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RESCUE
1st session
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DRAFT REPORT TO THE MARITIME SAFETY COMMITTEE

1 GENERAL

1.1 The Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) held its first session from 30 June to 4 July 2014 under the chairmanship of Mr. C. Salgado (Chile), who was unanimously elected as Chairman for 2014 at the opening of the session. The Vice-Chairman, Mr. R. Lakeman (Netherlands), who was unanimously elected as Vice-Chairman for 2014 at the opening of the session, was also present.

1.2 The session was attended by delegations from Members Governments; [Associate Members of IMO; by representatives from United Nations and specialized agencies;] by observers from intergovernmental organizations and by non-governmental organizations in consultative status, as listed in document NCSR 1/INF.1.

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 him that his advice and requests would be given every consideration in the deliberations of the Sub-Committee.

Adoption of the agenda and related matters

1.5 The Sub-Committee adopted the agenda (NCSR 1/1) and agreed to be guided in its work, in general, by the annotations contained in document NCSR 1/1/1 (Secretariat) and the arrangements in document NCSR 1/1/2/Rev.1 (Secretariat). The agenda, as adopted, together with the list of documents considered under each agenda item, is set out in document NCSR 1/INF.[...].

2 DECISIONS OF OTHER IMO BODIES

2.1 The Sub-Committee noted the decisions and comments pertaining to its work made by MSC 92, FSI 21, DE 57, FAL 38, C 110, A 28, SDC 1, HTW 1, MEPC 66 and MSC 93, as reported in documents NCSR 1/2, NCSR 1/2/1, NCSR 1/2/2 and NCSR 1/2/3, and took them into account in its deliberations when dealing with the relevant agenda items.

2.2 The Sub-Committee also noted that the Council, at its 110th session, approved the Committees' proposal for full five-day sessions, with interpretation, for the first sessions of the Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) and the Sub-Committee on Ship Design and Construction (SDC), to enable them to cope with their heavy agendas; and also approved their decision to request the Secretariat to make the necessary changes to the IMODOCS website to reflect the new sub-committee structure, while also maintaining access to documents under the previous sub-committee structure.

2.3 The Sub-Committee further noted that the Assembly, at its twenty-eighth session, approved the *Strategic plan for the Organization (for the six-year period 2014 to 2019)* (resolution A.1060(28)) and the *High-level Action Plan of the Organization and priorities for the 2014-2015 biennium* (resolution A.1061(28)).

3 ROUTEING OF SHIPS, SHIP REPORTING AND RELATED MATTERS

3.1 The Sub-Committee recalled that NAV 51 had agreed that a preliminary assessment of ships' routeing proposals would be made by the Chairman in consultation with the Secretariat and the Chairman of the Ships' Routeing Working Group and disseminated as a working paper. In this context, the Sub-Committee noted document NCSR 1/WP.2, outlining a preliminary assessment of the ships' routeing proposals.

Amendments to existing Traffic Separation Schemes (TSSs) and associated measures

Amendment to the existing Traffic Separation Scheme "In the Strait of Gibraltar" and amendment of the precautionary area off Tanger Med and of the south-western inshore traffic zone including anchorage areas

3.2 The Sub-Committee, noting that the proposal submitted by Morocco and Spain (NCSR 1/3) for amending the existing Traffic Separation Scheme "In the Strait of Gibraltar", the precautionary area off Tanger Med and of the south-western inshore traffic zone including anchorage areas did not require any decision by the Sub-Committee in principle, referred it to the Ships' Routeing Working Group for detailed consideration and advice.

Amendments to the Traffic Separation Scheme off the Chengshan Jiao Promontory

3.3 The Sub-Committee, noting that the proposal submitted by China (NCSR 1/3/1) relating to amendments to the existing Traffic Separation Scheme "In the waters off the Chengshan Jiao Promontory" did not require any decision by the Sub-Committee in principle, referred it to the Ships' Routeing Working Group for detailed consideration and advice.

Amendments to the routeing system "Off Friesland" and associated measures

3.4 The Sub-Committee, noting that the proposals submitted by the Netherlands (NCSR 1/3/4, NCSR 1/3/5, NCSR 1/3/6, and NCSR 1/3/7) relating to amendment to the routeing system "Off Friesland" and associated measures did not require any decision by the Sub-Committee in principle, referred it to the Ships' Routeing Working Group for detailed consideration and advice. In this context, the Sub-Committee noted that these proposals were supported by a report on the formal safety assessment (FSA) related to the proposed amendments in the routeing system "Off Friesland" (NCSR 1/INF.4).

3.5 The Sub-Committee, having noted the view expressed by the delegation of France that there was a need to revise MSC/Circ.1060, as amended, to allow for an overview when several routeing measures are submitted together for consideration, invited them to submit a proposal for a new unplanned output to revise this circular to the Committee.

Establishment of new Traffic Separation Schemes in the Iskenderun, Izmir, Candarli and a new two-way route in Nemrut Bays

3.6 The Sub-Committee noted with appreciation, the information provided by Turkey (NCSR 1/INF.12) relating to the establishment of new Traffic Separation Schemes in the Iskenderun, Izmir, Candarli and a new two-way route in Nemrut Bays.

Routeing measures other than traffic separation schemes (TSSs)*Amendment to the existing two-way route in the Great North-East Channel*

3.7 The Sub-Committee, noting that the proposal submitted by Australia (NCSR 1/3/3) relating to amendments to the existing two-way route in the Great North-East Channel did not require any decision by the Sub-Committee in principle, referred it to the Ships' Routeing Working Group for detailed consideration and advice.

Establishment of Two-way routes and a precautionary area at Jomard Entrance, Papua New Guinea

3.8 The Sub-Committee, noting that the proposal submitted by Australia and Papua New Guinea (NCSR 1/3/8) relating to the establishment of two-way routes and a precautionary area at Jomard Entrance, Papua New Guinea did not require any decision by the Sub-Committee in principle, referred it to the Ships' Routeing Working Group for detailed consideration and advice.

Cancellation of the IMO-adopted Area To Be Avoided in the region of the Great Barrier Reef

3.9 The Sub-Committee, noting that the proposal submitted by Australia (NCSR 1/3/12) relating to cancellation of the IMO-adopted Area To Be Avoided in the region of the Great Barrier Reef did not require any decision by the Sub-Committee in principle, after a brief discussion referred it to the Ships' Routeing Working Group for detailed consideration and advice.

Amendments to the existing area to be avoided in the region of Voriai Sporadhes Islands

3.10 The Sub-Committee considered the proposal submitted by Greece (NCSR 1/3/13) relating to amendments to the existing area to be avoided in the region of Voriai Sporadhes Islands. Having noted the views expressed that no compelling need had been demonstrated and some areas were outside the territorial water, the delegation of Greece withdrew the proposal and expressed its intention to resubmit it with additional information for consideration at a future session of the Sub-Committee.

Mandatory ship reporting system*New mandatory ship reporting system in the Izmit Bay (IZMITRAP)*

3.11 The Sub-Committee, noting that the proposal submitted by Turkey (NCSR 1/3/9) relating to the establishment of a new mandatory ship reporting system in the Izmit Bay (IZMITRAP) did not require any decision by the Sub-Committee in principle, after a brief

discussion referred it to the Ships' Routeing Working Group for detailed consideration and advice.

Amendments to the existing mandatory ship reporting system Off Chengshan Jiao Promontory

3.12 The Sub-Committee, noting that the proposal submitted by China (NCSR 1/3/2) relating to amendments to the existing mandatory ship reporting system Off Chengshan Jiao Promontory did not require any decision by the Sub-Committee in principle, referred it to the Ships' Routeing Working Group for detailed consideration and advice.

Experience gained from implementation of the mandatory ship reporting system SOUNDREP ("In the Sound between Denmark and Sweden")

3.13 The Sub-Committee noted with appreciation, the information provided by Denmark and Sweden (NCSR 1/INF.11) relating to the experience gained from implementation of the mandatory ship reporting system SOUNDREP ("In the Sound between Denmark and Sweden").

Review of adopted mandatory ship reporting systems

3.14 The Chairman recalled that at previous sessions of the NAV Sub-Committee, the chairman had subsequently taken the initiative to bring to the attention of Members the need for carrying out an evaluation of adopted mandatory ship reporting systems and had appealed to Members to undertake this exercise.

3.15 In this context, the Chairman appreciated the efforts by China for reviewing and submitting the proposal (NCSR 1/3/2) and suggested that Member Governments should review the various ship reporting systems adopted by the Organization at an early date to ensure that they are all up to date.

Guidance on amendments to existing IMO adopted ships' routeing systems

3.16 The Chairman invited the Sub-Committee's attention to paragraph 3.17 of the *General Provisions on Ships' Routeing* (resolution A.572(14)), as amended, that states: "A routeing system, when adopted by IMO, shall not be amended or suspended before consultation with an agreement by IMO unless local conditions or the urgency of the case require that earlier action be taken." The intention of this requirement was to ensure consistency and predictability in routeing measures and the charting of such measures, particularly with regard to TSSs.

3.17 The Chairman urged Member Governments to abide by this requirement and inform the Organization of any planned changes to an IMO-adopted routeing measure, so that the formal procedures for amendments were followed in line with the General Provisions on Ships' Routeing.

The state of hydrographic surveys and nautical charts in the areas of proposed routeing measures

3.18 Having noted the view expressed by the IHO observer that the level of information provided in submissions on the adequacy of the state of hydrographic surveys and nautical charts in the areas of proposed routeing measures had slowly eroded over the years, the Sub-Committee urged Member Governments to implement effectively the relevant provisions of the IMO Guidance Note on the Preparation of Proposals on Ships Routeing Systems and Ship Reporting Systems (MSC/Circ.1060, as amended). The Sub-Committee recalled that this guidance included the invitation that Governments who do not have the necessary hydrographic information should seek the assistance of the relevant charting authority, directly or through the IHO Secretariat, in obtaining such information. The Sub-Committee further recalled that such considerations should take place at a very early stage in the preparation of routeing measures.

ESTABLISHMENT OF THE SHIPS' ROUTEING WORKING GROUP

3.19 The Sub-Committee established the Ships' Routeing Working Group under the chairmanship of Mr. R. Lakeman (Netherlands) and instructed it, taking into account decisions of, and comments and proposals made in plenary, to consider documents NCSR 1/3, NCSR 1/3/1, NCSR 1/3/2, NCSR 1/3/3, NCSR 1/3/4, NCSR 1/3/5, NCSR 1/3/6, NCSR 1/3/7, NCSR 1/3/8, NCSR 1/3/9 and NCSR 1/3/12, as well as taking into account the information contained in document NCSR 1/INF.4, regarding routeing of ships and related matters and prepare routeing and reporting measures, including recommendations, as appropriate, for consideration and approval by the Sub-Committee with a view to adoption by the Committee, and submit a report on Thursday, 3 July 2014.

Report of the Ships' Routeing Working Group

3.20 Having received and considered the working group's report (NCSR 1/WP.6), the Sub-Committee approved it in general and, in particular, took action as summarized in the ensuing paragraphs.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

4 CONSIDERATION OF ECDIS MATTERS RELATED TO THE IMPLEMENTATION OF THE CARRIAGE REQUIREMENTS IN SOLAS REGULATIONS V/19.2.10 AND V/19.2.11

4.1 The Sub-Committee recalled that MSC 91 had agreed to include in the 2012-2013 biennial agenda of the NAV Sub-Committee and provisional agenda for NAV 59 an output on "Consideration of ECDIS matters related to the implementation of the carriage requirements in SOLAS regulations V/19.2.10 and V/19.2.11", with a target completion year of 2014.

4.2 The Sub-Committee further recalled the information provided to, and discussions which had taken place at NAV 59 (NAV 59/20, section 12).

4.3 The Sub-Committee considered:

- .1 the report submitted by IHO, CIRM and IEC (NCSR 1/4) on the revision of several ECDIS standards related to investigations into the anomalous operation of some ECDIS, which also addressed the transition from the current editions of the standards to the new ones; and
- .2 the information provided by IHO (NCSR 1/4/1) on the action taken by it since NAV 59 to monitor and address ECDIS issues related to the implementation of the carriage requirements in SOLAS regulations V/19.2.10 and V/19.2.11, and noted, in particular, that vigilance and attentiveness were still relevant.

4.4 During the ensuing discussions, the following views were expressed that:

- .1 there were a number of issues relating to ECDIS still pending to be resolved, however, it was difficult to decide on additional work needed in addition to that had been done so far;
- .2 the status of the revised standards, from IMO perspective, was governed by SN.1/Circ.266/Rev.1, which stated "ECDIS that is not updated for the latest version of IHO Standards may not meet the chart carriage requirements as set out in SOLAS regulation V/19.2.1.4"; and

- .3 some delegations expressed concerns with regard to the consequences of updating existing standards on an ad hoc basis without proper control or oversight from IMO.

4.5 Taking into account the view's expressed and given that no further work had been identified in relation to this agenda item, the Sub-Committee agreed to invite the Committee to delete the planned output "Consideration of ECDIS matters related to the implementation of the carriage requirements in SOLAS regulations V/19.2.10 and V/19.2.11" from its biennial agenda under agenda item 25.

