Report of 8th Meeting of IMO/ITU EG

Submitted by IHB

SUMMARY

Executive Summary: This document provides details of the outcomes of the 8th meeting of the IMO/ITU Experts Group on Maritime Radio Communications, which are relevant to WWNWS-SC

Action to be taken: Paragraph 2.

Related documents: COMSAR 17/4 dated 17 October 2012

1. See attached document.

2. The Sub-Committee is invited to note the information provided and take action as appropriate.

INTERNATIONAL MARITIME ORGANIZATION

E

SUB-COMMITTEE ON
RADIOCOMMUNICATIONS AND SEARCH
AND RESCUE
17th session
Agenda item 4

COMSAR 17/4
17 October 2012
Original: ENGLISH

ITU MARITIME RADIOCOMMUNICATION MATTERS

Report of the eighth meeting of the Joint IMO/ITU Experts Group on Maritime radiocommunication matters

Note by the Secretariat

SUMMARY

Executive summary:	This document contains in the annex the Report of the eighth meeting of the Joint IMO/ITU Experts Group on Maritime radiocommunication matters
Strategic direction:	1.1
High-level action:	1.1.2
Planned output:	1.1.2.12, 1.1.2.19
Action to be taken:	Paragraph 2
Related documents:	MSC 90/28; COMSAR 16/17; NAV 58/14; Circular letter No.3272 and documents as specified in the attached report (and available on IMODOCS)

Introduction

1 The report of the eighth meeting of the Joint IMO/ITU Experts Group on Maritime radiocommunication matters, held from 8 to 12 October 2012, at IMO Headquarters, is given in the annex.

Action requested of the Sub-Committee

2 The Sub-Committee is invited:

.1 to take the views of the Group, related to the development of a mandatory code for ships operating in polar waters, into account when considering this issue and inform DE 57, as appropriate (paragraphs 6 to 10);

.2 with regard to the review and modernization of the GMDSS to:

.1 note the discussion on General communications, including the proposed draft new SOLAS definition (paragraph 34);

.2 note the discussion on security related communications (paragraph 35);

.3 note the discussion on Maritime Safety Information (MSI) and that the SOLAS definition on MSI might need to be amended in the future to include security related requirements (paragraph 36);

.4 note that it is proposed that SOLAS chapter IV (Radiocommunications) be extended to include requirements for communications functions in addition to the GMDSS (paragraph 37);

.5 consider the proposal for a new set of functional requirements for radiocommunications in SOLAS chapter IV (paragraph 37);

.6 consider the proposal to maintain four priorities to be associated with voice messages and two priorities to control the radio link (paragraphs 39 and 40);

.7 note the opinion of the Group that certain specified services, systems and technologies should not form part of the international system (paragraph 42);

.8 note that more consideration was needed to decide which systems, relying on older or inefficient technologies, might be considered for replacement by more modern systems (paragraph 43);

.9 endorse the list of systems and technologies which might be included in the modernized GMDSS (paragraph 44);

.10 endorse the view of the Group that the existing Sea areas should be retained (paragraphs 47 and 48);

.11 consider the concept of a GMDSS Code (paragraphs 50 and 51);

.12 note the information provided regarding a possible alignment between chapters III, IV, V and XI-2 of SOLAS on arrangements with regard to type approval, secondary equipment and maintenance arrangements (paragraph 54); and

.13 endorse the view that the existing methodology of defining functional operational requirements followed by prescriptive equipment requirements was adequate (paragraph 56),

ANNEX

REPORT OF THE EIGHTH MEETING OF THE JOINT IMO/ITU EXPERTS GROUP ON MARITIME RADIOCOMMUNICATION MATTERS

BACKGROUND

1 The COMSAR Sub-Committee, at its sixteenth session (12 to 16 March 2012), endorsed the holding of the eighth meeting of the Joint IMO/ITU Experts Group on maritime radiocommunication matters, along with the Terms of Reference. The Maritime Safety Committee, at its ninetieth session (16 to 25 May 2012), authorized the convening of the eighth meeting of the Joint IMO/ITU Experts Group, to be held at the Organization's London Headquarters, from 8 to 12 October 2012.

GENERAL

2 The eighth meeting of the Joint IMO/ITU Experts Group on maritime radiocommunication matters (the Group) was held from 8 to 12 October 2012, at IMO Headquarters, under the chairmanship of Mr. K. Fisher (United Kingdom). The agenda for the meeting is set out at appendix 1.

