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AND RESCUE
17th session
Agenda item 17

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DRAFT REPORT TO THE MARITIME SAFETY COMMITTEE

1 GENERAL

1.1 The Sub-Committee on Radiocommunications and Search and Rescue held its seventeenth session from 21 to 25 January 2013 under the Chairmanship of Mr. C. Salgado (Chile). The Vice-Chairman, Mr. Ringo Lakeman (the Netherlands), who was elected Vice-Chairman at the start of the meeting, as decided by COMSAR 16, was also present.

1.2 The session was attended by delegations and observers from Member Governments, international organizations and non-governmental organizations in consultative status as listed in document COMSAR 17/INF.1.

Secretary-General's opening address

1.3 The Secretary-General welcomed participants and delivered his opening address, the full text of which can be downloaded from the IMO website at the following link: <http://www.imo.org/MediaCentre/SecretaryGeneral/Secretary-GeneralsSpeechesToMeetings>.

Chairman's remarks

1.4 In responding, the Chairman thanked the Secretary-General for his words of guidance and encouragement and assured the Secretary-General that his advice and requests would be given every consideration in the deliberations of the Sub-Committee and its working groups.

Statement by delegations

1.5 The delegation of Venezuela (Bolivarian Republic of) informed the Sub-Committee of an ongoing Search and Rescue operation in the area of Los Roques Archipelago involving the disappearance of an aircraft with two Venezuelan crew members and four passengers of Italian nationality. The Venezuelan SAR Organization was in constant contact with the Italian authorities regarding the air and sea searches for the aircraft.

Adoption of the agenda and related matters

1.6 The Sub-Committee adopted the agenda (COMSAR 17/1), and agreed, in general, that the work of the Sub-Committee should be guided by the annotations to the provisional agenda and timetable (COMSAR 17/1/1, as amended). The agenda, as adopted, together with the list of documents considered under each agenda item, is set out in document COMSAR 17/INF.[...].

2 DECISIONS OF OTHER IMO BODIES

2.1 The Sub-Committee noted the decisions and comments pertaining to its work by FSI 20, MSC 90, C 108, NAV 58, C 109 and MSC 91 (COMSAR 17/2 and COMSAR 17/2/1) and took them into account in its deliberations under the relevant agenda items.

3 GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS)

REVIEW AND MODERNIZATION OF THE GMDSS

3.1 The Sub-Committee noted:

- .1 the outcome of MSC 90 (MSC 90/28, paragraphs 8.10 to 8.13);
- .2 that the Joint IMO/ITU Experts Group had considered the report of the Correspondence Group on the Review of the GMDSS and other submissions received and provided advice for consideration by the Sub-Committee as given in document COMSAR 17/4;
- .3 that the ICAO/IMO Joint Working Group on SAR had discussed the issues listed for the High level review and provided its views for consideration by the Sub-Committee as given in document COMSAR 17/6.

Report of the eighth meeting of the Joint IMO/ITU Experts Group

3.2 The Sub-Committee considered the relevant part of document COMSAR 17/4 (Secretariat) providing the report of the eighth meeting of the Joint IMO/ITU Experts Group

on Maritime Radiocommunication Matters, which took place from 8 to 12 October 2012, under the chairmanship of Mr. K. Fisher (United Kingdom) and decided to refer the issues related to the review of the GMDSS to the Technical Working Group for detailed consideration and to provide comments and advice.

Report of the nineteenth session of the ICAO/IMO Joint Working Group

3.3 The Sub-Committee further considered the relevant part of document COMSAR 17/6 (Secretariat) providing the report of the nineteenth session of the ICAO/IMO Joint Working Group on the Harmonization of Aeronautical and Maritime Search and Rescue, held in Hong Kong, China, from 10 to 14 September 2012, under the Chairmanship of Mr. D. Edwards (United States) and decided to refer the issue related to the review of the GMDSS to the Technical Working Group for detailed consideration and to provide comments and advice.

Overarching principles and their consequential corollaries

3.4 The Sub-Committee considered the proposal submitted by the United States (COMSAR 17/3/4) to consider certain overarching principles based upon lessons learned from the existing GMDSS and their consequential corollaries.

3.5 During the ensuing discussions, the following views were expressed:

- .1 the added value of considering certain overarching principles when performing the review and modernization of the GMDSS was acknowledged;
- .2 such principles should be absolutely unambiguous, realistic and achievable, and be supported by a vast majority of Contracting Governments and observers;
- .3 the relation between the proposed principles and the suggested corollaries was not always clear;
- .4 a review and establishment of such principles should be executed with care and within the generally agreed time frame in line with the Work Plan; and
- .5 the correspondence group could be tasked to further consider the matter.

3.6 After some discussion, the Sub-Committee referred the issue to the Technical Working Group for detailed consideration and to provide comments and advice.

Non-SOLAS ships such as domestic ships and fishing vessels

3.7 The Sub-Committee considered the views expressed by Japan (COMSAR 17/3/5) that existing radiocommunication systems, established in domestic regulation of each State, should be taken into account when reviewing the GMDSS. In this regard, the Sub-Committee noted the GMDSS requirements in the Cape Town Agreement of 2012 on the Implementation of the Provisions of the Torremolinos Protocol 1993 relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977, and the view of Japan that output of future discussion by the SLF Sub-Committee should also be respected.

3.8 After a brief discussion, the Sub-Committee, supporting the proposal by Japan, decided to refer the document to the Technical Working Group for detailed consideration and to provide comments and advice on how existing radiocommunication systems, established in domestic regulation of each State, should be taken into account when reviewing the GMDSS.

ESTABLISHMENT OF THE TECHNICAL WORKING GROUP

3.9 The Sub-Committee established the Technical Working Group under the Chairmanship of Mr. Alexander Schwarz (Germany) and instructed it, taking into account decisions of, and comments and proposals made in Plenary, to:

- .1 consider document COMSAR 17/4, annex, paragraphs 25 to 57, taking into account COMSAR 17/6, annex, section 7.3 and, in particular, provide comments and advice on:
 - .1 the proposed draft new SOLAS definition for General communications (COMSAR 17/4, paragraph 2.2.1);
 - .2 the need to amend the SOLAS definition on Maritime Safety Information (MSI) to include security related requirements (COMSAR 17/4, paragraph 2.2.3);
 - .3 the proposal for a new set of functional requirements for radiocommunications in SOLAS chapter IV (COMSAR 17/4, paragraph 2.2.5);

- .4 the proposal to maintain four priorities to be associated with voice messages and two priorities to control the radio link (COMSAR 17/4, paragraph 2.2.6);
 - .5 the view of the Experts Group on the specified services, systems and technologies which should not form part of the international system (COMSAR 17/4, paragraph 2.2.7);
 - .6 the list of systems and technologies which might be included in the modernized GMDSS (COMSAR 17/4, paragraph 2.2.9);
 - .7 the continued need to broadcast information to a large number of vessels at the same time, preferably using one single type of communication (COMSAR 17/6, annex, paragraph 7.3.2.5);
 - .8 the continued requirement to have a communication system by which many ships could follow communications between other ships, on-scene coordinator and RCC (COMSAR 17/6, annex, paragraph 7.3.2.6);
 - .9 the view of the Experts Group that the existing sea areas should be retained (COMSAR 17/4, paragraph 2.2.10);
 - .10 the need to take non-SOLAS ships into account when reviewing the GMDSS (COMSAR 17/6, annex, paragraph 7.3.2.8);
 - .11 the concept of a GMDSS Code (COMSAR 17/4, paragraph 2.2.11); and
 - .12 the view of the Experts Group that the existing methodology of defining functional operational requirements followed by prescriptive equipment requirements was adequate (COMSAR 17/4, paragraph 2.2.13);
- .2 consider document COMSAR 17/3/4 (United States) and provide comments and advice on the proposed overarching principles and their consequential corollaries;

- .3 consider document COMSAR 17/3/5 (Japan) and provide advice on how existing radiocommunication systems, established in domestic regulation of each State, should be taken into account when reviewing the GMDSS;
- .4 prepare a first draft of the document containing the outcome of the High-level review of the GMDSS, clearly identifying issues which need further consideration by and advice from the correspondence group and the Joint IMO/ITU Experts Group;
- .5 prepare draft terms of reference for the Correspondence Group on the Review of the GMDSS for the intersessional work to be done between COMSAR 17 and the next session of the Sub-Committee, reporting to meetings of the Joint IMO/ITU Experts Group, as appropriate,

and submit its report on Thursday, 24 January 2013.

