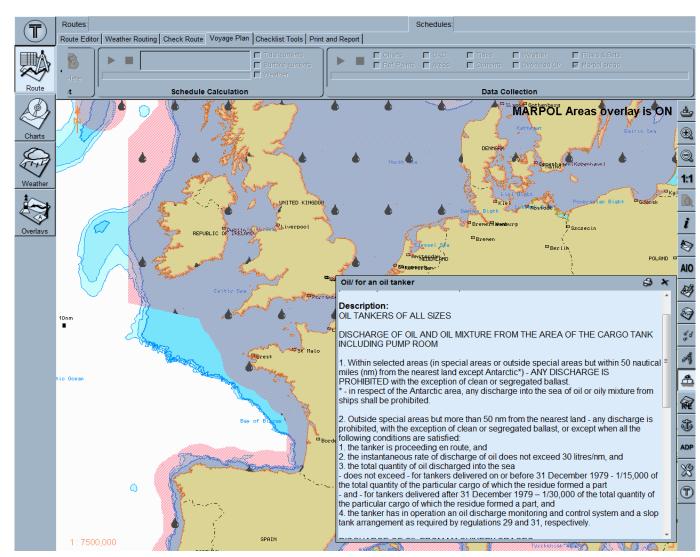
PORTRAYAL

OIL/ OIL MIXTURES

TRANISAS

- 1. Category of vessel = tanker
- Category of Oil = Oil or oil mixtures from cargo spaces

Coverage: Special areas + 50 nm zone from coast



PORTRAYAL

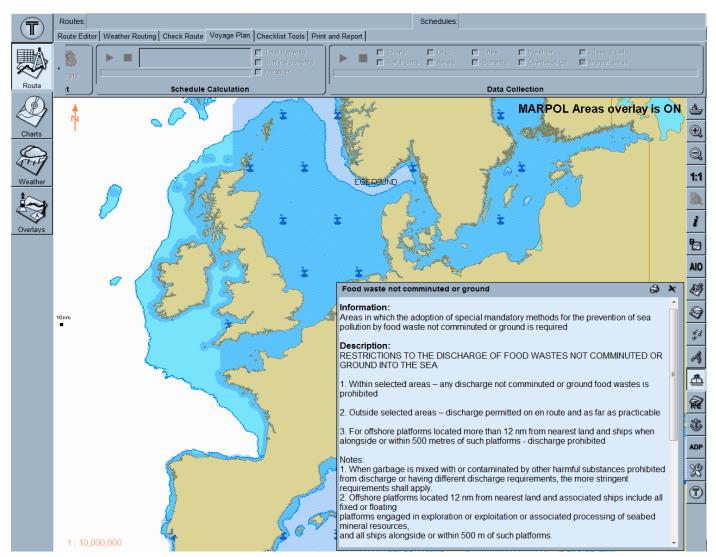
GARBAGE

TRANISAS

Category of Garbage = Food waste not comminuted or ground

Applicable for all vessels

Coverage: special areas +12 nm zone from the coast



PROPOSAL FOR S-122

HOW MARPOL AREAS CAN BE ENCODED IN S-122



- Encoding of Geo-objects
 - MARPOL areas could be encoded as RESARE object class

 New complex attribute "Category of pollutant type" shall be added in accordance with the number of Annexes MARPOL convention. This attribute consists of subattributes as category of oil mixtures, category of sewage, category of garbage...
 - Or, New Object classes as specified above could be added to S-124
- Information type objects

In current implementation does not support feature types where restrictions extend on the all waters of world ocean (worldwide).

For example: Annex III of Marpol convention – harmful substances on packaged form. Or type of garbage as All other garbage including plastics, domestic wastes, cooking oil, incinerator ashes, operational wastes and fishing gear.

ACTIONS

THE GROUP IS INVITED TO



- Note the report
- Discuss and agree/reject inclusion of MARPOL areas in S-122 MPA PS
- Suggest a way of encoding the MARPOL areas in accordance with S-122