3 The Experts Group was attended by delegations from the following Member Governments:

ARGENTINA
BAMAMAS
BULGARIA
CANADA
DENMARK
FINLAND
FRANCE
GERMANY
IRELAND
JAPAN
LATVIA
LIBERIA
NIGERIA
NORWAY
REPUBLIC OF KOREA
ROMANIA
SPAIN
SYRIAN ARAB REPUBLIC
UNITED KINGDOM
UNITED STATES

4 The meeting was also attended by representatives from the following United Nations specialized agency:

INTERNATIONAL TELECOMMUNICATION UNION (ITU)

and by observers from the following intergovernmental organizations:

MARITIME ORGANISATION FOR WEST AND CENTRAL AFRICA (MOWCA)
INTERNATIONAL MOBILE SATELLITE ORGANIZATION (IMSO)
EUROPEAN CONFERENCE OF POSTAL AND TELECOMMUNICATIONS ADMINISTRATIONS (CEPT)

and by observers from the following non-governmental organizations in consultative status:

COMITÉ INTERNATIONAL RADIO-MARITIME (CIRM)
INTERNATIONAL CHAMBER OF SHIPPING (ICS)

CONSIDERATION OF THE OUTCOME OF COMSAR 16, MSC 90, NAV 58 AND OTHER IMO BODIES, AS APPROPRIATE, INCLUDING CONSIDERATION OF THE RELEVANT PARTS OF THE DRAFT POLAR CODE (Agenda item 2)

5 The Group noted the information provided by the Secretariat on the outcome of COMSAR 16, MSC 90 and NAV 58 with regard to issues of relevance to the Group (IMO/ITU EG 8/2).

Development of a mandatory code for ships operating in polar waters

6 The Group noted that COMSAR 16 had invited the ICAO/IMO Joint Working Group on Search and Rescue and the Experts Group to consider the relevant parts of the draft Polar Code and provide advice to COMSAR 17. The Group further noted that the DE Sub-Committee had invited COMSAR 16 to consider chapter 10 of the draft Code, which related to the functional requirements of the communication equipment, with few prescriptive or performance requirements to define how these might be fulfilled, and chapter 8.3 for additional requirements for communications with life-saving equipment.

7 The Group considered document IMO/ITU EG 8/2/1 (Secretariat) containing in the annex the draft Polar Code. The Group further considered document IMO/ITU EG 8/2/3 (United States) proposing a review of the nine functional requirements of GMDSS for the Polar Regions. The Group noted that, with the increase in shipping density in the Polar regions, there was a need for improved general communication and reliable transmissions of distress and Maritime Safety Information (MSI) messages. It was noted that the purpose of the document was to review the nine GMDSS functional requirements, in light of the draft Polar Code, chapter 10, on telecommunication requirements.

8 After an extensive debate, the Group agreed to forward the following advice on the draft Polar Code for consideration by the COMSAR Sub-Committee:

.1 the Group noted that the Code was aimed to provide additional requirements or possibly amend the requirements;

.2 a concern was noted that this might instead result in deviating requirements from those already existing in the SOLAS Convention. In this regard it was noted that the current GMDSS requirements for Sea area A4 were to be kept as the baseline;

.3 the Group further noted that the technology currently available, namely HF communications, was suitable for use in Polar regions. Also Narrow Band Direct Printing (NBDP) had proven to be reliable, even in severe weather conditions;

.4 however, problems were noted with the diminishing amount of HF Coast Stations (HF CSs), lack of information on HF CSs, the fact that there was no central coordination regarding the operation of HF CSs and the absence of operational procedures;

.5 the Group noted in document IMO/ITU EG 8/2/3 that there is a lack of existing GMDSS satellite coverage in parts of the Polar regions;

.6 the Group noted that satellite systems were available to facilitate communications in the Polar regions, but that these systems were not recognized for use under the GMDSS in line with resolution A.1001(25);

.7 it was further noted that one of the main problems for complying with resolution A.1001(25) was that satellite systems did not provide broadcasting facilities and, therefore, could not provide Maritime Safety Information (MSI);

.8 regarding paragraphs 8.2.2 and 8.2.4.10 of the draft Code the Group noted that equipping every survival craft with dedicated equipment needed further consideration to establish the appropriate equipment needed on each type of survival craft. It was noted that liferafts were sealed units. In this regard, however, it was further noted that the current SOLAS requirements were for equipment to be taken from the ship into the lifesaving appliances;