Report of the Technical Working Group

[3.10 On receipt of the report of the Technical Working Group (COMSAR 17/WP.4/Add.1), the Sub-Committee established the Correspondence Group on the Review of the GMDSS, under the coordination of the United States*, approved its terms of reference, as set out in annex [...], and invited the Committee to endorse the above action.]

FURTHER DEVELOPMENT OF THE GMDSS MASTER PLAN ON SHORE-BASED FACILITIES

3.11 The Sub-Committee noted the information provided by the Secretariat on amendments to the GMDSS Master Plan as circulated by GMDSS/Circ.14 on 18 December 2012.

Revision of annex 7 of MSC.1/Circ.1382/Rev.1

3.12 The Sub-Committee briefly considered the proposal of IHO (COMSAR 17/3/1) on amendments to annex 7 of MSC.1/Circ.1382/Rev.1 containing the Questionnaire on Shore-based Facilities for the GMDSS and decided to refer the document to the Technical Working Group for detailed consideration and the preparation of a revision of annex 7 of MSC.1/Circ.1382/Rev.1.

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Instructions for the Technical Working Group

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

- .1 consider document COMSAR 17/3/1 and prepare a revision of annex 7 of MSC.1/Circ.1382/Rev.1,

and submit its report on Thursday, 24 January 2013.

Report of the Technical Working Group

[3.14 On receipt of the report of the Technical Working Group (COMSAR 17/WP.4, paragraph 3.1), the Sub-Committee instructed the Secretariat to prepare a revised annex 7 of MSC.1/Circ.1382/Rev.1, for approval by MSC 92.]

CONSIDERATION OF OPERATIONAL AND TECHNICAL COORDINATION PROVISIONS OF MARITIME SAFETY INFORMATION (MSI) SERVICES, INCLUDING REVIEW OF THE RELATED DOCUMENTS

International NAVTEX Coordinating Panel

3.15 The Sub-Committee noted with appreciation the report of the Chairman of the IMO NAVTEX Coordinating Panel (COMSAR 17/3/2) providing a summary of the current issues being addressed by the IMO International NAVTEX Coordinating Panel and its actions/activities since COMSAR 16.

Outcome of the fourth session of the IHO World-Wide Navigational Warnings Service Sub-Committee (WWNWS)

3.16 In considering document COMSAR 17/3/3 (IHO), the Sub-Committee noted with appreciation the matters discussed and decisions taken at the fourth session of the IHO WWNWS Sub-Committee which was held from 24 to 28 September 2012.

Review of resolutions A.705(17) and A.706(17), as amended

3.17 The Sub-Committee recalled that, following the completion of the holistic review of all World-Wide Navigational Warning Service documentation, the IHO WWNWS Sub-Committee had noted the need for further amendments to the previously revised documents in order to ensure consistency of terminology and guidance.

3.18 The Sub-Committee considered document COMSAR 17/3 (IHO and WMO) proposing draft amendments to resolutions A.705(17) and A.706(17), as amended by

MSC.1/Circ.1287 and MSC.1/Circ.1288, respectively, and decided to refer the document to the Technical Working Group for detailed consideration and to prepare associated amended draft MSC circulars.

Instructions for the Technical Working Group

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

- .1 consider document COMSAR 17/3 on the proposed draft amendments to resolutions A.705(17) and A.706(17), as amended, and prepare associated amended draft MSC circulars for approval by the Committee,

and submit its report on Thursday, 24 January 2013.

Report of the Technical Working Group

[3.20 On receipt of the report of the Technical Working Group (COMSAR 17/WP.4, paragraph 3.2, and annexes 2 and 3), the Sub-Committee instructed the Secretariat to prepare revised draft MSC circulars on amendments to resolutions A.705(17) and A.706(17), as amended, for approval by MSC 92.]

4 ITU MARITIME RADIOCOMMUNICATION MATTERS

CONSIDERATION OF RADIOCOMMUNICATION ITU-R STUDY GROUP MATTERS

4.1 The Sub-Committee noted the outcome of NAV 58 (NAV 58/14, paragraphs 5.3 to 5.5 and 5.15).

4.2 The Sub-Committee further noted the outcome of ITU-R's Working Party 5B meeting of November 2012 (COMSAR 17/4/2, paragraphs 5 to 18).

CONSIDERATION OF ITU WORLD RADIOCOMMUNICATION CONFERENCE MATTERS

4.3 The Sub-Committee noted the outcome of NAV 58 (NAV 58/14, paragraphs 5.6, 5.7 and 5.16 to 5.18), in relation to the preparation for WRC-15.

Report of the eighth meeting of the Joint IMO/ITU Experts Group

4.4 The Sub-Committee decided to refer the relevant issues contained in the report of the Experts Group (COMSAR 17/4) to the Technical Working Group for detailed consideration and advice.

Outcome of ITU-R's Working Party 5B meeting of November 2012

4.5 The Sub-Committee decided to refer the relevant issues (COMSAR 17/4/2, paragraphs 19 to 27) to the Technical Working Group for consideration when considering and finalizing the Preliminary draft IMO position on WRC-15 agenda items.

Provisions relating to Earth Stations located on board vessels

4.6 The Sub-Committee considered document COMSAR 17/4/1 (United States) related to earth stations located on board vessels (ESVs) and noted that the needs of shipping should be taken into account when reconsidering the regulatory limits of the use of Ku- and C-band ESVs, in preparation of and at WRC15.

4.7 After a brief discussion, the Sub-Committee decided to refer the document to the Technical Working Group for detailed consideration and the preparation of a liaison statement to ITU.

WRC-15 agenda item 1.16

Necessity for additional frequencies for AIS

4.8 The Sub-Committee, having considered the information provided by Japan (COMSAR 17/4/3) on the necessity for additional frequencies for AIS and inviting the Sub-Committee to encourage other AIS authorities of Member Governments to submit the VDL situation in their country to ITU-R Working Party 5B, decided to refer the issue to the Technical Working Group for consideration when considering and finalising the Preliminary draft IMO position on WRC-15 agenda items.

A satellite VDE segment as part of the future VHF Data Exchange

4.9 The Sub-Committee noted with appreciation the information provided by ESA (COMSAR 17/INF.7) regarding a possible satellite VDE downlink complement as part of the emerging VDE (VHF Data Exchange) that was discussed within WRC-15, agenda item 1.16.

Instructions for the Technical Working Group

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

- .1 consider document COMSAR 17/4 (Secretariat), paragraphs 58 to 97 and appendices 2 and 3 of the annex, and

- .1 provide advice regarding the consequences and action to be taken following the amendments made by WRC-12 to resolution 349 (Rev.WRC-12), the result of which is that it is now no longer in line with IMO's guidance on this matter as provided in resolution A.814(19) (COMSAR 17/4, paragraph 2.3);
 - .2 consider and finalize the draft COMSAR circular on *Guidance on the validity of radiocommunications equipment installed and used on ships* (COMSAR 17/4, paragraph 2.4 and appendix 2);
 - .3 consider and finalize the Preliminary draft IMO position on WRC-15 agenda items concerning matters relating to maritime services, taking into account the relevant parts of document COMSAR 17/4/2 and COMSAR 17/4/3, and prepare relevant liaison statements to responsible groups in ITU-R, as appropriate (COMSAR 17/4, paragraphs 2.5 and appendix 3);
 - .4 consider the need to instruct the ICAO/IMO Joint Working Group on SAR to consider the matter of broadband public protection and disaster relief (PPDR) in relation to the development of a draft IMO position on WRC-15, agenda item 1.3 and to provide appropriate advise (COMSAR 17/4, paragraphs 2.6);
 - .5 advise on the need for holding the 9th meeting of the Joint IMO/ITU Experts Group, provisionally scheduled to take place from 14 to 18 October 2013, at IMO Headquarters in London and on its terms of reference (COMSAR 17/4, paragraphs 2.8);
 - .6 consider the schedule to prepare for WRC-15 and advice on the arrangements needed, in order to meet the deadlines for the preparation of WRC-15 (COMSAR 17/4, paragraphs 2.7); and
- .2 consider document COMSAR 17/4/1 (United States) regarding WRC 15, agenda item 1.8 on the review of the provisions relating to earth stations located on board vessels and prepare a liaison statement to ITU,

and submit its report on Thursday, 24 January 2013.

[Report of the Technical Working Group

4.11 On receipt of the report of the Technical Working Group (COMSAR 17/WP.4, section 4), the Sub-Committee took action as summarized in the ensuing paragraphs.

