INTERNATIONAL MARITIME ORGANIZATION

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SUB-COMMITTEE ON
RADIOCOMMUNICATIONS AND
SEARCH AND RESCUE
8th session
Agenda item 18

COMSAR 8/18
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REPORT TO THE MARITIME SAFETY COMMITTEE

SUMMARY OF DECISIONS

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LIST OF ANNEXES

1 GENERAL

1.1 The Sub-Committee on Radiocommunications and Search and Rescue held its eighth session from 16 to 20 February 2004 at the Headquarters of the Organization under the Chairmanship of Mr. U. Hallberg (Sweden), who was elected Chairman at the start of the meeting, as decided at COMSAR 7. Since Mr. U. Hallberg had been elected Vice-Chairman for 2004 at COMSAR 7, a new Vice-Chairman, Mr. A. Olopoenia (Nigeria) was elected as well.

1.2 The session was attended by delegations from the following Member Governments:

ALGERIA
ARGENTINA
AUSTRALIA
BAHAMAS
BAHRAIN
BANGLADESH
BELGIUM
BRAZIL
CANADA
CHILE
CHINA
COLOMBIA
CROATIA
CUBA
CYPRUS
DENMARK
ECUADOR
EGYPT
ESTONIA
FINLAND
FRANCE
GERMANY
GREECE
INDONESIA
IRAN (ISLAMIC REPUBLIC OF)
IRELAND
ISRAEL
ITALY
JAPAN
KUWAIT
LATVIA
LEBANON
LIBERIA
LITHUANIA
MALAYSIA
MALTA
MARSHALL ISLANDS
MEXICO
NETHERLANDS
NIGERIA
NORWAY
PANAMA
PERU
PHILIPPINES
POLAND
PORTUGAL
REPUBLIC OF KOREA
ROMANIA
RUSSIAN FEDERATION
SAUDI ARABIA
SINGAPORE
SOUTH AFRICA
SPAIN
SWEDEN
TURKEY
UKRAINE
UNITED KINGDOM
UNITED STATES
VENEZUELA

and by the following Associate Member of IMO:

HONG KONG, China

1.3 The following United Nations specialized agencies were also represented:

UNITED NATIONAL HIGH COMMISSION FOR REFUGEES (UNHCR)
INTERNATIONAL TELECOMMUNICATION UNION (ITU)
INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO)
WORLD METEOROLOGICAL ORGANIZATION (WMO)

1.4 The session was also attended by observers from intergovernmental and non-governmental organizations:

INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO)
COMMISSION OF THE EUROPEAN COMMUNITIES (EC)
INTERNATIONAL MOBILE SATELLITE ORGANIZATION (IMSO)
COSPAS-SARSAT
INTERNATIONAL COMMITTEE OF THE RED CROSS (ICRC)
INTERNATIONAL CHAMBER OF SHIPPING (ICS)
INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)
INTERNATIONAL CONFEDERATION OF FREE TRADE UNIONS (ICFTU)
INTERNATIONAL ASSOCIATION OF MARINE AIDS TO NAVIGATION AND LIGHTHOUSE AUTHORITIES (IALA)
INTERNATIONAL RADIO-MARITIME COMMITTEE (CIRM)
INTERNATIONAL ASSOCIATION OF CLASSIFICATION SOCIETIES (IACS)
OIL COMPANIES INTERNATIONAL MARINE FORUM (OCIMF)
INTERNATIONAL FEDERATION OF SHIPMASTERS' ASSOCIATIONS (IFSMA)
INTERNATIONAL LIFESAVING APPLIANCES MANUFACTURERS' ASSOCIATION (ILAMA)
INTERNATIONAL ASSOCIATION OF INDEPENDENT TANKER OWNERS (INTERTANKO)
INTERNATIONAL LIFEBOAT FEDERATION (ILF)
INTERNATIONAL COUNCIL OF CRUISE LINES (ICCL)
INTERNATIONAL SAILING FEDERATION (ISAF)
THE INTERNATIONAL MARINE CONTRACTORS ASSOCIATION (IMCA)

Opening address

1.5 On behalf of the Secretary-General who was abroad on mission, Mr. K. Sekimizu, Director, Maritime Safety Division welcomed the participants and reiterated the Secretary-General's plea to the Council and Assembly last year, inviting all with an interest in the affairs of IMO and the shipping industry to join forces, to create a safer, more secure and environmentally friendly maritime world.

Referring to a number of casualties and the loss of lives, the severe weather conditions in the Black Sea region had caused recently, despite the efforts of search and rescue operations, he expressed the view that these incidents clearly indicated the perils of the sea and were a strong reminder of the importance of IMO activities and the continuous efforts by all parties involved.

Recalling the comprehensive work undertaken expeditiously by the Organization to build an adequate maritime security infrastructure so that Governments and the industry would have sufficient guidance to meet the challenges to protect shipping against international terrorism, Mr. Sekimizu, on behalf of the Secretary-General, urged all parties concerned, to intensify their efforts to meet the deadline of 1 July this year for the new security regime as specified in SOLAS chapter XI-2 and the International Ship and Port Facility Security Code.

He emphasized the importance of the Sub-Committee's discussion on the modified functional requirements for long-range identification and tracking of ships and the Committee's request to finalize the relevant draft amendments to the SOLAS Convention and to provide other relevant recommendations on the issue. He also emphasized the need to clarify the ambiguities of the SSASs requirements and to advise MSC 78 accordingly.

With regard to the work on large passenger ship safety, Mr. Sekimizu pointed out that the MSC had approved the guiding philosophy, strategic goals and objectives for the work and the Sub-Committee was requested to make further progress on the various tasks assigned to it and to provide a structured and focused way for dealing with the issue. Although a considerable amount of work had been accomplished intersessionally, a good deal still remained to be done.

Referring to ITU matters relating to the GMDSS, Mr. Sekimizu stated that the maintenance of such a reliable and constantly available System for seafarers world-wide was still a responsibility of IMO, working together with other parties. He was aware that ITU was planning to consider a set of Regulations concerning maritime mobile services at its next Conference in 2007, but that no specific agenda item thereon was planned for WRC-10. He informed the Sub-Committee that ITU was going to address these important issues and, therefore, he considered this as an invitation to the maritime community to ensure that it was fully prepared for discussions on this important issue at WRC-07.

He further drew the Sub-Committee's attention to other important matters, such as: matters relating to the IAMSAR Manual; progress in implementing the GMDSS Master Plan; revision of the NAVTEX Manual; maritime radiocommunication systems and technology; satellite services; medical assistance in SAR services; and revision of the forms of nuclear ship safety certificates.

Adoption of the agenda

1.6 The Sub-Committee adopted the agenda (COMSAR 8/1) and a list of documents (COMSAR 8/INF.10), considered under each agenda item. The Sub-Committee agreed, in general, to be guided in its work by the annotations contained in document COMSAR 8/1/1.

2 DECISIONS OF OTHER IMO BODIES

2.1 The Sub-Committee noted, in general, decisions and comments (COMSAR 8/2, COMSAR 8/2/1, COMSAR 8/2/2 and COMSAR 8/2/3) pertaining to its work made by FAL 30, NAV 49, MSC 77, C/ES.22 and A 23 and took these into account in its deliberations when dealing with relevant agenda items.

2.2 As reported in paragraph 2 of document COMSAR 8/2/3, the Sub-Committee noted that the Council, at its twenty-second extraordinary session, in considering the outcomes of SLF 46 and DSC 8 with regard to the trial reporting system, had:

.1 noted that, under the provisional arrangements, the issue of the availability of working groups' reports in all working languages for consideration on the penultimate day of the session was not fully resolved, especially if the reports in question were voluminous;

.2 agreed that the trial period of the provisional system be extended to cover all the sub-committees which will meet between now and the next sessions of the MSC and the MEPC;

.3 invited the MSC and the MEPC to consider the conclusions and recommendations of the reporting sub-committees and to draw their own recommendations which they should submit to C 93 for consideration and action, as appropriate;

.4 agreed that all the working papers approved by the sub-committees in plenary should be posted on the IMO website; and

.5 agreed that, until further notice, sub-committees should produce an approved final summary of decisions to enable the Committee(s) to take action as may be requested at the first opportunity after a sub-committee's session (as done by SLF 46 and DSC 8).

2.3 The Sub-Committee noted that MSC 77 had decided that, in the future, sub-committees should avoid developing unified interpretations for guidelines. In cases where the existing text of the guidelines is vague and needs modifications, the sub-committee concerned should amend the guidelines accordingly in lieu of developing unified interpretations.

2.4 The Sub-Committee recalled, in particular, the instruction by MSC 72 (MSC 72/23, paragraph 15.16) to all Sub-Committees to apply the Human Element Analysing Process (HEAP) given in MSC/Circ.878/MEPC/Circ.346 as a matter of priority in their work and the request to provide information on experience gained during application of that process with a view to further improvements, which the Committee would take into account in its work, as appropriate.

2.5 The Sub-Committee recalled also that MSC 76 had noted (MSC 76/2/Add.1, paragraph 8) that, in considering document C 89/12/3 (Cyprus, Philippines and ICFTU), C 89 had instructed the Committees and through them, their subsidiary bodies, when developing new instruments or amendments to existing ones, to ensure that these are compatible, and not in conflict, with other instruments or international law and that they should not be interpreted or used in a way that conflicts with such instruments, in particular, those addressing human rights. The Committee instructed the Secretariat to inform the sub-committees of the Council's decision and to remind the Committee and sub-committees of this decision as and when necessary.

3 GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS)

MATTERS RELATING TO THE GMDSS MASTER PLAN

3.1 The Sub-Committee noted that, in accordance with its instructions and using information provided by Governments after February 2003, the Secretariat had issued Corr.8 and Corr.9 to amend GMDSS/Circ.8 (Master Plan) in July and September 2003, respectively. Countries providing information for those circulars were: Brazil, Bulgaria, Canada, Chile, Croatia, Egypt, Finland, France, Greece, India, Netherlands, New Zealand, Peru and the Russian Federation.

3.2 The Secretariat informed the Sub-Committee that since issuing GMDSS/Circ.8/Corr.8 and Corr.9, it had received the updated information from Argentina, Belgium, Canada, Germany, Greece, Iran, Poland, the Russian Federation, Switzerland and Thailand mostly regarding installation of sea Area A1/A2 and NAVTEX facilities. The Secretariat planned to issue GMDSS/Circ.8/Corr.10 in May/June 2004.

3.3 Noting the above information, the Sub-Committee requested Member States to check their national data in GMDSS/Circ.8 and Corrigenda for accuracy, and provide the Secretariat with any necessary amendments, as soon as possible, and to respond to MSC/Circ.684, if they have not already done so.

OPERATIONAL AND TECHNICAL CO-ORDINATION PROVISIONS OF MARITIME SAFETY INFORMATION (MSI) SERVICES, INCLUDING REVIEW OF THE RELATED DOCUMENTS

3.4 The Sub-Committee briefly discussed documents submitted by Chairman of the NAVTEX Co-ordinating Panel (COMSAR 8/3 and COMSAR 8/3/1 and Corr.1) and Lithuania (COMSAR 8/INF.2).

Establishment of a drafting group

3.5 The Sub-Committee established the drafting group and instructed it to consider the above documents and, taking into account the comments made at Plenary, to prepare:

.1 a draft MSC circular attaching the revised NAVTEX Manual;

.2 a draft COMSAR circular to clarify the use of NAVTEX B_3 B_4 characters = 00 and the issue of NAVTEX Service Area limits;

.3 comments and proposals on possible use of the safety message facility on AIS, taking into account the outcome of NAV 49 regarding AIS binary messages; and

.4 any recommendations and/or proposals for improving MSI services,

for consideration at Plenary.

3.6 The Sub-Committee noted document COMSAR 8/3/2 (Chairman, International SafetyNET Co-ordinating Panel) providing information on the establishment of a new Inmarsat-C Enhanced Group Call SafetyNET Graphical Weather Service.

Report of the drafting group

3.7 Having received and considered the report of the drafting group (COMSAR 8/WP.6), the Sub-Committee approved it in general and, in particular (with reference to paragraphs in COMSAR 8/WP.6):

.1 agreed to the draft MSC circular on Adoption of the revised NAVTEX Manual, set out in annex 1, for submission to the Committee for adoption (paragraph 3.1);

.2 agreed to the draft COMSAR circular on Clarification on the use of NAVTEX B_3B_4 characters=00 and NAVTEX Service Areas, set out in annex 2, for submission to the Committee for approval (paragraph 4.1); and

.3 noted the opinion of the drafting group on:

.3.1 the possible use of the safety message facility on AIS (paragraph 4.4); and

.3.2 proposals for improving MSI services (paragraphs 4.5 and 4.6).

LISTENING WATCH ON VHF CHANNEL 16 BY SOLAS SHIPS

3.8 The Sub-Committee recalled that MSC 75, having agreed with the recommendation of COMSAR 6 that the existing SOLAS regulation IV/12.3 concerning watchkeeping on VHF

channel 16 should not be amended and the originally perceived date of cessation of watchkeeping by SOLAS ships on VHF channel 16 (i.e. 1 February 1999, the final implementation date for the GMDSS) should not be changed to 1 February 2005, as indicated in resolution MSC.77(69), had adopted resolution MSC.131(75) on Maintenance of a continuous listening watch on VHF channel 16 by SOLAS ships whilst at sea and installation of VHF DSC facilities on non-SOLAS ships, revoking resolution MSC.77(69).

By operative paragraph 1 of this resolution the MSC "DETERMINES, having regard to SOLAS regulation IV/12.3 that every ship, while at sea, shall continue to maintain, when practicable, continuous listening watch on VHF channel 16, until such time as the Maritime Safety Committee may determine the cessation of this requirement, provided that a re-assessment is undertaken by the Organization no later than 2005."

3.9 After considerable discussions on the matter, the Sub-Committee came to the conclusion that watch on VHF channel 16 by SOLAS ships, while at sea, should be required and kept for foreseeable future with a view to provide:

.1 a distress alerting and communication channel for non-SOLAS vessels; and

.2 bridge-to-bridge communications for SOLAS ships,

and invited the Committee to note this view.

3.10 Member Governments were invited to draw the attention of their national Telecommunication Authorities to the Sub-Committee's opinion above.

4 ITU MARITIME RADIOCOMMUNICATION MATTERS

General

4.1 The Sub-Committee considered under this agenda item documents submitted by the Secretariat (COMSAR 8/4 and COMSAR 8/4/2, annex 1) and Finland (COMSAR 8/4/1).

Establishment of a working group

4.2 Having briefly discussed the above documents, the Sub-Committee established the Technical Working Group and instructed it, taking into account the comments and decisions made at Plenary, to:

.1 consider documents COMSAR 8/4, COMSAR 8/4/1 and COMSAR 8/4/2, annex 1;

.2 analyse the outcome of WRC-03 in line with the IMO position;

.3 prepare terms of reference for a correspondence or a joint IMO/ITU working group to deal with questions raised in document COMSAR 8/4/1 and start the preparation of an IMO position on maritime issues to WRC-07;

.4 prepare, if agreed, a draft MSC or COMSAR circular addressing DSC test calls, taking into account the previously issued IMO circular(s) regarding the same matter (COMSAR/Circ.17);

.5 provide appropriate comments and/or recommendations; and

.6 report to the Plenary on Thursday morning.

Report of the Technical Working Group

4.3 Having received and considered the report of the Technical Working Group (COMSAR 8/WP.4 and COMSAR 8/WP.4/Add.1), the Sub-Committee approved it, in general, and took action as indicated hereunder.

ITU MARITIME RADIOCOMMUNICATION MATTERS

4.4 The Sub-Committee:

.1 concurred with the observation of the group that GMDSS provisions were not included in the plans for the 2010 WRC and that therefore GMDSS provisions would need to be completed in 2007 (COMSAR 8/WP.4, paragraph 4.2);

.2 concurred with the proposal of the group to establish a joint IMO/ITU experts group for WRC-07 preparation and invited the Committee to approve it with the agreed terms of reference (COMSAR 8/WP.4, paragraph 4.3), as set out at annex 3;

.3 invited the Committee to approve the draft COMSAR circular on Recommendations on MF/HF DSC test calls to coast stations (COMSAR 8/WP.4, paragraph 4.4), as set out at annex 4;

.4 approved the questionnaire prepared by the group which should be used to assess the actual loading on the DSC channels (COMSAR 8/WP.4, paragraph 4.5), as set out at annex 5; and

.5 invited Member Governments to submit the returns over the next year for three monthly periods ending in the months of May, August, November and February to the co-ordinator[*] for collation and presentation to COMSAR 9 (COMSAR 8/WP.4, paragraph 4.5).

Simplification of Digital Selective Calling (DSC)

4.5 In considering issues relating to simplification of Digital Selective Calling (DSC), under the main heading of ITU Maritime Radiocommunication matters, the Sub-Committee instructed the Secretariat to convey the liaison statement to the International Electrotechnical Commission (IEC) TC 80 and the ITU WP.8B, set out in annex 6, and invited the Committee to endorse the action taken.

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5 SATELLITE SERVICES (INMARSAT AND COSPAS-SARSAT)

SIMPLIFIED VOYAGE DATA RECORDERS (S-VDRS) FOR EXISTING CARGO SHIPS

5.1 The Sub-Committee briefly discussed documents submitted by the Secretariat (COMSAR 8/2/1, annex 1), Japan (COMSAR 8/5/3) and IEC (COMSAR 8/5/4) and referred them to the Technical Working Group established under agenda item 4 (see paragraph 4.2), for detailed consideration.

5.2 The Technical Working Group was instructed to consider the above documents and, taking into account the comments made at Plenary, to:

.1 provide, as high priority, comments/proposals/advice on whether it should be permitted and would be practical and reasonable to integrate a float-free S-VDR into an EPIRB required in SOLAS chapter IV, taking into account the issues related to coding, testing, maintenance, databases, false alerts, the use of 121.5 MHz signal for location and others, and indicate advantages and disadvantages; and

.2 check the draft performance standards for S-VDRs and prepare any views/recommendations on the issue.