Note:
The delegation of Spain noted that regarding paragraph 8.2.2.2, the Group could not provide information on the suitable design temperatures. Therefore, it must be taken into consideration that -30ºC ambient temperature could be surpassed (more extreme), and that with minimum design temperatures for some pieces of equipment such as EPIRB might not be operative. (See resolution A.812(19), annex, paragraph 2.6, ambient temperature between -20º C and 55ºC and after stowage temperature between -30ºC and 70ºC.);

.9 concerns were raised that a large number of distress alerting or locating devices being operated at the same time could overload certain radiocommunication systems;

.10 in paragraph 8.2.4.10, the Group noted that the term "distress signal" might not be appropriate and be replaced by "distress alerts";

.11 regarding 8.3.3 the Group noted that the term "tracked" needed a clear definition of what was intended;

.12 Regarding locating devices it was also noted that the requirement on the carriage of locating devices on board liferaft was currently 25 per cent of the liferaft on ro-ro passenger ships;

Note:
The delegation of Spain informed that as per SOLAS regulation III/26.2.5, liferafts carried on ro-ro passenger ships shall be fitted with a search and rescue locating device in the ratio of one search and rescue locating device for every four liferafts, which means a minimum of 25 per cent plus the required by regulation SOLAS regulation III/6.2.2.

.13 in considering the draft of chapter 10, the Group was of the view that the "alternative" text was preferable. The Group agreed that the current requirements for passenger ships to carry equipment to communicate with aircraft, should be extended to all ships operating in Polar Areas;

.14 the Group noted that the use of aeronautical frequencies should remain limited to the two VHF frequencies 121.5 MHz and 123.1 MHz, as currently mentioned in the SOLAS Convention and IMO Performance Standards;

.15 the Group further noted that no additional training requirements for ROC and/or GOC would be needed to be developed for the use of aeronautical frequencies;

.16 it was also noted that there was already guidance in IAMSAR Manual Volume III on this matter; and

.17 the Group noted that MSC.1/Circ.1184 on enhanced contingency planning guidance for passenger ships operating in areas remote from SAR facilities, specifies a 5-day "time to recover" parameter.

9 The Group recalled that COMSAR 16 had invited Member Governments and interested organizations to consider the matter in detail and submit comments and proposals to COMSAR 17.

10 The Group invited the COMSAR Sub-Committee to consider the views provided in the aforementioned paragraphs and inform DE 57, as appropriate.

REVIEW AND MODERNIZATION OF THE GMDSS (agenda item 4)

25 The Group noted that MSC 90 had agreed to include in the 2012-2013 biennial agenda of the COMSAR, NAV and STW Sub-Committees and provisional agendas for COMSAR 17 and STW 44 an unplanned output on "Review and modernization of the Global Maritime Distress and Safety System (GMDSS)", with a target completion year of 2017, assigning the COMSAR Sub-Committee as the coordinating organ.

26 The Group further noted the information provided by the Secretariat (IMO/ITU EG 8/4) containing the relevant part of the report of COMSAR 16 and the Work Plan for the Review and modernization of the GMDSS. It was noted that the Experts Group had been identified as a permanent advisory body throughout the process.

27 The Group also noted that MSC 90 had endorsed the terms of reference for the Correspondence Group on the Review of the GMDSS to enable intersessional work to be done between MSC 90 and COMSAR 17.

28 The Group considered the report of the Correspondence Group on the Review of the GMDSS (IMO/ITU EG 8/4/1) in parallel with the document submitted by France (IMO/ITU EG 8/4/2) and took action as summarized in the ensuing paragraphs.

29 The Group noted that in accordance with the Work Plan (COMSAR 16/17, annex 2), the project was to begin with a high-level review of the GMDSS. The Work Plan identified a minimum of 5 areas to be included in the high-level review:

.1 review of the existing nine functional requirements, including:

.1 the possible need for inclusion of security-related communications in the GMDSS; and

.2 the consideration of the possible need to develop a clearer definition of "General Communications", which is continuing to cause confusion, and consider if this category should be included within the requirements of the GMDSS;

.2 the need for the current order of priorities in use for radiocommunications;

.3 the future need for the four different areas of carriage requirements (sea areas A1 to A4), and Port State control procedures if sea areas are changed;

.4 the future need to allow for differences for certain categories of ships, including non-SOLAS ships; and

.5 whether distress communications should be separated from other types of communications and in consequence whether the arrangements in chapters in SOLAS could be revised (Note: chapter II, (part D – Electrical installations), chapter III (part B in several instances), chapter V in various instances including e-navigation applications).