4.12 The Sub-Committee instructed the ICAO/IMO Joint Working Group to consider:

- .1 the difficulty of switching off the EPIRB for a user, and the preferred cancellation procedure in case of an accidentally activated EPIRB; and
- .2 in relation to the preparation of the draft IMO position on relevant agenda items for WRC-15, the matter of broadband public protection and disaster relief (PPDR).

4.13 The Sub-Committee endorsed:

- .1 the draft MSC circular on *Guidance on the validity of radiocommunications equipment installed and used on ships*, as set out in annex [...], for approval by MSC 92; and
- .2 the holding of the ninth meeting of the Joint IMO/ITU Experts Group on Maritime Radiocommunication Matters at IMO Headquarters in London, from 14 to 18 October 2013, along with the terms of reference set out in COMSAR 17/WP.4, annex 8, and invited the Committee to authorize this intersessional meeting.

4.14 The Sub-Committee approved the preliminary draft IMO position on WRC-15, as set out in COMSAR 17/WP.4, annex 5, with a view to further developing it at the next meeting of the Joint IMO/ITU Experts Group.

4.15 The Sub-Committee approved:

- .1 the draft liaison statement to ITU-R WP 5A, 5B, 5D and Joint Task Group 4-5-6-7 on "IMO's concerns in relation to the wide range of frequency bands identified by ITU-R for future assessment of the suitability for IMT" as set out in annex [...]; and
- .2 the draft liaison statement to ITU-R WP 4A and CIRM on "Matters Related to WRC-15 Agenda item 1.8", as set out in annex [...],

and instructed the Secretariat to send these liaison statements to ITU and to ITU and CIRM, respectively, and invited the Committee to endorse this action.

4.16 In order to meet the WRC-15 deadlines, the Sub-Committee invited the Committee to authorize the holding of a meeting of the Joint IMO/ITU Experts Group during September 2014, and, if the schedule of Sub-Committee meetings so required, earlier in the year, before the last relevant meeting of ITU-R WP5B in May 2014.]

5 CONSIDERATION OF DEVELOPMENTS IN INMARSAT AND COSPAS-SARSAT

COSPAS-SARSAT SERVICES

5.1 The Sub-Committee briefly considered document COMSAR 17/5 (Cospas-Sarsat) containing a liaison statement from Cospas-Sarsat to IMO and ICAO, with regard to non-original equipment batteries being sold for use in Cospas-Sarsat type-approved 406-MHz EPIRBs. The Sub-Committee acknowledged the need to solve the problem and referred the issue to the SAR Working Group, for detailed consideration and advice.

5.2 The Sub-Committee further considered document COMSAR 17/5/2 (Cospas-Sarsat) highlighting work within the International Cospas-Sarsat Programme during the past year related to system enhancements, particularly specifications for next generation ("second generation") beacons and MEOSAR development, and the results of Cospas-Sarsat discussions on other matters of interest to the Sub-Committee.

5.3 During the ensuing discussions, regarding the beacon coding system the Sub-Committee noted that:

- .1 not all the advantages and disadvantages of the newly developed system had been worked out by Cospas-Sarsat and that the matter had not matured sufficiently to be considered by the Sub-Committee; and
- .2 experience with the current coding scheme was satisfactory and should be continued within the existing system.

5.4 The Sub-Committee decided to refer the issues mentioned in document COMSAR 17/5/2 to the SAR Working Group, for detailed consideration and advice.

5.5 The Sub-Committee noted with appreciation a status report on the Cospas-Sarsat System (COMSAR 17/5/3), including System operations, space and ground segments, beacons, false alerts and results of MCC-SPOC communication tests.

Review of performance standards for EPIRBs

5.6 The Sub-Committee considered the proposal of the United States (COMSAR 17/5/4) to consider reviewing the performance standards for 406 MHz EPIRBs (resolution A.810(19)) and provide advice to Cospas-Sarsat as it continues to finalize requirements of the second-generation distress beacon.

5.7 In this context, the Sub-Committee recalled that it had recently had a work programme item *Revision of Performance Standards for float-free satellite EPIRBs operating on 406 MHz* (resolution A.810(19)) and that the views, as expressed at COMSAR 14 and COMSAR 15, were too far apart to enable an agreement for revised performance standards for 406 MHz EPIRBs to be reached in the foreseeable future. After a brief discussion, the Sub-Committee agreed to refer to the SAR Working Group the proposal to consider, taking into account the outcome of COMSAR 15, whether the views had changed over the past two years and if an agreement could be reached on revised performance standards for 406 MHz EPIRBs, and to advise on the way forward, as appropriate.

5.8 The Cospas-Sarsat observer explained that the operational requirements for the second generation beacons were developed to meet the existing IMO and ICAO standards and that it was expected that manufacturers would soon start to produce the beacons in order to bring them into operation from 2015. Furthermore, manufacturers could take any additional guidance from the Organization into account at the development stage.

5.9 Noting that the revision of resolution A.810(19) would require a new unplanned output and that the main concern was to consider issues affecting the battery life of EPIRBs, the Sub-Committee decided to instruct the SAR Working Group to consider the development of a recommendation on those issues, with the aim of advising Cospas-Sarsat on this specific matter to assist them in developing the second generation 406 MHz distress beacon requirements.

INMARSAT SERVICES

5.10 The Sub-Committee noted with appreciation the information provided by IMSO (COMSAR 17/5/1) on the analysis and assessment of the performance by Inmarsat Global Limited of the Company's obligations for the provision of maritime services within the GMDSS, as overseen by IMSO for the period from 1 November 2011 to 31 October 2012. The Sub-Committee agreed that, during this period, Inmarsat had continued to provide sufficient quality of service to meet its obligations under the GMDSS.

The Inmarsat Maritime Safety Voice Service on FleetBroadband 500

5.11 The Sub-Committee noted with appreciation the information provided by Australia et al. (COMSAR 17/INF.8) on the Inmarsat Maritime Safety Voice Service which provided voice communications with distress, urgency, safety and routine priorities on FleetBroadband FB500.

ESTABLISHMENT OF THE SAR WORKING GROUP

5.12 The Sub-Committee established the SAR Working Group under the chairmanship of Mr. Nigel Clifford (New Zealand) and instructed it, taking into account decisions of, and comments and proposals made in Plenary, to consider:

- .1 document COMSAR 17/5 (Secretariat) on non-original equipment batteries being sold for use in Cospas-Sarsat type-approved 406-MHz EPIRBs and provide comments and advice, as appropriate;
- .2 document COMSAR 17/5/2 (Cospas-Sarsat) and provide advice on issues of interest to SAR providers and beacon coding methods; and
- .3 the development of a recommendation on issues affecting the battery life of EPIRBs, with the aim of advising Cospas-Sarsat on this specific matter to assist them in developing the second-generation 406 MHz distress beacon requirements, taking into account information contained in document COMSAR 17/5/4 (United States),

and submit its report on Thursday, 24 January 2013.

[Report of the SAR Working Group

5.13 On receipt of the report of the SAR Working Group (COMSAR 17/WP.3, section 3), the Sub-Committee took action as summarized in the ensuing paragraphs.

5.14 The Sub-Committee invited:

- .1 Member Governments to take note of the issue of non-original equipment batteries being sold for use in Cospas-Sarsat type-approved 406-MHz EPIRBs and potentially develop additional national measures to address the matter; and

- .2 Cospas-Sarsat to explore engineering trade-offs which minimised energy expenditure and maximized battery service life.

5.15 The Sub-Committee encouraged Member Governments to make detailed input on beacon coding methods to the Cospas-Sarsat technical meetings.

5.16 The Sub-Committee endorsed the Group's recommendation that:

- .1 a simplified beacon coding system for next generation beacons should include potential use of the country code, TAC number and a serial number as a beacon unique id, provided that provision is also made for transmission of the MMSI number; and
- .2 any beacon coding system should provide reliable, accurate, timely and complete information to SAR authorities.]

6 SEARCH AND RESCUE (SAR)

DEVELOPMENT OF GUIDELINES ON HARMONIZED AERONAUTICAL AND MARITIME SEARCH AND RESCUE PROCEDURES, INCLUDING SAR TRAINING MATTERS

6.1 The Sub-Committee noted that, as requested by COMSAR 16, MSC 90 had extended the target completion year for the planned output on the "Development of guidelines on harmonized aeronautical and maritime search and rescue procedures, including SAR training matters" to 2013.

Nineteenth session of the ICAO/IMO Joint Working Group on the Harmonization of Aeronautical and Maritime SAR

6.2 The Sub-Committee noted that, as agreed by COMSAR 16 and endorsed by MSC 90, the nineteenth session of the ICAO/IMO Joint Working Group (JWG) on the Harmonization of Aeronautical and Maritime Search and Rescue was held in Hong Kong, China, from 10 to 14 September 2012.