4.6 In this context, the Sub-Committee agreed that progress in resolving the outstanding issues with ECDIS operating anomalies, as well as other matters related to the implementation of ECDIS, could be reported to the Sub-Committee under Any other business.

4.7 The Sub-Committee also noted with appreciation the information provided by the Republic of Korea (NCSR 1/INF.15) on analysis of a survey held under seafarers on the display and functions of ECDIS, in order to identify any anomalies, as well as the seafarer's level of satisfaction and requirements, for further functional improvement.

5 CONSOLIDATION OF ECDIS-RELATED IMO CIRCULARS

5.1 The Sub-Committee recalled that MSC 90 had agreed to include in the 2012-2013 biennial agenda of the NAV Sub-Committee, an unplanned output on "Consolidation of ECDIS-related IMO circulars", with a target completion year of 2014.

5.2 The Sub-Committee also recalled that NAV 59, recognizing the complexity of the task at hand and that the target completion year for this output was 2014, invited Member Governments to review the draft MSC circular (NAV 59/11, annex) in order to meet the objectives to have all guidance related to ECDIS as a single new circular, revoking existing circulars, at NCSR 1.

5.3 The Sub-Committee considered document NCSR 1/5 (Australia et al.) proposing to consolidate existing ECDIS-related information contained in seven separate circulars into one circular and noted, in particular, that the proposed draft MSC circular:

- .1 consolidated the contents of seven "pure" ECDIS-related circulars (i.e. MSC.1/Circ.1391, SN.1/Circ.207/Rev.1, SN.1/Circ.266/Rev.1, SN.1/Circ.276, SN.1/Circ.312, STCW 7/Circ.10 and STCW 7/Circ.18) and, if approved, it would revoke the above-mentioned ECDIS-related circulars, allowing to easily keep the information up to date without duplication or need for continual cross-referencing; and
- .2 did not introduce any new ECDIS requirement, but rather consolidated existing guidance in a structured manner, including only ECDIS-related information that was contained in existing circulars.

5.4 After some discussion, the Sub-Committee referred the draft circular to the Drafting Group on the finalization of draft circulars and resolution with a view to finalization and subsequent approval by the Committee.

ESTABLISHMENT OF THE DRAFTING GROUP ON THE FINALIZATION OF DRAFT CIRCULARS AND RESOLUTION

5.5 The Sub-Committee established the Drafting Group on the finalization of draft circulars and resolution under the chairmanship of Mr. Yijiang Qu (China) and instructed it, taking into account decisions of, and comments and proposals made in plenary, to, using the text provided in the annex to document NCSR 1/5 as the base document, finalize a draft MSC circular on ECDIS – Guidance for Good Practice, for consideration by the Sub-Committee, forwarding to the HTW Sub-Committee for review and subsequent approval by the Committee, and submit its report on Thursday, 3 July 2014.

Report of the drafting group

5.6 On receipt of the report of the drafting group (NCSR 1/WP.9), the Sub-Committee took action as summarized in the ensuing paragraphs.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

6 APPLICATION OF THE SATELLITE NAVIGATION SYSTEM "BEIDOU" IN THE MARITIME FIELD

6.1 The Sub-Committee recalled that MSC 91 had agreed to include, in the 2012-2013 biennial agenda of the NAV Sub-Committee and provisional agenda for NAV 59, an output on "Application of the satellite navigation system 'BeiDou' in the maritime field", with 2014 as a target completion year.

6.2 The Sub-Committee noted that the performance standards for shipborne BDS receiver equipment had been adopted by MSC 93 as resolution MSC.379(93), and that NAV 59 had noted the preliminary assessment provided by China (NAV 59/4/1) which needed to be further developed in order to consider recognition of the new system as a future component of the World-Wide Radionavigation System (WWRNS).

6.3 The Sub-Committee considered the update provided by China (NCSR 1/6) on the status of BeiDou Navigation Satellite System (BDS) and further information for consideration of recognizing BDS as a component of WWRNS. In this context, they also indicated the intention to develop two more performance standards for GNSS receiver equipment as an extension of the current GPS/GLONASS receiver standard (resolutions MSC.114(73) and MSC.115(73)). To this end, the Sub-Committee noted that this would lead to the revision of the two existing MSC resolutions which did not fall within the current planned output and would require a proposal for a new unplanned output. Accordingly, the Sub-Committee invited China to forward a proposal for a new unplanned output to the Committee.

6.4 The Sub-Committee noted the views expressed by the EC observer that the development of these two more performance standards should be considered under agenda item 10 on the development of performance standards for multi-shipborne navigation receivers. Furthermore, the Sub-Committee also noted the intention expressed by the delegation of China that they were intending to submit a proposal for a new unplanned output to the Committee for the development of these two specific performance standards.

6.5 After some discussion related to the recognition of BDS, the Sub-Committee agreed that China had provided the necessary information and to advise the Committee to:

- .1 recognize BDS as a future component of the WWRNS and approve the associated draft Assembly resolution, as set out at annex [...]; and

- .2 delete the output "Approved satellite navigation system 'BeiDou' in the maritime field" from the biennial agenda of the Sub-Committee under agenda item 6.

6.6 The Sub-Committee noted that India was developing a satellite based navigation system called "GAGAN" and that they would provide further information shortly.

7 DEVELOPMENT OF EXPLANATORY FOOTNOTES TO SOLAS REGULATIONS V/15, V/18, V/19 AND V/27

7.1 The Sub-Committee recalled that MSC 90 had agreed to include in the 2012-2013 biennial agenda of the NAV Sub-Committee an unplanned output on "Development of explanatory footnotes to SOLAS regulations V/15, V/18, V/19 and V/27", with a target completion year of 2014.

7.2 The Sub-Committee recalled further that NAV 59, having considered documents NAV 59/13 (Australia et al.) and NAV 59/13/1 (ICS and CLIA), had invited Members to reconsider this issue and submit comments and proposals for consideration at this session.

7.3 The Sub-Committee considered document NCSR 1/7 (Republic of Korea) highlighting practical difficulties that may occur by the ECDIS software update and proposing the development of draft guidelines for ECDIS software update as an alternative solution to the development of explanatory footnotes to SOLAS regulations in order to contribute to the smooth implementation of ECDIS software update.

7.4 Having considered the proposal, along with the question of whether guidelines or explanatory footnotes to SOLAS regulations should be developed, the Sub-Committee, whilst noting that the proposed draft guidelines contained some useful elements, agreed that the best way forward to address the ECDIS issues related to implementation, would be to amend the relevant SOLAS regulations.

7.5 In this context, the Sub-Committee decided not to take any further action related to the output "Development of explanatory footnotes to SOLAS regulations V/15, V/18, V/19 and V/27" and agreed to invite the Committee to delete this planned output from its biennial agenda under agenda item 25.

7.6 The Sub-Committee also invited interested Member Governments to submit proposals for a new unplanned output on the development of draft SOLAS amendments in order to address the ECDIS-related issues to the Committee.

8 CONSIDERATION OF LRIT-RELATED MATTERS

8.1 The Sub-Committee noted the outcome of MSC 92 (MSC 92/26, paragraphs 9.15 to 9.17) on LRIT-related matters.

Developments in relation to the operation of the LRIT system since COMSAR 17

8.2 The Sub-Committee noted the information provided by the Secretariat (NCSR 1/8 and NCSR 1/INF.2) related to communication of information and the operation of the LRIT Data Distribution Plan (DDP) server and the Information Distribution Facility (IDF) since COMSAR 17, including issues related to the renewal of Public-Key Infrastructure (PKI) certificates.

8.3 The Sub-Committee also noted the information provided by the European Commission (NCSR 1/8/5) related to the operation, performance and maintenance of the International LRIT Data Exchange (IDE) during 2013, including a security assessment conducted by an independent auditor team recommending the use of a stronger cryptographic key as part of the implementation of PKI certificates.

8.4 With regard to the above recommendation, the Sub-Committee requested the Secretariat to consider, as PKI certificate authority, the recommendations for using a stronger cryptographic key and to advise NCSR 2 on the feasibility of its technical implementation, including any necessary modifications to the LRIT technical specifications and consequent impact on the functioning of existing LRIT Data Centres (DCs), the DDP server and the IDE.

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

8.5 The Sub-Committee had for its consideration the following documents submitted by IMSO, as the LRIT Coordinator:

- .1 NCSR 1/8/1 providing comments and recommendations related to the audits carried out since COMSAR 17;
- .2 NCSR 1/8/2 providing information related to 89 audits conducted from 19 October 2012 to 28 March 2014;

- .3 NCSR 1/INF.3 containing the summary audit reports of DCs and of the IDE;
and
- .4 NCSR 1/INF.18 containing information on the scale of charges to be levied
by the LRIT Coordinator during 2014.

8.6 The Sub-Committee noted the information contained in the above documents and, in particular, that:

- .1 the Venezuela NDC had not been audited since its establishment and had three audits pending due to the absence of acknowledgement or consent to the audit;
- .2 the latest audit of the Morocco NDC had been suspended due to outstanding financial obligations relating to its 2012 audit;
- .3 the Ecuador NDC had been issued with a major non-conformity note for the second consecutive time and that no corrective actions had been taken as of the end of the audit period; that the DC declined the 2013 audit as the Government of Ecuador was considering to either join another DC or to use the services of a commercial LRIT service provider to continue operating in the LRIT system; and that the DC did not renew the PKI certificate on 31 December 2013 and was therefore, since then, no longer able to connect to the LRIT system;
- .4 the Indonesia NDC had been issued with a major non-conformity note for the second consecutive time and that no corrective actions had been taken as of the end of the audit period; and that the DC had been re-established under a different DC provider in August 2013;
- .5 the Republic of Korea NDC had been issued with a major non-conformity note during the last audit and that the overall performance of the DC would be reviewed during the next audit; and
- .6 non-audited DCs were creating a financial burden for other DCs being audited.

8.7 The Sub-Committee recalled the decisions taken at MSC 90 related to DCs not audited and the barring, suspension or temporarily disconnection of DCs from operating in the LRIT system (MSC 90/28, paragraph 6.20).

8.8 Having considered the above issues, the Sub-Committee:

- .1 urged those Governments responsible for the DCs that had not been audited to ensure they comply with the provisions of Revised performance standards (resolution MSC.263(84), as amended), in particular paragraphs 7.5, 7.5.1 and 7.5.2;
- .2 requested the Secretariat to remove the Ecuador NDC from the DDP until it is fully retested and to inform the points of contact for LRIT-related matters designated by the Government of Ecuador of the action taken;
- .3 urged the Indonesia NDC and the Republic of Korea NDC to implement the necessary corrective actions and agreed to review the issues after the completion of the next year audits; and
- .4 agreed that DCs not being audited or issued with major non-conformity notes should conduct additional testing in order to verify their correct functioning and, in this respect, invited the LRIT Coordinator to prepare, in consultation with DC operators, draft test cases and procedures, for consideration by the Sub-Committee at a future session.

8.9 In this context, the Sub-Committee noted the views expressed by:

- .1 the delegation of Ecuador, advising that work was currently being carried out to rectify the issues with the Ecuador NDC and that technical assistance had been requested from the Secretariat;
- .2 the delegation of Indonesia, indicating that corrective actions had already been taken and that the LRIT Coordinator had been informed accordingly; and

- .3 the Republic of Korea, informing that a detailed analysis had been conducted and corrective actions were implemented, which would be reviewed by the LRIT Coordinator.

8.10 In light of the foregoing, the Sub-Committee endorsed a draft revised 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 for dissemination as COMSAR.1/Circ.54/Rev.2.

Proposals and recommendations related to the functioning and operation of the LRIT system and related procedures

8.11 The Sub-Committee had for its consideration the following documents:

- .1 NCSR 1/8/1 (IMSO), paragraph 23.3, recommending the promotion of a wider and more efficient use of the LRIT system amongst SAR services;
- .2 NCSR 1/8/3 (Secretariat) providing relevant outcomes and recommendations from the meetings of the LRIT Operational Governance Body (OGB) since COMSAR 17, including proposed amendments to MSC.1/Circ.1376/Rev.1 on *Continuity of service plan for the LRIT system* in order to review the composition of the OGB and allow the submission of relevant technical recommendations by the OGB to the Sub-Committee, through the Secretariat, with the view to improving the efficiency, effectiveness and security of the LRIT system;
- .3 NCSR 1/8/4 (IMSO) providing information on the outcome of the Second session of the IMSO LRIT Operators Meeting held from 3 to 5 March 2014, and containing a number of recommendations to improve the overall functioning of the LRIT system, including proposed amendments to:
 - .1 MSC.1/Circ.1259/Rev.5 and MSC.1/Circ.1294/Rev.3 on LRIT Technical documentation, parts I and II, respectively, and MSC.1/Circ.1376/Rev.1 on Continuity of service plan for the LRIT system concerning the notification, reporting and recording of temporary suspensions of operations or reduction of the level of

service provided, the provision of LRIT information to/from non-metropolitan territories and special administrative regions, the overlapping of Custom coastal area polygons and the provision of LRIT information in response to a SAR Surface Picture (SURPIC) request; and

- .2 MSC.1/Circ.1412 on Principles and guidelines relating to the review and audit of the performance of LRIT Data Centres and of the International LRIT Data Exchange concerning arrangements for making available summary audit reports of DCs and of the IDE;
- .4 NCSR 1/8/7 (European Commission) proposing the development of web services and related messages between DCs and the DDP server for the upload and validation of geographical polygons in the DDP and the activation of coastal State standing orders;
- .5 NCSR 1/8/8 (European Commission) proposing an amendment to MSC.1/Circ.1338 on *Guidance to Search and Rescue services in relation to requesting and receiving LRIT information* in case a DC is temporarily out of service and proposing the distribution of geographical polygons related to the area of responsibility of SAR services to DCs using the DDP server; and
- .6 NCSR 1/8/9 (China) proposing amendments to MSC.1/Circ.1307 on *Guidance on the survey and certification of compliance of ships with the requirement to transmit LRIT information* in order to establish procedures for revoking LRIT Conformance test reports which are no longer valid as per any of the reasons indicted in paragraphs 7.2 and 7.3 of the circular.