30 It was noted that the Correspondence Group had proposed to bring two subjects, in the Work Plan listed for the detailed review, forward to the high-level review. These subjects were:

.1 possible alignment between chapters III, IV, V and XI-2 of SOLAS, in particular, with regard to type approval, secondary equipment and maintenance arrangements and their regulatory status (i.e. mandatory or discretionary); and

.2 assess whether to increase the use of goal-based methodologies when reviewing the regulations and regulatory framework for GMDSS in SOLAS chapters IV and V and the STCW Convention, to provide flexibility to allow the GMDSS to adapt to new and evolving technologies without major revision of the SOLAS and STCW Conventions in future.

31 Furthermore, the Correspondence Group had provided material for a review of existing systems relying on older or inefficient technology which might be considered for replacement by more modern systems, and new systems and technologies which might be included in the modernized GMDSS.

32 The Group considered the above-mentioned issues regarding the high-level review under the following headings:

.1 Review of the existing nine functional requirements;

.2 Order of priorities in use for radiocommunications;

.3 Review of existing systems considered for replacement, and existing and new systems and technologies for inclusion in the modernized GMDSS;

.4 Future need for the four different areas of carriage requirements;

.5 Future need to allow for differences for certain categories of ships, including non-SOLAS ships;

.6 Separation of distress communications from other types of communications;

.7 Possible alignment between chapters III, IV, V and XI-2 of SOLAS; and

.8 Assessment whether to increase the use of goal-based methodologies.

Review of the existing nine functional requirements

33 The Group noted that SOLAS regulation IV/4 provided the existing functional requirements for radiocommunications on board ships to which SOLAS chapter IV applied.

General communications

34 In considering the issue of General communications, the Group:

.1 noted the existing definition in SOLAS regulation IV/2.1.5, that general communications means operational and public correspondence traffic, other than distress, urgency and safety messages conducted by radio;

.2 noted that the (Government-owned) coast radio stations, which provided public correspondence facilities when the GMDSS was first designed, had now all largely closed down;

.3 noted that facilities for public correspondence were required. These communications were now being achieved using commercial services which were not normally associated with coast radio stations;

.4 was, therefore, of the view that the term "General communications" needed to be redefined;

.5 agreed on a new draft definition for general communications, as follows:

"general communications means operational traffic, other than distress conducted by radio";

.6 noted that under the definition of urgency and safety communications in article 33 of the Radio Regulations the following communications were included:

.1 navigational and meteorological warnings and urgent information;

.2 ship-to-ship safety of navigation communications;

.3 ship reporting communications;

.4 support communications for search and rescue operations;

.5 other urgency and safety messages; and

.6 communications relating to the navigation, movements and needs of ships and weather observation messages destined for an official meteorological service, and

.7 agreed, therefore, that the new definition for general communication in the GMDSS would enable all the above types of communication to be achieved using the facilities of the GMDSS which were given special protection by the Radio Regulations. However, public correspondence, using commercial services, would not be given special protection.

Security-related communications

35 In considering the issue of security-related communications the Group:

.1 noted that the requirements for maritime security were given in SOLAS chapter XI-2 and the Ship Security Alert System (SSAS) did not involve communication with other ships or with coast radio stations. Communications were addressed to a designated competent authority; and

.2 was, therefore, of the view that security-related communications should not be a functional requirement of the GMDSS but noted that there was a need for ships to be capable of security-related communications.

Maritime Safety Information

36 In considering the issue of Maritime Safety Information (MSI) the Group:

.1 noted the existing definition in SOLAS regulation IV/2/1/9, that maritime safety information means navigational and meteorological warnings, meteorological forecasts and other urgent safety-related messages broadcast to ships;

.2 noted that security-related requirements (in accordance with the requirements of the International Ship and Port Facility Security (ISPS) Code only) were already included in paragraph 4.2.2.17 of the Joint IMO/IHO/WMO Manual on Maritime Safety Information (MSI Manual), and that the SOLAS definition on MSI might need to be amended in the future;

.3 noted that the e-navigation gap-analysis had identified a need for machine-readable MSI, so that it could be readily displayed on navigational systems. It was further noted that current standards for NAVTEX and SafetyNet did not provide information that achieved this;

.4 was of the view that MSI was still very important for ships and should be retained as a functional requirement for the GMDSS. In order to achieve the machine-readable solution in the short term, there might be a need for communications that were not necessarily compatible with a functional requirement of the GMDSS; and

.5 noted that new operational, performance and technical standards would be required.