6.3 The Sub-Committee briefly considered document COMSAR 17/6 (Secretariat), containing the report of the JWG and noted:

- .1 the discussion on Distress Vessel Classification for First SAR Actions, "Vessel Triage" and Maritime SAR Mission Risk Survey System (for Vessel Accident) (section 3.4 of the annex);

- .2 issues related to IMRF's conference on maritime mass rescue operations, held in Gothenburg, Sweden, from 3 to 5 June 2012 (section 4.2 of the annex);
- .3 the discussion on Smartphone and Other Computer Device SAR Applications (section 4.5 of the annex);
- .4 the follow-up with regard to the final report on the crash of Air France 447 on 1 June 2009 (section 5.1 of the annex);
- .5 the information provided on the Operational Management System for the United Kingdom Coastguard Service MRCC system (section 5.2 of the annex); and
- .6 issues related to developments in Cospas-Sarsat (sections 7.4 and 7.5 of the annex).

6.4 The Sub-Committee decided to refer the action items mentioned in paragraphs 2.1, 2.8, 2.9, 2.11, 2.18, 2.19, 2.23 and 2.24 of document COMSAR 17/6 to the SAR Working Group for detailed consideration.

6.5 The delegation of South Africa expressed the view that, taking into account the fact that since its formation SAR expertise had grown and spread in all the major regions of the world, the membership of the JWG would need to be reconsidered by the Committee. The implementation of Florence Conference resolution No.1 was part testimony of this achievement. In this context, South Africa was of the view that it was now appropriate to consider broadening the membership to include additional experts from countries of Africa whose experts were currently participating as observers in meetings of the JWG. Full membership would allow Member Governments to budget for participation in future meetings.

Mass Rescue Operations

6.6 The Sub-Committee noted with appreciation the information provided by the IMRF (COMSAR 17/INF.3) containing the report on the conclusions of an international conference on mass rescue at sea held near Gothenburg, Sweden, from 3 to 5 June 2012, and outlining how the IMRF's project on mass rescue operations would proceed.

6.7 The Sub-Committee further noted with appreciation the information provided by the United States (COMSAR 17/INF.5) on initiatives related to mass rescue operations (MROs) and, in particular, the planned Black Swan offshore mass rescue exercise involving a passenger ship.

FURTHER DEVELOPMENT OF THE GLOBAL SAR PLAN FOR THE PROVISION OF MARITIME SAR SERVICES, INCLUDING PROCEDURES FOR ROUTEING DISTRESS INFORMATION IN THE GMDSS

Global SAR Plan

6.8 The Sub-Committee noted the information provided by the Secretariat on amendments to the Global SAR Plan as circulated by SAR.8/Circ.4 on 1 December 2012.

6.9 The Sub-Committee further noted that MSC 91 had approved COMSAR.1/Circ.55 on *Guidance for entering and updating information on search and rescue into GISIS* and on how to get access to the information for operational use. Furthermore, the Sub-Committee also noted that access had been made available for Member Governments to enter and update information on SAR services directly into GISIS from 1 December 2012. Direct access to updated information on SAR services (on a "read-alone" basis) had also been made available to interested parties, including the general public.

6.10 The Sub-Committee also noted that the SAR.8 circular would no longer be circulated. Accordingly, the Sub-Committee encouraged Member Governments to check the available information in GISIS and update the information, as appropriate.

Establishment of MRCCs in Central America

6.11 The Sub-Committee recalled the information provided at COMSAR 16 on the establishment of MRCCs in Central America (COMSAR 16/17, paragraphs 6.13 to 6.15).

6.12 The Sub-Committee noted that MSC 90 had agreed to move the technical co-operation project forward with the aim of establishing MRCCs in all seven countries and to establish a SAR organization for Central America in which the individual countries would cooperate with their neighbouring countries.

6.13 The Sub-Committee further noted that a second SAR regional meeting on the development of a multilateral agreement for the Central American region had been held in Managua, Nicaragua, from 22 to 26 October 2012.

Report on the Fourteenth Combined Antarctic Naval Patrol, 2011-2012

6.14 The Sub-Committee noted with appreciation the information provided by Argentina and Chile (COMSAR 17/6/1) on the activities of the fourteenth combined Antarctic naval patrol carried out during the southern hemisphere summer of 2011/2012 by Argentina and Chile with the aim of enhancing maritime safety and environmental protection on the Antarctic continent.

The Arctic Council

6.15 The delegation of Norway informed the Sub-Committee that, after endorsement by all Member States of the Arctic Council, the Agreement on Cooperation in Aeronautical and Maritime Search and Rescue in the Arctic took effect on 19 January 2013. The agreement was between the eight Member States of the Arctic Council, namely Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States. The agreement established a commitment to cooperate in rescue operations, including improved regional organization of search and rescue in the Arctic. Strengthening rescue cooperation was essential for optimal utilization of resources in this area, which is characterized by long distances and harsh climate.

Training courses delivered by the Malta Search and Rescue Training Centre

6.16 The delegation of Malta provided information on the training courses related to maritime search and rescue delivered by the Malta Search and Rescue Training Centre over the one-year period October 2011 to October 2012. A copy of their statement is provided in annex [...].

Report of the 9th Black Sea Conference on SAR and GMDSS

6.17 The delegation of Ukraine provided information on the outcome of the 9th Black Sea Conference on SAR and GMDSS, which was held in Odessa, Ukraine, on 25 and 26 September 2012. A copy of their statement is provided in annex [...].

Draft revision of SAR.7/Circ.10 – List of IMO documents and publications which should be held by a Maritime Rescue Coordination Centre (MRCC)

6.18 The Sub-Committee briefly considered document COMSAR 17/6/2, containing a proposed update of the list of IMO documents and publications which should be held by an MRCC, and referred the issue to the SAR Working Group for detailed consideration and preparation of the revised SAR.7 circular.

Alignment of MSC.1/Circ.1182 – Guide to Recovery Techniques

6.19 The Sub-Committee considered the proposal by Iceland and the IMRF (COMSAR 17/6/3) on alignment of MSC.1/Circ.1182 on the *Guide to Recovery Techniques*, in view of the adoption of new SOLAS regulation III/17.1, which required all ships to have ship-specific plans and procedures for recovery of persons from the water, taking into account the guidelines developed by the Organization.

6.20 In this context, the Sub-Committee noted that MSC 91 had adopted new SOLAS regulation III/17.1 (resolution MSC.338(91)) and approved MSC.1/Circ.1447 on *Guidelines for the development of plans and procedures for recovery of persons from the water*. The Sub-Committee further noted that these new Guidelines should be read in conjunction with the *Guide to recovery techniques* (MSC.1/Circ.1182) and the revised *Guide for cold water survival* (MSC.1/Circ.1185/Rev.1) approved by MSC 91.

6.21 After some discussion, the Sub-Committee agreed that it would be beneficial if a written proposal for editorial changes was provided for consideration by a Working Group. Accordingly, the Sub-Committee invited Iceland and the IMRF to forward a proposal for editorial changes on MSC.1/Circ.1182 to the next session of the JWG and instructed the JWG to consider the matter and provide advice for consideration by the next session of the Sub-Committee.

Instructions for the SAR Working Group

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

- .1 consider and advise regarding paragraphs 2.1, 2.8, 2.9, 2.11, 2.18 and 2.19 of document COMSAR 17/6, and in particular to consider:
 - .1 encouraging Member Governments to make SAR experts available to participate at meetings of ICAO regional offices;
 - .2 providing the Antarctic Treaty Consultative Meeting (ATCM) with advice on the way ahead for the ATCM to make best use of its one full day special working group on SAR on 23 May 2013;
 - .3 encouraging Member Governments to consider the ATCM request to "include relevant experts on SAR in addition to national

Antarctic programme personnel in their delegations participating in the special working group" (section 3.3 of the annex);

- .4 finalizing the draft COMSAR circular containing guidance on the use of the graph at figure N.14, as contained in appendix N of IAMSAR Manual, Volume II, for approval by MSC 92 with the aim of having it distributed at the same time that the 2013 edition of the IAMSAR Manual is published; and
- .5 preparing advice for Cospas-Sarsat on IMO's view on the future implementation of type-2 acknowledgments, type-2 messaging and beacon manipulation, taking into account document COMSAR 17/5/2 and also the development of alternative RLS systems, as appropriate;
- .2 consider document COMSAR 17/6/2, containing the proposed update of the list of IMO documents and publications which should be held by an MRCC and prepare the draft revised SAR.7 circular;
- .3 provide proper justification, should there be a need for extension of the target completion year of the biennial agenda item "Development of guidelines on harmonized aeronautical and maritime search and rescue procedures, including SAR training matters" to 2014,

and submit its report on Thursday, 24 January 2013.