Report of the Working Group

5.3 In considering the relevant part of the Technical Working Group report (COMSAR 8/WP.4, section 5 and COMSAR 8/WP.4/Add.1) referring to the above issue, the Sub-Committee invited the Committee to:

.1 note the recommendations regarding S-VDRs for existing ships, as follows:

.1.1 EPIRBs and float-free S-VDR capsules including locating device should be considered as separate devices with differing requirements. The requirements for S-VDR capsules should be specified separately but may include reference to EPIRB performance standards and test standards where appropriate. This route removes any need to revise existing beacon standards and thus minimizes delay in bringing S-VDRs into service;

.1.2 EPIRBs and locating devices associated with S-VDR capsules should contain coding which enables the signal to identify the specific function of the transmitting device and whether or not it needs to be recovered; and

.1.3 should a manufacture wish to combine an EPIRB and an S-VDR capsule within a single unit this should be allowed. However, this unit should meet all of the requirements for an EPIRB and all of the requirements for an S-VDR capsule. Maintenance, test specifications/testing and coding of such a device would require special attention and performance standards may need to be revised; and

.2 take into account the proposed amendments to the Performance Standards to S-VDRs when adopting them, as follows:

.2.1 reference to resolution A.812(19) should be redrafted to read:

A.812(19) - Performance standards for float-free satellite emergency position-indicating radio beacons operating through the geostationary Inmarsat satellite system on 1.6 GHz; and

.2.2 the following additional paragraph be added:

"5.1.3.3.3 The device should be capable of transmitting an initial locating signal and further locating/homing signals for at least 48 hours over a period of not less than 7 days/168 hours."

5.4 The Secretariat was instructed to convey the above paragraphs 5.1 to 5.3 to NAV 50.

GUIDELINES ON ANNUAL TESTING OF L-BAND SATELLITE EPIRBS

5.5 After brief discussion of document COMSAR 8/5/2 (United Kingdom) proposing draft guidelines, the Sub-Committee instructed the Technical Working Group to consider it in detail and prepare a draft MSC circular with the attached draft guidelines, for further consideration.

Report of the Working Group

5.6 Having considered the relevant part of the Technical Working Group report (COMSAR 8/WP.4 and COMSAR 8/WP.4/Add.1) referring to the above matter, the Sub-Committee agreed to the draft MSC circular – Guidelines on annual testing of L-band satellite EPIRBs, set out in annex 7, and invited the Committee to approve it.

COSPAS-SARSAT SERVICES

5.7 The Sub-Committee noted with appreciation document COMSAR 8/5 (COSPAS-SARSAT) reporting on the status of the COSPAS-SARSAT Programme.

INMARSAT SERVICES

5.8 The Sub-Committee noted that no documents concerning the issue had been received for this session.

REVISION OF RESOLUTION A.888(21)

5.9 The Sub-Committee noted that MSC 77, in accordance with operative paragraph 3(c) of resolution A.888(21) on Criteria for the provision of mobile-satellite communication systems in the GMDSS, had authorized the Sub-Committee to review the resolution, under its work programme item "Satellite services (Inmarsat and COSPAS-SARSAT)", with a view to keeping it updated to secure the long-term integrity of the GMDSS.

5.10 In considering document COMSAR 8/5/1 (United States) proposing the revision of the Annex to resolution A.888(21), the Sub-Committee pointed out that:

.1 resolution A.888(21) was a document reflecting the policy of the Organization with respect to the future providers of satellite communications for the GMDSS;

.2 it was obvious that more views on the issue and comments on the proposed revised Annex were required; and

.3 any proposed amendments should be clearly presented and identified.

5.11 Therefore, the delegation of the United States was invited to re-submit their proposed amendments to COMSAR 9 for consideration and Member Governments were invited to provide their comments and proposals on the issue.

AMENDMENTS TO SOLAS REGULATION IV/15.9

5.12 The Sub-Committee noted document COMSAR 8/INF.7 (Finland, Norway, Sweden, Latvia, Denmark and Poland) informing that some changes/corrections to the approved by MSC 77 draft amendments to SOLAS regulation IV/15.9 would be submitted to MSC 78 for consideration.

6 EMERGENCY RADIOCOMMUNICATIONS, INCLUDING FALSE ALERTS AND INTERFERENCE

6.1 The Sub-Committee noted that MSC 77 had concurred with the Sub-Committee's decision to extend the work of the correspondence group/Voluntary Group of Experts on false alerts, with terms of reference as indicated in COMSAR 7/23, paragraph 6.9, to 2006 and had extended likewise the target completion date of the high priority item "Emergency radiocommunications, including false alerts and interference" to 2006.

6.2 The Sub-Committee recalled that COMSAR 7 had:

.1 agreed with the opinion of its Operational Working Group that establishment of a GMDSS-SMR programme was important for GMDSS efficiency, and it should be a task for IMO;

.2 also agreed with the Working Group’s opinion that there was a need for a GMDSS-SMR Voluntary Group of Experts within IMO, which could summarize and distribute lessons learned from the analysis of false alerts; and

.3 noted that:

.3.1 membership of the Voluntary Group of Experts would be open to all interested parties and initially would be formed by members of the former correspondence group on false alerts with the terms of references as specified in paragraph 6.9.1 of COMSAR 7/23; and

.3.2 the GMDSS-SMR Voluntary Group of Experts could be established, as a panel of experts similar to the Joint ICAO-IMO Working Group and/or the International NAVTEX Co-ordinating Panel without any budgetary impact to the Organization.

6.3 The Sub-Committee noted that no submissions had been received for this session.

6.4 After some discussion on the issue, the Sub-Committee agreed that VGEs should be established in near future for analysing of the GMDSS from false alerts, interference and other disadvantages point of view. However, it decided first to establish the correspondence group on false alerts under the co-ordination by Norway* with the following terms of reference:

.1 consider and analyse the previous work of the GMDSS SMR correspondence group (COMSAR 7/23, paragraph 6.8 – 6.4 and COMSAR 7/23, annex 4) from practical application point of view;

.2 recognizing that no Administrations had submitted reports on false alerts to the Organization in the format as present in COMSAR/Circ.29, develop a simplified reporting format, taking into account the need to minimize double reporting, which would:

.2.1 increase the reporting from ships to shore-based facilities; and

.2.2 encourage Administrations to provide reports on GMDSS distress alerting to the Organization;

.3 assess and analyse if there is any gapping, overlapping and/or conflicting in the Organization's guidelines (resolutions, circulars, reports, etc.) dealing with false alerts and interference issues; and

.4 report to COMSAR 9.

6.5 Members were invited to submit their comments and proposals on the matter for consideration at COMSAR 9.

7 MATTERS CONCERNING SEARCH AND RESCUE, INCLUDING THOSE RELATED TO THE 1979 SAR CONFERENCE AND IMPLEMENTATION OF THE GMDSS

HARMONIZATION OF AERONAUTICAL AND MARITIME SEARCH AND RESCUE PROCEDURES, INCLUDING SAR TRAINING MATTERS

7.1 The Sub-Committee briefly discussed documents submitted by Secretariat (COMSAR 8/7 and Add.1), the United Kingdom (COMSAR 8/7/2), the United States (COMSAR 8/INF.4) and Canada (COMSAR 8/INF.9).

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Establishment of a Working Group

7.2 The Sub-Committee established the Working Group on Search and Rescue and instructed it to consider the above documents in detail and, taking into account the comments made at Plenary, to:

.1 provide comments on recommendations made by the 10th session of the IMO/ICAO Joint Working Group;

.2 with regard to the GMDSS Coast Station Operator's Certificate Course:

.1 review the proposed CSOC aims and objectives, syllabus items and syllabus aims and objectives as detailed in annexes 1, 2 and 3 to COMSAR 8/7/2;

.2 make appropriate recommendations on its validation; and

.3 identify, whether this is an urgent matter, and if so whether the course should be issued in the form of a COMSAR circular until the validation process is completed;

.3 prepare justification, if there is a need for extension of the target completion date of the work programme item "Harmonization of aeronautical and maritime search and rescue procedures, including SAR training matters" to 2005;

.4 review terms of reference for the ICAO/IMO JWG and draft the agenda for its next meeting; and

.5 prepare any recommendations or proposals for harmonization of aeronautical and maritime SAR procedures.

Report of the Working Group

7.3 Having received the report of the Working Group (COMSAR 8/WP.2 and addenda), the Sub-Committee approved the report in general and took action as indicated hereunder.

7.4 The Sub-Committee noted and endorsed the relevant recommendations of the joint ICAO/IMO working group at its tenth session.

7.5 The Sub-Committee approved the CSOC course, as detailed in annexes to COMSAR 8/7/2, as the future model course for Coast Station and RCC Operators; invited MSC 78 to instruct the Secretariat to establish a validation panel, as done for the SSO, CSO and PFSO model courses for validation; and decided that this was an urgent matter and agreed to issue in the interim COMSAR/Circ.33 until the validation process is completed. The Committee was invited to endorse the action taken.

7.6 The Sub-Committee agreed to the continuation of the Joint ICAO/IMO Working Group for the next session planned to be held in Göteborg, Sweden, for 5 days in September 2004, noting that there might be a change of venue, and invited the Committee to approve it and extend the target completion date for the agenda item "Harmonization of aeronautical and maritime search and rescue procedures, including SAR training matters" to 2005.

7.7 The Sub-Committee reviewed and agreed the terms of reference and provisional agenda for JWG 11, as given in annex 8.

PLAN FOR THE PROVISION OF MARITIME SAR SERVICES, INCLUDING PROCEDURES FOR THE ROUTING DISTRESS INFORMATION IN THE GMDSS

7.8 The Sub-Committee briefly discussed documents submitted by the Secretariat (COMSAR 8/7, paragraph 5.3, COMSAR 8/7/1 and COMSAR 8/INF.3) and ILF (COMSAR 8/7/4).

Establishment of an international SAR fund

7.9 The Sub-Committee instructed the SAR Working Group to consider documents COMSAR 8/7, paragraph 5.3 and COMSAR 8/7/4 with a view to comment on:

.1 the proposed establishment of the Global SAR Development Advisory Group and its composition; and

.2 the proposed terms of reference for the Global SAR Development Advisory Group.

7.10 In considering the relevant part of the SAR Working Group report (COMSAR 8/WP.2 and addenda) referring to the above issue, the Sub-Committed endorsed establishment of the Global SAR Development Advisory Group consisting of:

.1 the chairman of the ICAO/IMO Joint Woking Group;

.2 a representative from the ILF Secretariat;

.3 a representative from the IMO Secretariat; and

.4 a representative from the ICAO Secretariat.

7.11 The Sub-Committee agreed to the Terms of Reference for the Global SAR Development Advisory Group, as revised (COMSAR 8/WP.2/Corr.1) and set in annex 9, and invited the Committee to approve them well as the composition of that Group.

Current availability of SAR services world-wide

7.12 Having considered documents submitted by the Secretariat (COMSAR 8/7/1 and COMSAR 8/INF.3), the Sub-Committee:

.1 endorsed the issuing of circular SAR.8/Circ.1 – Global SAR Plan with a view that it should be issued twice a year in loose-leaf format and be available at IMO website;

.2 urged Member Governments to respond to COMSAR/Circ.27 as soon as possible if they have not already done it;

.3 noted the information given in document COMSAR 8/INF.3 and urged Member Governments to inform the Secretary-General on the established Agreements on Search and Rescue Regions and Services in accordance with paragraph 2.1.4 of the Annex to the International Convention on Maritime Search and Rescue, 1979, as amended; and

.4 invited the Committee to endorse the action taken.

MEDICAL ASSISTANCE IN SAR SERVICES

7.13 The Sub-Committee briefly discussed documents submitted by the Secretariat (COMSAR 8/2, paragraph 1.6 and COMSAR 8/2/Add.1) and France, the co-ordinator of the correspondence group on medical assistance in SAR service (COMSAR 8/7/3) and instructed the SAR Working Group to:

.1 consider document COMSAR 8/7/3 and finalize the relevant draft MSC circular on Guidelines on responsibility and liability issues related to the use of the emergency medical kit/bag and evaluation of its use in emergency incidents;

.2 identify passenger ships other than ro-ro passenger ships, which should benefit from being equipped with the emergency medical kit/bag (EMK); and

.3 consider document COMSAR 8/2/Add.1 and comment or make proposals.

Report of the Working Group

7.14 In considering the relevant part of the SAR Working Group report (COMSAR 8/WP.2 and addenda) referring to the above issue, the Sub-Committee endorsed the draft MSC circular on "Guidelines on responsibility and liability issues related to the use of the emergency medical kit/bag and evaluation of its use in emergency accidents" and, as authorized by MSC 77, requested the Secretariat to disseminate it as MSC/Circ.1105.

7.15 The Sub-Committee identified passenger ships, other than ro-ro passenger ships which would benefit from being equipped with the EMK, as being passenger ships not carrying a medical doctor on board but carrying more than 100 passengers on a route which would make the response time for a medical intervention from ashore longer than 30 minutes. Subsequently the Sub-Committee invited the Committee to consider making MSC/Circ.1042 also applicable to such ships and amend it accordingly.

7.16 In considering document COMSAR 8/2/Add.1, containing draft Guidelines on the basic elements of a shipboard occupational health and safety programme prepared by BLG 8, the Sub-Committee agreed that no modifications to the draft guidelines were necessary from the radiocommunication and search and rescue point of view and invited the Committee to advise BLG 9 accordingly.

8 REVIEW OF THE CONVENTION PROVISIONS REGARDING THE TREATMENT OF PERSONS RESCUED AT SEA

SAR AND SOLAS CONVENTIONS

8.1 Having briefly discussed documents submitted by the Secretariat (COMSAR 8/2, paragraph 1.7 and COMSAR 8/2/2, paragraph 2), the United States, the co-ordinator of the correspondence group (COMSAR 8/8/1), ICS and IFSMA (COMSAR 8/8/2) and Spain (COMSAR 8/8/3), the Sub-Committee instructed the SAR Working Group, taking into account the comments made at Plenary, to consider the above documents and finalize the draft guidelines in a format of a draft MSC circular or resolution, using as a basis document COMSAR 8/8/1.

8.2 The Sub-Committee noted document COMSAR 8/8 (United States) proposing changes to the SAR Convention amendments approved at MSC 77 and was of the opinion that such changes should be submitted directly to the Committee.

Report of the Working Group

8.3 In considering the relevant part of the SAR Working Group Report (COMSAR 8/WP.2, paragraphs 17 to 19 and COMSAR 8/WP.2/Add.1) referring to the above matter, the Sub-Committee approved the draft MSC resolution on Guidance on the treatment of persons rescued at sea, set out in annex 10, and invited the Committee to adopt it.

8.4 The Sub-Committee noted that the Working Group had considered the oral proposal of Singapore to add the following additional paragraph to section 6 of the Guidance, as instructed by the Sub-Committee, and had pointed out that the issue was already covered in the draft Guidance, as developed:

> "Based on the information provided by the master of assisting ship and taking into consideration of the potential health and safety of rescued person, the RCC may request the assistance of the nearest port. Coastal States of the nearest port to the assisting ship should assist the RCC to meet the needs on board, or to facilitate safe and secured disembarkation of the survivors."

8.5 The Sub-Committee instructed JWG11 to incorporate paragraphs 5.3 and 5.4 of the annex to document COMSAR 8/8/1 when considering new amendments to the IAMSAR Manual.

FAL AND SALVAGE CONVENTIONS

8.6 The Sub-Committee noted that no submissions had been received under this agenda item. However, taking into account that other bodies of the Organization would continue its work on the issue, the Sub-Committee invited the Committee to extend the target completion date for review of the FAL and SALVAGE Conventions to address facilitation matters in the context of the treatment of persons rescued at sea, to 2005.

9 LARGE PASSENGER SHIP SAFETY

9.1 The Sub-Committee briefly discussed documents submitted by Secretariat (COMSAR 8/2, paragraph 1.8), the United Kingdom, as the co-ordinator of the correspondence group (COMSAR 8/9, COMSAR 8/INF.6 and COMSAR 8/INF.8) and ICCL (MSC 77/4/1).

9.2 The Sub-Committee instructed the SAR Working Group to:

.1 consider the report of the correspondence group taking into account documents COMSAR 7/10/1 and MSC 77/4/1 and, in particular, 53 variously directed recommendations with a view to:

.1 assess the recommendations and make them more specific from an action point of view;

.2 identifying which tasks will require further action by the Sub-Committee and which tasks need no further action; and

.3 provide appropriate explanatory text and target completion dates for the tasks requiring further consideration; and

.2 consider whether there is a need for the correspondence group to be re-established and, if so, prepare the terms of reference for consideration by the Sub-Committee.

Report of the Working Group

9.3 In considering the relevant part of the SAR Working Group report (COMSAR 8/WP.2/Add.2, paragraphs 1 to 7) referring to the issue, the Sub-Committee:

.1 endorsed the recommendations relating to Large Passenger Ship Safety which need further consideration by MSC 78, as set out in annex 11; and

.2 invited the Committee to decide whether to extend the target completion date for Large Passenger Ship Safety to 2005, subject to its decision on the Sub-Committee's recommendations thereon.

10 DEVELOPMENTS IN MARITIME RADIOCOMMUNICATION SYSTEMS AND TECHNOLOGY

General

10.1 The Sub-Committee considered under this agenda item documents submitted by CIRM (COMSAR 8/10) and Norway (COMSAR 8/10/1 and COMSAR 8/10/2).

10.2 The Sub-Committee recalled that COMSAR 7 had agreed that this item should be a permanent one in the Sub-Committee's agendas. Meanwhile, recognizing the importance and broadness of this item, the Sub-Committee agreed that ***no submissions concerning performance standards for any radiocommunication equipment should be accepted and/or considered under this work programme item***.

10.3 Having briefly discussed the above documents, the Sub-Committee instructed the Technical Working Group, taking into account the comments and decisions made at Plenary, to:

.1 consider documents COMSAR 8/10, COMSAR 8/10/1 and COMSAR 8/10/2 with a view whether digital terrestrial communications, including e-mail, could cover the public correspondence and/or distress communications required under the GMDSS; and

.2 provide comments/recommendations on any further action concerning this agenda item,

Report of the Working Group

10.4 In considering the relevant part of the Technical Working Group report (COMSAR 8/WP.4, section 6 and COMSAR 8/WP.4/Add.1, paragraph 6.1) referring to the above issue, the Sub-Committee agreed to the liaison statement to WP.8B on Developments in maritime radiocommunication systems and technology, set out in annex 12, and instructed the Secretariat to convey it to the ITU-R WP.8B for consideration.

10.5 The Committee was invited to endorse the action taken.

11 REVISION OF THE IAMSAR MANUAL

11.1 The Sub-Committee considered documents submitted by the Secretariat (COMSAR 8/7, sections 3.4, 3.5 and 4 and appendixes D, E, F, G, H and I) and Italy (COMSAR 8/11/1).

11.2 The Sub-Committee noted that ICAO had withdrawn its document COMSAR 8/11.

11.3 The Sub-Committee instructed SAR Working Group to consider the documents listed in paragraphs 11.1 above and prepare:

.1 a draft MSC circular on Adoption of amendments to the IAMSAR Manual;

.2 draft proposed amendments to the IAMSAR Manual recommending the date of their application; and

.3 relevant comments and proposals, for consideration at Plenary.

Report of the Working Group

11.4 In considering the relevant part of the SAR Working Group report (COMSAR 8/WP.2, paragraphs 14 and 15) referring to the issue, the Sub-Committee endorsed the draft MSC circular on Adoption of amendments to the IAMSAR Manual, set out in annex 13, for submission to ICAO for approval and to MSC 78 for adoption with an entry into force date of 1 January 2005.

