

## **7 DEVELOPMENTS IN MARITIME RADIOCOMMUNICATION SYSTEMS AND TECHNOLOGY**

7.1 The Sub-Committee recalled that COMSAR 7 had agreed that no submissions concerning performance standards for any radiocommunication equipment should be accepted and/or considered under this agenda item (COMSAR 7/23, paragraphs 11.5 and 11.6).

7.2 The Sub-Committee further recalled that, based on the request of COMSAR 15, the Committee had extended the target completion year for this item to 2012.

### **Automatic Transmission of the Identification of the Radiotelephone Station**

7.3 The Sub-Committee considered document COMSAR 16/7 (Poland) proposing the inclusion of an automatic transmission of radiotelephone station identification during operation of radio equipment in the VHF and MF/HF frequency bands and referred it to the Technical Working Group for detailed consideration and to advise the Sub-Committee, as appropriate.

### **Working toward use of AIS as a means for distress communications**

7.4 The Sub-Committee considered:

- .1 document COMSAR 16/7/1 (United States) relating to advantages for the possible future use of AIS for distress communications and possible problems which would need to be overcome before such a capability could be implemented; and
- .2 document COMSAR 16/7/3 (Australia) commenting on document COMSAR 16/7/1, in particular AIS-SART, Satellite detection (for distress alerts via AIS) and the continuous need for DSC.

7.5 In considering the possible future use of AIS for distress communications, the following views were expressed that:

- .1 to address issues identified in document COMSAR 16/7/1, the matter would need to be considered, not only by the Organization, but also in ITU-R and IALA;
- .2 to initiate work in ITU-R and IALA, it would be beneficial to send a liaison statement to these organizations, informing them of the desire of some IMO Member Governments to study the possible future use of AIS for distress communications;
- .3 the initial focus should be on existing equipment, currently in use on SOLAS ships; and
- .4 the consideration of this issue would need an appropriate new unplanned output, approved by the Committee.

7.6 The Sub-Committee was informed by the Secretariat that:

- .1 MSC 86 had considered the matter of satellite detection of AIS and was awaiting the outcome of studies in ITU;
- .2 there was a need to inform the Committee on the progress made in ITU on the matter of satellite detection of AIS since MSC 86, on the basis of which the Committee could reconsider this matter;
- .3 the request for a new unplanned output for the consideration of the possible future use of AIS for distress communications should be submitted to the Committee by a Member Government; and
- .4 until the Committee had agreed on a new unplanned output on the possible future use of AIS for distress communications, it would not be appropriate for the Sub-Committee to consider these issues or send liaison statements to other organizations.

7.7 The delegation of France, supported by others, informed the Sub-Committee that the work in ITU-R in relation to satellite detection of AIS had been finalized. As a result of the studies on this matter in ITU-R, Report ITU-R M.2084 on Satellite detection of automatic identification system messages had been published and a revision of Recommendation ITU-R M.1371 had been adopted in order to introduce the new message 27 to permit the reception of AIS emissions of long-range AIS broadcast messages. Based on these studies and proposals received, WRC-12 had identified VHF channels 75 and 76 of appendix 18 of the Radio Regulations for the satellite detection of AIS messages (COMSAR 16/4/5, paragraph 13). The Sub-Committee noted that the IMO position for WRC-12 had supported this allocation to the mobile satellite service (Earth-to-space) relating to the frequencies of channels 75 and 76 of appendix 18 (COMSAR 15/16, annex 4, page 6).

7.8 Following some discussion, the Sub-Committee invited interested Member Governments to submit proposals to the Committee for a new unplanned output to consider the possible future use of AIS for distress communications.

#### **Developments in Man Overboard (MOB) and similar devices using AIS-SART technology**

7.9 In considering the issue of developments in Man Overboard (MOB) and similar devices using AIS-SART technology (COMSAR 16/7/3, paragraphs 12 to 20), the Sub-Committee concurred with the view that there was a need to consider the use of the AIS symbol for these kind of devices and to develop guidance to inform seafarers that there were devices which operated in a similar way to an AIS-SART, had the same symbol displayed, but were used for different purposes.

7.10 In considering that the use of the AIS symbol, the Sub-Committee recalled that this was a matter under the purview of the NAV Sub-Committee and instructed the Technical Working Group to develop a suitable request to be forwarded to the NAV Sub-Committee inviting them to consider the use of the AIS symbol for these kinds of devices and to develop appropriate guidance to seafarers for further consideration and finalization by COMSAR 17.