Conclusion

37 Following the above, the Group proposed that chapter IV (Radiocommunications) be extended to include requirements for communications functions in addition to the GMDSS, as follows below.
The new functional requirements for radiocommunications on board ships could be:

Regulation 4 [proposed revision]
Functional requirements

1 Every ship, while at sea, shall be capable:

.1 of performing the [Modernized] Global Maritime Distress and Safety System ([M]GMDSS) functions as follows:

.1 transmitting ship-to-shore distress alerts by at least two separate and independent means, each using a different radiocommunication service;

.2 of receiving shore-to-ship distress relay alerts;

.3 of transmitting and receiving ship-to-ship distress alerts;

.4 of transmitting and receiving search and rescue coordinating communications;

.5 of transmitting and receiving on-scene communications;

.6 of transmitting and receiving signals for locating;

.7 of receiving Maritime Safety Information (MSI);

.8 of transmitting and receiving general communications; and

.9 of transmitting and receiving bridge-to-bridge communications,

.2 of transmitting and receiving public correspondence to and from shore-based radio systems or networks; and

.3 of transmitting and receiving security-related communications, in accordance with the requirements of the International Ship and Port Facility Security Code.

Action requested of the Sub-Committee

38 The Sub-Committee is invited to:

.1 note the discussion on General communications, including the proposed draft new SOLAS definition;

.2 note the discussion on security related communications;

.3 note the discussion on Maritime Safety Information (MSI) and that the SOLAS definition on MSI might need to be amended in the future to include security-related requirements;

.4 note that it is proposed that SOLAS chapter IV (Radiocommunications) be extended to include requirements for communications functions in addition to the GMDSS; and

.5 consider the proposal for a new set of functional requirements for radiocommunications in SOLAS chapter IV.

Order of priorities in use for radiocommunications

39 The Group noted that Article 53 of the Radio Regulations provided the existing order of four levels of priority, as follows:

.1 Distress calls, distress messages, and distress traffic.

.2 Urgency communications.

.3 Safety communications.

.4 Other communications.

40 In considering this issue, the Group

.1 was of the opinion that for voice messages the existing four priorities were still required; and

.2 noted that, however, only two priorities were currently sufficient for controlling the radiocommunication link, for example using pre-emption.

Action requested of the Sub-Committee

41 The Sub-Committee is invited to consider the proposal to maintain:

.1 four priorities to be associated with voice messages; and

.2 two priorities to control the radio link.

Review of existing systems considered for replacement, and existing and new systems for inclusion in the modernized GMDSS

42 In considering this issue, the Group was of the opinion that mobile internet services, mobile telephone services, Broadband wireless access (BWA), e.g. Wimax/mesh networks wireless Local Area Networks and non-regulated Satellite Emergency Notification Devices (SENDs), although more and more used by the public, including non-SOLAS ships for alerting, were not the appropriate means and, therefore, should not form part of the international system.

43 The Group agreed that more consideration was needed to decide which systems, relying on older or inefficient technologies, might be considered for replacement by more modern systems.

44 The Group agreed that the following new equipment, systems and technologies, currently not included in GMDSS, might be included in the modernized GMDSS:

.1 AIS, including Satellite monitoring of AIS and additional AIS channels for identification but not alerting;
.2 HF e-mail and data systems;
.3 VHF data systems;
.4 Application Specific Messages over AIS or VHF data systems;
.5 NAVDAT;
.6 Modern satellite communication technologies;
.7 Additional GMDSS satellite service providers;
.8 Hand-held satellite telephones in survival craft;
.9 Hand-held VHF with DSC and GNSS for survival craft;
.10 Man Overboard Devices;
.11 Cospas-Sarsat MEOSAR system; and
.12 AIS and GNSS-equipped EPIRBs.

45 The delegation of France expressed its concern regarding the capacity of future radar technology to locate radar-SARTs. From an operational point of view, locating would be more effective by homing in on a relative bearing than geographical position.