11.5 The Secretariat was instructed to convey the agreed draft amendments to ICAO for approval.

11.6 The Committee was invited to take account of the response to be received from ICAO and adopt the draft MSC circular and amendments to the IAMSAR Manual.

12 REVIEW OF THE 2000 HSC CODE AND AMENDMENTS TO THE DSC CODE AND 1994 HSC CODE

12.1 The Sub-Committee considered document COMSAR 8/12 (Secretariat) concerning the essence of MSC/Circ.1057 (Proposed amendments to update the DSC Code and the 1994 HSC Code) and an application of Codes.

12.2 It was noted that:

.1 2000 HSC Code applies to HSC the keels of which are laid or which are at a similar status of construction on or after 1 July 2002;

.2 1994 HSC Code applies to HSC constructed on or after 1 January 1996 but before 1 July 2002;

.3 DSC Code applies to DSC/HSC constructed before 1 January 1996;

.4 chapter 14 - Radiocommunications of the 2000 HSC Code is equivalent to SOLAS chapter IV, as amended (up to and including resolutions MSC.69(69) and MSC.123(75)) and should be incorporated into the 1994 HSC Code and the DSC Code as indicated in MSC/Circ.1057; and

.5 the final decision by MSC 78 with regard to SOLAS regulation IV/15.9 on maintenance/testing of satellite EPIRBs should be taken into account as well, and regulation 14.15.10 of the 2000 HSC Code should be amended accordingly.

12.3 Taking into account comments and proposals made during the discussion on the above issue, the Sub-Committee was of the opinion that SOLAS chapter IV, as amended, should apply to all Codes and, with a view to progress the matter further, established a correspondence group under the co-ordination by Singapore.* The correspondence group was instructed to prepare draft amendments on radiocommunications which should apply to all Codes and report to COMSAR 9.

12.4 The Secretariat was instructed to convey this section of the report to DE 47.

13 MEASURES TO ENHANCE MARITIME SECURITY

General

13.1 The Sub-Committee noted that MSC 77 had:

.1 instructed the NAV Sub-Committee to review the modified functional requirements and draft amendments to the SOLAS Convention and submit their comments to COMSAR 8;

.2 instructed the COMSAR Sub-Committee to consider the means of best implementing the modified functional requirements; to finalize the draft amendment to the SOLAS Convention taking the modified functional requirements into account; to recommend, if considered appropriate, the means for recognizing appropriate satellite systems; to recommend, if considered appropriate, the appropriate body that could co-ordinate identification and tracking

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among satellite service providers; and to submit its recommendations to MSC 78 so that the Committee could then approve the appropriate amendments to the SOLAS Convention for long-range identification and tracking of ships with a view to adoption at MSC 79; and

.3 established an intersessional correspondence group co-ordinated by the United States to begin discussion on the above issues and to report to COMSAR 8.

13.2 The Sub-Committee had for its consideration under this agenda item documents submitted by the United States, the co-ordinator of the correspondence group (COMSAR 8/13/4 and COMSAR 8/INF.5), the United States (COMSAR 8/13, COMSAR 8/13/5 and COMSAR 8/13/6), Finland (COMSAR 8/13/1), COSPAS-SARSAT (COMSAR 8/13/2), Japan (COMSAR 8/13/3), the Netherlands, Sweden and IALA (COMSAR 8/13/7) and the Secretariat (COMSAR 8/4/2, annex 2).

13.3 The Sub-Committee agreed that the above documents should be considered under two separate issues:

.1 long- range identification and tracking of ships; and

.2 ship security alert systems.

Establishment of a working group

13.4 Having briefly discussed the above documents, the Sub-Committee established the Working Group on Maritime Security and instructed it, taking into account the comments and decisions made in Plenary, to:

.1 consider COMSAR 8/4/2, annex 2, COMSAR 8/13, COMSAR 8/13/4, COMSAR 8/13/5, COMSAR 8/13/7 and COMSAR 8/INF.5;

.2 recommend the best means of implementing the modified functional requirements for long-range identification and tracking of ships;

.3 finalize the proposed draft amendments concerning LRIT to the SOLAS Convention, taking the modified functional requirements into account;

.4 recommend, if considered appropriate, the means for recognizing appropriate satellite systems;

.5 recommend, if considered appropriate, the appropriate body that could co-ordinate identification and tracking among satellite service providers;

.6 recommend provisions for the registration and inclusion of shipborne equipment for long-range identification and tracking of ships in Safety/Security Certificates (records of equipment);

.7 consider COMSAR 8/13/1, COMSAR 8/13/2, COMSAR 8/13/3 and COMSAR 8/13/6;

.8 revise MSC/Circ.623/Rev.3 to ensure consistency with the guidance given in MSC/Circ.1073;

.9 provide any comments and/or recommendations concerning the handling of ship security alerts ashore;

.10 recommend provisions for the registration and inclusion of ship security alert system equipment in Safety/Security Certificates (records of equipment); and

.11 submit a report to Plenary on Thursday morning.

Report of the Working Group

13.5 Having received the report of the working group on Maritime Security (COMSAR 8/WP.5), the Sub-Committee approved it in general and took action as summarized hereunder.

LONG-RANGE IDENTIFICATION AND TRACKING OF SHIPS

13.6 The Sub-Committee:

.1 noted the discussion in connection with long-range identification and tracking of ships in general (paragraphs 4 to 42) and, in particular, that the Group had identified a number of issues related to LRIT which need to be discussed further prior to the Sub-Committee being able to advise the Committee on this issue. The Group started the development of a draft regulation for SOLAS chapter XI-2 on LRIT, based on the submission by the United States (COMSAR 8/13). However, the Group was unable to finalize this work at this session. The preliminary draft is set out in annex 14 and to be considered as a work in progress. In view of this, the Committee was invited to authorize COMSAR 9 to further develop this draft regulation and report to the MSC;

.2 concurred with the view of the Group and invited the Committee to endorse the relevant views and take action on the following issues:

.1 there is a need to develop a phased-in implementation scheme with respect to those ships to which SOLAS chapter XI-2 applies (paragraphs 4, 6 to 8);

.2 ships operating exclusively within Sea Area A1 which are fitted with AIS do not need to be fitted with additional equipment to provide LRIT information (paragraph 5);

.3 each Administration should be able to receive LRIT information for ships entitled to fly its flag world wide and that port States should be able to receive LRIT information for ships which have indicated to that port State the intention to enter a port facility under its jurisdiction and that the distance or the period for receiving such information should be determined by each Contracting Government (paragraphs 9 and 10);

.4 it would be necessary to develop and agree:

.4.1 the functional requirements which LRIT systems have to meet;
.4.2 the criteria for assessment of such systems;
.4.3 the security requirements to be complied with by such systems;
.4.4 the procedures for recognition and acceptance of such systems; and

.4.5 the oversight of LRIT service providers (paragraphs 21 to 25);

.5 it would be necessary to develop and agree various security-related aspects to be complied by the LRIT service providers (paragraphs 26 to 28);

.6 from the security point of view, the only information which needs to be provided by a ship is the identity of the ship, its location (latitude and longitude) and the time and date of the position (paragraph 29);

.7 the system should be designed to ensure the integrity of the data and to prevent the intentional or accidental transmission of false information) (paragraph 30);

.8 LRIT should be at no cost to the ship and that the total cost of LRIT information should be paid by the user Contracting Government to the LRIT service provider (paragraph 32);

.9 LRIT should not be interfaced with AIS (paragraph 34);

.10 LRIT information may be provided by a Contracting Government to Search and Rescue services (paragraph 35); and

.11 considerable work needs to be done before the Sub-Committee will be in a position to advise the Committee on the issue of LRIT (paragraph 38);

.3 requested the Committee to clarify its position on the issue of the provision of LRIT information to a coastal State by ships exercising the right of innocent passage and not intending to proceed to a port facility under the jurisdiction of a coastal State (paragraphs 11, and 40 to 41) and in this respect, on the role of the Organization in collecting, storing and disseminating LRIT information (paragraph 12 to 20); and

.4 invited the Committee to note, in particular, that some delegations expressed the view that a cost benefit analysis and study needs to be undertaken before the issue of LRIT can be pursued further (paragraph 39).

SHIP SECURITY ALERT SYSTEMS

13.7 The Sub-Committee:

.1 noted the discussion in connection with the COSPAS-SARSAT implementation of SSAS (paragraphs 46 and 47);

.2 invited those Contracting Governments that have yet to provide the information required by SOLAS regulation XI-2/13, to do so as a matter of priority (paragraphs 46, 48 and 50);

.3 concurred with the establishment of a database containing the information listed below:

.3.1 the flag State;
.3.2 the competent authority;

.3.3 the ultimate destination of alert messages;
.3.4 the required content fields for SSAS messages;
.3.5 formats for the message body text;
.3.6 delivery formats; and
.3.7 unique test messages (paragraph 50);

.4 invited those Contracting Governments that have yet to establish criteria for delivering SSAS alerts, to do so as a matter of priority (paragraph 51);

.5 concurred with the view that there is a need to develop a test message protocol for testing SSAS (paragraph 52);

.6 concurred with the view that SSAS alerts should be sent directly from the ship to its Administration, or proper recipient as designated by the Administration, without transmission to coastal States or MRCCs in the region unless directed otherwise by the Administration (paragraph 54);

.7 agreed with the view that those Companies which have already implemented SSAS on the basis of systems or procedures approved by the Administration should not be required to effect any changes at this stage in respect of the ships concerned (paragraph 56);

.8 decided not to pursue further amendments to the record of equipment (Forms P, R and C) associated with the ship's safety certificates relating to SSAS (paragraph 57); and

.9 invited the Committee to note, that in the light of the absence of specific submissions relating to the revision of MSC/Circ.623/Rev.3 to ensure consistency with the guidance given in MSC/Circ.1073, the Working Group had not considered it prudent to embark on any discussion on this issue (paragraph 58).

13.8 The oral statement by the delegation of Japan regarding SSASs is set out in annex 15.

14 REVISION OF THE FORMS OF NUCLEAR SHIP SAFETY CERTIFICATES

14.1 Having considered document COMSAR 8/14 (Russian Federation), the Sub-Committee agreed to the proposed draft amendments to the Form of Nuclear Passenger Ship Safety Certificate and the Form of Nuclear Cargo Ship Safety Certificate, set out in annex 16, and instructed the Secretariat to convey the agreed draft amendments to the DE Sub-Committee (co-ordinator).

14.2 The Committee was invited to delete the item "Revision of the forms of nuclear ship safety certificates" from the Sub-Committee's work programme, as the work on this item had been completed.

15 WORK PROGRAMME AND AGENDA FOR COMSAR 9

TERMS OF REFERENCE FOR THE SUB-COMMITTEE

15.1 The Sub-Committee was informed that FP 48 had debated, as requested by MSC 77, the view expressed with regard to the need to consolidate, under one sub-committee, the responsibility for escape, evacuation and recovery and, having agreed that all matters related to

escape and evacuation covered under SOLAS chapter II-2 should remain within the FP Sub-Committee's purview, invited the Committee to note this view.

15.2 Pursuant to the request by MSC 77 and taking into account the view expressed by FP 48 above, the Sub-Committee also considered the issue and was of the opinion that evacuation and all life-saving and search and rescue recovery matters should be within the COMSAR Sub-Committee's purview. MSC 78 was invited to note this view. The Secretariat was instructed to inform DE 47 on the matter.

15.3 As instructed by MSC 76, the Sub-Committee considered its proposed draft terms of reference prepared by the Secretariat (COMSAR 8/15) and the proposed updated TORs prepared by the Chairman (COMSAR 8/WP.3 and Rev.1) and, after some discussion, agreed to the draft revised terms of reference, set out in annex 17, for submission to MSC 78 and MEPC 52 for consideration and action as appropriate.

WORK PROGRAMME AND AGENDA FOR COMSAR 9

15.4 Taking into account the progress made at this session and the provisions of the agenda management procedure contained in paragraphs 3.11 to 3.23 of the Guidelines on the organization and method of work (MSC/Circ.1099-MEPC/Circ.405), the Sub-Committee revised its work programme (COMSAR 8/WP.1), based on that approved by MSC 77 (COMSAR 8/2, annex), and invited the Committee to approve the proposed revised work programme and provisional agenda for COMSAR 9, set out in annex 18.

ARRANGEMENTS FOR THE NEXT SESSION

15.5 The Sub-Committee agreed to establish at its next session the following working groups:

.1 GMDSS operational;

.2 search and rescue; and

.3 technical.

15.6 The Sub-Committee noted that its ninth session had been tentatively scheduled to take place from 7 to 11 February 2005.

16 ELECTION OF CHAIRMAN AND VICE-CHAIRMAN FOR 2005

16.1 In accordance with the Rules of Procedure of the Maritime Safety Committee, the Sub-Committee unanimously re-elected Mr. U. Hallberg (Sweden) as Chairman and Mr. A. Olopoenia (Nigeria) as Vice-Chairman for 2005.

17 ANY OTHER BUSINESS

AIS MATTERS

17.1 The Sub-Committee noted that, having considered document MSC 77/10/5(Germany and United States), suggesting that AIS be connected to the radio station's reserve power source, and, taking into account comments made by several delegations, the Committee had decided that it would be premature to agree in principle to the proposed amendments and instructed COMSAR 8

to consider document MSC 77/10/5 from the technical point of view and advise MSC 78 accordingly.

17.2 The Sub-Committee had also for its consideration document COMSAR 8/17 (Australia, Chile, France, Japan, Spain, Sweden, United States and IALA) pointing out problems regarding the installation and use of AISs and decided to refer the above documents to the Technical Working Group, established under agenda item 4 (see paragraph 4.2).

17.3 The Technical Working Group was instructed to consider documents MSC 77/10/5 and COMSAR 8/17 and, taking into account the comments made at Plenary, to:

.1 provide a technical view on a possible connection of the AIS to the reserve power sources, taking into account COMSAR/Circ.16, and, if the answer is affirmative, prepare preliminary draft amendments to SOLAS; and

.2 prepare any recommendations on how to deal with the identified problems regarding the installation and use of the AIS.

Report of the Working Group

17.4 In considering the relevant part of the Technical Working Group's report (COMSAR 8/WP.4, section 7 and COMSAR 8/WP.4/Add.1, paragraphs 8.12 to 8.15) referring to the above issue, the Sub-Committee:

.1 urged all Member Governments, manufacturers and users to pay careful attention to the installation and use of AIS, including coding, and draw their attention to the requirements of SN/Circ.227 when new AIS installations are carried out (paragraph 7.1);

.2 concurred with the view of the group that AIS should ideally be connected through an uninterruptible power supply (UPS) to the ship's power supply as defined in SOLAS chapter II-1 (paragraph 7.2);

.3 invited the NAV Sub-Committee to note the view of the group that SN/Circ.227, concerning installation guidelines, needed further revision and that the need for UPS might be added to it (paragraph 7.3);

.4 invited the NAV Sub-Committee to consider COMSAR 8/17 and take appropriate action (paragraph 7.3); and

.5 invited the Committee to concur with the Sub-Committee's view on connection of AIS to the ship's power supply.

17.5 The oral statement by the delegation of Sweden concerning AIS connections to the ship's power supply is set out in annex 19.

REVISION OF SOLAS REGULATION IV/14 ON PERFORMANCE STANDARDS

17.6 The Sub-Committee considered document COMSAR 8/17/1 (Korea, Republic of) proposing amendments to regulation IV/14 with a view that regulation should be identical with new regulation V/18 in force since 1 July 2002 and pointed out that:

.1 in accordance with Guidelines on the organization and method of work of the MSC and MEPC and their subsidiary bodies, as amended (MSC/Circ.1099-MEPC/Circ.405), sub-committees should not suggest/prepare any changes to the mandatory instruments if not instructed/authorized by committees;

.2 by resolution MSC.123(75) chapter IV, as a whole, and regulation 14, in particular, had been amended with a view to be simplified, in a way that regulation 14 consists of one paragraph only, as follows:

> "1 All equipment to which this chapter applies shall be of a type approved by the Administration. Such equipment shall conform to appropriate performance standards not inferior to those adopted by the Organization."

.3 the revised regulation 14 was in force from 1 January 2004; and

.4 therefore, no amendments to regulation IV/14 were needed.

REVALIDATION OF GMDSS OPERATOR'S CERTIFICATES

17.7 Having discussed document COMSAR 8/17/2 (Norway) providing the results of radio surveys performed, in particular, that navigators holding a GMDSS operator's certificate, in many cases, were not familiar with technical and operational distress and safety procedures on board radio equipment the serve, the Sub-Committee concurred with the concern expressed and noted that, in Norway and in some other countries, every revalidation of a GMDSS operator's certificate should be established by passing an approved test, as indicated in section A-I/11, item 1.3.1 of the STCW Code. During the test the candidate would be required to demonstrate how to perform the functions described in SOLAS regulation IV/4.

17.8 The Sub-Committee also concurred with the concern expressed by Norway (COMSAR 8/17/3) about the apparently lack of knowledge and understanding on how distress alerting and the follow-up communications should be performed on a GMDSS ship in case of distress incidents.

17.9 Therefore, the Committee was invited to note the Sub-Committee's concern on the performance of GMDSS operator's certificate holders on board ships and, in this context, to request the STW Sub-Committee to further consider revalidation matters in line with the existing provisions of the STCW Code.

17.10 In considering document COMSAR 8/17/4 (Norway), the Sub-Committee supported the opinion that all radio life-saving appliances as well as mandatory GMDSS radio equipment should be tested and communications should be established during exercises related to lifeboat manoeuvres and/or fire-fighting exercises/drills.

EXPRESSIONS OF APPRECIATION

17.11 The Sub-Committee expressed appreciation to the following delegates and observers, who had recently relinquished their duties, retired or were transferred to other duties or were about to, for their invaluable contribution to its work and wished them a long and happy retirement or, as the case might be, every success in their new duties:

- Mr. Zafrul ALAM, First Secretary, Maritime Affairs (Singapore), (on return to his country);

- Lt. Cdr. C. J. PINK, (United Kingdom, Secretary – IMO NAVTEX Co-ordinating Panel), (on retirement);

- François ESCAFFRE, (France, Rear Admiral, Maritime Affairs, National Maritime SAR Co-ordinator), (on retirement);

- Mr. Johannes Hässler, (Germany, Lecturer, Advisor), (on retirement); and

- Captain Richard Hartman (United States, Chief, Office of Communication Systems, United States Coast Guard), (on retirement).