8.12 Having considered the above proposals, the Sub-Committee took action as indicated in the ensuing paragraphs.

Proposed amendments to LRIT-related circulars

8.13 The Sub-Committee agreed with the proposed amendments to:

- .1 MSC.1/Circ.1376/Rev.1, as set out in the annex of document NCSR 1/8/3;
- .2 MSC.1/Circ.1259/Rev.5, MSC.1/Circ.1294/Rev.3 and MSC.1/Circ.1376/Rev.1, as set out in annexes 3 to 6 to the annex of document NCSR 1/8/4, with a minor modification to the draft amendments to paragraph 2.2.4.9 of the Technical specifications for communications within the LRIT system (MSC.1/Circ.1259/Rev.5, annex, annex 3) to clarify that the DC should only check the position reports received during the last 24 hours;
- .3 MSC.1/Circ.1412, as set out in annex 7 to the annex of document NCSR 1/8/4; and
- .4 MSC.1/Circ.1338, as set out in the annex of document NCSR 1/8/8, with a minor modification to insert the new text proposed in paragraph 4 of document NCSR 1/8/8 at the end of paragraph 4.1 of the Guidance instead of paragraph 4.4 and to add the word "However" at the beginning of the proposed text.

8.14 With regard to the draft amendments to MSC.1/Circ.1307 proposed in document NCSR 1/8/9, the Sub-Committee, whilst supporting the idea in general, agreed that further modifications would be required to address concerns expressed during its consideration and, in this regard, invited China to re-submit a revised proposal to NCSR 2.

8.15 In relation to the above-mentioned proposed amendments to MSC.1/Circ.1412, the Sub-Committee also agreed to:

- .1 request the Secretariat to modify the web interface of the DDP so as to allow the LRIT Coordinator to upload summary audit reports and information related to the list of audits conducted directly in the DDP and to make this information available to GISIS users of Member States; and

- .2 in view of the above decision, discontinue the publishing of future revised versions of COMSAR.1/Circ.54,

and invited the Committee to endorse the above actions.

8.16 Subsequently, the Sub-Committee endorsed the draft amendments to MSC.1/Circ.1259/Rev.5, MSC.1/Circ.1294/Rev.3, MSC.1/Circ.1338, MSC.1/Circ.1376/Rev.1 and MSC.1/Circ.1412, as set out in annex [...], and invited the Committee to approve them.

8.17 In doing so, the Sub-Committee authorized the Secretariat to prepare the final text of the draft amendments and to make any editorial corrections that may be identified.

Promotion of a wider and more efficient use of the LRIT system

8.18 The Sub-Committee agreed that:

- .1 coastal States should be allowed to set the reporting rate for the provision of LRIT information (i.e. 15 min, 30 min, 1 h, 3 h or 6 h) in the context of coastal State standing orders in the DDP and perform filtering based on the flag and type of ship (NCSR 1/8/4, paragraph 17.3.1);
- .2 the use of the existing SAR SURPIC request message should be expanded in order to allow coastal States to send a one-time request message for the provision of LRIT information related to ships navigating within a predefined circular or rectangular area and to perform filtering based on the flag and type of ships (NCSR 1/8/4, paragraph 17.3.2); and
- .3 additional web service(s) between DCs and the DDP server and related messages should be developed for the upload and validation of geographical polygons in the DDP, including the activation/deactivation of coastal State standing orders (NCSR 1/8/7),

and invited IMSO to develop, in consultation with DC operators, the necessary draft amendments to the technical specifications for consideration by the Sub-Committee at a future session.

8.19 The Sub-Committee also agreed to request the Secretariat to promote a wider and more efficient use of the LRIT system by SAR services during the implementation of SAR-related technical cooperation activities (NCSR 1/8/1, paragraph 23.3).

8.20 With regard to the further development of an option to allow filtering by type of ship, as indicated in paragraphs 8.18.1 and 8.18.2 above, IMSO clarified that the options that could be considered for classification of type of ships were those defined in SOLAS chapter I or in SN/Circ.227, and that consideration would be given to comments when developing the draft amendments to the LRIT Technical specifications, including adding an extra option for type of ship "undefined".

Further improvements to the functioning of DCs and processing of messages

8.21 The Sub-Committee agreed to:

- .1 complement Receipt Messages with Receipt Code 5 (ship not responding), which were sent in response to a poll or change of frequency request, with standard text to provide information to the requesting SOLAS Contracting Government on the date and time of the last LRIT information received from the ship concerned; and
- .2 the proposal for the distribution of SAR area polygons through the DDP server (NCSR 1/8/8),

and invited IMSO to develop, in consultation with DC operators, the necessary draft amendments to the technical specifications for consideration by NCSR 2.

8.22 The delegation of Greece, supported by Cyprus, Italy, Poland and the United Kingdom, expressed their support, in general, to the proposal made by the European Commission in document NCSR 1/8/8, noting that the DDP polygons representing territorial waters of States should also be clearly displayed on the DC interface.

Other issues

8.23 The Sub-Committee encouraged SOLAS Contracting Governments to keep the contact information of the persons in charge of the operation of their DCs up to date in the DDP (NCSR 1/8/4, paragraph 17.4).

8.24 With regard to the action requested in paragraph 17.6 of document NCSR 1/8/4, the Sub-Committee found it not necessary to encourage Administrations to consider the use of dedicated shipborne terminals for LRIT reporting given that the implementation of related application requirements was already part of the duties and obligations of the Administrations.

8.25 The Sub-Committee noted the technical capability and real potential of the existing LRIT shore-based infrastructure, which could be expanded in the future to facilitate the exchange of additional ship-related information between Administrations to enhance maritime security, safety and the protection of the marine environment (NCSR 1/8/4, paragraph 17.8).

Consideration of the need to review the LRIT system

8.26 The Sub-Committee had for its consideration document NCSR 1/8/6 (European Commission) providing a brief summary of the operational experience of the European Union Cooperative LRIT Data Centre after five years of operation and recommending to initiate a review of the LRIT system for the purpose of continuous improvement.

8.27 During the consideration of the above document, the following views were expressed:

- .1 several delegations supported the proposal for initiating a review of the LRIT system, noting that that was a policy issue that should be considered by the Committee;
- .2 some of the measures that could be reviewed include the consideration of:
 - .1 changing the frequency of data transmissions from four to one transmission per day;

- .2 the need to continue with annual audits of DCS, as well as the high cost of the audits;
 - .3 alternatives for the LRIT Coordinator role and means of auditing DCs; and
 - .4 meeting the objective of LRIT by other means, such as the use of satellite augmented AIS;
-
- .3 careful consideration should be given to the proposal for making the LRIT information available at no cost and the possible consequences; and
 - .4 the level of use of LRIT data remains well below that envisaged at the time the system was developed with consequential impacts on the financial implications for Contracting Governments.

8.28 After some discussion, the Sub-Committee, recognizing the need for a review of the LRIT system, agreed that the consideration of possible solutions on the functioning and operation of the LRIT system to improve its financial sustainability and viability was a policy issue that was within the remit of the Committee. Accordingly, the Sub-Committee invited interested Member Governments, if they considered it to be necessary, to submit appropriate proposals to the Committee.

9 DEVELOPMENT OF AN E-NAVIGATION STRATEGY IMPLEMENTATION PLAN

9.1 The Sub-Committee recalled that NAV 59 had re-established the Correspondence Group on e-navigation to, inter alia, finalize the draft e-navigation Strategy Implementation Plan (SIP) and progress related guidelines (NAV 59/20, paragraphs 6.37 and 6.38).

9.2 The Sub-Committee noted that:

- .1 HTW 1 had considered a report of the Correspondence Group (HTW 1/20/1) on human element and training issues along with possible training implications related to the introduction of e-navigation and agreed that it was premature to consider any training requirements at that stage, pending the finalization of the SIP (HTW 1/21, paragraphs 20.9 to 20.13); and

- .2 MSC 93, noting the relevant discussions at NAV 59 regarding the convening of an intersessional meeting on e-navigation, had decided that there was no need to convene such a meeting (MSC 93/22, paragraphs 8.9 to 8.11).

Consideration of the draft e-navigation Strategy Implementation Plan and related guidelines

9.3 The Sub-Committee had for its consideration the following documents:

- .1 NCSR 1/9 and NCSR 1/9/1 (Norway) containing the report of the Correspondence Group on e-navigation along with the draft SIP and four draft guidelines related to e-navigation;
- .2 NCSR 1/9/2 (Germany) commenting on document NCSR 1/9 and proposing an improved specification of the Risk Control Option (RCO) 5 as basis for the continuing completion, detail and harmonization of related tasks, especially task T12 described in the SIP; and
- .3 NCSR 1/9/3 (CIRM) commenting on document NCSR 1/9 and proposing the removal of references to the development of S-Mode from the SIP.

9.4 The Sub-Committee noted with appreciation, the information contained in the following documents:

- .1 NCSR 1/INF.5 and NCSR 1/INF.6 (Norway), related to the report of the correspondence group, containing background information on the development of e-navigation and a list of Standards that could be evaluated for e-navigation, respectively;
- .2 NCSR 1/INF.7 (Republic of Korea), providing information on the results of a research to specify the Common Maritime Data Structure (CMDS) at a detailed level for improving existing onboard systems related to the implementation of e-navigation;
- .3 NCSR 1/INF.13 (BIMCO and CIRM), providing information on the work of the CIRM/BIMCO Joint Working Group on Software Maintenance, which

was established to address the problems involved with shipboard software and firmware maintenance;

- .4 NCSR 1/INF.16 (Denmark, Republic of Korea and Sweden), reporting on the international joint test for e-navigation solutions in Korean waters as a first step toward implementing a global e-navigation test bed;
- .5 NCSR 1/INF.17 (Republic of Korea), providing information on the consideration on available services from the perspective of shipboard users of e-navigation;
- .6 NCSR 1/INF.18 (Italy and Sweden), providing results and recommendations from the MONALISA and MONALISA 2.0 projects; and
- .7 NCSR 1/INF.21 (Denmark, France and Republic of Korea), providing an overview of the Maritime Cloud concept.

9.5 During the consideration of the draft SIP, the following views, inter alia, were expressed:

- .1 IMO should continue to lead and coordinate the future work on e-navigation in order to ensure global implementation in a structured and coordinated manner;
- .2 a project management approach should be adopted to control the overall progress of e-navigation, in particular, with regard to those tasks requiring coordination with other international organizations;
- .3 implementation of tasks should be conducted taking into account the methods of work of the Organization;
- .4 a new item should be added to the agenda of the Sub-Committee to continue monitoring implementation and future developments on e-navigation during the next two biennia after 2015;

- .5 a single new planned/unplanned output could be proposed to address the work of all tasks contained in the SIP, but this could be not in line with the methods of work of the Organization;
- .6 some of the tasks could be considered and further developed as part of the review of the GMDSS (e.g. task 15 related to integration of existing communication systems and their future development);
- .7 the Organization should consider inviting relevant international organizations to assist with the development and implementation of e-navigation; and
- .8 the future development of e-navigation was within the purview of the Committee.

9.6 The Sub-Committee considered document NCSR 1/9/2 (Germany) and, following Germany's advice, agreed to consider the proposals contained in the document under agenda item 10 "Development of performance standards for multi-system shipborne navigation receivers" (see paragraph 10.[...]).

9.7 With regard to document NCSR 1/9/3 (CIRM), the Sub-Committee agreed with the view of the majority of the delegations that references to S-Mode should not be deleted from the SIP.

9.8 After a lengthy discussion related to the role of IMO in coordinating the future development of e-navigation and on how to proceed with the implementation of related tasks bearing in mind the methods of work of the Organization, the Sub-Committee finalized the SIP, as set out in annex [...], and agreed to forward it to the Committee for approval.

9.9 The Sub-Committee also agreed to invite the Committee to note:

- .1 the views expressed by delegations in paragraph 9.5 above; and
- .2 that IALA, IHO, the Nautical Institute and others had indicated that they were ready to continue to support IMO with the future development of e-navigation and to contribute with the work of related tasks.

9.10 The Sub-Committee noted that some Member States were considering to submit proposals to the Committee for new planned/unplanned outputs addressing the future development of the tasks contained in the SIP.