[Report of the SAR Working Group

6.23 On receipt of the report of the SAR Working Group (COMSAR 17/WP.3, section 4), the Sub-Committee took action as summarized in the ensuing paragraphs.

6.24 The Sub-Committee requested Member Governments to make SAR experts available for participation at meetings of ICAO regional offices to promote the harmonization of maritime and aeronautical search and rescue.

6.25 The Sub-Committee encouraged Member Governments with SAR interests in the Antarctic region to include relevant SAR experts in their delegations attending sessions of the Antarctic Treaty Consultative Meeting (ATCM).

6.26 The Sub-Committee endorsed the draft COMSAR circular on guidance on the use of the graph in figure N.14, appendix N of IAMSAR Manual, Volume II, and invited the Committee to approve it.

6.27 The Sub-Committee agreed to advise Cospas-Sarsat of IMO's view on the future implementation of type-2 acknowledgements, type-2 messaging and beacon manipulation as follows:

- .1 the current proposals for type-2 acknowledgements (acknowledgements from the RCC to the beacon) were not supported;
- .2 the current proposals for two-way messaging under the currently developed specifications were not supported;
- .3 the current proposals to have functionality for manipulating Distress Beacon Operating Characteristics were not supported; and
- .4 the exploration of two-way technology was worthy of future detailed study.

6.28 The Sub-Committee instructed the Secretariat to:

- .1 add a column to the SAR.7 circular showing the list of IMO documents and publications which should be held by an MRCC, stating where the documents were available and whether the documents were free to download or had to be purchased; and
- .2 circulate SAR.7/Circ.11 on the list of IMO documents and publications which should be held by an MRCC and invited the Committee to endorse the action taken.

6.29 The Sub-Committee invited the Committee to extend the target completion year for the work programme item "Development of guidelines on harmonized aeronautical and maritime search and rescue procedures, including SAR training matters" to 2014.]

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 noted that based on the request of COMSAR 16, the Committee had extended the target completion year for this item to 2013.

Man Overboard (MOB) and similar devices using AIS-SART technology

7.3 The Sub-Committee recalled that COMSAR 16 had considered the issue of developments in Man Overboard (MOB) and similar devices using AIS-SART technology (COMSAR 16/17, paragraphs 7.9 to 7.12 and 7.20 to 7.24) and noted that MSC 90 had requested NAV 58 to develop draft guidance to seafarers.

7.4 The Sub-Committee considered document COMSAR 17/7 (Secretariat) containing a draft SN circular prepared by NAV 58, providing information to seafarers on the display of AIS-SART, AIS Man Overboard (MOB) and EPIRB-AIS devices, for further consideration and finalization by the Sub-Committee.

7.5 The Sub-Committee further considered the information provided by the Secretariat (COMSAR 17/7/1) that NAV 58, in considering the information to be provided to seafarers in the aforementioned draft SN circular, was of the view that the development of further guidance material for Administrations would be of benefit, and therefore invited the Sub-Committee to consider the development of further guidance material for Administrations on the use of devices using AIS technology.

7.6 The delegation of Australia, supported by Sweden, expressed its concern regarding the advice provided by MSC 91 to manufacturers, to affix product labels to the AIS-SART, EPIRB-AIS and AIS Man Overboard (MOB) equipment, indicating that these AIS devices must be regarded as location aids in emergency situations and not as distress alert systems. They were of the view that this could lead to confusion, in particular, in the case of EPIRB-AIS.

7.7 In this context, the Sub-Committee noted that the ICAO/IMO Joint Working Group on SAR (JWG) had also considered the issue (COMSAR 17/6, paragraphs 4.4.1 to 4.4.7) and was of the view that advice and guidance should be developed and made available on search planning and coverage procedures and processes to be carried out, if required.

7.8 After some discussion, the Sub-Committee decided to refer the issue to the SAR Working Group, as well as the Technical Working Group.

Instructions for the SAR Working Group

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

- .1 as a matter of priority, consider documents COMSAR 17/7 and COMSAR 17/7/1 and provide, as soon as possible, the Technical Working Group with relevant advice from the SAR point of view; and
- .2 consider the need for the development of advice and guidance on search planning and coverage procedures and processes to be carried out on receipt of reports of an AIS-SART, AIS Man Overboard (MOB) or EPIRB-AIS device and provide advice on this matter,

and submit its report on Thursday, 24 January 2013.

[Report of the SAR Working Group

7.10 On receipt of the report of the SAR Working Group (COMSAR 17/WP.3, section 5), the Sub-Committee took action as summarized in the ensuing paragraphs.

7.11 The Sub-Committee noted the advice given to the Technical Working Group regarding the finalization of the draft SN circular providing information on the display of AIS-SART, AIS Man Overboard (MOB) and EPIRB-AIS devices.

7.12 The Sub-Committee instructed the ICAO/IMO Joint Working Group to:

- .1 develop detailed guidance for Administrations on how to respond to reports of an AIS-SART signal including search planning applications; and
- .2 consider the issue of inappropriate use of currently available AIS-MOB devices, with a view to providing further clarification and recommendations for possible actions by Administrations.

Instructions for the Technical Working Group

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

- .1 consider documents COMSAR 17/7 and COMSAR 17/7/1 and, taking into account the advice to be provided by the SAR Working Group,

- .1 finalize the draft SN.1 circular providing information to seafarers on the display of AIS-SART, AIS Man Overboard (MOB) and EPIRB-AIS devices; and
- .2 consider the development of further guidance material for Administrations on the use of devices using AIS technology and provide advice on this matter,

and submit its report on Thursday, 24 January 2013.]

[Report of the Technical Working Group

7.14 On receipt of the report of the Technical Working Group (COMSAR 17/WP.4, section 5), and taking into account the outcome of the SAR Working Group (COMSAR 17/WP.3, section 5), the Sub-Committee took action as summarized in the ensuing paragraphs.

7.15 The Sub-Committee endorsed the SN.1 circular providing information to seafarers on the display of AIS-SART, AIS Man Overboard (MOB) and EPIRB-AIS devices, and invited the Committee to approve it.

7.16 The Sub-Committee invited Member Governments and international organizations to submit proposals:

- .1 on the development of further guidance material for Administrations on the use of devices using AIS technology to the next meeting of the Sub-Committee; and
- .2 to improve the situation regarding the display symbol for AIS-SART, AIS Man Overboard and EPIRB-AIS devices to NAV 59, under agenda item 7, or to the Correspondence Group established on this issue by NAV 58.]

8 DEVELOPMENT OF AMENDMENTS TO THE IAMSAR MANUAL

8.1 The Sub-Committee noted that MSC 90 had approved draft amendments to the IAMSAR Manual (MSC 90/28, paragraphs 8.20 and 8.21).

8.2 The Sub-Committee recalled that COMSAR 16 had noted that the ICAO/IMO Joint Working Group on SAR (JWG) had identified several issues which needed further work and would be amended for inclusion in the 2016 edition of the IAMSAR Manual, and noted that

the JWG was in the process of preparing several amendments (COMSAR 17/6, paragraph 3.1.4 of the annex).

8.3 The Sub-Committee briefly considered the proposed amendments to IAMSAR Manual, Volume II, appendix B on Commercial Emergency Notification and Locating Devices (CENALD) message format and sample message (COMSAR 17/6, paragraphs 3.1.5 and 3.1.6 and appendix D of the annex) and decided to refer the issue to the SAR Working Group for detailed consideration and advice.

Instructions for the SAR Working Group

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

- .1 consider the draft proposed amendment to the IAMSAR Manual, as given in document COMSAR 17/6, appendix D for inclusion in the 2016 edition of the IAMSAR Manual;
- .2 provide justification for holding the next session in 2013 of the ICAO/IMO Joint Working Group, prepare the draft provisional agenda and also review its terms of reference, taking into account appendix G of document COMSAR 17/6; and
- .3 consider the schedule to finalize the amendments for the 2016 edition of the IAMSAR Manual and advise on the arrangements needed, in order to finalize them in time,

and submit its report on Thursday, 24 January 2013.

[Report of the SAR Working Group

8.5 On receipt of the report of the SAR Working Group (COMSAR 17/WP.3, section 6 and annexes 4 and 5), the Sub-Committee took action as summarized in the ensuing paragraph.