18 ACTION REQUESTED OF THE COMMITTEE

18.1 The Maritime Safety Committee is invited to:

.1 adopt the draft MSC circular on Adoption of the revised NAVTEX Manual (paragraph 3.7.1 and annex 1);

.2 approve the draft COMSAR circular on Clarification on the use of NAVTEX B_3 B_4 characters = 00 and NAVTEX Service Areas (paragraph 3.7.2 and annex 2);

.3 note the Sub-Committee's view that watch on VHF channel 16 by SOLAS ships, while at sea, should be required and kept for foreseeable future with a view to provide:

.3.1 a distress alerting and communication channel for non-SOLAS vessels; and

.3.2 bridge-to-bridge communications for SOLAS ships (paragraph 3.9);

.4 approve the establishment of a joint IMO/ITU experts group for preparation of an IMO position to WRC-07 with the agreed TORs, (paragraph 4.4.2 and annex 3);

.5 approve the draft COMSAR circular on Recommendations on MF/HF DSC test calls to coast stations (paragraph 4.4.3 and annex 4);

.6 endorse the action taken by the Sub-Committee in instructing the Secretariat to convey the liaison statement concerning simplification of DSC operation to IEC TC 80 and ITU-R WP.8B (paragraph 4.5 and annex 6);

.7 note the recommendations regarding S-VDRs for existing ships (paragraph 5.3.1);

.8 take into account the proposed amendments to the draft performance standards for S-VDR when adopting them (paragraph 5.3.2);

.9 approve the draft MSC circular – Guidelines on annual testing of L-band satellite EPIRBs (paragraph 5.6 and annex 7);

.10 instruct the Secretariat to establish a validation panel to validate the GMDSS Coast Station Operator's Certificate model course (paragraph 7.5);

.11 endorse the issuing of COMSAR/Circ.33 on GMDSS Coast Station Operator's Certificate (CSOC) model course in the interim (paragraph 7.5);

.12 approve the convening of the ICAO/IMO JWG 11 intersessionally (paragraph 7.6 and annex 8);

.13 approve the establishment and composition of the Global SAR Development Advisory Group and its terms of reference (paragraphs 7.10 and 7.11 and annex 9);

.14 endorse the issuing of SAR.8/Circ.1 – Global SAR Plan containing information on the current availability of SAR services, in loose-leaf format and with display at IMO website (paragraphs 7.12.1 and 7.12.4);

.15 urge Member Governments to respond to COMSAR/Circ.27 as soon as possible if they have not already done it (paragraphs 7.12.2 and 7.12.4);

.16 urge Member Governments to inform the Secretary-General on the established Agreements on Search and Rescue Regions and Services in accordance with paragraph 2.1.4 of the Annex to the International Convention on Maritime Search and Rescue, 1979, as amended (paragraphs 7.12.3 and 7.12.4);

.17 note that the Sub-Committee finalized the draft "Guidelines on responsibility and liability issues related to the use of the emergency medical kit/bag and evaluation of its use in emergency incidents" and, as authorized by MSC 77, instructed the Secretariat to issue them as MSC/Circ.1105 (paragraph 7.14);

.18 endorse the identification of passenger ships, other than ro-ro passenger ships, which should benefit from being equipped with the emergency medical kit/bag (EMK), as being passenger ships not carrying a medical doctor on board but carrying more than 100 passengers on a route which would make the response time for a medical intervention from ashore longer than 30 minutes (paragraph 7.15);

.19 if sub-paragraph .18 above endorsed, authorize the Sub-Committee to amend MSC/Circ.1042 accordingly (paragraph 7.15);

.20 note that no modifications to the draft guidelines on the basic elements of a shipboard occupational health and safety programme are necessary from the radiocommunication and search and rescue point of view and advise BLG 9 accordingly (paragraph 7.16);

.21 adopt draft MSC resolution on Guidance on the treatment of persons rescued at sea (paragraph 8.3 and annex 10);

.22 consider the recommendations relating to Large Passenger Ship Safety and decide as appropriate (paragraph 9.3.1 and annex 11);

.23 endorse the action taken in instructing the Secretariat to convey the liaison statement on Developments in maritime radiocommunication systems and technology to the ITU-R WP.8B for consideration (paragraph 10.5 and annex 12);

.24 adopt the draft MSC circular on Adoption of amendments to the IAMSAR Manual (paragraph 11.4 and annex 13);

.25 take into account and consider the Sub-Committee's view on long-range identification and tracking of ships and ship security alert system issues as work in progress (paragraphs 13.6 and 13.7 and annex 14);

.26 note that the Sub-Committee agreed the draft amendments to the forms of nuclear ship safety certificates and conveyed them to the DE Sub-Committee, as co-ordinator (paragraph 14.1 and annex 16);

.27 note the opinion that evacuation and all life-saving and search and rescue recovery matters should be within the purview of the COMSAR Sub-Committee (paragraph 15.3);

.28 consider the draft revised terms of reference for the Sub-Committee and decide as appropriate (paragraph 15.3 and annex 17);

.29 approve the proposed revised work programme of the Sub-Committee and provisional agenda for COMSAR 9 (paragraph 15.4 and annex 18);

.30 concur with the Sub-Committee's view that AIS should ideally be connected through an uninterruptible power supply (UPS) to the ship's power supply as defined in SOLAS chapter II-1 (paragraph 17.4);

.31 note the Sub-Committee's concern on the performance of GMDSS operator's certificate holders on board ships and, in this context, to request the STW Sub-Committee to further consider revalidation matters in line with the existing provisions of the STCW Code, (paragraph 17.9); and

.32 approve the report in general.

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ANNEX 1

DRAFT MSC CIRCULAR

ADOPTION OF THE REVISED NAVTEX MANUAL

The Maritime Safety Committee, [at its seventy-eighth session (12 to 21 May 2004], adopted the revised NAVTEX Manual, given at annex, and decided that it should enter into force on [1 January 2006].

NAVTEX Manual

200.... Edition

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Foreword

NAVTEX is an international automated direct-printing service for promulgation of navigational and meteorological warnings and urgent information to ships. It has been developed to provide a low-cost, simple and automated means of receiving maritime safety information on board ships at sea in coastal waters. The information transmitted may be relevant to all sizes and types of vessel and the selective message-rejection feature ensures that every mariner can receive a safety information broadcast which is tailored to his particular needs.

NAVTEX fulfils an integral role in the global maritime distress and safety system (GMDSS) which has been developed by the International Maritime Organization (IMO) and contributes to safety at sea.

The NAVTEX system is commended to Administrations having responsibility for maritime affairs and to mariners who require an effective maritime safety information service.

This manual is intended, primarily, for use by Maritime Administrations and others concerned with the preparation and broadcasting of safety information. It will also be of interest to seafarers, ship-owners and others who need to receive such information in order to safely go about their business at sea. It should be used in conjunction with the IHO/IMO World-Wide Navigational Warning Service Guidance Document, Special Publication No. 53 (WWNWS), and the Joint IMO/IHO/WMO Manual on Maritime Safety Information (MSI) Special Publication S – 53, Appendix 1. These latter publications are available from the IHO. Member administrations may obtain them free of charge through the IHO web site (www.iho.shom.fr).

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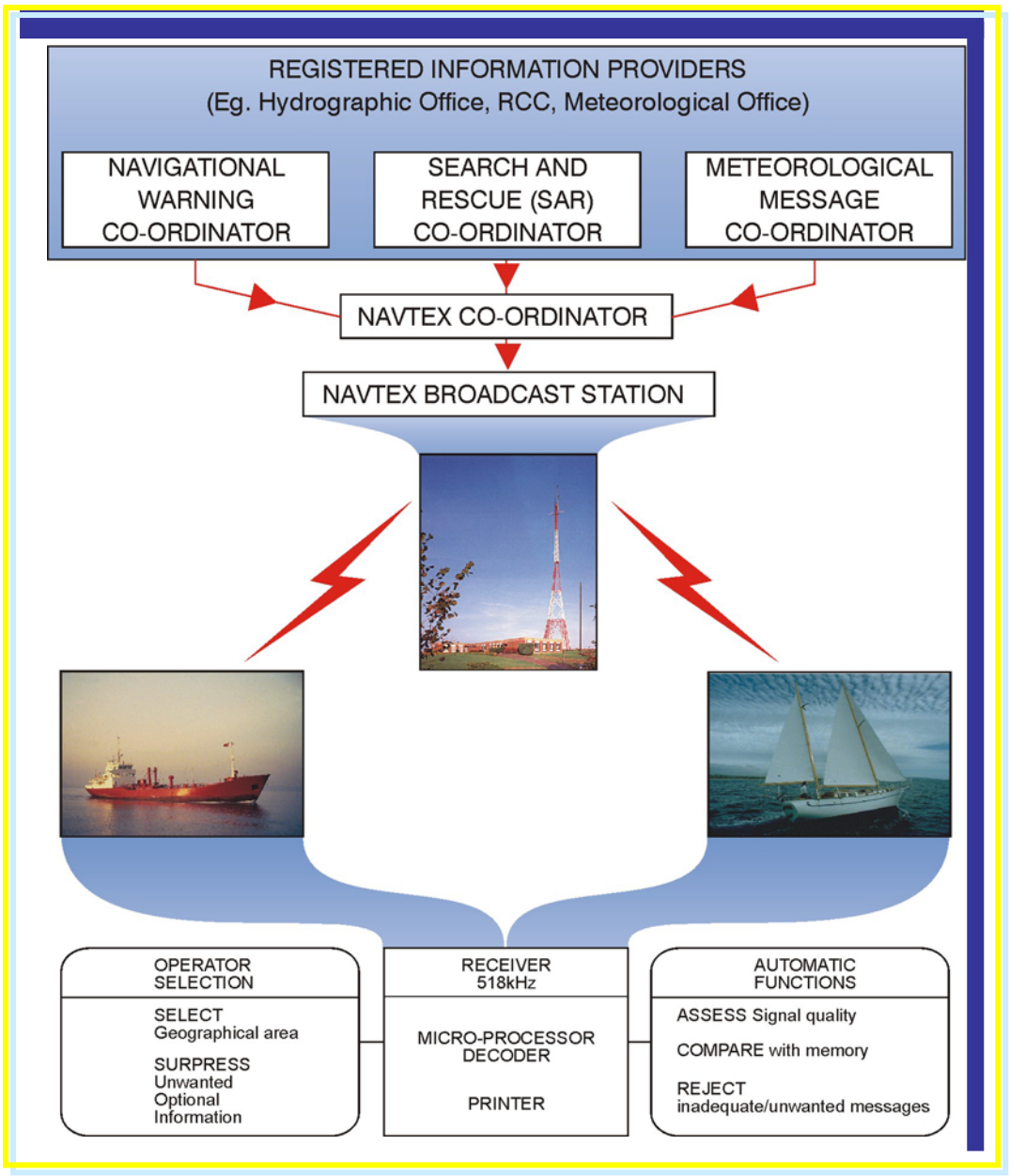

Figure 1 – The NAVTEX concept

NAVTEX Manual

1 - Introduction

This fourth edition of the manual includes all amendments up to and including the seventy-eighth session of the Maritime Safety Committee (May 2004) and describes the structure, control and operation of the NAVTEX service. It is intended primarily for national Administrations, but may also be useful to the mariner who requires more details than are found in the operational handbooks.

NAVTEX provides shipping with navigational and meteorological warnings and urgent information as listed in paragraph 7.3, by automatic display or print-out from a dedicated receiver. It is suitable for use in all sizes and types of ships. Figure 1 illustrates the way the service is typically structured.

NAVTEX is a component of the IMO/IHO World-Wide Navigational Warning Service (WWNWS) defined by IMO Assembly resolution A.706(l7), as amended, and the WMO Manual on Marine Meteorological Services, Part 1*bis*, Provision of warnings and weather and sea bulletins (GMDSS application). It has also been included as an element of the global maritime distress and safety system (GMDSS).

In the GMDSS, a NAVTEX receiving capability is part of the mandatory equipment which is required to be carried in certain vessels under the provisions of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended in 1988.

Authority for co-ordinating the use of the frequencies 490, 518 and 4209.5 kHz for NAVTEX services world-wide, was effectively delegated by ITU to IMO at WRC-97 through Resolution 339. This was re-affirmed at WRC-03. IMO has vested responsibility for the overall management and co-ordination of the global NAVTEX services in its NAVTEX Co-ordinating Panel. The terms of reference for this panel are attached at Annex 1.

Details of operational and planned NAVTEX services are published periodically in the various national lists of radio signals, in an annex to the International Telecommunication Union's (ITU) list VI - List of Radiodetermination and Special Service Stations - and in the GMDSS Master Plan published by IMO. Procedures applicable to stations transmitting NAVTEX information on the frequency 518 kHz are also given in article 14A of the Radio Regulations and Resolution no. 324 (Mob-87) of the World Administrative Radio Conference for the Mobile Services, 1987.

2 - Definitions

2.1 *NAVTEX* means the system for the broadcast and automatic reception of maritime safety information by means of narrow-band direct-printing telegraphy.

2.2 *International NAVTEX service* means the co-ordinated broadcast and automatic reception on the frequency 518 kHz of maritime safety information by means of narrow-band direct-printing telegraphy using the English language[*] It is important for the benefit of service users that the content format and criteria for including warnings and other messages on this frequency, are as consistent as possible world-wide.

2.3 *National NAVTEX services* means the broadcast and automatic reception of maritime safety information by means of narrow-band direct-printing telegraphy using frequencies other than 518 kHz and languages as decided by the Administrations concerned. These services may simply repeat the messages broadcast over the International NAVTEX service but in the national language, or they may be tailored to meet particular national requirements, for example by providing different or additional information to that broadcast on the International NAVTEX service targeted at recreational vessels or fishing fleets. These National NAVTEX services may be broadcast on 490 kHz or 4209.5 kHz (frequencies co-ordinated by IMO through the NAVTEX Co-ordinating Panel) or on nationally assigned frequencies.

[*] See also paragraph 7.5

3 - Planning a NAVTEX service

3.1 When planning to set up a NAVTEX service* it is essential that Administrations appreciate the high level of local and international co-ordination required by this single-frequency service. The central principles which should be borne in mind are as follows:

.1 All NAVTEX stations, when operational, are part of the strategic infrastructure of both the GMDSS and WWNWS.

.2 It is essential for the efficiency and effectiveness of the service that only a minimum number of stations are used to cover a sea area. This may require neighbouring states to either share facilities or be prepared to promulgate information provided by another state.

.3 Each station should contribute to the overall service of the particular region in a co-ordinated way, bearing in mind the geographical area logically covered by each station and the effective co-ordination and control of information to be transmitted. The information to be transmitted by NAVTEX should be routed between countries using the established communications channels.

.4 Each station will usually provide all the information for a unique and precisely defined sea area which takes full account of the character and volume of information and maritime traffic patterns in the region.

.5 Member States, seeking to establish NAVTEX services, should undertake preliminary discussions with the NAVAREA Co-ordinator, METAREA Co-ordinator and neighbouring administrations prior to formal application to IMO through the IMO NAVTEX Co-ordinating Panel. These discussions should consider the possible geographical locations for sites to ensure optimal coverage, service area boundaries and links with data providers. These initial discussions are particularly important when proposing to establish a new station as part of the International NAVTEX service. Should a Member State wish to move an existing site, once it is operational, or extend its range, then the whole co-ordination process outlined above, must be repeated, keeping the NAVTEX Co-ordinating Panel informed at all times.

.6 Member States seeking to set up an International NAVTEX service will not receive approval from the NAVTEX Co-ordinating Panel unless the planned service includes all the MANDATORY elements i.e. Navigational Warnings, Meteorological Warnings and Search and Rescue information and pirate attack warnings.

.7 When limitations on resources affect the rate of establishment of NAVTEX, every effort should be made to implement the NAVTEX service first in the areas of highest shipping density. If NAVTEX services are not established within 18 months of a B_1 character and time slot being issued by the NAVTEX Co-ordinating Panel, the Panel may after suitable notification, withdraw the allocation. The Member State would then need to submit a new application when ready to establish the service.

.8 The range of a NAVTEX transmitter depends on the transmitted power and local propagational conditions. The actual range achieved should be adjusted to the minimum required for adequate reception in the specified service area*, taking into account the needs of ships approaching from other areas. Experience indicates that the required range of 250 to 400 nautical miles will normally be attained by transmitted power of no more than 1KW during daylight with a 60% reduction during night-time.

.9 After the choice of transmitter sites, the main need for co-ordination lies in the assignment of B_1 characters, time schedules and the agreement of proposed service areas (if appropriate). The IMO NAVTEX Co-ordinating Panel allocates B_1 characters and time schedules and will arbitrate on the service area limits if these cannot be agreed locally.

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* The criteria for use when providing a NAVTEX service and the definitions of *coverage area* and *service area* are given in annex 5 (annex 4 to resolution A.801(19), Provision of Radio Services for the Global Maritime Distress and Safety System (GMDSS)

.10 The national NAVTEX co-ordinator should make arrangements for a quality-control organization in his area which should include both the message-originating offices and the NAVTEX Co-ordinator/transmitting stations. This organization should aim at confirming, on a continuing basis, that:

- **MINIMUM** power is used to achieve satisfactory range performance;
- time schedules are **not** exceeded; and
- the co-ordinated service is operating satisfactorily.

3.2 Guidance on these and the many other factors to be considered when planning NAVTEX services should be obtained at an early stage from IMO, through its NAVTEX Co-ordinating Panel. Details of how to contact the Panel may be found at annex 1.

4 - Principal features of NAVTEX

4.1 The operational and technical characteristics of the NAVTEX system are contained in Recommendation ITU-R M.540-2, reproduced in annex 2. Performance standards for shipborne narrow-band direct-printing equipment, if installed before 1 July 2005, are laid down in IMO Assembly resolution A.525(13). If installed on or after 1 July 2005, they should conform to IMO resolution MSC.148(77), reproduced in annex 3.

4.2 The principal features are:

.1 The International NAVTEX service uses a single frequency with transmissions from nominated stations within each NAVAREA/METAREA being arranged on a time-sharing basis to reduce the risk of mutual interference. All necessary information is contained in each transmission. Similarly, broadcasts on other IMO co-ordinated frequencies are operated on a time-sharing basis.

.2 The power of each transmitter is regulated so as to reduce the risk of interference between transmitters with the same B_1 character in different parts of the world.

.3 A dedicated NAVTEX receiver which has the ability to select messages to be printed, according to:

.3.1 a technical code ($B_1B_2B_3B_4$), which appears in the preamble of each message; and

.3.2 whether or not the particular message has already been printed.

Certain essential classes of safety information such as navigational and meteorological warnings and search and rescue information are non-rejectable to ensure that ships using NAVTEX always receive the most vital information.

.4 NAVTEX co-ordinators exercise control of messages transmitted by each station according to the information contained in each message and the geographical coverage required. Thus a user may choose to accept messages, as appropriate, either from the single transmitter which serves the sea area around his position or from a number of transmitters. Ideally, the user should select the station within whose coverage his vessel is currently operating and the station into whose coverage area his vessel will transit next.