9.11 The Sub-Committee also noted the views expressed by some delegations that the establishment of a website could help to promote information on e-navigation and that IMO should continue to coordinate and lead the work related to e-navigation through an appropriate mechanism.

9.12 With regard to the draft guidelines contained in annexes 1 to 4 of document NCSR 1/9/1 (Norway), the Sub-Committee:

- .1 endorsed the draft *Guidelines on Harmonization of test beds reporting*, as set out in annex [...], and agreed to invite the Committee to approve it; and
- .2 agreed that the draft *Guidelines on Human Centred Design (HCD) for e-navigation systems*, the draft *Guidelines on Usability Testing, Evaluation and Assessment (UTEA) for e-navigation systems* and the draft *Guidelines on Software quality assurance (SQA) in e-navigation* should be combined and harmonized into one single circular to avoid overlapping of subjects and cross-referencing.

9.13 Taking into account the above decisions, the Sub-Committee agreed to establish a Correspondence Group on Harmonization of guidelines related to e-navigation under the coordination of Australia¹ and instructed it to:

- .1 consolidate the draft *Guidelines on Human Centred Design (HCD) for e-navigation systems*, the draft *Guidelines on Usability Testing, Evaluation and Assessment (UTEA) for e-navigation systems* and the draft *Guidelines on Software quality assurance (SQA) in e-navigation* contained in annexes 1, 2 and 3 of document NCSR 1/9/1, respectively, into a single and harmonized guideline;

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- .2 if necessary, submit a report to HTW 2 raising specific questions related to human element aspects contained the draft guideline; and
- .3 submit a consolidated final report to NCSR 2.

9.14 The Sub-Committee authorized the Secretariat, when preparing the final text of the SIP and the draft *Guidelines on Harmonization of test beds reporting*, to make any editorial corrections that might be identified.

10 DEVELOPMENT OF PERFORMANCE STANDARDS FOR MULTI-SYSTEM SHIPBORNE NAVIGATION RECEIVERS

10.1 The Sub-Committee recalled that MSC 90 agreed to include in the post-biennial agenda of the Committee, an unplanned output on "Development of performance standards for multi system shipborne navigation receivers", with two sessions needed to complete the work, assigning the NAV Sub-Committee as the coordinating organ.

10.2 The Sub-Committee considered:

- .1 the proposal by the United States et al. (NCSR 1/10) providing draft Performance standards for shipborne receiver equipment capable of using either a single radionavigation system or a combination of radionavigation systems;
- .2 comments and proposed amendments provided by China (NCSR 1/10/1); and
- .3 a proposed amendment provided by ESA (NCSR 1/10/2).

10.3 The Sub-Committee also considered a proposal by Germany (NCSR 1/9/2), submitted under agenda item 9, related to the development of an open, harmonized and extendable onboard PNT system concept covering the requirements for resilience and integrity for PVT within multi radionavigation equipment and for PNT within INS and recommending the development of a functional, goal-based performance standard for the PVT data processing for multi radionavigation equipment and PNT processing unit for INS.

10.4 During the ensuing discussion, the following views were expressed:

- .1 a number of delegations supported the draft Performance standards, as presented in document NCSR 1/10 (United States et al.), including as well comments and modifications proposed in documents NCSR 1/10/1 (China) and NCSR 1/10/2 (ESA);
- .2 further consideration should be given to the proposal contained in document NCSR 1/9/2 (Germany); and
- .3 some changes in organization regarding the modular concept as well as other editorial corrections may be required.

10.5 Recognizing that this would need further consideration and the target completion year for this planned output was 2015, and having noted that some interested parties were willing to work together to produce a joint proposal for consideration at the next session of the Sub-Committee, the Sub-Committee invited member Governments and interested organizations to consider the matter in detail and submit comments and proposals to NCSR 2.

11 REVISION OF THE GUIDELINES FOR THE ONBOARD OPERATIONAL USE OF SHIPBORNE AUTOMATIC IDENTIFICATION SYSTEMS (AIS)

11.1 The Sub-Committee recalled that:

- .1 MSC 90 had agreed to include in the 2012-2013 biennial agenda of the NAV Sub-Committee an unplanned output on "Revision of the Guidelines for the onboard operational use of shipborne automatic identification systems (AIS)", with a target completion year of 2014; and
- .2 NAV 59, having progressed the development of the draft amendments, forwarded the draft text of the revised Assembly resolution, as set out in document NAV 59/WP.7, annex 4, to NCSR 1 for review and finalization and invited Member Governments and international organizations to submit comments and proposals to NCSR 1.

11.2 The Sub-Committee noted that the Secretariat had provided the outcome of NAV 59 (NAV 59/WP.7, annex 4), with some editorial corrections proposed by the Secretariat (NCSR 1/11).

11.3 The Sub-Committee considered the proposal submitted by Australia (NCSR 1/11/1), commenting on and proposing an amendment to the draft revised Guidelines. After a brief discussion, the Sub-Committee decided to refer the finalization of the draft circular to the Drafting Group on the finalization of draft circulars and resolution.

11.4 The Sub-Committee noted with appreciation the information provided by Australia (NCSR 1/INF.9) relating to Australia's experiences with deficiencies with the content of AIS transmissions from ships.

Instruction for the Drafting Group on the finalization of draft circulars and resolution

11.5 The Sub-Committee instructed the Drafting Group on the finalization of draft circulars and resolution, taking into account decisions of, and comments and proposals made in plenary, to finalize the draft revision of the *Guidelines for the onboard operational use of shipborne automatic identification systems (AIS)* (resolution A.917(22), as amended by resolution A.956(23)), using the text provided in the annex to document NCSR 1/11 as the basis to work from and taking into account document NCSR 1/11/1, for consideration and endorsement by the Sub-Committee, and submit its report on Thursday, 3 July 2014.

Report of the Drafting Group on the finalization of draft circular and resolution

11.6 On receipt of the report of the Drafting Group on the finalization of draft circulars and resolution (NCSR 1/W.9), the Sub-Committee took action as summarized in the ensuing paragraphs.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

12 DEVELOPMENTS IN MARITIME RADIOCOMMUNICATION SYSTEMS AND TECHNOLOGY

12.1 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).

12.2 The Sub-Committee noted that based on the request of COMSAR 17, the Committee had extended the target completion year for this item to 2014.

Recognition of Iridium mobile-satellite system as a GMDSS service provider

12.3 The Sub-Committee recalled that MSC 92 had considered matters related to the application of the Iridium mobile-satellite system for recognition and use in the GMDSS and agreed to refer the matter to the NCSR Sub-Committee for evaluation of detailed information under its agenda item on "Developments in maritime radiocommunication systems and technologies" (MSC 92/26, paragraphs 9.22 to 9.25).

12.4 The Sub-Committee considered:

- .1 the proposal submitted by the United States (NCSR 1/12) that the Iridium mobile-satellite system be considered for recognition in the GMDSS in accordance with the criteria and guidance of resolution A.1001(25) and MSC.1/Circ.1414, providing detailed information related to the Application to recognize Iridium Satellite LLC for use in the GMDSS;
- .2 the information provided by IMSO (NCSR 1/12/1) on actions it had undertaken in preparation for the recognition of a new mobile satellite communications system for the GMDSS and highlighting relevant financial and operational matters; and
- .3 comments provided by the United Kingdom (NCSR 1/12/2) on document NCSR 1/12, outlining a number of concerns on the details provided relating to the recognition of the Iridium mobile-satellite system as a GMDSS service provider, expressing the view that their concerns would need to be addressed before the proposal could be subject to any further detailed consideration.

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

- .1 that the recognition of new satellite service providers as part of the GMDSS was supported in general;

- .2 whilst sharing the concerns of the United Kingdom (NCSR 1/12/2), the majority of the delegations supported the evaluation of Iridium for recognition as satellite service provider of the GMDSS and recommended that further technical analysis be undertaken;
- .3 other delegations highlighted other concerns, such as: incompatibility of satellite systems and of equipment requirements under SOLAS chapter IV; additional requirements and equipment for SAR authorities and RCCs, the limitation of the network architecture with regard to the number of accesses to land stations which could affect the effective dissemination of information; and the costs associated with equipment acquisition and transmission of MSI related messages, etc.;
- .4 the detailed technical assessment should be conducted as soon as possible, by IMSO or another independent group of experts, addressing all related concerns to ensure compliance with the criteria set out in resolution A.1001(25);
- .5 some delegations indicated that more information should be presented to the Sub-Committee in order to evaluate the proposal, while others were of the opinion that, in order to avoid delaying the process, the additional information could be presented directly to the independent body that would conduct the technical assessment; and
- .6 MSC 94 could consider establishing a group of experts to conduct the detailed technical assessment which should be reported to NCSR 2.

12.6 The Chairman, noting the provisions of resolution A.1001(25) and MSC.1/Circ.1414, clarified the following procedures related to the process of recognition of mobile satellite communication systems for use in the GMDSS:

- .1 an application for recognition should be considered and reviewed first by the Committee and, if there are no objections, it should be forwarded to the NCSR Sub-Committee;

- .2 the NCSR Sub-Committee should then verify and evaluate the information, based on the information provided by the Government proposing such satellite system for possible recognition and produce an evaluation report; in doing so, the provisions of relevant regulations of SOLAS chapter IV and the criteria established by resolution A.1001(25) should be observed;
- .3 in order to produce such an evaluation report, a technical and operational assessment should be conducted by an independent body which can report directly to the NCSR Sub-Committee; however, it is within the purview of the Committee to decide who should undertake the technical and operational assessment and to issue the request;
- .4 once the technical and operational assessment is received by the NCSR Sub-Committee and the evaluation report is produced, the Committee, following satisfactory consideration of the evaluation report, should adopt an MSC resolution recognizing the new Maritime Mobile Satellite Services provider; and
- .5 the new Maritime Mobile Satellite Services provider should then be subject to oversight by IMSO in accordance with the rules and arrangements set out in the public services agreement (PSA) to be concluded between the service provider and IMSO.

12.7 With regard to the documents presented and the comments and views expressed by delegations, the Chairman also clarified that, based on the provisions of paragraph 11 of MSC.1/Circ.1414, the technical and operational assessment report to inform the Sub-Committee's evaluation could be produced by an independent body, but not necessarily only by IMSO.

12.8 The IMSO observer confirmed the Chairman's interpretation and clarified that their submission was in response to the request of the United States (NCSR 1/12). IMSO also indicated its readiness and willingness to proceed with the technical evaluation and assessment, should the Committee wish to request IMSO to do so.

12.9 After an in-depth discussion, the Sub-Committee, recognizing general support that the Iridium application be evaluated as GMDSS mobile satellite service provider in accordance with the criteria defined in resolution A.1001(25), agreed:

- .1 to invite the Committee to consider and decide on which independent body should produce a technical and operational assessment of the information contained in documents NCSR 1/12 and NCSR 1/12/2 and provide a report to the NCSR Sub-Committee for evaluation;
- .2 that additional information as required could be presented directly to the independent body through the Secretariat in order to address the relevant concerns expressed in document NCSR Q0 1 1(i)5(on)3 2q-4((BT)-6(BT10 1 375-4(o)-0

Maritime radiocommunication matters, which took place from 14 to 18 October 2013 under the Chairmanship of Mr. K. Fisher (United Kingdom).

Definition of sea areas A3 and A4

13.3 The Sub-Committee considered document NCSR 1/13/3 (France) highlighting the challenges for the Organization when more mobile satellite communication systems would be recognized as GMDSS service provider and focussing on the definition of sea areas A3 and A4 and their view that defining areas A3 and A4 should go beyond the three options proposed in paragraph 30, appendix 2 of the annex to document NCSR 1/17.

13.4 During the ensuing discussions, the Sub-Committee:

- .1 noted this was a complex matter and more options should be considered, including for instance the option of establishing separate sea areas for satellite systems with regional (A5) and global (A6) coverage;
- .2 taking into account that becoming a satellite provider for use in the GMDSS was a lengthy and complex process, noted that it was not expected that a large amount of GMDSS service providers would be recognized in the foreseeable future; and
- .3 agreed that this matter should be further considered in the detailed review.

