

Hydrographic Services and Standards Committee

Proposal by the United States (NOAA)

HSSC11-05.1G

Development of a new S-100 Specification for
MARPOL



Introduction

- MARPOL is the International Convention for the Prevention of Pollution from ship and other Environmental Regulations
- Signed in 1973, in force 1983
- MARPOL contains six Annexes:
 - Oil
 - Noxious Liquid Substances in Bulk
 - Harmful Substances in Packaged Form
 - Sewage from Ships
 - Garbage from Ships
 - Air Pollution from Ships



Analysis/Discussion

- Electronic Navigation Chart covers SOLAS it is missing the capability to encode and display information to meet rules laid out by MARPOL
 - Is also a gap regarding to encode national regulations regarding environmental regulations
- MARPOL is dependent on the nature of the vessel and its operations
 - Relevant in the context of the vessel navigation and the charts that it carries
- Much of MARPOL applies within a number of nautical miles measured from the “baseline” – but does not require the baseline to be published



Analysis/Discussion

- Territorial sea areas serve as the 12NM zone as a proxy to MARPOL
 - Currently are manually measure by reference to the low water line
- Currently 4 fixed Emission Control Areas
 - Baltic Sea
 - North Sea
 - North American ECA
 - US Caribbean ECA
- Currently no protocol for including ECA's (either local or IMO adopted) within an ENC



Conclusions

- Currently, no meaningful way of representing MARPOL within the context of IHO standards
- Mariners have to rely on guesswork or complex paper publications from the IMO to adhere to MARPOL
- Various stakeholders within the United States have requested the inclusion of MARPOL regulations into the ENC's or as a separate product
- 2016 – Transas proposed to NIPWG that S-122 be extended to cover MARPOL
 - HSSC opted to defer until a request was made formally by the IMO
- In the interest of safe navigation and the prevention of pollution the IHO should not wait for a formal request from the IMO
- Instead leverage its S-100 Framework to provide a mechanism for Member States to provide MARPOL regulations to the maritime industry



Recommendations

- Option 1: Extend the S-101 ENC Product Specification to include MARPOL
 - Pro: The data is contained within a single product
 - Con: Time to market will be much longer
- Option 2: Create a new S-100 based product specification that addresses MARPOL
 - Pro: The time to operationalize is quicker
 - Con: Will also need to be considered within the S-98 Interoperability Spec.
- Option 3: Extend S-122 – Marine Protected Areas
 - Pro: Natural Linkages to S-122
 - Con: S-122 will need to be updated to S-100 4.0.0 to better meet some of the new portrayal mechanisms



Recommended Option

- Option 2 – Create a new S-100 based specification for MARPOL
 - United States (NOAA) is prepared to sponsor this work.



Action Required of HSSC

- Discuss the development of MARPOL information for use in Electronic Chart Systems
- Consider each of the three options
- Recommend one of the three options and assign it to the appropriate HSSC working group/project team