5 - The transmitter identification character (B_1)

5.1 The transmitter identification character B_1, is a single letter which is allocated to each transmitter. It is used to identify the broadcasts which are to be accepted by the receiver and those to be rejected, and also the time slot for the transmission.

5.2 In order to avoid erroneous reception of transmissions from two stations having the same B_1 character, it is necessary to ensure that such stations have a large geographical separation. Originally, this was achieved by allocating B_1 characters in line with the general global scheme given in figure 2, which shows the initial

IMO-adopted strategy for allocating B_1 characters by alphabetical sequence through each NAVAREA/METAREA of the World-Wide Navigational Warning Service. Subsequent experience has shown that when traffic levels increase significantly, some NAVTEX Co-ordinators are unable to control the data volumes broadcast from their stations and transmissions may overrun their allocated timeslots. The impact of this is that if adjacent stations have adjacent B_1characters, and the first station overruns, its signal masks the phasing signal of the second station. To the receiver, this seems as if the second station is off the air and vital safety information can be missed. Hence B_1characters are now allocated in a more random manner with consecutive letters **not** allocated to adjacent stations, but still achieving the required separation between stations having the same B_1character (see 5.3 below).

5.3 NAVTEX transmissions have a designed maximum range of about 400 nautical miles. The minimum distance between two transmitters with the same B_1 identifier must, therefore, be sufficient to ensure that a receiver cannot be within range of both at the same time.

5.4 Close co-ordination between transmitting stations in adjacent NAVAREAs/METAREAs is necessary to achieve this separation. For this reason, national administrations should request the advice of the IMO NAVTEX Co-ordinating Panel at an early stage in the planning of a new NAVTEX service. The Panel will allocate B_1 characters in such a way as to minimize the risk of interference occurring.

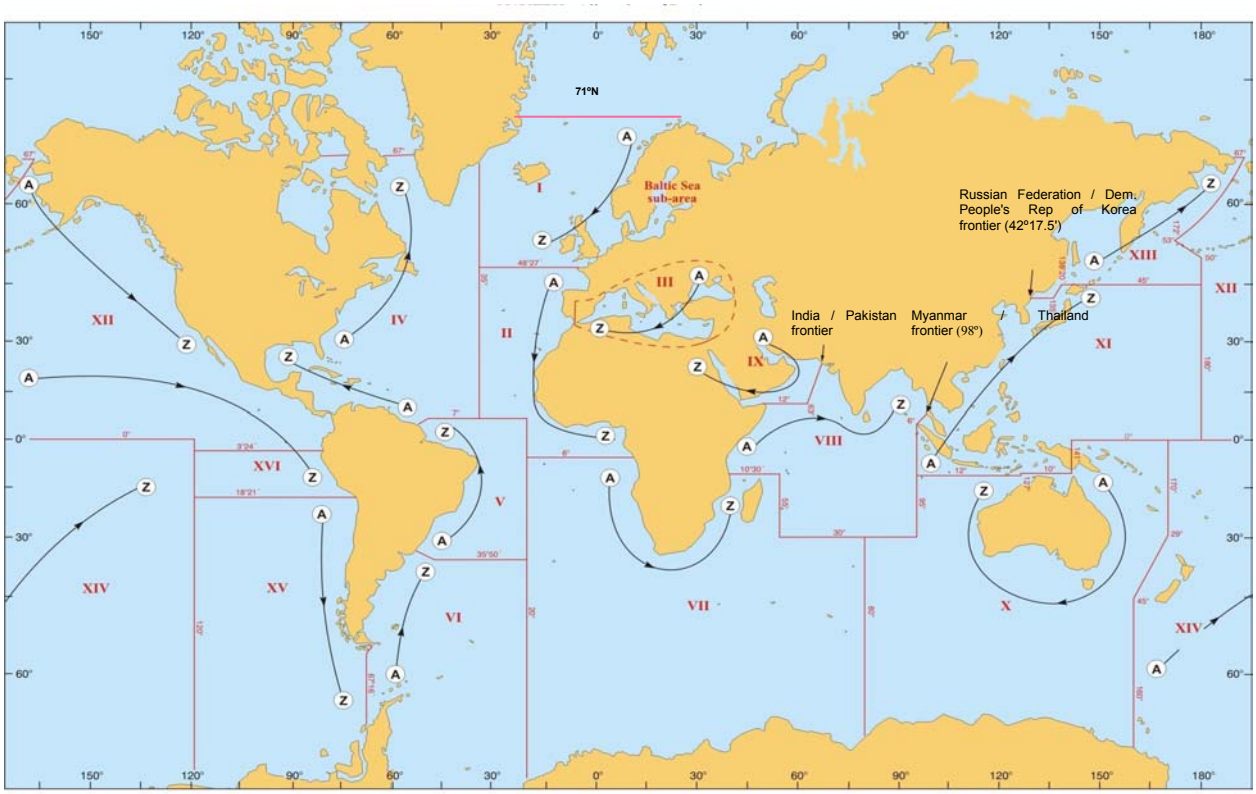


Figure 2 – NAVAREAs/METAREAs of the World-Wide Navigational Warning Service, showing the original scheme for allocation of transmitter identification (B_1) characters by the Organization. The delimitation of these NAVAREAs is not related and shall not prejudice the delimitations of any boundary between States.

6 - Allocation of transmission times

6.1 Figure 3 illustrates the basic organizational matrix which is used by the IMO NAVTEX Co-ordinating Panel to evaluate and allocate time schedules for each transmitter of a proposed new service. The table shows the breakdown of a representative NAVAREA/METAREA into four groups of transmitters. Each group has a potential capacity of six transmitters, each with a 10 minute allocated transmission time every 4 hours.

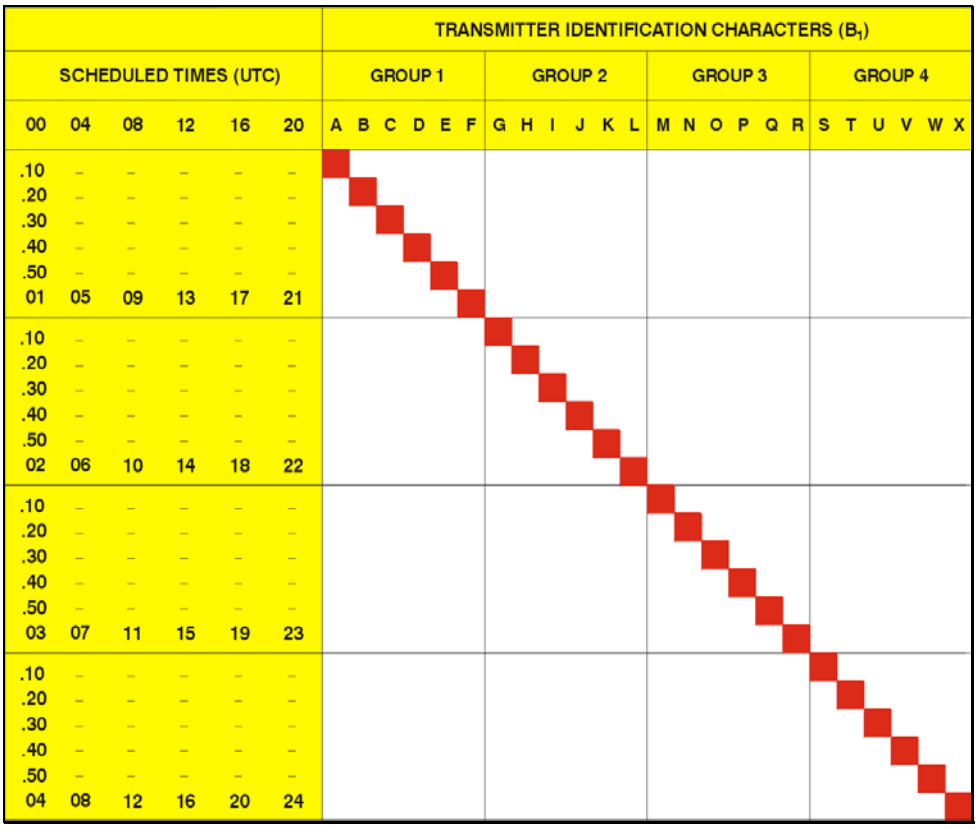


Figure 3 - Scheme for allocation of transmission schedules by the Organization

6.2 In some regions, it has become necessary to accommodate a large number of stations. In extreme cases, it has even been necessary to re-use some B1characters for a second time within a region. Where this occurs every effort is made to ensure stations with the same character are as far apart as possible to reduce the risk of mutual interference.

6.3 Whenever possible, the frequency should remain unused for a high percentage of the time, so as to allow for the immediate broadcast of vital information, e.g. search and rescue information, gale warnings, etc.

7 - Subject indicator characters (B_2)

7.1 Information is grouped by subject in the NAVTEX broadcast, and each subject group is allocated a subject indicator character, B_2.

7.2 The subject indicator character is used by the receiver to identify different classes of messages as listed in paragraph 7.3. The indicator is also used to reject messages concerning certain optional subjects which may not be required by the ship (e.g. LORAN messages may be rejected in a ship which is not fitted with a LORAN receiver). Receivers also use the B_2 character to identify messages which, because of their importance, may not be rejected (see paragraph 4.2.3)

7.3 The following subject indicator characters are in use:

A = Navigational warnings[1]
B = Meteorological warnings[1]
C = Ice reports
D = Search and rescue information, and pirate attack warnings[1]
E = Meteorological forecasts
F = Pilot service messages
G = AIS
H = LORAN messages
I = spare
J = SATNAV messages
K = Other electronic navaid Messages[2]
L = Navigational warnings – Additional to letter A[3]
V } Special services
W } – allocation by the
X } NAVTEX Panel
Y }
Z = No messages on hand

7.4 National authorities should obtain the agreement of IMO for all proposals for the use of special service subject indicator characters. Applications should be addressed to the IMO NAVTEX Co-ordinating Panel. Such proposals should meet the following criteria:

.1 The full international service must remain unaffected.

.2 The special service broadcasts should be transmitted only when time allows, and with due regard to the necessity for the frequency to remain unused for a high percentage of the time.

.3 The special service broadcast should be uniquely prepared for its intended purpose.

7.5 Language and national broadcast options

There is often a requirement for broadcasts to be made in national languages in addition to English and for subject matter other than that listed in paragraph 7.3. Methods of achieving these objectives are outlined below:

.1 Provision of national NAVTEX services on the internationally adopted frequencies for such services (490 kHz or 4209.5 kHz) or on a nationally allocated frequency, as defined in paragraph 2.3.

.2 Use of additional subject indicator characters (B_2) V, W, X and Y on 518 kHz. (Subject to allocation by the NAVTEX Panel.)

8 - Message format

8.1 The format of all messages should be in strict accordance with figure 4. This defines the essential elements of the messages which influence the operation of the receiver. Great care is required to avoid errors of syntax in the groups ZCZC, $B_1B_2B_3B_4$ and NNNN as they will cause receivers to operate incorrectly, and may well result in the loss of a vital message. Transmitting stations should be particularly aware of this when monitoring their own broadcasts.

8.2 The phasing signal, which appears at the top of Figure 4, is critical to the effective operation of the system. It is this signal which enables a receiver to lock-on to a particular station's transmission. If another station within transmitting range and with a timeslot prior to the station selected overruns its slot, its transmission will blank the phasing signal of the subsequent transmitter. It will then seem to the receiver as if the second station is off the air and its broadcast will not be received, possibly denying the user significant safety information. Similarly if the phasing signal for a particular station is too short, some receivers will be unable to lock on to the transmission.

[1] Cannot be rejected by the receiver.
[2] Messages concerning radionavigation services.
[3] Should not be rejected at the receiver (continuation of B_2 subject group A)

8.3 The following example illustrates the standard format for NAVTEX messages:

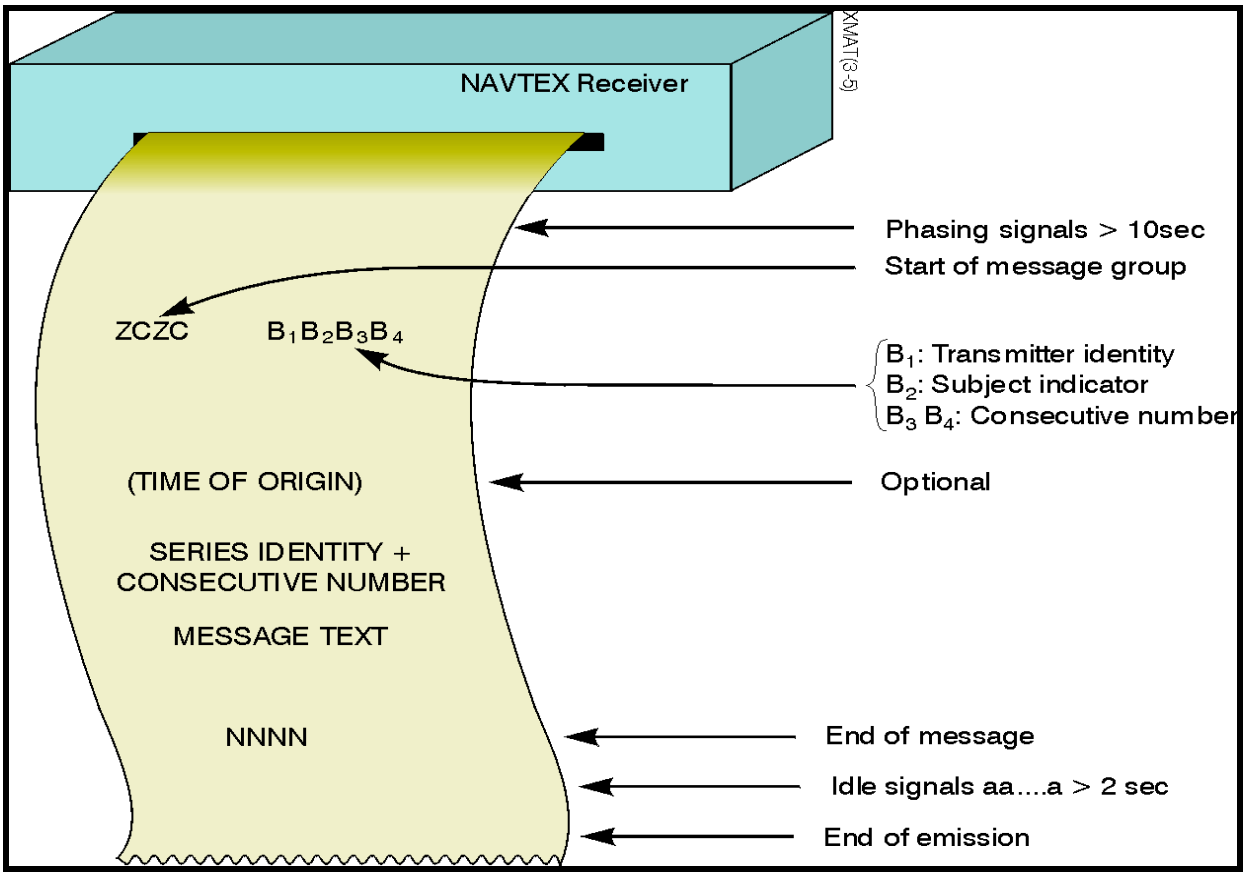
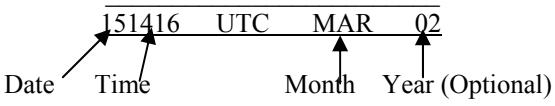


Figure 4 - Standard format for NAVTEX messages

8.4 Certain practices have been adopted for the textual content of NAVTEX messages. These contribute to the clarity and uniformity of the messages, and are recognized for use in all cases. They include:

.1 The date, time (UTC) and month of origin may be given at the start of the message text, where this contributes to the value of the message, as follows:



The date, time and month of origin should always be followed immediately by a carriage return/line feed, so that it appears as a separate line at the start of the message text.

.2 The first words of the text should invariably be the message series identity and consecutive number. Note that this consecutive number is not the same as the NAVTEX serial number B_3B_4, but instead identifies the source of the report (e.g. NAVAREA IX 274 or OOSTENDE Radio NAV WNG 767).

.3 The clarity of a series of messages is improved by ensuring that the end of message group NNNN appears on a separate line at the end of each message.

.4 The text of the message must be in accordance with the Joint IMO/IHO/WMO Manual on Maritime Safety Information (MSI) IHO Special Publication S-53 – Appendix 1(COMSAR Circ.15, as amended)

9 - Message numbering

9.1 Each message within a subject group is allocated a serial number, B_3B_4, between 01 and 99. On reaching 99, numbering should re-commence at 01 but avoid the use of message numbers still in force.

9.2 A shortage of numbers should, where possible, be alleviated by the allocation of messages to other relevant subject groups. It has been found that 99 messages are not always enough for some subject groups. B_2 = L may be used for additional navigational warnings to receive the overflow from B_2 = A, when necessary.

9.3 Numbers should be allocated by the relevant NAVTEX coordinator, the authority responsible for the selection of information to be broadcast by each transmitter within each subject group. Each co-ordinator may have one or more transmitters under his control.

9.4 Certain messages are allocated B_3B_4 = 00. Use of this number should be **strictly controlled** since messages carrying it will always be printed and may set off the alarm in the receiver, if the broadcast containing such messages is identified to be accepted by the receiver (see Recommendation ITU-R M.540-2 (annex 2)). Therefore, the number 00 must only be used for Initial Distress Messages. Other more routine messages and service messages should not be allocated the number 00. The fact that receivers are, in any case, unable to reject certain classes of vital safety information should be borne in mind when considering the exceptional use of B_3B_4 = 00.

10 - Information control

10.1 The time-shared nature of NAVTEX imposes the need for strict discipline in controlling the information flow of the broadcast. To achieve this, it is necessary to co-ordinate the messages in each B_2 category at each transmitter. In general, all messages should be brief and clear and avoid duplication. Strict adherence to relevant guidelines such as those in IMO Assembly resolution A.706(17), as amended, the WMO Manual on Marine Meteorological Services, Part 1*bis*, Provision of warnings and weather and sea bulletins (GMDSS application) and COMSAR Circ.15, as amended, is recommended, but certain additional operating procedures have also been found necessary:

.1 Messages in each category should be broadcast in reverse order of receipt, with the latest being broadcast first.

.2 Cancellation messages should be broadcast once only. The cancelled message should be removed from the broadcast in which the corresponding cancellation message appears and the cancellation message should then be removed from the broadcast.

11 – Message Content

11.1 It is important that Administrations operating a NAVTEX service and those intending to establish new services, are quite clear what sort of information may be included in the messages for broadcast and what should not.