13.5 The Sub-Committee noted that the Joint IMO/ITU Expert Group had finalized the draft outcome of the High-level review, based on the draft prepared by the Correspondence Group on the Review of the GMDSS, as set out in appendix 2 of the annex to document NCSR 1/17. In this context the Sub-Committee:

- .1 noting that, although in most cases the same equipment was used, security related communications, including the Ship Security Alert System, did not form part of the GMDSS and were clearly separated from the new proposed functional requirements for the proposed Modernized GMDSS, endorsed the new proposed definition of "Security related communications", to be added to SOLAS regulation IV/2 (paragraph 6 of appendix 2);
- .2 endorsed the proposed revision to the definition of "General communications" in SOLAS regulation IV/2 (paragraph 11 of appendix 2);

- .3 noted that there was no need to revise the current definition of Maritime Safety Information in SOLAS regulation IV/2 (paragraphs 6 and 14 of appendix 2);
- .4 endorsed to include the abbreviation 'MSI' in SOLAS regulation IV/2, by means of an editorial amendment (paragraph 14 of appendix 2);
- .5 endorsed the proposal to add a new functional requirement for ships to be capable for transmitting and receiving safety related information, whilst retaining the functional requirement for ships to receive Maritime Safety Information (MSI) (paragraphs 16 and 17 of appendix 2);
- .6 endorsed the proposed ten functional requirements for the Modernized GMDSS (paragraph 17 of appendix 2);
- .7 noted that the four levels of priority should be retained and that two priorities were sufficient for controlling the radiocommunication link, for example by using pre-emption (paragraphs 19 and 20 of appendix 2);
- .8 noted that sea areas A1 and A2 should be retained as separate sea areas (paragraphs 22 and 23 of appendix 2);
- .9 taking into account the discussion set out in paragraph 13.4 above, noted that there were several options for the definition of sea areas A3 and A4 and that this, together with port State control procedures, would be further considered under the detailed review (paragraphs 24 to 32 of appendix 2);
- .10 noted that at the present time, there was no compelling case for the development of a GMDSS Code (paragraph 36 of appendix 2);
- .11 noted that issues to allow for differences for certain categories of ships would be further considered under the detailed review (paragraph 37 of appendix 2);

- .12 noted that it was too early to decide which systems and equipment would or would not be included in the Modernized GMDSS (paragraph 40 of appendix 2);
- .13 noted the need for interoperability of radiocommunications between ships and between ships and shore stations, as well as the need for consistent user interfaces, alignment with other SOLAS chapters and that the use of goal-based methodologies was not appropriate (paragraph 52 and paragraph 43 of appendix 2); and
- .14 approved the outcome of the High-level Review, as set out in annex [...].

Report of the Correspondence Group on the review of the GMDSS

13.6 The Sub-Committee noted that the Joint IMO/ITU Experts Group had discussed the development of the Outline of the detailed review as prepared by the Correspondence Group on the Review of the GMDSS (CG) and had invited the correspondence group to further consider this matter and report directly to the Sub-Committee (NCSR 1/17, paragraphs 54 to 58 and appendix 3).

13.7 The Sub-Committee considered document NCSR 1/13 (United States) providing the report of the Correspondence Group on the review of the GMDSS, containing a revised draft outline of the Detailed Review of the GMDSS.

13.8 After a brief discussion, the Sub-Committee endorsed the draft outline of the Detailed Review as presented by the correspondence group, and referred it to the Technical Working Group for detailed review using the outline as prepared by the correspondence group.

Coordination of the work on GMDSS review and implementation of e-navigation

13.9 The Sub-Committee considered the proposal submitted by France et al. (NCSR 1/13/4) on coordination between planned outputs relative to the detailed review and modernization of the GMDSS and the development of an e-navigation strategy implementation plan,

13.10 The Sub-Committee noted that:

- .1 whilst e-navigation had a wider scope than the GMDSS, radiocommunications formed a key element for e-navigation;
- .2 there would be benefits in coordinating the work and that there was a need to consider which issues specifically needed coordination; and
- .3 the methodology for the proposed coordination should also be considered.

13.11 After some discussion, the Sub-Committee decided to refer the issue to the Technical Working Group for detailed consideration and advice.

Reduction of inadvertent activation of EPIRPs

13.12 The Sub-Committee considered the proposal submitted by the Islamic Republic of Iran et al. (NCSR 1/13/2) concerning a new system to receive EPIRB alerts directly on board ships and, as such, reduced inadvertent activation of EPIRBs.

13.13 The Sub-Committee noted that:

- .1 false alerts were still a cause for concern and were still being considered as a part of the GMDSS review; and
- .2 the proposal was to require additional carriage requirements which would need a planned output before it could be considered by the Sub-Committee.

13.14 Accordingly, the Sub-Committee decided not to take this proposal further and invited the Islamic Republic of Iran and other interested Member Governments to submit proposals for a new unplanned output on this matter to the Committee.

Plan of work for the GMDSS Review and Modernization project

13.15 The Sub-Committee briefly considered document NCSR 1/13/1 (Secretariat) proposing an editorial revision of the current Plan of work for the GMDSS Review and Modernization project and referred it to the Technical Working Group for detailed consideration and advice, in particular, with regard to the timing of the deliverables.

Analysis of the results of a user survey conducted among seafarers

13.16 The Sub-Committee noted with appreciation the information provided by the Republic of Korea (NCSR 1/INF.14) concerning analysis of the results of a user survey conducted among seafarers in relation to GMDSS modernization.

ESTABLISHMENT OF THE TECHNICAL WORKING GROUP

13.17 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 taking into account document NCSR 1/13/3, conduct further work on the Detailed Review using the outline of the Detailed Review (NCSR 1/13, annex) as prepared by the correspondence group, and identify matters to be considered by the Correspondence Group and by the Experts Group intersessionally between this session and the next session of the Sub-Committee;
- .2 consider document NCSR 1/13/4 on the proposed coordination of the work on GMDSS review and implementation of e-navigation, in particular, to identify areas for which coordination would be required, as well as the methodology of coordination, and advise the Sub-Committee, as appropriate;
- .3 taking into account the progress made at this session, review the Plan of work as provided in the annex to document NCSR 1/13/1 and advise the Sub-Committee, as appropriate, in particular, with regard to the timing of the deliverables; and
- .4 prepare draft terms of reference for the Correspondence Group on the Review of the GMDSS for the intersessional work to be done between NCSR 1 and NCSR 2, reporting in between to the meeting of the Joint IMO/ITU Experts Group; and
- .5 prepare draft terms of reference for the 10th meeting of the Joint IMO/ITU Experts Group, scheduled to take place from 6 to 10 October 2014,

and submit its report on Thursday, 3 July 2014.

Report of the Technical Working Group

13.18 On receipt of the report of the Technical Working Group (NCSR 1/WP.7), the Sub-Committee took action as summarized in the ensuing paragraphs.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

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

14.1 The Sub-Committee noted the information provided by the Secretariat on amendments to the GMDSS Master Plan as disseminated through GMDSS/Circ.16 and encouraged Administrations to check their national data issued in GMDSS/Circ.16, for accuracy, and provide the Secretariat with any necessary amendments, as soon as possible.

Promulgation of Maritime Safety Information – IMO NAVTEX Coordinating Panel

14.2 The Sub-Committee noted that the Chairman of the IMO NAVTEX Coordinating Panel, Mr. Guy Beale, had retired and that the members of the Panel had unanimously endorsed Mr. William Van Den Bergh as its new Chairman. The Sub-Committee congratulated Mr. Van Den Bergh on his appointment and wished him good luck with this new assignment. The Sub-Committee invited the new Chairman of the IMO NAVTEX Coordinating Panel to convey to Mr. Guy Beale the sincere thanks and appreciation of the Sub-Committee for all the work done by him, first for many years as the Secretary and later on as the Chairman of the Panel.

14.3 The Sub-Committee further noted with appreciation the report of the Chairman of the IMO NAVTEX Coordinating Panel (NCSR 1/14) providing a summary of the current operational issues associated with the NAVTEX service worldwide, being addressed by the Panel and its actions/activities since COMSAR 17.

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

Proposed Amendments to the Joint IMO/IHO/WMO Manual on Maritime Safety Information

15.1 The Sub-Committee recalled that

- .1 MSC 86 approved the revised Joint IMO/IHO/WMO Manual on Maritime Safety Information (MSI), as prepared by the WMO and the IHO and endorsed by COMSAR 13, and that COMSAR 17, 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; and
- .2 MSC 92 adopted amendments to resolution A.705(17), as amended on the Promulgation of Maritime Safety Information, and resolution A.706(17), as amended on the IMO/IHO World-Wide Navigational Warning Service Guidance Document. These amendments had been circulated as MSC.1/Circ.1287/Rev.1 and MSC.1/Circ.1288/Rev.1, respectively, and were due to come into force on 1 January 2015.

15.2 The Sub-Committee, noting that the proposal submitted by the IHO and the WMO (NCSR 1/15/1/Rev.1) on amendments to the Joint IMO/IHO/WMO Manual on Maritime Safety Information did not require any decision by the Sub-Committee in principle, referred it to the Technical Working Group for detailed consideration and advice.

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

15.3 In considering document NCSR 1/15 (IHO), the Sub-Committee noted with appreciation the matters discussed and decisions taken at the fifth session of the IHO WWNWS Sub-Committee which was held from 1 to 4 October 2013.

Instructions for the Technical Working Group

15.4 The Sub-Committee instructed the Technical Working Group, taking into account decisions of, and comments and proposals made in plenary, to consider the proposed amendments to the Joint IMO/IHO/WMO Manual on Maritime Safety Information

(NCSR 1/15/1/Rev.1), and provide comments and advise with a view to finalization of the draft MSC circular by the Sub-Committee for approval by the Committee, and submit its report on Thursday, 3 July 2014.

Report of the Technical Working Group

15.5 On receipt of the report of the Technical Working Group (NCSR 1/WP.7), the Sub-Committee took action as summarized in the ensuing paragraphs.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

16 CONSIDERATION OF RADIOCOMMUNICATION ITU-R STUDY GROUP MATTERS

16.1 The Sub-Committee noted that, since COMSAR 17, ITU-R Working party 5B (WP 5B) had held three meetings, in May 2013, November 2013 and May 2014 and that in relation to these meetings, radiocommunication ITU-R Study Group matters of relevance to the Sub-Committee, among others, were the:

- .1 finalization of the revision of Recommendation ITU-R M.1371-4 on AIS;
- .2 finalization of a new Recommendation on characteristics of a digital system, named navigational data for broadcasting maritime safety and security related information from shore-to-ship in the maritime HF frequency band;
- .3 finalization of a new report on Maritime survivor locating systems and devices (man overboard systems), providing an overview of systems and their mode of operation;
- .4 finalization of a new report on Automatic identification system VHF data link loading;
- .5 finalization of a new report on Digital voice communication system on MF/HF radio channels of the maritime mobile service for shore-to-ship/ship-to-shore applications;

- .6 ongoing work on new, and revision of existing recommendations and reports on a variety of topics; and
- .7 ongoing consideration of amendments to Recommendation ITU-R M.493-13 on Digital Selective-Calling (DSC) System for use in the Maritime Mobile Service.

16.2 The Sub-Committee noted further the outcome of the ninth meeting of the Joint IMO/ITU Experts Group on maritime radiocommunication matters (NCSR 1/17) relating to radiocommunication ITU-R Study Group related matters and, in particular:

- .1 the discussion on the Proposed modification of resolution A.803(19) (paragraphs 7 to 9 of the annex to document NCSR 1/17);
- .2 that there might be a need for a mechanism which would allow for the administrative update of:
 - .1 IMO instruments when the ITU Radio Regulations had been revised, to bring IMO regulations in line with ITU regulations; and
 - .2 other IMO instruments dealing with related issues, when a new or revised IMO instrument was adopted (paragraph 8 of the annex to document NCSR 1/17);
- .3 the discussion on the Out-of-Band roll-off for radars (paragraphs 10 and 11 of the annex to document NCSR 1/17); and
- .4 the discussion concerning the liaison statement from Cospas-Sarsat to WP 5B on proposed amendments to the draft revision of Recommendation ITU-R M.1371-4 (paragraphs 12 to 15 of the annex to document NCSR 1/17).

Revision of Recommendation ITU-R M.493-13

16.3 The Sub-Committee referred a liaison statement regarding the revision of Recommendation ITU-R M.493-13 on DSC, received from WP 5B (NCSR 1/16), to the Technical Working Group for consideration and preparation of a liaison statement back to WP 5B, as appropriate.

16.4 In this context, the Sub-Committee noted that WP 5B further developed the revision of the above recommendation and that there was a need to establish the relevance of the liaison statement sent by the November meeting. It further noted that COMSAR 9, COMSAR 10, COMSAR 12, COMSAR 13, COMSAR 14 and COMSAR 16 had sent liaison statements on this matter to WP 5B and that these should be taken into account when finalizing the liaison statement referred to in paragraph 16.3.

Instructions for the Technical Working Group

16.5 The Sub-Committee instructed the Technical Working Group, taking into account decisions of, and comments and proposals made in plenary, to consider document NCSR 1/16 regarding the revision of Recommendation ITU-R M.493-13 on DSC, taking into account further developments in ITU-R Working Party 5B's May 2014 meeting and liaison statements sent by the COMSAR Sub-Committee in previous years, and prepare a liaison statement on this matter back to Working Party 5B, as appropriate and submit its report on Thursday, 3 July 2014.

Report of the Technical Working Group

16.6 On receipt of the report of the Technical Working Group (NCSR 1/WP.7), the Sub-Committee took action as summarized in the ensuing paragraphs.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

17 CONSIDERATION OF ITU WORLD RADIOCOMMUNICATION CONFERENCE MATTERS

Draft IMO position on relevant WRC-15 agenda items

17.1 The Sub-Committee noted that:

- .1 all ITU-R Working Parties and the Joint Task Group 4-5-6-7 (JTG 4-5-6-7) involved in the preparation for WRC-15 had to finalize studies and deliver text for the draft CPM report; and
- .2 the second meeting of the Conference Preparatory Meeting (CPM-2) was scheduled to take place from 23 March to 2 April 2015 and that the draft

IMO position on relevant WRC-15 agenda items, which had to be finalized at this session and approved by MSC 94, would be sent to CPM-2.

