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Agenda item 12

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NAVIGATION, COMMUNICATIONS AND SEARCH AND RESCUE

Implication of introducing new communication technologies

Submitted by Liberia and ICS

SUMMARY

Executive summary: The revised SOLAS chapter IV (resolution MSC.496(105)) entered into force on 1 January 2024. One of the big changes from the previous requirements was to take into account the development of the new technology. The revised chapter IV is written based on functional requirements. Taking into account the discussion at NSCR 10, the co-sponsors noted a potential gap between the service supported by the shore authority and the equipment required on board.

Strategic directions, if applicable: 2 and 7

Outputs: 2.27, 2.28 and 7.2

Action to be taken: Paragraph 9

Related documents: NSCR 10/22 and MSC.1/Circ.1645

Introduction

1 During the tenth session of the Sub-Committee on Navigation, Communications and Search and Rescue (NSCR 10), several agenda items covered developing technologies for the dissemination of maritime safety information (MSI). However, these discussions revealed practical problems of the "functional approach" introduced in the revised SOLAS chapter IV.

Background

2 In the revised SOLAS chapter IV, instead of specifying the specific equipment to be carried on board, the carriage requirements on board are based upon the function, i.e. regulation IV/7.1.4 states that "every ship to be provided with receiver(s) capable of receiving maritime safety information (MSI) and search and rescue (SAR) related information throughout the entire voyage".

3 However, even before the entry into force of the revised SOLAS chapter IV, it became apparent that this approach does not work despite the guidance given in MSC.1/Circ.1645 on *Guidance for the reception of maritime safety information and search and rescue related information as required in the Global Maritime Distress and Safety System (GMDSS)*.

Discussion

The choice

4 Among various issues addressed during NCSR 10, the co-sponsors noted one common issue that existed in many agenda items and work streams of the working groups at NCSR 10, which was the understanding of the functional requirements introduced by the revised SOLAS chapter IV, i.e. whether the choice of means or equipment to achieve that function is an option left for a flag State or coastal State to decide.

5 If the choice is left to the ship to make, coastal States must broadcast all information through all means for that function. This may not be financially sustainable unless full interoperability is established. However, the platforms are so widely diversified that the approval standard of each function does not have interoperability or there is no platform/standard to achieve interoperability. If the option is for the coastal States to decide, then the ship will have to have all communication equipment on board, which defeats one of the objectives of function-based requirements, i.e. to pursue a better service through competition.

6 To fulfil the safety requirements, ships would need to carry all the minimum set of equipment. To identify the "minimum set" requires consideration of the compatibility between the shipborne equipment and the system used by coastal States.

Concrete cases

7 The above issues are relevant to the discussion on:

- .1 VDES (NCSR 10, agenda item 6);
- .2 NAVDAT (NCSR 10, agenda item 8); and
- .3 MSI distribution (NCSR 10, agenda item 10).

Proposal

8 The co-sponsors propose that discussion on SOLAS chapter IV should be restricted only to the matter that affects carriage requirements on board and surveys and ship certification. In particular, due consideration should be given to the following:

- .1 MSI providers should provide information through all recognized mobile satellite services immediately. If that is not the intention, then consideration to this should be given when a mobile satellite service is recognized in the future. Ships are required only to carry one of the receivers (e.g. Inmarsat or Iridium, unless the second is a duplication/backup arrangement).
- .2 Introduction of NAVDAT should not trigger replacing onboard NAVTEX receivers with NAVDAT receivers.

- .3 If satellite VDES is used for GMDSS function(s), the satellite segment should be recognized as a mobile satellite service by the Organization, and all MSI providers should be committed and ready for MSI dissemination using VDES.

Action requested of the Committee

- 9 The Committee is invited to consider the comments above, in particular the proposals in paragraph 8, and take action as appropriate.
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