11.2 **The International NAVTEX service** should NOT be used as a medium for providing Notices to Mariners. Similarly, Local Warnings (see paragraph 11.2.1.2) should not be broadcast on the International NAVTEX service. They should be transmitted locally on VHF R/T channels or perhaps through local AIS services. NAVTEX is essentially a medium for broadcasting information that is **needed** by vessels to safely navigate through the service area of the appropriate station, particularly those vessels engaged in coastal passages. More detailed guidance in respect to different classes of messages is given below. Examples of the content and layout of NAVTEX messages are shown in COMSAR Circ. 15. This publication should be available to all personnel responsible for the drafting of messages to be broadcast on NAVTEX.

11.2.1 ***Navigational warnings***

.1 Coastal warnings and NAVAREA warnings (B_2 = A or L) issued under the guidance of IMO Assembly resolution A.706(17), as amended which would be of concern to ships in the service area allocated to the transmitter should be included in the broadcast (see annex 4). Relevant Coastal warnings should normally be repeated at every scheduled transmission for as long as they remain in force or until permanent changes are promulgated as Notices to Mariners. NAVTEX co-ordinators should arrange to receive NAVAREA warnings appropriate to their area for inclusion in their broadcasts. These should be broadcast at least twice each day - to avoid overloading the broadcast time slot, they should normally be scheduled for transmission during slots that do not include weather forecasts (see also paragraph 11.2.2.2).

.2 Local warnings, as defined by IMO Assembly resolution A.706(17), as amended i.e. information relating to the sea area inshore of the fairway buoy/pilot station,, should not be broadcast on NAVTEX (see annex 4).

.3 Negative tidal surge and tsunami warnings will normally be the subject of navigational warnings. They should be broadcast immediately on receipt and at subsequent scheduled transmissions.

.4 A summary of navigational warnings remaining in force should normally be broadcast each week.

11.2.2 ***Meteorological messages***

.1 Meteorological warnings (B_2 = B) e.g. gale warnings are raised by nominated Meteorological authorities. They should be placed on the broadcast immediately on receipt by the NAVTEX Co-ordinator and at the next routine scheduled transmission only. These messages should contain **only** the appropriate warnings and should be separate from the sea area weather forecasts.

.2 NAVTEX sea area weather forecasts (B_2 = E) should be broadcast at least twice each day. This service should be carefully co-ordinated where transmitters are geographically close together. It is important that such forecasts only appertain to the appropriate NAVTEX service area.

.3 Routine ice reports should normally be broadcast on NAVTEX once a day.

.4 Ice accretion warnings should normally be included in the routine ice report but, when separately issued, they are to be treated as a meteorological warning using B_2 = B and transmitted immediately on receipt and at the next routine scheduled transmission.

11.2.3 ***Search and rescue information, and pirate attack warnings***

.1 The NAVTEX broadcast is not suitable for distress traffic. Therefore, the Initial Distress Message **only** should be retransmitted on NAVTEX, using B_2 = D, in order to alert mariners to a distress situation, by setting off an audio alarm. The use of B_3B_4 = 00 is only to be used for distress messages.

.2 A single authority, which will normally be a maritime rescue co-ordination centre (MRCC), should be designated SAR co-ordinator to input information to NAVTEX. Coast radio stations, where still extant, are deemed to have discharged their responsibility for retransmitting Initial Distress Messages on NAVTEX by passing the message to the designated SAR co-ordinator for broadcast on NAVTEX. This does not affect a coast radio station's responsibility for re-transmitting Initial Distress Messages on other frequencies.

.3 Pirate attack warnings, given by an appropriate authority, should be transmitted under B_2 = D immediately after a pirate attack happens.

11.2.4 ***Pilotage service messages***

Category B_2 = F is to be used only for broadcasting temporary alterations to the pilot service. This can include messages which notify the temporary movement or suspension of a pilot service due to stress of

weather, etc. This category is for the information of all ships approaching a port, and is not to be used for specific instructions to individual ships or pilots.

11.2.5 ***Electronic navaid messages***

B_2 categories are provided for the principal electronic navaids, which are suitable for use in the NAVTEX region. They should be used to advise mariners of significant degradation of the particular service. Short periods of transmission failure are seldom appropriate since they do not affect prudent navigation. The following thresholds have been found to be appropriate for the majority of users:

.1 LORAN -off air > I hour

.2 SATNAV - off air > 4 hours.

11.2.6 ***No messages on hand***

This facility may be used by transmitting stations to confirm the correct operation of receivers and transmitters at scheduled times when no messages are on hand for transmitting. In accordance with the simple philosophy of NAVTEX, the plain language text "NO MESSAGES ON HAND" should be used.

11.2.7 ***Use of abbreviations***

Use of abbreviations should be strictly in accordance with internationally accepted usage.

11.3 On **National NAVTEX Services** it is important to keep to the same basic message format as that required for the International NAVTEX Service i.e that shown in figure 4 and in paragraphs 7, 8, and 9 of this publication. It is also important to ensure that the complete broadcast does not overrun the allocated time slot, particularly when using 490kHz or 4209.5kHz. However, in order to meet national requirements, message content may deviate from the guidelines provided for the International Service (paragraphs 10 and 11.1-11.2 above) if required.

12 - Message Priorities and Broadcast Procedures

12.1 Message Priorities

12.1.1 The message originator i.e. the navigational warning co-ordinator, the search and rescue co-ordinator or the meteorological message co-ordinator, is responsible for assessing the urgency of the information and inserting the appropriate priority marking. One of three message priorities is used to dictate the timing of the first broadcast of a new warning in the NAVTEX service. In descending order of urgency, they are:

.1 **VITAL** - for immediate broadcast;

.2 **IMPORTANT** - for broadcast at the next available period when the frequency is unused;

.3 **ROUTINE** - for broadcast at the next scheduled transmission

12.1.2 Both **VITAL** and **IMPORTANT** warnings are to be repeated, at the minimum, at the next scheduled transmission.

12.1.3 The priority marking is a procedural instruction to the transmitting station which consists of the word **VITAL**, **IMPORTANT** or **ROUTINE** added as a prefix to the NAVTEX message. It should form a separate line immediately before the groups ZCZC $B_1B_2B_3B_4$ and should **not** normally to be broadcast.

12.1.4 In order to avoid unnecessary disruption to the service, the priority marking **VITAL** is to be used only in cases of extreme urgency, i.e. Initial Distress Alerts. In addition, **VITAL** messages are to be kept as brief as possible. The message originator is responsible for ensuring that the NAVTEX Co-ordinator has his attention drawn to **VITAL** messages, either by use of the telex alarm or by other means.

12.2 Broadcast procedures

.1 ***VITAL*** *warnings.* On receipt of a **VITAL** warning, the NAVTEX Co-ordinator will immediately commence monitoring the NAVTEX frequency. If the frequency is clear, the VITAL message is to be transmitted at once. If the frequency is in use, the Co-ordinator is to determine which other station is transmitting. He should then contact that station by any other means at his disposal with a request that they break their transmission to allow the sending of a **VITAL** warning. As soon as the frequency is clear, the **VITAL** warning is to be transmitted. Once the **VITAL** warning has been transmitted, the former station is free to resume scheduled transmissions.

.2 ***IMPORTANT*** *warnings.* Messages bearing the priority marking **IMPORTANT** are to be broadcast during the next available period when the NAVTEX frequency is unused. This is to be identified by monitoring the frequency. It is expected that this level of priority will be sufficient for the majority of urgent information.

.3 ***ROUTINE*** *warnings.* **ROUTINE** messages are to be broadcast at the next scheduled transmission after receipt at the NAVTEX transmitting station. This level of priority will be appropriate for almost all messages broadcast on NAVTEX and is always to be used unless special circumstances dictate the use of a higher priority.

13 - Best Practice For Those Using The Service

13.1 ***Setting watch***

It is recommended that, in order to ensure that all necessary maritime safety information has been received, the NAVTEX receiver should be switched on at least 8 hours before sailing, or left on at all times. To avoid excessive use of printer paper, the user should programme his receiver to print out only those classes of messages required and from only the stations selected.

13.2 ***Logging***

The reception of weather forecasts or navigational warnings on NAVTEX does not require to be noted in the radio log. The NAVTEX printout replaces the log entries required by chapter IV of the 1974 SOLAS Convention, as amended in 1988. Where a printer is not provided, a log should be maintained electronically.

14 - Management of the Service

14.1 ***Data Priority and Formatting***

.1 Most information broadcast on NAVTEX relates to either Navigational Warnings or Meteorological Information. These types of information often originate from different organisations within a country and it is not until they arrive with the NAVTEX Co-ordinator that an assessment can be made whether there is too much information for the relevant broadcast time slot. Each data provider may consider their data to be more important and therefore for transmission in full. However, the NAVTEX Co-ordinator needs to control the overall volume of data broadcast and may need to refer back to data providers to prioritise their information and reduce the amount of data to be broadcast. Some NAVTEX Co-ordinators utilise digital systems which include software that provides a readout of predicted transmission times for data held ready for broadcast. This enables the Co-ordinator to anticipate any problems and take action before the scheduled broadcast.

.2 Transmission times should be kept to a minimum by strictly formatting messages and avoiding the use of free text whenever possible.

.3 Data to meet purely national requirements should not be broadcast on the International NAVTEX service, but should be migrated to a National NAVTEX service (see annex 7 - COMSAR/Circ.28).

14.2 ***Mutual Interference between NAVTEX Stations***

.1 Principal causes of interference are: transmission overruns and excessive power output. Transmission overruns lead to interference with adjacent stations with sequential B_1 characters/time slots. Excessive power output causes interference with remote stations with the same B_1 character time slot. Transmission overruns should be either eliminated by controlling the volume of data broadcast (see paragraph 13.1) or managed by liaison with adjacent stations. This can work in areas where there is both good co-operation and good communications. Where data volumes exceed the 10 minute time slot, broadcasts may be started early when there is no other traffic on the frequency or allowed to overrun with the agreement of the next station in sequence who will delay the start of their broadcast until the earlier station has finished.

.2 When interference is detected, particularly when it affects the service to system users, the matter should be addressed immediately. When the interference is with adjacent stations, attempts should be made to resolve the problem locally. Advice may also be sought from the NAVAREA Co-ordinator. If this is unsuccessful, the IMO NAVTEX Co-ordinating Panel should be alerted to the problem and their advice sought. Occasionally it may be necessary to change the B_1 character/time slot of one of the stations to introduce more time separation between the broadcasts. However this should be viewed as a last resort as this may have a significant impact on data providers, particularly providers of meteorological information, as they may have to reschedule their services. When the interference is from a station with the same B_1 character in a different area, the NAVTEX Co-ordinating Panel should be contacted and they will initiate any necessary investigation/action.

14.3 ***Balancing the volume of data to be broadcast throughout the daily transmission cycle***

.1 Each NAVTEX transmitter is allocated a 10 minute transmission slot every 4 hours; 6 slots each day. Within these slots there is a requirement to transmit the following information relevant for the service area of the transmitter:

.1 coastal navigation warnings - in every slot
.2 NAVAREA warnings appropriate to the area of the NAVTEX transmitter - at least twice/day
.3 summary of navigation warnings in force - weekly
.4 meteorological warnings - on receipt and at next slot
.5 sea area weather forecasts - at least twice/day
.6 ice reports - at least once day
.7 SAR and pirate attack warnings - on receipt
.8 Pilot service and electronic navaid messages - next routine slot

.2 For many of these categories of message there is no option about when they should be transmitted. However, in order to minimise the risk of over-running the allocated 10 minute time slot, it is possible to balance the overall length of transmissions by broadcasting NAVAREA warnings at different times to sea area weather forecasts and the weekly summary of navigation warnings in force. An example of how this may be managed is given below for a station with a B_1 character of C:

Timeslot	Content
0020 - 0030	coastal navigational warnings NAVAREA warnings
0420-0430	coastal navigational warnings summary of navigational warnings in-force (once/week only)
0820-0830	coastal navigational warnings sea area weather forecast
1220-1230	coastal navigational warnings NAVAREA warnings

1620-1630	coastal navigational warnings ice reports
2020-2030	coastal navigational warnings sea area weather forecast

15 - Information for mariners and publicity

15.1 The widest publicity should be given to the establishment of a NAVTEX service within those countries concerned and within their respective NAVAREA.

15.2 National Administrations should ensure that mariners are informed of the establishment of a NAVTEX service by inclusion of full details in Notices to Mariners and lists of radio signals. In addition, full details of the service finally agreed should be forwarded to:

- International Maritime Organization
  4 Albert Embankment
  London SE I 7SR
  United Kingdom

- International Telecommunication Union
  Radiocommunication Bureau
  Place des Nations
  1211 Genève 20
  Switzerland

- Those authorities known to produce international lists
  of radio signals.

ANNEX 1

IMO SUB-COMMITTEE ON RADIOCOMMUNICATIONS AND SEARCH AND RESCUE (COMSAR)
Co-ordinating Panel on NAVTEX

1 *Terms of reference*

.1 Advise Government Administrations planning to implement a NAVTEX service on the frequencies 518 kHz, 490 kHz or 4209.5 kHz, on the operational aspects of the system. In particular, advise on the optimum number of stations, the allocation of identifying characters (B_1), broadcast times, and broadcast message criteria.

.2 Co-ordinate the operational aspects of NAVTEX in the planning stages to minimize the risk of mutual interference between States or regions owing to the number of stations, transmitter power, time of broadcasts, or B_1 character assignment.

.3 Remain aware of system problems which arise, through reports from sea and correspondence with operational NAVTEX co-ordinators. When problems are identified, liaise with appropriate national Administrations involved, NAVAREA/METAREA Co-ordinators, the Sub-Committee, IHO or WMO, as appropriate, recommend solutions or mitigating measures and, when agreed, co-ordinate their implementation .

.4 Prepare documentation supporting the system for the Sub Committee, including both that needed by the broadcasting authority to guide its operations, and that needed to inform the user of the service (mariner, shipowner, and operator).

2 *Contact addresses*

The NAVTEX Co-ordinating Panel can be contacted at the following addresses:
The Chairman
IMO NAVTEX Co-ordinating Panel
International Maritime Organization
4 Albert Embankment
London SE1 7SR
United Kingdom

Telephone: (+)44 (0)20 7735 7611
Telefax: (+)44 (0)20 7587 3210
Telex: 23588 IMOLDN G
Email: jnavarro@imo.org

Any correspondence will then be forwarded to the Panel by the IMO Secretariat. Alternatively, correspondence may be sent directly to the present chairman who is also the NAVAREA I Co-ordinator and United Kingdom National Co-ordinator for Radio Navigational Warnings, at the following address:

The Chairman
IMO NAVTEX Co-ordinating Panel
United Kingdom Hydrographic Office
Admiralty Way
Taunton
TA1 2DN
United Kingdom

3 ***Panel membership and Participation***

The membership of the NAVTEX Co-ordinating Panel should include experts designated by Administrations willing to participate in the Panel and representatives of concerned international organizations. Anyone with the necessary qualifications and experience who is interested in becoming a member of the Panel should contact the Chairman.

The work of the Panel is conducted mainly by correspondence, but it has been found useful to hold occasional meetings to discuss current issues. These meetings are usually scheduled to be held in the margins of IMO, WMO or IHO meetings when Panel members are in attendance. This also allows attendance by other experts in order to provide advice on specific matters.

ANNEX 2

RECOMMENDATION ITU-R M.540-2*

Operational and Technical Characteristics for an Automated Direct-Printing Telegraph System for Promulgation of Navigational and Meteorological Warnings and Urgent Information to Ships

(Question 5/8)

The CCIR,† (1978-1982-1990)

CONSIDERING

(a) that the availability of navigational and meteorological warnings and urgent information on board ships is of great importance for safety;

(b) that the existing radiocommunication system for promulgation of navigational and meteorological warnings and urgent information to ships can be improved by use of modern techniques;

(c) that the IMO has established the following definitions on the promulgation of maritime safety information:

- *NAVTEX* means the system for the broadcast and automatic reception of maritime safety information by means of narrowband direct-printing telegraphy;
- *international NAVTEX service* means the coordinated broadcast and automatic reception on 518 kHz of maritime safety information by means of narrow-band direct-printing telegraphy using the English language, as set out in the NAVTEX manual, published by the IMO;
- *national NAVTEX service* means the broadcast and automatic reception of maritime safety information by means of narrowband direct-printing telegraphy using frequencies and languages as decided by the administrations concerned;

(d) that the 1988 Amendments to the international Convention for the Safety of Life at Sea, 1974, require that every ship to which the Convention applies shall be provided with a receiver capable of receiving international NAVTEX service broadcasts;

(e) that several countries are operating a coordinated international NAVTEX service based on narrow-band direct printing in accordance with Article 14A of the Radio Regulations;

(f) that the system should be applicable to the maritime mobile service (both international and national);

(g) that it is desirable that the service fulfils the requirements of all types of ships desiring to use it;

(h) that although each area may need specific guidance, the use of standard technical and operational characteristics would facilitate the extension of the service,

* The Director, CCIR, is requested to bring this Recommendation to the attention of the international Maritime Organization (IMO), the International Hydrographic Organization (IHO), the World Meteorological Organization (WMO) and to the International Association of Lighthouse Authorities (IALA).
† The name "CCIR" was changed to "Radiocommunication Bureau" by the reorganization of the International Telecommunication Union on 1 March 1993.

UNANIMOUSLY RECOMMENDS

1. that the operational characteristics for the promulgation of navigational and meteorological warnings and urgent information using NBDP should be in accordance with Annex 1;

2. that the technical characteristics for the promulgation of navigational and meteorological warnings and urgent information using NBDP should be in accordance with Annex II.

ANNEX 1

OPERATIONAL CHARACTERISTICS

1. Narrow-band direct-printing techniques should be used for an automated telegraph system for promulgation of navigational and meteorological warnings and urgent information to ships. Common frequencies for such transmissions should be internationally agreed upon and the frequency 518 kHz has been designated for world-wide use in the international NAVTEX service (see Radio Regulations Nos. 474, 2971 B and N2971B).

1.1 For national NAVTEX services administrations should also utilize the format of this Recommendation on the appropriate frequencies as defined in the Radio Regulations.

2. The radiated power from the coast station transmitter should only be that sufficient to cover the intended service area of that coast station. The range extension occurring during night hours should also be considered.

3. The information transmitted should primarily be of the type used for coastal waters preferably using a single frequency (Resolution No. 324 (Mob-87)).

4. The transmission time allocated to each station should be restricted to that which is adequate for the anticipated messages to be broadcast to the area concerned.

5. Scheduled broadcasts should take place at intervals not exceeding eight hours and be coordinated, to avoid interference with broadcasts from other stations.