17.2 Having noted that the ICAO/IMO Joint Working Group (JWG) had discussed SAR-related agenda items of WRC-15 (NCSR 1/19, sections 7.3 and 7.4), the Sub-Committee noted, in particular, that the JWG had concluded that the matter of broadband public protection and disaster relief (PPDR) was not an issue on which it could advise on an IMO position for WRC-15.

17.3 Following the advice of the JWG, the Sub-Committee encouraged maritime administrations participating in IMO meetings to liaise with the telecom administrations in their country to bring IMO's position on WRC-15 agenda items to their attention.

17.4 Having noted the discussions of the Joint IMO/ITU Experts Group, as reflected in paragraphs 59 to 94 of the annex to document NCSR 1/17 relating to the draft IMO position on relevant WRC-15 agenda items, the Sub-Committee referred appendix 4 of the annex to document NCSR 1/17 to the Technical Working Group for finalization of the draft IMO position, for endorsement by the Sub-Committee, approval by MSC 94 and submission to CPM-2.

Preparation of World Radiocommunication Conference 2015, agenda item 1.1

17.5 Having noted the information provided by the Secretariat (NCSR 1/17/1), concerning the progress in JTG 4-5-6-7 in relation to the preparation of WRC-15, agenda item 1.1, highlighting issues for consideration when updating the draft IMO position on WRC-15 and containing a draft liaison statement to the last meeting of the Joint Task Group to be held from 21 to 31 July 2014, the Sub-Committee referred it to the Technical Working Group to amend the draft IMO position on WRC-15 and finalize a liaison statement to JTG 4-5-6-7, as appropriate.

Instructions for the Technical Working Group

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

- .1 consider paragraphs 59 to 94 and appendix 4 of the annex of document NCSR 1/17 and finalize the draft IMO position on WRC-15 agenda items concerning matters relating to maritime services for endorsement by the Sub-Committee, approval by MSC 94 and submission to CPM-2; and

- .2 consider document NCSR 1/17/1 on issues related to the preparation of WRC-15, agenda item 1.1, and amend the draft IMO position on WRC-15 and finalize a liaison statement to JTG 4-5-6-7, as appropriate,

and submit its report on Thursday, 3 July 2014.

Report of the Technical Working Group

17.7 On receipt of the report of the Technical Working Group (NCSR 1/WP.7), the Sub-Committee took action as summarized in the ensuing paragraphs.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

18 CONSIDERATION OF DEVELOPMENTS IN INMARSAT AND COSPAS-SARSAT

COSPAS-SARSAT SERVICES

18.1 The Sub-Committee noted with appreciation a status report on the Cospas-Sarsat System (NCSR 1/18/3), including System operations, space and ground segments, beacons, false alerts and results of MCC-SPOC communication tests.

Outcome of the ICAO/IMO Joint Working Group

18.2 The Sub-Committee noted that the ICAO/IMO Joint Working Group (JWG) (NCSR 1/19) had:

- .1 considered issues related to the regular testing of MCC-SPOC communications and that it had noted with concern that poor test results could also indicate that SAR services in the relevant areas might be unreliable:
- .2 agreed that the homing frequency for Cospas-Sarsat beacons currently mandated within ICAO and IMO carriage requirements should remain as directed and that ICAO and IMO could be requested to re-examine the issue at such time that second generation beacons and the MEOSAR system could demonstrate location accuracies and detection reliability that would reduce the reliance on homing for the location of distress beacons;

- .3 noting that, according to its terms of reference, it had no authorization to make recommendations to States, nor to any organization other than IMO and ICAO, agreed that Cospas-Sarsat should be advised to also bring matters directly to the attention of the relevant IMO body, as decisions on maritime related matters could only be taken by the Maritime Safety Committee; and
- .4 invited the Sub-Committee to request Cospas-Sarsat to provide a comprehensive list related to SPOC communication tests, which includes all the SPOCs that had been tested.

18.3 In light of the foregoing, the Sub-Committee invited Cospas-Sarsat to:

- .1 also bring matters directly to the attention of the Sub-Committee and not only to the JWG since it had no authorization to make recommendations to States, nor to any organization other than IMO and ICAO; and
- .2 provide a comprehensive list related to SPOC communication tests, which includes all the SPOCs that had been tested.

18.4 Having considered the JWG's recommendation to consider building questions on search and rescue for IMO's voluntary audit program, including the issue of Cospas-Sarsat's Special Point of Contacts (SPOCs), the Sub-Committee decided to refer the consideration of the inclusion of additional questions on search and rescue for use in the audit program to the SAR Working Group.

Draft amendments to MSC.1/Circ.1210

18.5 The Sub-Committee, noting that the proposal submitted by Cospas-Sarsat (NCSR 1/18/2) providing draft amendments to MSC.1/Circ.1210 on the Cospas-Sarsat International 406 MHz Beacon Registration Database did not require any decision by the Sub-Committee in principle, referred it to the SAR Working Group for detailed consideration and advice.

INMARSAT SERVICES

18.6 The Sub-Committee noted with appreciation the information provided by IMSO (NCSR 1/18) providing analysis and assessment of the performance by Inmarsat Global Ltd.

in relation to the company's obligations for the provision of maritime services within the GMDSS, as overseen by IMSO. The information covered the period from 1 November 2012 to 31 October 2013. The Sub-Committee agreed that, during this period, Inmarsat had continued to provide a sufficient quality of service to meet its obligations under the GMDSS.

Closure date for Inmarsat B services

18.7 The Sub-Committee noted with appreciation the information provided by IMSO (NCSR 1/18/1) on the extension of the closure date for Inmarsat B services until 30 December 2016, which would also apply for Inmarsat M and Inmarsat Mini-M services.

ESTABLISHMENT OF THE SAR WORKING GROUP

18.8 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 the Plenary, to:

- .1 taking into account document NCSR 1/19, section 7.2.2, consider the inclusion of additional questions on search and rescue for use in the audit program and advise the Sub-Committee, as appropriate; and
- .2 consider document NCSR 1/18/2 containing draft amendments to MSC.1/Circ.1210 on Guidance on Cospas-Sarsat International 406 MHz Beacon Registration Database (IBRD) and prepare MSC.1/Circ.1210/Rev.1,

and submit its report on Thursday, 3 July 2014.

Report of the SAR Working Group

18.9 On receipt of the report of the SAR Working Group (NCSR 1/WP.5), the Sub-Committee took action as summarized in the ensuing paragraphs.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

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

19.1 The Sub-Committee noted that, as requested by COMSAR 17, MSC 92 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 2014.

Report of the twentieth session of the ICAO/IMO Joint Working Group on Harmonization of Aeronautical and Maritime Search and Rescue

19.2 The Sub-Committee noted that, as agreed by COMSAR 17 and authorized by MSC 92, the twentieth session of the ICAO/IMO Joint Working Group was held in Amsterdam, the Netherlands, from 23 to 27 September 2013, under the Chairmanship of Mr. D. Edwards (United States).

19.3 The Sub-Committee briefly considered the relevant part of document NCSR 1/19 (Secretariat) providing the report of the twentieth session of the ICAO/IMO Joint Working Group (JWG) and noted:

- .1 the discussion which took place with regard to AIS-SARTs and other devices using AIS technology, including AIS-MOB, and that a proposal would be prepared for consideration by the next session of the JWG (section 2.4 of the annex to document NCSR 1/19);
- .2 the ongoing work related to mass rescue operations (section 4.3 and paragraph 2.2.2.5 of the annex);
- .3 the JWG's and the IMO Secretariat's involvement in the ICAO Asia/Pacific SAR Task Force, aiming at enhancement and improvement of SAR capabilities within the Asia/Pacific Region and adjacent regions (sections 5.1, 5.2 and 5.3 of the annex);
- .4 the discussions relating to the creation of a website for documents required to be held by RCCs (section 5.4 of the annex);

- .5 the discussions relating for improving performance of RCCs and that a proposal would be prepared for consideration by the next session of the JWG (section 5.5 of the annex);
- .6 the information provided by the United States on the termination of its shore-based MF communications network from 1 August 2013 (section 7.1 of the annex);
- .7 the discussion relating to Electronic Visual Distress Signaling Devices (EVDSD) and that a proposal of a way ahead would be prepared for consideration by the next session of the JWG (section 9.1 of the annex); and
- .8 that MSC 92 had already authorized the holding of the twenty-first session of the JWG in 2014 and instructed the Secretariat to take action, as appropriate and that the Council has endorsed this intersessional meeting for 2014 (paragraph 2.2.4 in relation to section 9.4 of the annex).

19.4 In this context, the Sub-Committee noted that the twenty-first session of the JWG was scheduled to take place from 15 to 19 September 2014, at IMO Headquarters in London.

19.5 The Sub-Committee decided to refer the action items mentioned in paragraphs 2.1, 2.2, 2.10, 2.23, 2.25 and 2.27 of document NCSR 1/19 to the SAR Working Group, for detailed consideration.

Report on the fifteenth Combined Antarctic Naval Patrol 2012-2013

19.6 The Sub-Committee noted with appreciation the report provided by Argentina and Chile (NCSR 1/19/1) on activities of the fifteenth combined Antarctic naval patrol carried out by the submitting States with the aim of enhancing maritime safety and environmental protection on the Antarctic continent.

Instructions for the SAR Working Group

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

- .1 consider and advice regarding paragraphs 2.1, 2.2, 2.10, 2.23, 2.25 and 2.27 of document NCSR 1/19 and, in particular, to:
 - .1 consider the advice on the preferred cancellation procedure in case of an accidental activation of an EPIRB, and advise the Sub-Committee, as appropriate;
 - .2 consider the advice provided on possible measures preventing the beacon's transmission in case of an accidental activation of an EPIRB, and advise the Sub-Committee, as appropriate;
 - .3 consider the draft revision of MSC.1/Circ.1182 on guide to recovery techniques, for endorsement by the Sub-Committee and approval by the Committee;
 - .4 consider encouraging member Governments to participate in exchange programs for SAR Mission Coordinators, and advise the Sub-Committee, as appropriate;
 - .5 review the list of pending and new action items for the JWG, and advise the Sub-Committee, as appropriate; and
 - .6 consider and finalize the provisional agenda for JWG 21; and
- .2 provide proper justification, if there is a need for extension of the target completion year of the biennial agenda item *Guidelines on harmonized of aeronautical and maritime search and rescue procedures, including SAR training matters* to 2015.

and submit its report on Thursday, 3 July 2014.

Report of the SAR Working Group

19.6 Having received and considered the working group's report (NCSR 1/WP.5), the Sub-Committee approved it in general and, in particular, took action as summarized in the ensuing paragraphs.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

20 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

20.1 The Sub-Committee noted the information provided by the Secretariat on the status of the Global SAR Plan as available in GISIS.

20.2 The Sub-Committee further noted that the Global SAR Plan had been updated by several Member Governments during the time between COMSAR 17 and this first session of the NCSR Sub-Committee. It was further noted that the status of the availability of SAR services changed day by day and, therefore, providing updated information directly into GISIS was of utmost importance. Having available updated information would enable Rescue Coordination Centres to act promptly without losing precious time the moment they were dealing with a distress situation.

20.3 The Sub-Committee encouraged Member Governments to check the available information in GISIS on a regular basis and update the information immediately when changes had been notified to them.

Medical advice and related matters

20.4 The Sub-Committee briefly considered document NCSR 1/20 (France), proposing the creation of a platform (for instance GISIS) to facilitate the exchange of medical information between Telemedical Assistance Services (TMASs) during international SAR operations. In this context, the Sub-Committee noted that there would be a need to clarify several issues, including the security of the data and whether GISIS would be an appropriate platform to facilitate the exchange of this kind of information. After a brief discussion, the

Sub-Committee decided to refer the document to the SAR Working Group for detailed consideration and advice.

20.5 The Sub-Committee considered document NCSR 1/20/1 (France) relating to the creation of an international procedure facilitating the provision of medical supplies to ships in ports outside their own flag State, and noted the view of CLIA, supported by ICS, that:

- .1 the issues raised were complex and operational in nature;
- .2 might not be within the remit of IMO; and
- .3 could be better addressed by ILO through the implementation of the Maritime Labour Convention, 2006,

agreed not to pursue this further. Furthermore, the Sub-Committee invited France to consider to bring this issue to the attention of ILO and WHO.

20.6 The Sub-Committee, noting that document NCSR 1/20/2 (France), inviting consideration of appropriate action to enable better implementation of MSC.1/Circ.1218, in particular, to inform and raise awareness among Telemedical Assistance Services (TMASs) on the need to exchange medical information during international SAR operations did not require any decision by the Sub-Committee in principle, referred it to the SAR Working Group for detailed consideration and advice.

SAR related technical cooperation activities in the Asia/Pacific region

20.7 The Sub-Committee noted with appreciation the information contained in document NCSR 1/INF.22 (Secretariat) on SAR related technical cooperation activities in the Asia/Pacific region for the years 2013 and 2014.