8.6 The Sub-Committee endorsed:

- .1 the draft amendments to the IAMSAR Manual volume II, as set out in COMSAR 17/WP.3, annex 4, for approval by MSC 95 in 2015 and consequential inclusion in the 2016 edition of the IAMSAR Manual;

- .2 the holding of the 20th session of the ICAO/IMO Joint Working Group in 2013, along with the terms of reference and provisional agenda, as set out in COMSAR 17/WP.3, annex 5, and invited the Committee to authorize the convening of this intersessional meeting; and
- .3 the Group's view that, in order to finalise amendments for inclusion in the 2016 edition of the IAMSAR Manual, there was also a need for the holding of the 21st session of the ICAO/IMO Joint Working Group in 2014, and invited the Committee to also authorize the convening of this intersessional meeting and to instruct the Secretariat to schedule the meeting for September/October 2014, or if the schedule of Sub-Committee meetings so required, earlier in the year.]

9 DEVELOPMENT OF MEASURES TO AVOID FALSE DISTRESS ALERTS

9.1 The Sub-Committee recalled that during discussions on the proposals sent to COMSAR 16 on this matter, delegations could not agree (COMSAR 16/17, section 9).

9.2 Noting that no proposals had been submitted to this session, the Sub-Committee, following the suggestion of COMSAR 16, concluded that these issues should be further considered, if required, under the existing agenda items on the development of e-navigation and the review of the GMDSS, as appropriate.

9.3 Noting that the work on this planned output had been completed, the Sub-Committee agreed to invite the Committee to delete this planned output when discussing its biennial agenda under agenda item 14.

10 MEASURES TO PROTECT THE SAFETY OF PERSONS RESCUED AT SEA

10.1 The Sub-Committee recalled that COMSAR 16 had noted information provided by the Secretariat on the progress of the Group of interested parties working on the development of a draft regional arrangement (COMSAR 16/17, section 10).

10.2 The Sub-Committee noted the information provided by the Secretariat that the second formal regional meeting of the Group working on the development of a draft regional arrangement had been convened through Circular letter No.3254, and that representatives of the Governments of Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, the Syrian Arab Republic, Tunisia, Turkey and the United Kingdom had

been invited. It was further noted that following a request for more time to be given for informal consultations between some Parties concerned, the meeting had been postponed.

10.3 The Sub-Committee also noted that bilateral consultations had continued and it was expected that the second regional meeting would be rescheduled in the near future.

10.4 Having noted the aforementioned information, the Sub-Committee, taking into account that the work on this matter was still ongoing, decided to invite the Committee to extend the target completion year for this planned output to 2014, when discussing its biennial agenda under agenda item 14.

11 DEVELOPMENT OF AN E-NAVIGATION STRATEGY IMPLEMENTATION PLAN

11.1 The Sub-Committee noted the outcome of STW 43 (STW 43/14, paragraphs 6.13 to 6.16), MSC 90 (MSC 90/28, paragraphs 10.10 to 10.12), NAV 58 (NAV 58/14, paragraphs 6.37 to 6.46) and MSC 91 (MSC 91/22, paragraph 12.10) in relation to e-navigation.

11.2 In this context, the Sub-Committee also noted that NAV 58, noting that the gap analysis had been completed, had approved the final list of gaps of e-navigation (NAV 58/14, annex 7), and endorsed the preliminary list of potential e-navigation solutions as work in progress (NAV 58/WP.6, annex 2). Furthermore, NAV 58 re-established the Correspondence Group on e-navigation under the terms of reference set out in paragraph 6.44 of document NAV 58/14.

11.3 The Sub-Committee considered documents COMSAR 17/11, COMSAR 17/11/1 and COMSAR 17/INF.6 (Norway) containing the report of the Correspondence Group on e-navigation and including the list of potential e-navigation solutions most relevant to communication and search and rescue aspects. The documents also contained information on the ongoing process of risk and cost-benefit assessments, the results of test beds in Singapore and the Arctic and the outcome of two workshops related to e-navigation.

11.4 In this context, the Sub-Committee noted:

- .1 the ongoing process of risk and cost-benefit assessment for e-navigation;
- .2 that a test bed had been satisfactorily conducted in Singapore to demonstrate the use of the IHO S-100 standard to promulgate Maritime Safety Information (MSI); and

- .3 the comments and observations related to information exchange and communications in the Polar and other remote regions, including the possibility of routing e-navigation information through existing LRIT Data Centres (DCs) to facilitate the exchange of information between Administrations and different shore-based stakeholders.

11.5 The Sub-Committee expressed general appreciation for the work carried out by the Correspondence Group on e-navigation, in particular with respect to the ongoing preparation of the final list of e-navigation solutions, the identification of risk control options and the feasibility evaluation process, including the cost-benefit analysis.

11.6 Some delegations supported the idea of exploring the use of the existing LRIT shore-based infrastructure (not the ship side) to facilitate the exchange of certain e-navigation information in the future, thereby leveraging its current implementation. Other delegations were of the view that the Sub-Committee should proceed with caution and that careful consideration should be given to technical, financial and legal aspects to avoid adversely affecting the normal functioning of the LRIT system by adding new functionalities to existing established DCs.

11.7 Following discussion, the Sub-Committee decided to refer documents COMSAR 17/11, COMSAR 17/11/1 and COMSAR 17/INF.6 to the Working Group on e-navigation and LRIT for comments and advice, as appropriate, on the list of e-navigation solutions and on the possibility of further exploring the current LRIT shore-based infrastructure as a platform for the exchange of e-navigation information.

ESTABLISHMENT OF THE WORKING GROUP ON E-NAVIGATION AND LRIT

11.8 The Sub-Committee established the Working Group on e-navigation and LRIT under the Chairmanship of Dr. S. Ryan (Canada) and instructed it, taking into account decisions of, and comments and proposals made in the Plenary, to:

- .1 consider document COMSAR 17/11/1 and provide comments, as appropriate, on the list of e-navigation solutions most relevant to the COMSAR Sub-Committee; and
- .2 consider document COMSAR 17/11 and provide advice on the possibility of further exploring the current LRIT shore-based infrastructure as a platform for the exchange of e-navigation information between Administrations and

different shore-based stakeholders, taking into account relevant information provided in document COMSAR 17/INF.6,

and submit its report on Thursday, 24 January 2013.

[Report of the Working Group

11.9 On receipt of the report of the Working Group on e-navigation and LRIT (COMSAR 17/WP.5), the Sub-Committee took note of the comments and observations of the group (paragraphs 4 to 11) related to e-navigation and requested the Correspondence Group on e-navigation to take them into account for the preparation of the final list of potential e-navigation solutions to be submitted to NAV 59, as well as during the cost-benefit and risk-analysis process.]

[more to come]

12 CONSIDERATION OF LRIT-RELATED MATTERS

12.1 The Sub-Committee noted the outcome of MSC 90 (MSC 90/28, paragraphs 6.2 and 6.23) and MSC 91 (MSC 91/22, paragraphs 6.1 to 6.9) on LRIT-related matters.

Developments in relation to the operation of the LRIT system since COMSAR 16

12.2 The Sub-Committee noted the information provided by the Secretariat (COMSAR 17/12 and COMSAR 17/INF.2) relating to information communicated to the Organization by Governments pursuant to the provisions of SOLAS regulation V/19-1 and the *Revised Performance standards and functional requirements for the long-range identification and tracking (LRIT) of ships* (Revised performance standards), adopted by resolution MSC.263(84), as amended; the status of establishment of LRIT Data Centres (DCs); the operation of the LRIT Data Distribution Plan (DDP) and the Information Distribution Facility (IDF); the renewal of Public-Key Infrastructure (PKI) certificates and technical co-operation activities related to LRIT.

Audits of LRIT Data Centres and of the International LRIT Data Exchange

12.3 The Sub-Committee considered documents COMSAR 17/12/2/Rev.1, COMSAR 17/INF.4 and COMSAR 17/INF.4/Add.1 (IMSO) containing the summary audit reports of DCs audited during the period from 8 December 2011 until 16 November 2012. The Sub-Committee also considered document COMSAR 17/12/7 (IMSO) providing observations and recommendations relating to the performance of the LRIT system deriving from the audits carried out since COMSAR 16.