6. ***Message priorities***

6.1 Three message priorities are used to dictate the timing of the first broadcast of a new warning in the NAVTEX service. In descending order of urgency they are:

VITAL: for immediate broadcast, subject to avoiding interference to ongoing transmissions;

IMPORTANT: for broadcast at the next available period when the frequency is unused;

ROUTINE: for broadcast at the next scheduled transmission period

Note: Both VITAL and IMPORTANT warnings will normally need to be repeated, if still valid, at the next scheduled transmission period.

6.2 In order to avoid unnecessary disruption to the service, the priority marking VITAL is to be used only in cases of extreme urgency, such as some distress alerts. In addition, VITAL messages are to be kept as brief as possible.

6.3 Periods should be scheduled between the regular transmission periods permitting immediate/early transmission of VITAL messages.

6.4 By use of the message serial number 00 in the preamble of a message (see also Annex 11 § 6) it is possible to override any exclusion of coast stations or of message types which might have been made in the receiving equipment.

7. Initial shore-to-ship distress-related messages should first be broadcast on the appropriate distress frequency by coast stations in whose SAR area distress cases are handled.

8. Participating transmitting stations should be provided with monitoring facilities to enable them to:

- monitor their own transmissions as to signal quality and transmission format;
- confirm that the channel is not occupied.

9. In case a message is repeated by more than one transmitting station within the same NAVTEX region (e.g. for better coverage) the original preamble B_1~B_4 (see Annex 11) should be used.

10. In order to avoid overloading of the channel it is desirable to use a single language and where a single language is used it shall be English.

11. Dedicated on-board equipment is recommended.

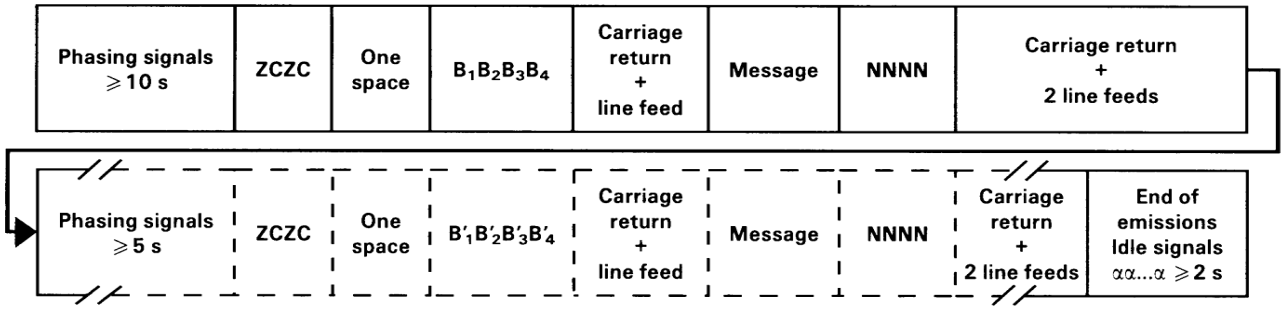
12. Other operational characteristics and detailed guidance are given in the NAVTEX Manual developed by the International Maritime Organization.

ANNEX II

TECHNICAL CHARACTERISTICS

1. The signals transmitted should be in conformity with the collective B-mode of the direct-printing system specified in Recommendations 476 and 625.

2. The technical format of the transmission should be as follows:



in which ZCZC defines the end of the phasing period,

the B_1 character is a letter (A-Z) identifying the transmitter coverage area,

the B_2 character is a letter (A-Z) for each type of message.

2.1 Both the B_1 characters identifying the different transmitter coverage areas and the B_2 characters identifying the different types of messages are defined by IMO and chosen from Table I of Recommendations 476 and 625, combination numbers 1-26.

2.1.1 Ship equipment should be capable of automatically rejecting unwanted information using character B_1.

2.1.2 Ship equipment should be capable of disabling print-out of selected types of messages using character B_2 with the exception of messages with B_2 characters A, B and D (see also § 2.1).

2.1.3 If any facility is rejected or disabled in § 2. 1.1 and 2.1.2 above, the extent of any such limitation must be clearly indicated to the user.

2.2 B_3B_4 is a two-character serial number for each B_2, starting with 01 except in special cases where the serial number 00 is used (see § 6 below).

2.3 The characters ZCZC $B_1B_2B_3B_4$ need not be printed.

3. The printer should only be activated if the preamble B_1~B_4 is received without errors.

4. Facilities should be provided to avoid printing of the same message several times on the same ship, when such a message has already been satisfactorily received.

5. The necessary information for the measures under § 4 above should be deduced from the sequence $B_1B_2B_3B_4$ and from the message.

6. A message should always be printed if $B_3B_4 = 00$.

7. Extra (redundant) letter and figure shifts should be used in the message to reduce garbling.

8. In case a message is repeated by another transmitting station (e.g. for better coverage) the original preamble B_1~B_4 should be used.

9. The equipment on board ships should be neither unduly complex or expensive.

10. The transmitter frequency tolerance for the mark and the space signals should be better than $\pm$ 10 Hz.

ANNEX 3

RESOLUTION MSC.148(77)
(adopted on 3 June 2003)

ADOPTION OF THE REVISED PERFORMANCE STANDARDS FOR NARROW-BAND DIRECT-PRINTING TELEGRAPH EQUIPMENT FOR THE RECEPTION OF NAVIGATIONAL AND METEOROLOGICAL WARNINGS AND URGENT INFORMATION TO SHIPS (NAVTEX)

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO resolution A.886(21), by which the Assembly resolved that the functions of adopting performance standards for radio and navigational equipment, as well as amendments thereto, shall be performed by the Maritime Safety Committee on behalf of the Organization,

NOTING the carriage requirement in SOLAS chapter IV/7.1.4 for a receiver capable of receiving International NAVTEX narrow-band direct-printing (NBDP) broadcasts for the promulgation of navigational and meteorological warnings to shipping,

NOTING FURTHER the success of the International NAVTEX service in the promulgation of Maritime Safety Information (MSI),

NOTING ALSO with regard to the enhanced storage, processing and display possibilities offered by recent technical advances,

CONSIDERING that further growth in information promulgated to ships will be constrained by the capacity of the International NAVTEX service and the increasing importance of National NAVTEX services,

HAVING CONSIDERED the recommendations on the revision of resolution A.525(13) made by the Sub-Committee on Radiocommunications and Search and Rescue at its seventh session,

1. ADOPTS the revised Recommendation on Performance Standards for Narrow-Band Direct-Printing Telegraph Equipment for the Reception of Navigational and Meteorological Warnings and Urgent Information to Ships (NAVTEX), set out in the Annex to the present resolution;

2. RECOMMENDS Governments to ensure that NAVTEX receiver equipment:

   (a) if installed on or after 1 July 2005, conforms to performance standards not inferior to those specified in the Annex to the present resolution;

   (b) if installed before 1 July 2005, conforms to performance standards not inferior to those specified in the Annex to resolution A.525(13).

Annex

REVISED RECOMMENDATION ON PERFORMANCE STANDARDS FOR NARROW-BAND DIRECT-PRINTING TELEGRAPH EQUIPMENT FOR THE RECEPTION OF NAVIGATIONAL AND METEOROLOGICAL WARNINGS AND URGENT INFORMATION TO SHIPS (NAVTEX)

1 INTRODUCTION

1.1 The equipment, in addition to meeting the requirements of the Radio Regulations, the provisions of Recommendation ITU-R M.540 applicable to shipborne equipment and the general requirements set out in resolution A.694(17), should comply with the following performance standards.

2 GENERAL

2.1 The equipment should comprise radio receivers, a signal processor and:

either

.1 an integrated printing device; or

.2 a dedicated display device[1], printer output port and a non-volatile message memory; or

.3 a connection to an integrated navigation system and a non-volatile message memory.

3 CONTROLS AND INDICATORS

3.1 Details of the coverage areas and message categories which have been excluded by the operator from reception and/or display should be readily available.

4 RECEIVERS

4.1 The equipment should contain one receiver operating on the frequency prescribed by the Radio Regulations for the International NAVTEX System. The equipment should contain a second receiver capable of working at the same time as the first one on at least two other frequencies recognized for the transmission of NAVTEX information. The first receiver should have priority in the display or printing of received information. Printing or displaying of messages from one receiver should not prevent reception by the other receiver.

4.2 The receiver sensitivity should be such that for a source with an e.m.f. of 2μV in series with a non-reactive impedance of 50 Ω, the character error rate is below 4%.

5 DISPLAY DEVICE AND PRINTER

5.1 The display device and/or printer should be able to display a minimum of 32 characters per line.

5.2 If a dedicated display device is used, the following requirements should be met:

.1 an indication of newly received unsuppressed messages should be immediately displayed until acknowledged or until 24 hours after receipt; and

.2 newly received unsuppressed messages should also be displayed.

5.3 The display device should be able to display at least 16 lines of message text.

5.4 The design and size of the display device should be such that displayed information is easily read under all conditions by observers at normal working distances and viewing angles.

[1] Where there is no printer, the dedicated display device should be located in the position from which the ship is normally navigated.

5.5 If automatic line feed entails division of a word, this should be indicated in the displayed/printed text.

5.6 When displaying received messages on a display device, a clear indication of the end of a message should be given by automatically adding line feeds after the message or including some other form of delineation. The printer or printer output should automatically insert line feeds after completing print of the received message.

5.7 The equipment should display/print an asterisk if the character is received corrupted.

5.8 Where the printer is not integrated, it should be possible to select the following data to be output to a printer:

.1 all messages as they are received;

.2 all messages stored in the message memory;

.3 all messages received on specified frequencies, from specified locations or having specified message designators;

.4 all messages currently displayed; and

.5 individual messages selected from those appearing on the display.

6 STORAGE

6.1 Non-volatile message memory

6.1.1 For each receiver fitted it should be possible to record at least 200 messages of average length 500 characters (printable and non-printable) in non-volatile message memory. It should not be possible for the user to erase messages from memory. When the memory is full, the oldest messages should be overwritten by new messages.

6.1.2 The user should be able to tag individual messages for permanent retention. These messages may occupy up to 25% of the available memory and should not be overwritten by new messages. When no longer required, the user should be able to remove the tag on these messages which may then be overwritten in normal course.

6.2 Message identifications

6.2.1 The equipment should be capable of internally storing at least 200 message identifications for each receiver provided.

6.2.2 After between 60 h and 72 h, a message identification should automatically be erased from the store. If the number of received message identifications exceeds the capacity of the store, the oldest message identification should be erased.

6.2.3 Only message identifications which have been satisfactorily received should be stored; a message is satisfactorily received if the error rate is below 4%.

6.3 Programmable control memories

6.3.1 Information for location (B1)[2] and message (B2)[2] designators in programmable memories should not be erased by interruptions in the power supply of less than 6 h.

7 ALARMS

7.1 The receipt of search and rescue information (B2 = D) should give an alarm at the position from which the ship is normally navigated. It should only be possible to reset this alarm manually.

[2] Refer Recommendation ITU-R M.540-2.

8 TEST FACILITIES

8.1 The equipment should be provided with a facility to test that the radio receiver, the display device/printer and non-volatile message memory are functioning correctly.

9 INTERFACES

9.1 The equipment should include at least one interface for the transfer of received data to other navigation or communication equipment.

9.2 All interfaces provided for communication with other navigation or communication equipment should comply with the relevant international standards.[3]

9.3 If there is no integrated printer, the equipment should include a standard printer interface.

[3] Refer to IEC 61162.

ANNEX 4

IMO RESOLUTION A.706(17), as amended

World-Wide Navigational Warning Service

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety,

BEARING IN MIND the decisions of the XIth International Hydrographic Conference,

NOTING that the world-wide navigational warning service, adopted by resolution A.419(XI), has successfully been in existence since 1979,

NOTING FURTHER the provisions made for the promulgation of maritime safety information by the 1988 amendments to the International Convention for the Safety of Life at Sea, 1974, concerning radio-communications for the global maritime distress and safety system,

HAVING CONSIDERED the recommendations made by the Maritime Safety Committee at its fifty-ninth session,

1. ADOPTS the IMO/IHO World-Wide Navigational Warning Service - Guidance Document, as set out in annex 1 to the present resolution;

2. RECOMMENDS Governments to implement the world-wide navigational warning service;

3. AUTHORIZES the Maritime Safety Committee to amend the world-wide navigational warning service, as may be necessary, in accordance with the procedure set out in annex 2 to the present resolution;

4. REVOKES resolution A.419(XI).

Annex 1

IMO/IHO World-Wide Navigational Warning Service
Guidance Document

1 INTRODUCTION

The original resolution of the tenth International Hydrographic Conference in 1972 recommended the formation of an ad hoc joint IMO/I HO Commission to study the "establishment of a co-ordinated, efficient global radio navigational warning service". Subsequently, this became a purely IHO Commission known as the Commission on Promulgation of Radio Navigational Warnings which nevertheless consulted continuously with IMO. In its report to the eleventh International Hydrographic Conference in 1977, the Commission submitted a Draft Plan for the Establishment of a World-Wide Navigational Warning System, also referred to as Plan for the Establishment of a Coordinated Radio Navigational Warning Service. The title World-Wide *Navigational Warning Service* or WWNWS used for this revised edition of the document reflects the evolution of the system from a proposed action to an effective co-ordinated service which now has all of its 16 NAVAREA in operation. This revised edition contains changes necessitated by the advent of the global maritime distress and safety system (GMDSS), as adopted by the Conference of Contracting Governments to the International Convention for the Safety of Life at Sea, 1974, on the Global Maritime Distress and Safety System in November 1988, effective on 1 February 1992.

Future amendments to the guidance document will be considered formally and approved by IHO normally through the use of circular letters and by IMO through its Maritime Safety Committee in accordance with the procedures set out in Annex 2 to this document. Proposed amendments will normally be evaluated by the IHO Commission on Promulgation of Radio Navigational Warnings, which includes as an ex-officio member a representative of the IMO Secretariat, prior to any extensive IHO or IMO consideration.

World-Wide Navigational Warning Service
(WWNWS)

1 INTRODUCTION

This document provides specific guidance for the promulgation of internationally co-ordinated NAVAREA and coastal warnings via NAVTEX and international SafetyNET services. It includes the situation where international SafetyNET is used in lieu of NAVTEX as the primary means of transmitting coastal warnings. Its guidance does not apply to purely national warning services which supplement those internationally co-ordinated services.

2 DEFINITIONS

2.1 For the purposes of this service, the following definitions apply:

2.1.1 *Navigational warning:* A broadcast message containing urgent information relevant to safe navigation. Types of information suitable for transmission as navigational warnings are described in 4.2.1.3.

2.1.2 *Maritime safety information (MSI):* Navigational and meteorological warnings, meteorological forecasts and other urgent safety-related messages.

2.1.3 *NAVAREA:* A geographical sea area, as shown in the appendix established for the purpose of co-ordinating the transmission of radio navigational warnings. Where appropriate, the term NAVAREA followed by an identifying roman numeral may be used as a short title. The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.

2.1.4 *Subarea:* A subdivision of a NAVAREA in which a number of countries have established a co-ordinated system for the promulgation of coastal warnings. The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.

2.1.5 *Region:* The part of a NAVAREA or subarea established for the purpose of co-ordinating the transmission of coastal warnings by NAVTEX or international SafetyNET broadcast.

2.1.6 *NAVAREA co-ordinator:* The authority charged with co-ordinating, collating and issuing long range navigational warnings and NAVAREA warnings bulletins to cover the whole of the NAVAREA.

2.1.7 *Subarea co-ordinator:* The authority charged with the co-ordination of navigational warnings information within a designated subarea.

2.1.8 *National co-ordinator:* The national authority charged with collating and issuing coastal warnings in a region.

2.1.9 *NAVAREA warning:* A navigational warning issued by the NAVAREA co-ordinator for the NAVAREA.

2.1.10 *NAVAREA warnings bulletin:* A list of serial numbers of those NAVAREA warnings in force issued and broadcast by the NAVAREA co-ordinator during at least the previous six weeks.

2.1.11 *Coastal warning:* A navigational warning promulgated by a national co-ordinator to cover a region. (Coastal warnings may also be broadcast by means other than those of the WWNWS as a national option.)

2.1.12 *Local warning:* A navigational warning which covers inshore waters, often within the limits of jurisdiction of a harbour or port authority.

3 BROADCAST SYSTEMS

3.1 Broadcast systems

3.1.1 The radio systems to be used internationally for the promulgation of maritime safety information are laid down in the International Convention for the Safety of Life at Sea, 1974 (SOLAS), as amended. These include:

.1 NAVTEX: Single frequency time-shared broadcast system with automated reception and message rejection/selection facilities. Use of NAVTEX is regulated by the IMO NAVTEX Manual (IMO publication 951).

.2 international (enhanced group call) SafetyNET service: Dedicated satellite broadcast system with automated reception and message rejection/selection facilities. Use of this service is regulated by the International SafetyNET Manual (IMO publication no. 908).

3.2 Broadcast scheduling

3.2.1 *Automated systems (SafetyNET/NAVTEX)*

3.2.1.1 Navigational warnings should be transmitted as soon as possible or as dictated by the nature and timing of the event. Normally, the initial broadcast should be made as follows:

.1 for SafetyNET, within 30 min of receipt of original information;

.2 for NAVTEX, at the next scheduled broadcast, unless circumstances indicate the use of procedures for VITAL or IMPORTANT warnings.

3.2.1.2 Navigational warnings should be repeated in scheduled broadcasts in accordance with the guidelines promulgated in the following documents, as appropriate:

.1 International SafetyNET Manual (IMO publication no. 908)

.2 NAVTEX Manual (IMO publication no. IMO-951E).

3.2.1.3 At least two daily transmission times are necessary to provide adequate promulgation of NAVAREA warnings. When NAVAREAs may extend across more than six time zones, more than two broadcasts should be especially considered to ensure that warnings can be received.

3.2.2 *Schedule changes*

3.2.2.1 NAVAREA co-ordinators should ensure that the times of HF broadcasting do not coincide with those in adjacent NAVAREAs. Times of scheduled broadcasts under the international SafetyNET service should be co-ordinated through the International SafetyNET Co-ordinating Panel.

3.2.2.2 Changes to broadcast schedules should be implemented only after the International Telecommunication Union (ITU) has been given at least three months' notice by the appropriate national authority, unless urgent operational considerations dictate more immediate action.

3.2.2.3 IMO and IHO should be informed of intended changes at the same time as they are communicated to ITU.

3.2.2.4 Arrangements should be made for informing mariners in good time of all changes.

4 NAVIGATIONAL WARNINGS

4.1 General

4.1.1 There are three types of navigational warnings: NAVAREA warnings, coastal warnings are local warnings. The WWNWS guidance and co-ordination are involved with only two of them: NAVAREA warnings and coastal warnings; of the latter, only with those coastal warnings which are broadcast under the internationally co-ordinated services using NAVTEX, or in lieu of NAVTEX, international SafetyNET service, as their primary means of transmission.