Instructions for the SAR Working Group

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

- .1 consider document NCSR 1/20 on the creation of a platform to facilitate the exchange of medical information between Telemedical Assistance Services (TMASs) during international SAR operations, and advise the Sub-Committee, as appropriate; and

- .2 consider document NCSR 1/20/2 on the need for better implementation of MSC.1/Circ.1218 on *Guidance on exchange of medical information between telemedical assistance services (TMAS)*, and advise the Sub-Committee, as appropriate,

and submit its report on Thursday, 3 July 2014.

Report of the SAR Working Group

20.9 Having received and considered the working group's report (NCSR 1/WP.5), the Sub-Committee approved it in general and, in particular, took action as summarized in the ensuing paragraphs.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

21 DEVELOPMENT OF AMENDMENTS TO THE IAMSAR MANUAL

21.1 The Sub-Committee noted that:

- .1 the ICAO/IMO Joint Working Group (JWG) had prepared amendments to the IAMSAR Manual;
- .2 many tasks were still pending towards the finalization of proposed amendments for inclusion in the 2016 edition of the IAMSAR Manual and that the JWG was expected to finalize these amendments at its upcoming meeting in September 2014; and
- .3 the latest opportunity to endorse amendments for inclusion in the 2016 edition of the IAMSAR Manual would be NCSR 2, since MSC 95 needed to approve the amendments one year before they would become applicable on 1 June 2016.

Instructions for the SAR Working Group

21.2 Accordingly, 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 amendments to the IAMSAR Manual, as given in document NCSR 1/19, appendices D, E and F for approval by MSC 95 and consequential inclusion in the 2016 edition of the IAMSAR Manual;
- .2 consider the proposal from the JWG to revoke COMSAR.1/Circ.57 when the amendments to the 2016 edition of the IAMSAR Manual become applicable, and advise the Sub-Committee, as appropriate; and
- .3 consider the proposal from the JWG to revoke COMSAR/Circ.23 on *Guidance for Central Alerting Posts (CAPs)*, and advise the Sub-Committee, as appropriate,

and submit its report on Thursday, 3 July 2014.

Report of the SAR Working Group

21.3 Having received and considered the working group's report (NCSR 1/WP.5), the Sub-Committee approved it in general and, in particular, took action as summarized in the ensuing paragraphs.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

22 DEVELOPMENT OF MEASURES TO PROTECT THE SAFETY OF PERSONS RESCUED AT SEA

22.1 The Sub-Committee recalled that COMSAR 17 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 17/17, section 10).

22.2 The Sub-Committee noted the information provided by the Secretariat that:

- .1 the Second formal Regional Meeting scheduled to be held on 18 April 2013, was postponed following a request for more time to be given for informal consultations between some parties concerned;
- .2 the tragic accidents happened, on 3 October 2013 when a boat carrying migrants from Libya to Italy sank off the Italian island of Lampedusa, with 155 survivors and more than 360 deaths, and on 11 October 2013 when another boat sank within the territorial waters of Malta and at least 34 individuals were later confirmed dead, made the Secretariat reactivate the discussion on the development of a draft regional agreement, and an informal meeting between the Member States involved in previous discussions was convened on 20 November 2013.
- .3 consequently, two additional meetings were held on 11 February 2014 and on 7 April 2014, to progress the work on the development of a draft regional agreement. It was expected that the Second formal Regional Meeting would be rescheduled in the upcoming months.

22.3 The Sub-Committee noted views expressed by the delegations of Bahamas, Italy, Malta, Marshall Islands, Panama and ICS, that:

- .1 the countries in the Mediterranean were experiencing an increase in migration and were expecting another 100,000 to 150,000 migrants to arrive in Europe over the course of the second part of this year;
- .2 coast guard and rescue vessels could not deal with the large amount of people which needed to be picked up at sea and assistance from merchant vessels was required on a daily basis;
- .3 ICS had prepared additional guidance complementary to the guidance made available by ICS, IMO, UNHCR at an earlier stage;
- .4 this caused a heavy burden upon the administrations and ship owners involved;

- .5 appreciation was expressed for the invaluable assistance provided by a large amount of merchant vessels;
- .6 the role of the FAL Committee and the III and NCSR Sub-Committees was marginal and that no substantive work had been done for many years; and
- .7 this planned output better be postponed until such time that further progress on this matter had been made regionally.

22.4 In light of the foregoing, recognizing the importance of the issues involved and noting that no progress had been made so far on the above-mentioned regional agreement, the Sub-Committee agreed to invite the Committee to move this output to the post biennial agenda of the Sub-Committee with two sessions needed for completion, until further progress on this matter had been made regionally.

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

23.1 The Sub-Committee noted the information provided by the Secretariat (NCSR 1/23) that SDC 1 had forwarded the chapters of the draft Mandatory Code for Ships Operating in Polar Waters (Polar Code) on navigation and communication to NCSR 1 for further consideration and finalization. It was also noted that the draft Polar Code was further revised at MSC 93, but that the chapters to be considered by the Sub-Committee had not been changed since SDC 1.

23.2 The Sub-Committee further noted the outcome of MSC 93 (NCSR 1/23/3) and, in particular, that MSC 93 had:

- .1 approved, in principle, the draft Polar Code and referred matters to NCSR 1 for consideration in conjunction with the finalization of renumbered chapters 9 (Safety of Navigation) and 10 (Communication) (consequent to the deletion of chapter 7 on Operational Safety and subsequent renumbering);
- .2 invited NCSR 1 to note that in other chapters of the draft Code the words "ships intended to operate in ice" had been replaced with the words "ships ice strengthened in accordance with chapter 3" and a definition had been

developed for the term "ships intended to operate in low air temperatures", to editorially amend renumbered chapters 9 and 10, as appropriate, and to consider the appropriate application of the various measures in renumbered chapters 9 and 10;

.3 instructed NCSR 1 to further consider whether the scope of application of renumbered chapters 9 and 10 of the draft Polar Code should also include different types and sizes of ships or if it would be sufficient to address this issue in phase 2 (non-SOLAS ships) of the Polar Code; and

.4 referred further to NCSR 1, for consideration:

.1 document MSC 93/10/19 (CLIA), regarding the potential need to install two independent echo-sounding devices on board ships;

.2 paragraphs 14 and 15 of document MSC 93/10/4 (Argentina), regarding the requirement in paragraph 10.3.1.1.1 of the draft Polar Code that ships shall have equipment capable of receiving and displaying information on ice and voyage monitoring, respectively;

.3 paragraphs 10, 13 and 14 of document MSC 93/10/16 (United States), concerning consistent language to be used regarding functional and prescriptive requirements in each chapter of part I-A, and, in this regard, the need to restructure re-numbered chapters 9 and 10, taking into account section 1.1 of part I-A of the draft Polar Code for consistency with other chapters of the Code;

.4 the additional guidance in part I-B of the draft Polar Code regarding the personal and group survival equipment; and

.5 the Record of additional equipment and operational limitations for the Polar Ship Certificate for navigation and communication equipment.

23.3 The Sub-Committee also noted that further to discussions at SDC 1 on matters related to the scope of application with regard to the types of ships to be covered by the Code, as well as its application to new and existing ships (SDC 1/26, paragraph 3.34), MSC 93 had agreed to apply the provisions of the Polar Code to new and existing ships certificated in accordance with SOLAS Chapter I (MSC 93/WP.7, paragraphs 5 to 7 and MSC 93/22, paragraphs 10.42 to 10.45) and instructed NCSR 1 to further consider whether the scope of application of renumbered chapters 9 and 10 of the draft Polar Code should also include different types and sizes of ships or if it would be sufficient to address this in phase 2 (non-SOLAS ships) of the Polar Code.

23.4 Having considered the outcome of MSC 93, in particular the issue of the scope of application of renumbered chapters 9 and 10 of the Polar Code, the Sub-Committee agreed:

- .1 that the provisions of the above chapters should only apply to new and existing ships certified in accordance with SOLAS Chapter I, in line with the rest of the Code, as agreed by MSC 93;
- .2 that the application to other types and sizes of ships (i.e. non-SOLAS ships) could be addressed in phase 2 of the Polar Code; and
- .3 to refer all matters to the SAR and Ships' Routeing Working Groups for detailed consideration and advice.

23.5 The Sub-Committee briefly considered document NCSR 1/23/1 (United States) proposing amendments to renumbered Chapter 10 of the draft Polar Code and referred it to the SAR Working Group for detailed consideration and advice.

23.6 The Sub-Committee also considered briefly document NCSR 1/23/2 (CLIA) commenting on the proposed requirement (10.3.1.1.2) in the draft Polar Code that 'Ships shall have two independent echo-sounding devices' and proposing an alternative requirement and referred it to the Ships' Routeing Working Group for detailed consideration and advice.

23.7 The Sub-Committee noted with appreciation the information provided by Australia (NCSR 1/INF.10) regarding the Search and Rescue response to the incident involving **Akademik Shokalskiy**, in particular, in relation to discussions on the draft Polar Code as

outlined in the report of COMSAR 17 and the matter of "Time to rescue" as set out in paragraphs 12 and 13 of document COMSAR 17/WP.6.

Instructions for the SAR Working Group

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

- .1 taking into account the outcome of MSC 93 and using the text provided in document NCSR 1/23 as the basis to work from, consider the re-numbered chapter 10 of the draft Polar Code and, in particular:
 - .1 the need to restructure the chapter, taking into account section 1.1 of part I-A of the draft Code and document MSC 93/10/16 (United States), paragraphs 10, 13 and 14, to achieve consistent language to be used regarding functional and prescriptive requirements for consistency with other chapters of the draft Code; and
 - .2 the proposed amendments in document NCSR 1/23/1 (United States) and amend the chapter, as appropriate,with a view to finalization and subsequent approval/adoption by MSC 94;
 - .2 consider the additional guidance in part I-B regarding the personal and group survival equipment (MSC 93/WP.7/Add.1, annex 2) and advise the Sub-Committee, as appropriate;
 - .3 consider the Record of additional equipment and operational limitations for the Polar Ship Certificate for navigation and communication equipment (MSC 93/WP.7/Add.1, annex 2) and advise the Sub-Committee, as appropriate; and
 - .4 start and finalize discussion on this matter on Tuesday, 1 July 2014,
- and submit a report on Thursday, 3 July 2014.

Instructions for the Ships' Routeing Working Group

23.9 The Sub-Committee instructed the Ships' Routeing Working Group, taking into account decisions of, and comments and proposals made in plenary, to:

.1 taking into account the outcome of MSC 93 and using the text provided in document NCSR 1/23 as the basis to work from, consider the renumbered chapter 9 of the draft Polar Code and, in particular:

.1 the need to restructure the chapter, taking into account section 1.1 of part I-A of the draft Code and document MSC 93/10/16 (United States), paragraphs 10, 13 and 14, to achieve consistent language to be used regarding functional and prescriptive requirements for consistency with other chapters of the draft Code;

.2 editorially amend the chapter in replacing the words "ships intended to operate in ice" by the words "ships ice strengthened in accordance with chapter 3";

.3 consider document NCSR 1/23/2 (CLIA), regarding the potential need to install two independent echo-sounding devices on board ships, and amend the chapter, as appropriate; and

.4 consider document MSC 93/10/4 (Argentina), paragraph 14, regarding the requirement in paragraph 10.3.1.1.1 of the draft Polar Code that ships shall have equipment capable of receiving and displaying information on ice and amend the chapter, as appropriate,

with a view to finalization and subsequent approval/adoption by MSC 94;

.2 taking into account the outcome of MSC 93 and using the text provided in NCSR 1/23 as the basis to work from, consider paragraph 12.5 of the draft Polar Code, taking into account document MSC 93/10/4 (Argentina), paragraph 15 on voyage monitoring and amend the paragraph, as appropriate;

- .3 consider the Record of additional equipment and operational limitations for the Polar Ship Certificate for navigation and communication equipment (MSC 93/WP.7/Add.1, annex 2) and advise the Sub-Committee, as appropriate; and
- .4 start and finalize discussion on this matter on Wednesday, 2 July 2014, and submit a report on Thursday, 3 July 2014.

Report of the SAR Working Group

23.10 On receipt of the report of the SAR Working Groups (NCSR 1/WP.5/Add.1), the Sub-Committee took action as summarized in the ensuing paragraphs.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

Report of the Ships' Routeing Working Group

23.11 On receipt of the report of the Ships' Routeing Working Group (NCSR 1/WP.6/Add.1), the Sub-Committee took action as summarized in the ensuing paragraphs.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

24 CONSIDERATION OF IACS UNIFIED INTERPRETATIONS

24.1 The Sub-Committee recalled that MSC 78 had included this as a continuous item on its biennial agenda, so that IACS could submit any newly developed or updated unified interpretations for consideration of the Sub-Committee with a view to developing appropriate IMO interpretations, if deemed necessary.

Pilot transfer arrangements (SOLAS regulation V/23.3.3)

24.2 The Sub-Committee recalled that NAV 59, noting that the length of the pilot boarding ladder should be calculated inclusive of the consideration of an adverse list of 15 degrees,

reiterated that when considering pilot transfer arrangements at any distance more than nine metres above the surface of the water under any circumstances, a combination pilot boarding arrangement would be required, in accordance with existing SOLAS regulation V/23.3.3.2. Accordingly, NAV 59 did not agree with the IACS unified interpretation on pilot transfer arrangements and requested IACS to re-consider its proposal.