12.4 In this context, the Sub-Committee noted that:

- .1 47 audits had been carried out during the above mentioned period, 14 of which were completed without the need to issue any observation or non-conformity notes;
- .2 several observation and non-conformity notes had been issued as a result of identified diversions from the technical specifications for the LRIT system;
- .3 two DCs had been issued with major non-conformity notes as a result of their constant and mistreated deviations from the requirements of the audit criteria;
- .4 at the time of the submission of the information, the performance review and audit of only one DC was not progressing; the audit of other DCs which had not been audited in the past, as reported by IMSO during COMSAR 16, had been completed or was in process of completion;
- .5 many DCs had been found to be using the LRIT system status message (message type 11) incorrectly and not in accordance with the Technical specifications for the LRIT system, including significant delays in their transmission;
- .6 different interpretations and implementations in relation to the processing of coastal request messages had been observed which would need to be clarified to ensure common and standard implementation;
- .7 the custom-coded solutions for geospatial calculations implemented by some DCs should be adjusted to be consistent with the industry-standard GIS tools; and
- .8 several processing issues related to non-metropolitan territories and special administrative regions were unclear and should be clarified in a separate section within the technical specifications for the LRIT system.

12.5 After a brief discussion, the Sub-Committee decided to refer documents COMSAR 17/12/2/Rev.1, COMSAR 17/12/7, COMSAR 17/INF.4 and COMSAR 17/INF.4/Add.1 to the Working Group on e-navigation and LRIT for further consideration and advice,

as appropriate, and preparation of a COMSAR circular summarizing the audits conducted by IMSO so far.

Access to the web interface of the LRIT Data Distribution Plan and information concerning authorized testing Application Service Providers

12.6 The Sub-Committee considered document COMSAR 17/12/1 (Secretariat) proposing to allow GISIS users to have partial read-only access to the LRIT Data Distribution Plan (DDP) and proposing changes to its web interface so as to include information related to authorized testing Application Service Providers (ASPs) and consequently to discontinue the publishing of revisions of MSC.1/Circ.1377 on *List of application service providers authorized to conduct conformance tests* and issue LRIT Conformance test reports on behalf of the Administrations.

12.7 Some delegations supported the proposal of allowing GISIS users to have partial read-only access to the DDP module of GISIS, whilst others disagreed and recommended proceeding with caution to avoid disclosing confidential information to the general public. The proposal for the inclusion of information related to authorized testing APS in the web interface of the DDP received general support.

12.8 After some discussion, the Sub-Committee referred the document to the Working Group on e-navigation and LRIT for detailed consideration and further advice.

Draft MSC resolution on "Operation of the International LRIT Data Exchange after 2013"

12.9 The Sub-Committee recalled the decision of MSC 90 relating to the continuous operation of the IDE by the European Maritime Safety Agency (EMSA) and of its disaster recovery site by the United States beyond 2013, and having considered document COMSAR 17/12/3 containing a draft MSC resolution on Operation of the International LRIT Data Exchange after 2013, instructed the Working Group on e-navigation and LRIT to finalize the draft resolution with a view to approval by MSC 92.

Proposal for inclusion of NOA message information in the LRIT system

12.10 The Sub-Committee considered document COMSAR 17/12/4 (Brazil) proposing the inclusion of Notice of Arrival (NOA) information in the LRIT system in order to facilitate and increase the use of the system by port States.

12.11 During the consideration of the proposal, views were equally divided. Some delegations supported the proposal and were of the view that it could increase the use

of the system, in particular by port States willing to track ships using LRIT after receiving the NOA. Other delegations stated that the proposal was outside the purview of the LRIT system and its implementation could entail amendments to the existing SOLAS regulation/19-1 including cost and legal implications, and could place an additional burden on Administrations. The view was also expressed that this was a policy issue and should be considered by the Committee before the Sub-Committee could undertake this exercise.

12.12 In light of the foregoing, the delegation of Brazil advised the Sub-Committee that they would be re-submitting the proposal to the Committee for a policy decision and inclusion of a new unplanned output, as appropriate.

Proposal to solve the ghost terminal problem

12.13 The Sub-Committee considered document COMSAR 17/12/5 (China), proposing to develop a global LRIT terminal Inmarsat Mobile Number (IMN) inquiry tool for all DCs and Inmarsat Communication Service Providers (CSPs) as a solution to solve the ghost terminal problem.

12.14 The Sub-Committee expressed its appreciation to China for having considered the issue and having proposed a solution to solve the ghost terminal problem. However, it could not agree with the proposal as this was an issue that should be dealt with internally between Administrations and their respective DCs.

Proposed solutions to the issue of shipborne terminals not reporting as expected

12.15 The Sub-Committee noted with appreciation the information provided by China (COMSAR 17/12/6) on the issue of LRIT shipborne terminals not reporting as expected and, in particular,

- .1 the experience of the China National LRIT Data Centre (NDC) on this matter; and
- .2 the troubleshooting and reporting-resuming procedure introduced.

12.16 In this context, the Sub-Committee encouraged DCs to continue studying the issue of terminals' abnormal reports and sharing their experiences so as to improve the terminals reporting rate.

Instructions for the Working Group on e-navigation and LRIT

12.17 The Sub-Committee instructed the Working Group on e-navigation and LRIT, taking into account decisions of, and comments and proposals made in the Plenary, to:

- .1 consider documents COMSAR 17/12/2/Rev.1, COMSAR 17/INF.4, COMSAR 17/INF.4/Add.1 and COMSAR 17/12/7 (IMSO) and provide advice, as appropriate, regarding the audit reports, as well as the comments and recommendations provided by the LRIT Coordinator, and prepare a draft COMSAR circular summarizing the audits conducted by the LRIT Coordinator to date;
- .2 consider document COMSAR 17/12/1 and provide advice on the proposed partial read-only access to the DDP module to other GISIS users, and the inclusion in the DDP of information related to authorized testing ASPs and the consequential proposed discontinuation of revisions of MSC.1/Circ.1377; and
- .3 consider document COMSAR 17/12/3 and finalize the draft MSC resolution on *Operation of the International LRIT Data Exchange after 2013* for approval,

and submit its report on Thursday, 24 January 2013.

Report of the Working Group

12.18 On receipt of the report of the Working Group on e-navigation and LRIT (COMSAR 17/WP.[...]), the Sub-Committee took action as summarized in the ensuing paragraphs.

[Report of the Working Group

12.19 On receipt of the report of the Working Group on e-navigation and LRIT (COMSAR 17/WP.5), the Sub-Committee took action as summarized in the ensuing paragraphs.

12.20 The Sub-Committee endorsed:

- .1 a draft revised version of COMSAR.1/Circ.54 on Audits of LRIT Data Centres and of the International LRIT Data Exchange conducted by the

LRIT Coordinator, as set out in annex [...], and invited the Committee to approve it;

- .2 the decisions and recommendations of the group related to the audit findings, comments and observations submitted by the LRIT Coordinator (COMSAR 17/WP.5, paragraphs 14 to 22); and
- .3 the recommendations of the group related to the provision of read-only access to the web interface of the DDP to GISIS users of Member Governments and the inclusion of information related to authorized testing ASPs, and requested the Secretariat to implement the necessary changes in the web interface of the DDP and discontinue the publishing of revised versions of MSC.1/Circ.1377, and invited the Committee to approve this action (COMSAR 17/WP.5, paragraphs 23 to 26).

12.21 The Sub-Committee approved a draft MSC resolution on *Operation of the International LRIT Data Exchange after 2013*, as set out in annex [...], and invited the Committee to adopt it.

12.22 The Sub-Committee noted the information provided by the European Commission related to the operation of the IDE, including planned activities for 2013 (COMSAR 17/WP.5, paragraph 28).]

13 DEVELOPMENT OF A MANDATORY CODE FOR SHIPS OPERATING IN POLAR WATERS

13.1 The Sub-Committee recalled that COMSAR 16 had considered the issue (COMSAR 16/17, paragraphs 16.11 to 16.13) and, noting that DE 57 was scheduled for eight weeks after COMSAR 17, had invited Member Governments and interested organizations to consider the matter in detail and submit comments and proposals to COMSAR 17.

13.2 The Sub-Committee further recalled that COMSAR 16 had agreed to invite the ICAO/IMO Joint Working Group and the Joint IMO/ITU Experts Group to consider the issue and noted that these Groups had reported back to the Sub-Committee in documents COMSAR 17/6 and COMSAR 17/4, respectively.

13.3 The Sub-Committee briefly considered views and proposed edits to chapters 8 and 10 of the draft Polar Code provided by the United States (COMSAR 17/13).

13.4 During the ensuing discussions, the following views were expressed:

- .1 the purpose and benefit of additional tracking requirements, in particular, for survival craft was not clear;
- .2 no compelling need or justification for additional requirements for tracking had been established;
- .3 referring to paragraph 12.5 of the draft Polar Code, communication with RCCs was of great importance, such as reporting the planned voyage upon entering polar waters;
- .4 discussing carriage requirements for different types of ships and survival craft was not in the purview of the COMSAR Sub-Committee, and the Sub-Committee should only provide advice to the DE Sub-Committee from a technical point of view; and
- .5 the risk-based approach should be taken into account and general requirements should be the rule with prescriptive requirements only when needed.