7.11 The Sub-Committee further instructed the SAR Working Group to consider the issue from an operational perspective and advice, as appropriate.

7.12 Accordingly, the Sub-Committee referred document COMSAR 16/7/3 to the Technical and SAR Working Groups and instructed the groups, as set out above in paragraphs 7.10 and 7.11.

**Promoting study on AIS Personal Locator Beacons**

7.13 The Sub-Committee considered document COMSAR 16/7/2 (China) proposing to promote a study on AIS Personal Locator Beacons based on AIS-SART technology, to be used on lifejackets, in order to facilitate effective search and rescue of survivors in water.

7.14 The ICS observer, supported by others, expressed the view that any study should be conducted by either Member Governments or international organizations and the results submitted to the relevant IMO body for consideration. Furthermore, the cost implications of any requirement for all lifejackets would be significant and no justification or compelling need had been identified. The proposed study should also consider the potential disadvantages e.g. accidental activation, mass activation of the devices in congested waters and testing and maintenance requirements. Accordingly, more information was required before this could be discussed further.

7.15 After a brief discussion, the Sub-Committee agreed that there would be a need for a proposal to the Committee for a new unplanned output if future consideration of this matter was preferred. The delegation of China informed the Sub-Committee that they would consider submitting a proposal to the Committee.

7.16 The CIRM observer suggested that, since the term "PLB" was linked to Cospas-Sarsat beacons, it might be more appropriate to use the term AIS Man Overboard devices.

**Instructions for the Technical Working Group**

7.17 The Sub-Committee instructed the Technical Working Group, taking into account decisions of, and comments and proposals made in Plenary to:

- .1 consider and provide advice, as appropriate, on the proposal for the inclusion of the automatic transmission of radiotelephone station identification during operation of radio equipment in the VHF and MF/HF frequency bands (COMSAR 16/7); and
- .2 develop a suitable request to be forwarded to the NAV Sub-Committee inviting them:
  - .1 to consider the use of the AIS symbol for Man Overboard (MOB) and similar devices using AIS-SART technology; and
  - .2 to develop draft guidance to seafarers, to be further considered and finalized by COMSAR 17,

and submit its report on Thursday, 15 March 2012.

**Report of the Technical Working Group**

7.18 On receipt of the report of the Technical Working Group (COMSAR 16/WP.4, section 5), the Sub-Committee took action as summarized in the ensuing paragraphs.

7.19 The Sub-Committee noted the opinion that the proposal on automatic transmission of radiotelephone station identification should be considered by the Correspondence Group on the Review of the GMDSS, except for the technical solutions mentioned in the document.

7.20 The Sub-Committee agreed to forward to the NAV Sub-Committee the concerns regarding the difficulties arising in interpreting the AIS-SART symbol, along with the established text message SART ACTIVE, when used for Man Overboard (MOB) and similar devices using AIS-SART technology, and to request it to develop draft guidance to seafarers, to be further considered and finalized by COMSAR 17 (COMSAR 16/WP.4, paragraphs 5.4 and 5.5), subject to concurrence by the Committee.

7.21 The Sub-Committee noted the view of the Working Group that there was inconsistency between AIS-SART and radar-SART in SOLAS chapter IV, regulation 7.1.3, and annex IV of COLREG (COMSAR 16/WP.5, paragraph 5.6).

**Instructions for the SAR Working Group**

7.22 The Sub-Committee instructed the SAR Working Group, taking into account decisions of, and comments and proposals made in Plenary to consider document COMSAR 16/7/3, paragraphs 12 to 20, on Man Overboard (MOB) and similar devices using AIS-SART technology from an operational perspective and advice, as appropriate and submit its report on Wednesday, 14 March 2012.

**Report of the SAR Working Group**

7.23 On receipt of the report of the SAR Working Group (COMSAR 16/WP.3, section 5), the Sub-Committee took action as summarized in the ensuing paragraphs.

7.24 The Sub-Committee noted the deliberations of the Working Group and the SAR operational concerns on Man Overboard (MOB) and similar devices using AIS-SART technology (COMSAR 16/WP.3, paragraph 5.2).

7.25 Recognizing that it remained very important for the Sub-Committee to consider developments in maritime radiocommunication systems and technology and that further proposals might be submitted, it was decided to invite the Committee to extend the target completion year for this item to 2013, when discussing its biennial agenda under agenda item 14.