24.3 The Sub-Committee considered:

- .1 a revised unified interpretation submitted by IACS (NCSR 1/24), which included a recommended implementation date due to the fact that this might involve a change of the pilot transfer design arrangement; and
- .2 comments on the proposed revised unified interpretation submitted by IMPA (NCSR 1/24/2), expressing the view that the decision of NAV 59 did not propose a change of pilot transfer design arrangement, but merely confirmed a situation that had already existed for 40 years.

24.4 The IACS observer indicated that it was not clear whether the calculation of the nine metres should include, or not, an adverse list of 15 degrees and that the provisions of SOLAS regulation V/23.1.4, as written, might allow no compliance with the requirements of regulation V/23 even after replacement of equipment and arrangements (i.e. because of the use of the terms "in so far as is reasonable and practicable").

24.5 In response to the above, the IMPA observer, supported by several delegations, indicated that the SOLAS regulation V/23 and its predecessor (i.e. SOLAS regulation V/17) were clear and that it was not aware of any problem or interpretation issue. For that reason, they could not agree on a future implementation date for compliance with requirements which were already in place. As recognized by NAV 59, the most fundamental principle of regulation V/23 and its predecessor had always been that a pilot should never have to climb a ladder more than nine metres from the surface of the water. The decision of NAV 59 to confirm the requirements of regulation V/23 would not resolve in any ship, now or in the future, having to add an accommodation ladder solely due to a possible 15 degrees list. As recognized by IACS, the 15 degrees adverse list allowance had to do with the length of the pilot ladder not to the requirement combining an accommodation ladder with a pilot ladder or any exceptional circumstances. SOLAS regulation V/23.1.4 was for considering the transition

to the revised regulation V/23 which entered into force on 1 July 2012, however, the existing requirements were never changed. Efforts to avoid the nine metres rule should be rejected.

24.6 Some delegations were of the view that the calculation of the nine metres should not take into account the adverse list of 15 degrees and that the IACS interpretation should not apply to existing ships.

24.7 After some discussion, the Sub-Committee agreed with IMPA's interpretation and decided to instruct the Secretariat to prepare a draft MSC circular containing the text as provided in the annex to document NCSR 1/24, with a modification in paragraph 3 to delete the words "installed on or after", the text in square brackets, including the brackets and the footnote, for approval by the Committee, as set out in annex [...].

Completion of items 2.1 and 2.2 of part 3 of the form E and items 2.1 and 2.2 of part 5 of forms P and C

24.8 The Sub-Committee recalled that NAV 59, having considered the need to clarify how to document flexibility in using either paper charts or ECDIS as means of navigation, accepted the offer of IACS to develop an IACS unified interpretation for consideration by NCSR 1, taking into account the comments made with respect to ship management responsibilities (NAV 59/20, paragraph 16.11 to 16.14).

24.9 The Sub-Committee considered a draft IACS unified interpretation submitted by IACS (NCSR 1/24/1) providing a common approach on how to complete items 2.1 and 2.2 of part 3 of the form E and items 2.1 and 2.2 of part 5 of forms P and C.

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

- .1 SOLAS did not mandate that ECDIS should always be the primary mean, this can also be nautical charts;
- .2 SOLAS mandated the carriage of ECDIS but not its use;
- .3 paper charts did not require backup, so a third scenario could be added; and

- .4 taking into account the definition of "nautical charts" provided in regulation V/2.2, which indicated that it could be an electronic chart or a paper chart, the term "standard navigational chart" should be used instead.

24.11 After the discussion and having noted the support expressed by several delegations with regard to the draft IACS unified interpretation, the Sub-Committee decided to instruct the Secretariat to prepare a draft MSC circular containing the text as provided in the annex to document NCSR 1/24/1, as amended to clarify the use of the term "nautical chart" as indicated in paragraph 24.9.4 above, for approval by the Committee, as set out in annex [...].

[25 BIENNIAL AGENDA AND PROVISIONAL AGENDA FOR NCSR 2

Outcome of A 28

25.1 In considering matters related to the biennial agenda and provisional agenda, the Sub-Committee recalled that the Assembly, at its twenty-eighth session, approved the *Strategic Plan for the Organization (for the six-year period 2014 to 2019)* (resolution A.1060(28)) and the *High-level Action Plan and priorities for the 2014-2015 biennium* (resolution A.1061(28)).

Biennial status report and proposed provisional agenda for NCSR 2

25.2 Taking into account the progress made at the session and the instructions of MSC 93, the Sub-Committee prepared the biennial status report of the Sub-Committee for the 2014-2015 biennium (NCSR 1/WP.4, annex 1) and the proposed provisional agenda for NCSR 2 (NCSR 1/WP.4, annex 2), as set out in annexes [...] and [...], respectively, for consideration by MSC 94.

Arrangements for the next session

25.3 The Sub-Committee agreed to change the names of the Ships' Routeing and Technical Working Groups into Navigation and Communications Working Groups, respectively.

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

- .1 Navigation;

.2 Communications; and

.3 Search and Rescue.

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

Date of next session

25.6 The Sub-Committee noted that the second session of the Sub-Committee has been tentatively scheduled to take place from 9 to 13 March 2015.]

[26 ELECTION OF CHAIRMAN AND VICE-CHAIRMAN FOR 2015

26.1 In accordance with the Rules of Procedure of the Maritime Safety Committee, the Sub-Committee unanimously re-elected Mr. C. Salgado (Chile) as Chairman and Mr. R. Lakeman (Netherlands) as Vice-Chairman for 2015.]

27 ANY OTHER BUSINESS

Distress position indication method utilizing Radar Cross Section

27.1 The Sub-Committee considered the proposal submitted by the Republic of Korea (NCSR 1/24/4) introducing a distress position indication method that utilized Radar Cross Section (RCS) to inform ships and aircrafts operating nearby of the position of a survivor in real-time, and to complement beacons such as SART.

27.2 The Sub-Committee, noting the views expressed by several delegations that:

.1 more information was needed;

.2 it was not the appropriate Sub-Committee to deal with matters related to the LSA Code; and

.3 consideration of this matter would require a new output,

The Sub-Committee invited the Republic of Korea to submit a proposal for a new unplanned output to the Committee.

Protection of Cable Ships and Repair Operations for International Submarine Cables

27.3 The Sub-Committee recalled that NAV 59 had noted with appreciation the information provided by the United States on the provisions of the International Convention for Protection of Submarine Cables (Cable Convention) and the safety distances for vessels from cable ships and cable repair buoys during repair operations and, in particular, the responsibility to abide by the Cable Convention, especially articles 5 and 6, respectively.

27.4 The Sub-Committee considered a proposal by the United States (NCSR 1/27) for a draft Safety of Navigation circular highlighting the provisions of the International Convention for Protection of Submarine Cables (Cable Convention) and the safety distances for vessels from cable ships and cable repair buoys during repair operations.

27.5 During the ensuing discussion, the following views were expressed, that:

- .1 there was general support for issuing a Safety of Navigation circular on this important matter;
- .2 there was a need to amend the current proposed text, in particular, with respect to the reference to the International Convention for Protection of Submarine Cables, which was not under the purview of IMO;
- .3 care should be taken not to conflict with the regulatory regime within the purview of IMO;
- .4 the proposed safety distance would not be practicable in narrow waters and that the insertion of the term "as far as possible" could provide the necessary flexibility for masters;
- .5 this was an urgent safety matter which needed urgent action; and
- .6 there was no unplanned output to carry out this important work.

27.6 In light of the importance of the work and taking into account the views expressed, the Sub-Committee invited the United States to prepare an updated proposal for consideration by NCSR 2, based on the views expressed at this session, and agreed that this urgent matter could be dealt with under Any other business.

Progress on standards development by the IEC

27.7 The Sub-Committee noted with appreciation the update submitted by IEC (NCSR 1/27/1) on the preparation of relevant standards to support the performance standards of the Organization.

Publication of ISO/PAS19697, Ships and marine technology – Navigation and ship operations – Electronic inclinometers

27.8 The Sub-Committee recalled that MSC 92 has adopted resolution MSC.363(92) on Performance standards for electronic inclinometers.

27.9 Having noted the information provided by ISO (NCSR 1/27/2) informing of its publication ISO/PAS 19697, "Ships and marine technology - Navigation and ship operations – Electronic inclinometers", providing the construction, performance requirements, methods of testing and test results of electronic inclinometers required by the Recommendation on performance standards for electronic inclinometer given in resolution MSC.363(92), the Sub-Committee encouraged Member Governments and international organizations to make use or reference to the new Publicly Available Specification (PAS) for electronic inclinometers, as appropriate.

Participation in the WMO Voluntary Observing Ships' Scheme

27.10 The Sub-Committee recalled that MSC 85 had approved and circulated MSC.1/Circ.1293 regarding participation in the WMO Voluntary Observing Ships' (VOS) Scheme, inviting Member States to consider increased participation in the VOS Scheme for ships in the Arctic.

27.11 The Sub-Committee considered the information provided by the United States et al. (NCSR 1/27/3) relating to the WMO VOS Scheme and to encourage increased participation in the VOS Scheme by all flag States, in particular, those with vessels sailing in Arctic waters.

27.12 Having noted additional oral information provided by the WMO observer, in particular, that the Arctic was only one of several areas in the world where data was not forthcoming, and that WMO planned to submit a paper providing information on areas where it seeks to increase participation in the WMO VOS scheme, the Sub-Committee invited Member States

to consider increased participation in the VOS Scheme, in particular, those with vessels which sail in Arctic waters.

Counterfeit Charts and Publications

27.13 The Sub-Committee noted with appreciation the information provided by the United Kingdom (NCSR 1/INF.19) on the proliferation of counterfeit nautical charts and publications and providing information and advice on identifying such rogue and potentially unsafe products.

Update of maritime radiocommunication systems and equipment

27.14 The Sub-Committee noted with appreciation the information provided by Argentina (NCSR 1/INF.20) providing an update of maritime radiocommunication systems and equipment in Argentina to improve shore-ship radiocommunications within the framework of its duties as a coastal State.

The IMO/IALA Award for Zero Accident Campaign

27.15 The Sub-Committee recalled that NAV 59 (NAV 59/20, paragraphs 19.4 to 19.6) had noted the information provided by the Secretariat (NAV 59/19/1) and the oral intervention by IALA that it was confident that the implementation of the IMO/IALA Award for Zero Accident Campaign would improve the safety of navigation. Furthermore, the specifically for this purpose established Group of Experts consisting of experts from IALA, IHO, IMO, IAPH and IMPA, which met on 28 January 2013 under the competent chairmanship of the NAV Sub-Committee Chairman, was well placed to highlight the important role that the campaign could play in reducing incidents. Accordingly, they strongly supported this initiative and were willing to support it.

27.16 The Sub-Committee noted the proposal brought forward by the Secretariat to launch an IMO/IALA award for each VTS in different regions of the world based on the criteria developed jointly by IMO and IALA. The evaluation would be carried out by a panel comprising of the:

- .1 Chairman of the Sub-Committee on Safety of Navigation, Communications and Search and Rescue (Chairman of the Panel);
- .2 Secretary-General of IALA (or representative);

- .3 Secretary-General of IMPA (or representative);
- .4 Secretary-General of IAPH (or representative);
- .5 Chairman of the IALA VTS Committee;
- .6 IALA accredited VTS expert;
- .7 VTS expert of IFSMA; and
- .8 VTS expert of IHMA.

The Sub-Committee further noted that it was expected that the call for nominations would be distributed after the Committee had endorsed the proposal.

27.17 In light of the foregoing, the Sub-Committee agreed to invite the Committee to endorse the establishment of an IMO/IALA award to promote the zero accident campaign.

Goal-based guidelines on the framework of requirements for ships' life-saving appliances

27.18 The Sub-Committee recalled that MSC 92 had noted that DE 57 had referred parts of the draft *Goal-based guidelines on the framework of requirements for ships' life-saving appliances* (DE 57/WP.5, annex 1) to the STW (HTW), COMSAR (NCSR) and FP (SSE) Sub-Committees for consideration, as appropriate.

27.19 The Sub-Committee had no comments on the functional requirements in Tier II of the draft *Goal-based guidelines on the framework of requirements for ships' life-saving appliances*, and instructed the Secretariat to inform the SSE Sub-Committee accordingly.

Launch of missiles without giving navigational warnings

27.20 The Sub-Committee noted the statements made by the United States, the Republic of Korea, Japan, Australia, the Marshall Islands and France, as set out at annex [...], related to the launch of missiles without issuing the appropriate navigational warnings by the Democratic People's Republic of Korea, which was a danger to navigation. The

Sub-Committee further noted the response by the Democratic People's Republic of Korea, also set out at annex [...].

27.21 In this context, the Sub-Committee urged Member Governments to provide adequate advance notice for all operations that might affect the safety of navigation, in compliance with resolution A.706(17), as amended.

28 ACTION REQUESTED OF THE COMMITTEE

28.1 The Maritime Safety Committee, at its ninety-fourth session, is invited to:

[to be prepared by the Secretariat in consultation with the Chairman after the meeting]