13.5 After an in-depth discussion, the Sub-Committee decided to refer specific issues to the SAR and Technical Working Groups as set out in paragraphs 13.6 and 13.12, respectively to provide their comments to Plenary before entrusting it to a drafting group, to be established.

Instructions for the SAR Working Group

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

- .1 provide advice on:
 - .1 an "expected maximum time to rescue", taking into account the existing guidance in MSC.1/Circ.1184 and whether there might be a need to make distinctions on certain matters between requirements applicable for voyages in the Arctic and Antarctic, respectively;

- .2 the definition of the term "tracking";
- .3 whether required tracking is warranted for the ship and survival craft;
- .4 a requirement for the interval between transmissions of tracking devices; and
- .5 the impact on SAR authorities of receiving and using tracking data.

Report of the SAR Working Group

[13.7 On receipt of the report of the SAR Working Group (COMSAR 17/WP.[...] section [...]), the Sub-Committee took action as summarized in the ensuing paragraphs.

13.8 The Sub-Committee noted the description of the differences between tracking and locating systems.

13.9 The Sub-Committee further noted that there would be no need for an additional requirement for tracking, since the LRIT system was developed to function on a worldwide basis. However, noting that geostationary satellites were not covering the Polar areas, the Technical Working Group was instructed to advise on the use of the LRIT system in Polar regions.

13.10 Having noted the advice provided by the SAR Working Group that all survival craft required locating systems that would allow the responding SAR assets to locate them during a distress situation, the Sub-Committee instructed the Technical Working Group to take equipment for locating into account when considering the equipment needed on each type of survival craft.

13.11 The Sub-Committee further agreed to instruct the Drafting Group, to be established, to take the comments from the SAR Working Group into account in its work.]

Instructions for the Technical Working Group

13.12 Having considered the advice from the SAR Working Group (COMSAR 17/WP.[...] section [...]), the Sub-Committee instructed the Technical Working Group, taking into account the advice of the SAR Working Group and decisions of, and comments and proposals made in the Plenary, to:

- .1 provide advice on:
 - .1 the equipment needed, including equipment for locating, on each type of survival craft (additional to what is already required, taking into account hazards specific for Polar regions), including the provisions laid down in paragraph 8.3.2.7, and with particular emphasis on requirements for passenger ships taking into account the existing guidance in MSC.1/Circ.1184;
 - .2 the minimum design temperatures for all communication equipment intended to be used, taking into account that -30°C ambient temperature could be surpassed (more extreme);
 - .3 the inclusion of the use of AIS in section 8.3.3, for instance to report on specific issues such as persons on board;
 - .4 the use of the LRIT system in polar regions;
 - .5 the minimum time the equipment should continue to operate;
 - .6 paragraphs 8 and 9 of document COMSAR 17/13, and, in particular, if, and if so how, planned satellite systems not (yet) part of GMDSS might serve ships operating within Sea Area A4; and
 - .7 the proposed amendments to sections 10.2 and 10.3 of document COMSAR 17/13.

Report of the Technical Working Group

[13.13 On receipt of the report of the Technical Working Group (COMSAR 17/WP.[...] section [.]), the Sub-Committee took action as summarized in the ensuing paragraphs.

13.14 The Sub-Committee agreed that the advice prepared by the Technical Working Group was not a final conclusion on the matters debated by the SAR and Technical Working Groups, and that its advice would be an input for further discussion and decisions by the DE Sub-Committee.

13.15 After a brief discussion, the Sub-Committee agreed that the drafting group should merge the advice from the SAR and Technical Working Groups to prepare consolidated advice for DE 57.]

ESTABLISHMENT OF THE DRAFTING GROUP ON THE DEVELOPMENT OF A MANDATORY POLAR CODE

13.16 In light of the foregoing, the Sub-Committee established the drafting group on the development of a mandatory Polar Code under the Chairmanship of Ms. Turid Stemre (Norway) and instructed it, taking into account decisions of, and comments and proposals made in the Plenary, and those provided by the SAR and Technical Working Groups, to finalize a consolidated response to the DE Sub-Committee on the parts of the Polar Code under the purview of the Sub-Committee, and submit its report on Thursday, 24 January 2013.

Report of the Drafting Group

[13.17 On receipt of the report of the drafting group (COMSAR 17/WP.6), the Sub-Committee endorsed the advice to be sent to the DE Sub-Committee, as set out in the annex to document COMSAR 17/WP.6 and instructed the Secretariat to forward it to DE 57 for consideration.]

14 BIENNIAL AGENDA AND PROVISIONAL AGENDA FOR COMSAR 18**General**

14.1 The Sub-Committee recalled that the Assembly, at its twenty-seventh session, had approved the six-year Strategic Plan for the Organization (resolution A.1032(27)) and the *High-level Action Plan of the Organization and priorities for the 2012-2013 biennium* (resolution A.1038(27)).

14.2 The Sub-Committee noted that, with regard to the proposed restructuring of the sub-committees (COMSAR 17/2/1), it was still instructed to prepare its biennial and provisional agendas, bearing in mind that they were subject to change pending the decisions of MEPC 65, MSC 92 and C 110.

Biennial agenda, post-biennial agenda and provisional agenda for COMSAR 18

[14.3 Taking into account the progress made at the session and the instruction of MSC 91, the Sub-Committee prepared its proposed biennial agenda for 2014-2015, including outputs on the Committee's post biennial agenda that fall under the purview of the Sub-Committee, as appropriate (COMSAR 17/WP.2, annex 1), and the provisional agenda for COMSAR 18 (COMSAR 17/WP.2, annex 2), as set out in annexes [...] and [...], respectively, for consideration by MSC 92.

Arrangements for the next session

14.4 The Sub-Committee agreed to establish, at its next session, working groups on the following subjects:

- .1 SAR;
- .2 GMDSS, ITU and operational matters and performance standards; and
- .3 e-navigation and LRIT.

14.5 The Sub-Committee also established a correspondence group on the Review of the GMDSS.

Status of planned outputs in the High-level Action Plan

14.6 The Sub-Committee, noting that the status of planned outputs will no longer be produced as part of a working paper during the session in order to avoid a duplication of work, invited MSC 92 to note the status of planned outputs, set out in annex [...].

Date of next session

14.7 The Sub-Committee noted the information provided by the Secretariat that the date of the next session will be announced in due course, pending the decisions by MEPC 65, MSC 92 and C 110 on the proposed Sub-Committee restructuring.]

15 ELECTION OF CHAIRMAN AND VICE-CHAIRMAN FOR 2014

[15.1 In light of the decisions of C 109 and MSC 91 regarding the potential Sub-Committee restructuring, the Sub-Committee did not elect a Chairman and Vice-Chairman for 2014.]

16 ANY OTHER BUSINESS

16.1 The Sub-Committee noted that no submissions had been received for consideration under this agenda item.

Reform of the subsidiary bodies reporting to MSC

16.2 The Sub-Committee, having noted the information provided by the Secretariat regarding the discussions at MSC 91 on matters related to the review and reform of the Organization (C 109/D and MSC 91/22), was invited by the Secretary-General to comment on the implications and practicability of the proposed amalgamation of the NAV and COMSAR Sub-Committees into one new sub-committee (MSC 91/19/9). The proposed

amalgamation was supported in principle by the majority of those who spoke, provided effectiveness and participation were not compromised. A clear preference was expressed to retain Search and Rescue (SAR) issues with Radiocommunications, due to their close relationship, and for SAR issues to be addressed annually within any new sub-committee, to ensure continuity. Some concern was expressed about the possible increased workload due to the amalgamation of work programmes in one sub-committee and the possible need to reconsider the current policy on the provision of interpretation for plenary sessions and/or to schedule some longer (8-day) meetings when necessary. The possible option of making some items of work (e.g. e-navigation and revision of performance standards) free-standing was also proposed and the importance of the continuation of the ICAO/IMO Joint Working Group on SAR stressed.

16.3 The Secretary-General informed the Sub-Committee that the views expressed would be taken into account in the preparation of the detailed proposal requested by MSC 91 for consideration at MEPC 65 and MSC 92.

17 ACTION REQUESTED OF THE COMMITTEE

17.1 The Maritime Safety Committee, at its ninety-second session, is invited to:

[to be prepared by the Secretariat]