Action requested of the Sub-Committee

46 The Sub-Committee is invited to:

.1 note the opinion of the Group that certain specified services, systems and technologies should not form part of the international system;

.2 note that more consideration was needed to decide which systems, relying on older or inefficient technologies, might be considered for replacement by more modern systems; and

.3 endorse the list of systems and technologies which might be included in the modernized GMDSS.

Future need for the four different areas of carriage requirements

47 The Group noted that SOLAS regulation IV/2 provided the existing Sea areas.

48 In considering this issue, the Group:

.1 noted that the equipment available for installation on board ships was invariably combined MF/HF transceivers which were suitable for use in Sea areas A2 and A3;

.2 further noted that still considerable use was made of MF voice communications and that, therefore, if Sea areas A2 and A3 were combined, MF should be retained;

.3 also noted that there were currently different maintenance requirements for Sea area A2 and A3;

.4 was, therefore, of the view that Sea areas A2 and A3 should be retained as separate areas;

.5 noted the extensive use made of VHF communications and, therefore, Sea area A1 should be retained;

.6 further noted that without a global satellite system recognized under the GMDSS, terrestrial radio was the only means of radiocommunication in Sea area A4;

.7 also noted that the duplication arrangements for Sea area A4 were currently more stringent than for Sea area A3;

.8 therefore, was of the opinion that Sea areas A3 and A4 should be retained separately; and

.9 was of the view that there was no need for further Sea areas to define the coverage areas of regional mobile satellite communication systems when recognized for use in the GMDSS in future.

Action requested of the Sub-Committee

49 The Sub-Committee is invited to endorse the view of the Group that the existing Sea areas should be retained.

Future need to allow for differences for certain categories of ships, including non-SOLAS ships

50 In considering this issue, the Group:

.1 noted that after WRC-07, the provisions of the Radio Regulations concerning the GMDSS applied to all ships of all types;

.2 further noted that SOLAS chapter IV currently had provisions limited to certain types of ships, which were then required to carry certain equipment;

.3 noted that the Organization had Codes (DSC, SPS, MODU and HSC Codes) containing requirements for carriage of radio equipment for certain other types of ships; and

.4 discussed possible ways of extending SOLAS chapter IV to apply to all ships and considered that the drafting of a Code for GMDSS could be a solution. The Code would be made a mandatory requirement for the ships subject to the SOLAS Convention. The Code would further serve as a recommendation and parts could be made a mandatory requirement for certain types of ships.

51 The delegation of Japan expressed the view that when discussing the application of fishing vessels, the requirements of the Cape Town Agreement of 2012 on the Implementation of the Provisions of the 1993 Protocol relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977 must be respected.

Action requested of the Sub-Committee

52 The Sub-Committee is invited to consider the concept of a GMDSS Code.

Separation of distress communications from other types of communications

53 The Group noted that there would be no need to include an extra chapter in the document outlining the outcome of the high-level review, on the Separation of distress communications from other types of communications, because the issue had been fully covered in discussing the Review of the existing nine functional requirements.

Possible alignment between chapters III, IV, V and XI-2 of SOLAS

54 In considering this issue, the Group:

.1 noted the different arrangements with regard to type approval, secondary equipment and maintenance arrangements and the regulatory status in SOLAS chapters II, IV, V and XI-2;

.2 noted that these arrangements would be retained for existing vessels, unless a revised GMDSS would have application to existing vessels and not be limited to new vessels;

.3 discussed type approval arrangements for different types of equipment and noted that Administrations had different arrangements for equipment installed on board SOLAS ships and non-SOLAS ships; and

.4 was of the view that it was premature to consider any change to the current arrangements before more detail of the review had been decided.

Action requested of the Sub-Committee

55 The Sub-Committee is invited to note the information provided regarding a possible alignment between chapters III, IV, V and XI-2 of SOLAS on arrangements with regard to type approval, secondary equipment and maintenance arrangements.

Assessment whether to increase the use of goal-based methodologies

56 In considering this issue, the Group:

.1 supported the concept of a goal-based approach to SOLAS chapter IV. However, with radio systems there was a need for interoperability and these required prescriptive requirements of the performance of equipment; and

.2 was of the view that the existing methodology of defining functional operational requirements followed by prescriptive equipment requirements was adequate.

Action requested of the Sub-Committee

57 The Sub-Committee is invited to endorse the view that the existing methodology of defining functional operational requirements followed by prescriptive equipment requirements was adequate.