4.1.2 Navigational warnings should normally refer only to the area concerned.

4.1.3 Navigational warnings should be broadcast for as long as the information is valid or until it is made available by other means.

4.1.4 Navigational warnings should remain in force until cancelled by the originating co-ordinator.

4.1.5 The duration of a navigational warning should be given in the text, if known.

4.2 The three types of navigational warnings are:

4.2.1 *NAVAREA warnings*

4.2.1.1 Generally speaking, NAVAREA warnings are concerned with the information detailed below which ocean-going mariners require for their safe navigation. This includes, in particular, failures of important aids to navigation, as well as information which may require changes to planned navigational routes.

4.2.1.2 Warnings for coastal areas may be provided by NAVTEX or the international SafetyNET service, when implemented in lieu of NAVTEX. From the date a NAVTEX receiver is mandatory on all ships sailing in areas of NAVTEX service (1 August 1993), it is intended that such information not be rebroadcast as a NAVAREA warning unless it is deemed of such significance that the mariner should be aware of it before entering the area of NAVTEX coverage. The national co-ordinator will evaluate the significance of the information for consideration as a NAVAREA warning while the NAVAREA co-ordinator will make the final determination (see 6.6.7 and 6.2.3 respectively).

4.2.1.3 The following subject areas are considered suitable for transmission as NAVAREA warnings. This list is not exhaustive and should be regarded only as a guideline. Furthermore, it presupposes that sufficiently precise information about the item has not previously been disseminated in a notice to mariners:

.1 casualties to lights, fog signals and buoys affecting main shipping lanes;

.2 the presence of dangerous wrecks in or near main shipping lanes and, if relevant, their marking;

.3 establishment of major new aids to navigation or significant changes to existing ones when such establishment or change, might be misleading to shipping;

.4 the presence of large unwieldy tows in congested waters;

.5 drifting mines;

.6 areas where search and rescue (SAR) and anti-pollution operations are being carried out (for avoidance of such areas);

.7 the presence of newly discovered rocks, shoals, reefs and wrecks likely to constitute a danger to shipping, and, if relevant, their marking;

.8 unexpected alteration or suspension of established routes;

.9 cable- or pipe-laying activities, the towing of large submerged objects for research or exploration purposes, the employment of manned or unmanned submersibles, or other underwater operations constituting potential dangers in or near shipping lanes;

.10 establishment of offshore structures in or near shipping lanes;

.11 significant malfunctioning of radionavigation services and shore-based maritime safety information radio or satellite services;

.12 information concerning special operations which might affect the safety of shipping, sometimes over wide areas, e.g. naval exercises, missile firings, space missions, nuclear tests, etc. It is important that where the degree of hazard is known, this information is included in the relevant warning. Whenever possible, such warnings should be originated not less than five days in advance of the scheduled event. The warning should remain in force until the event is completed;[*]

[*] The Maritime Safety Committee is authorized to review the provisions of this paragraph and, if appropriate, to provide for exemptions from this requirement, under special circumstances.

.13 acts of piracy and armed robbery against ships.

4.2.1.4 NAVAREA warnings bulletins should be transmitted not less than once per week at a regularly scheduled time.

4.2.1.5 Arrangements should be made for the text of NAVAREA warnings in force to be available at port offices and, where appropriate, for their eventual inclusion in a generally available printed form.

4.2.2 *Coastal warnings*

4.2.2.1 Coastal warnings promulgate information which is necessary for safe navigation within a given region. Coastal warnings should normally provide sufficient information for safe navigation to seaward of the fairway buoy or pilot station and should not be restricted to main shipping lanes. Where the region is served by NAVTEX, it should provide navigational warnings for the entire IMO approved service area of the NAVTEX transmitter. Where the region is not served by NAVTEX, it is necessary to include all warnings relevant to the coastal waters up to 250 miles from the coast in the international SafetyNET service transmission.

4.2.2.2 Coastal warnings should include, at a minimum, the types of information required for NAVAREA warnings in 4.2.1.3.

4.2.3 *Local warnings*

4.2.3.1 Local warnings supplement coastal warnings by giving detailed information within inshore waters including the limits of a harbour or port authority on aspects which the ocean-going ship normally does not require.

5 INFORMATION CONTROL

5.1 Message numbering

5.1.1 Navigational warnings in each series should be consecutively numbered throughout the calendar year, commencing with 0001 at 0000 UTC on 01 January.

5.1.2 Navigational warnings should, as a general rule, be transmitted in reverse numerical order on scheduled broadcasts.

5.1.3 At the beginning of every navigational warning scheduled broadcast for which there are no warnings to be disseminated, a brief message should be transmitted to identify the broadcast and advise the mariner that there is no navigational warning message traffic on hand.

5.2 Priority message handling

5.2.1 The guidelines for the handling of navigational warnings are promulgated, as appropriate, in the following documents:

.1 International SafetyNET Manual (IMO publication no. 908).

.2 NAVTEX Manual (IMO publication no. IMO-951E).

5.3 Language

5.3.1 All NAVAREA and coastal warnings must be transmitted in English in the internationally coordinated services.

5.3.2 In addition, NAVAREA warnings may be broadcast in one or more of the official languages of the United Nations.

5.3.3 Coastal warnings may also be broadcast in the national language, and local warnings may be issued only in the national language as a national service.

6 CO-ORDINATOR RESOURCES AND RESPONSIBILITIES

6.1 NAVAREA co-ordinator resources

6.1.1 The NAVAREA co-ordinator must have:

.1 the expertise and information sources of a well established national hydrographic service;

.2 effective communication links, e.g. telex, facsimile, e-mail, etc., with subarea and national co-ordinators in the NAVAREA and with other NAVAREA co-ordinators;

.3 access to effective facilities for transmission to the entire NAVAREA. Reception normally should be possible 700 miles beyond the limit of the NAVAREA (24 hours' sailing by a fast ship).

6.2 NAVAREA co-ordinator responsibilities

6.2.1 The NAVAREA co-ordinator must:

.1 endeavour to be informed of all events that could significantly affect the safety of navigation within the NAVAREA;

.2 immediately upon receipt, assess all information in the light of expert knowledge for relevance to navigation in the NAVAREA;

.3 select information for broadcast in accordance with the guidance given in 4.2.1 above;

.4 draft NAVAREA warning messages in accordance with the Joint IMO/IHO/WMO Manual on Maritime Safety Information (MSI) for standardization of texts and message drafting;

.5 direct and control the broadcast of NAVAREA warning messages, making full and efficient use of national broadcast facilities in keeping with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended.

.6 pass NAVAREA warnings which warrant further promulgation in adjacent-areas directly to the appropriate NAVAREA co-ordinators, using the quickest possible means;

.7 ensure that written copies of NAVAREA warnings likely to remain in force for more than six weeks are made available to those NAVAREA co-ordinators or national authorities requesting them. Immediate transmission by telex, facsimile, or by high-speed communications is recommended in the absence of an alternative appropriate delivery arrangement, subject to agreement between the co-ordinators concerned;

.8 as soon as possible after the receipt of information concerning scheduled underwater operations as described in 4.2.1.3.9, or other scheduled operations such as in 4.2.1.3.3 and 4.2.1.3.10, pass such information to those national co-ordinators in his own NAVAREA and other NAVAREA co-ordinators who maintain a notices to mariners service covering the affected area and who have requested such information;

.9 transmit periodical NAVAREA warnings bulletins;

.10 promulgate the cancellation of NAVAREA warnings which contain information which is no longer valid;

.11 arrange for the text of NAVAREA warnings in force to be available at port offices and, where appropriate, for their eventual inclusion in a generally available printed form;

.12 act as the central point of contact on matters relating to navigational warnings within the NAVAREA;

.13 promote the use of established international standards and practices in the promulgation of navigational warnings within the NAVAREA;

.14 when notified by the authority designated to act on reports of piracy and armed robbery against ships, arrange for the broadcast of a suitable NAVAREA warning. Additionally, keep the national or regional piracy control centre informed of long-term broadcast action(s);

.15 monitor the broadcasts which they originate to ensure that the messages have been correctly broadcast;

.16 co-ordinate preliminary discussions between Member States seeking to establish NAVTEX services and neighbouring administrations, prior to formal application.

Note: Although arrangements made by the NAVAREA co-ordinator should enable all ships to receive messages in force for an area either before reaching or on entering an area, nevertheless it should be possible, in exceptional cases, for ships to obtain, on request, texts of messages in force but not included in the current scheduled broadcasts.

6.3 Sub-area co-ordinator resources

6.3.1 The sub-area co-ordinator must have, or have access to:

.1 expertise and information resources of a well established national hydrographic service;

.2 effective communication links with national co-ordinators in the sub-area;

.3 effective communication links with the NAVAREA co-ordinator.

Note: Normally a sub-area co-ordinator will serve also as a national co-ordinator.

6.4 Sub-area co-ordinator responsibilities

6.4.1 The sub-area co-ordinator must:

.1 endeavour to be informed of all events that could significantly affect the safety of navigation within the sub-area;

.2 inform the NAVAREA co-ordinator of any events in the sub-area which warrant the promulgation of a NAVAREA warning;

.3 co-ordinate and promote the exchange of information between national co-ordinators in the sub-area and the NAVAREA co-ordinator;

.4 act as the central point of contact on matters relating to navigational warnings within the sub-area;

.5 promote the use of established international standards and practices in the promulgation of navigational warnings within the sub-area.

.6 monitor the broadcasts which they originated to ensure that the messages have been correctly transmitted.

6.5 National co-ordinator resources

6.5.1 The national co-ordinator must have:

.1 established sources of information relevant to the safety of navigation within national waters;

.2 effective communication links with the sub-area/NAVAREA co-ordinator and adjacent national co-ordinators;

.3 access to effective facilities for the transmission of navigational warnings to the region.

6.6 National co-ordinator responsibilities

6.6.1 The national co-ordinator must:

.1 endeavour to be informed of all events that could significantly affect the safety of navigation within his region or national area of responsibility;

.2 immediately upon receipt, assess all information in the light of expert local knowledge for relevance to safety of navigation in his area of responsibility;

.3 select information for broadcast in accordance with the guidance given in 4.2.1.3 above;

.4 draft coastal warnings in accordance with established international standards;

.5 direct and control the broadcast of coastal warnings by a broadcast system adopted for the WWNWS;

.6 arrange to receive NAVAREA warnings broadcast for his area of responsibility and, where appropriate, coastal warnings from other national co-ordinators;

.7 include relevant warnings in NAVTEX/SafetyNET broadcasts and, if appropriate, in notices to mariners;

.8 arrange for the texts of NAVAREA warnings and relevant. coastal warnings to be available at port offices and, where appropriate, for their eventual inclusion in a generally printed form and/or notice to mariners;

.9 inform the NAVAREA co-ordinator or, where established, the subarea co-ordinator of any events in his area of responsibility which warrant the promulgation of a NAVAREA warning;

.10 act as the central point of contact on matters relating to navigational warnings within his area of responsibility;

.11 pass coastal warnings that warrant further promulgation in adjacent regions to the appropriate national co-ordinators;

.12 when notified by the authority designated to act on reports of piracy and armed robbery against ships, arrange for the broadcast of a suitable NAVAREA warning. Additionally, keep the national or regional piracy control centre informed of long-term broadcast action(s);

.13 monitor the broadcasts which they originate to ensure that the messages have been correctly broadcast.

Annex 2

IMO PROCEDURE FOR AMENDING THE WORLD-WIDE NAVIGATIONAL WARNING SERVICE

1 Proposed amendments to the world-wide navigational warning service should be submitted to the Maritime Safety Committee for evaluation.

2 Amendments to the service should normally come into force at intervals of approximately two years or at such longer periods as determined by the Maritime Safety Committee at the time of adoption. Amendments adopted by the Maritime Safety Committee will be notified to all concerned, will provide at least 12 months notification and will come into force on 1 January of the following year.

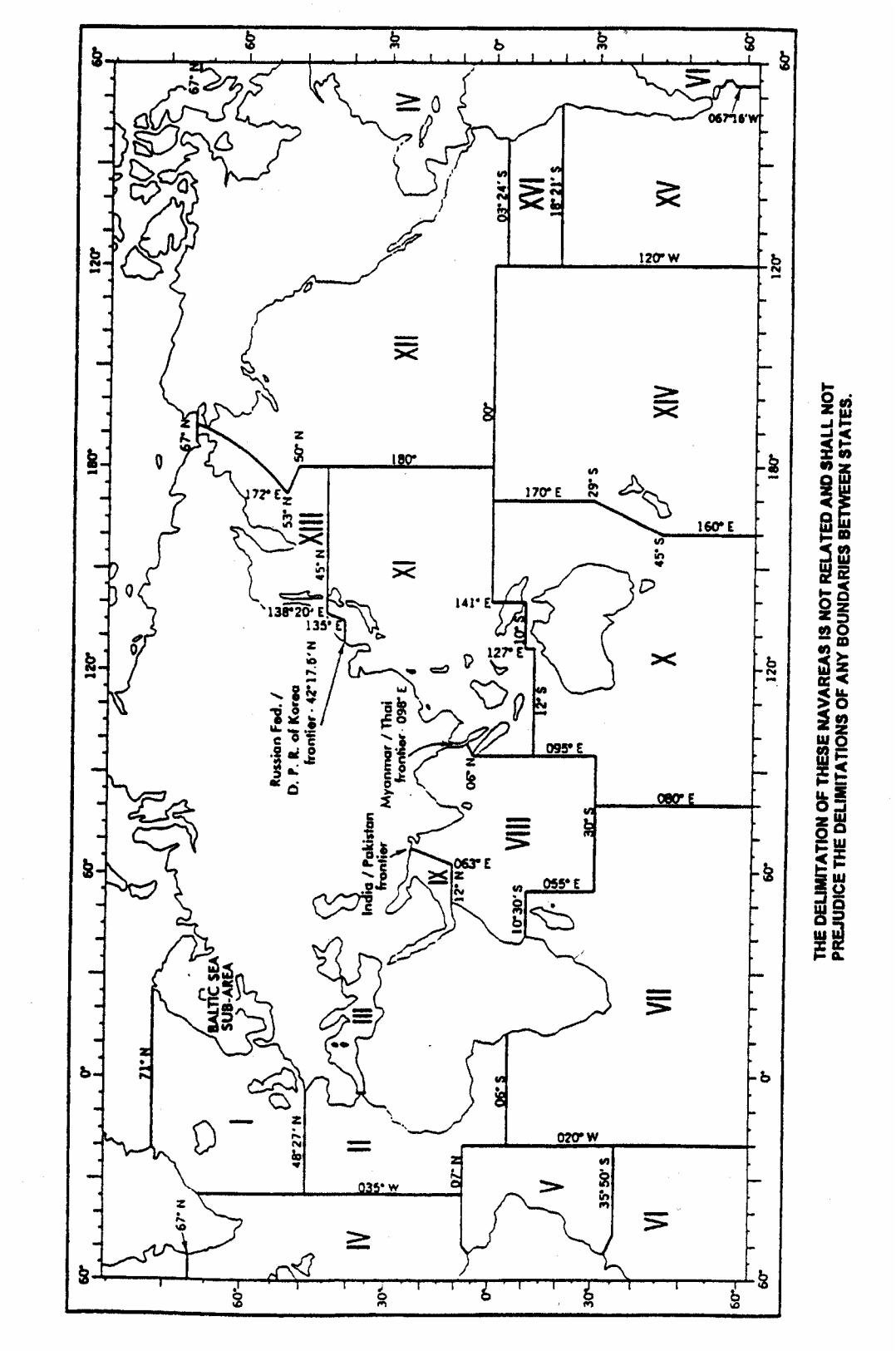
3 The agreement of the International Hydrographic Organization and the active participation of other bodies should be sought according to the nature of the proposed amendments.

4 When the proposals for amendment have been examined in substance, the Maritime Safety Committee will entrust the Sub-Committee on Radiocommunications and Search and Rescue with the ensuing editorial tasks.

5 The NAVAREA schedule of broadcast times and frequencies, not being an integral part of the service and being subject to frequent changes, will not be subject to the amendment procedures.

Appendix

GEOGRAPHICAL AREAS FOR CO-ORDINATING AND PROMULGATING RADIO-NAVIGATIONAL WARNINGS.



ANNEX 5

IMO RESOLUTION A.801(19)**,** annex 4

Criteria for use when providing a NAVTEX service

1 There are two basic areas which must be defined when establishing a NAVTEX service. They are:

Coverage area: An area defined by an arc of a circle having a radius from the transmitter calculated according to the method and criteria given in this annex.

Service area: A unique and precisely defined sea area, wholly contained within the coverage area, for which MSI is provided from a particular NAVTEX transmitter. It is normally defined by a line that takes full account of local propagation conditions and the character and volume of information and maritime traffic patterns in the region.

2 Governments desiring to provide a NAVTEX service should use the following criteria for calculating the coverage area of the NAVTEX transmitter they intend to install, in order to:

- determine the most appropriate location for NAVTEX stations having regard to existing or planned stations;
- avoid interference with existing or planned NAVTEX stations;
- establish a service area for promulgation to seafarers.

3 The ground-wave coverage may be determined for each coast station by reference to CCIR Recommendation 368 and CCIR Report 322 for the performance of a system under the following conditions:

Frequency	- 518 kHz
Bandwidth	- 500 Hz
Propagation	- ground wave
Time of day[1]	
Season'	
Transmitter power[2]	
Antenna efficiency[2]	
RF S/N in 500 Hz bandwidth	- 8 db[3]
Percentage of time	- 90

4 Full coverage of NAVTEX service area should be verified by field strength measurements.

[1] Administrations should determine time periods in accordance with NAVTEX time transmission table (NAVTEX Manual, figure 3) and seasons appropriate to their geographic area based on prevailing noise level.

[2] The range of a NAVTEX transmitter depends on the transmitter power and local propagation conditions. The actual range achieved should be adjusted to the minimum required for adequate reception in the NAVTEX area served, taking into account the needs of ships approaching from other areas. Experience has indicated that the required range of 250 to 400 nautical miles can generally be attained by transmitter power in the range between 100 and 1,000 W during daylight with a 60% reduction at night.

[3] Bit error rate 1 x 10^{-2}

ANNEX 6

PROCEDURE FOR AMENDING THE NAVTEX MANUAL

1 Proposals for amendments to the NAVTEX Manual should be examined in substance by the Sub-Committee on Radiocommunications and Search and Rescue (COMSAR). Amendments will only be adopted after the approval of the Maritime Safety Committee.

2 Amendments to the Manual should normally be adopted at intervals of approximately two years or at such longer periods as may be determined by the Maritime Safety Committee. Amendments adopted by the Maritime Safety Committee will be notified to all concerned, will provide at least 12 months' notification and will come into force on 1 January of the following year.

3 The agreement of the International Hydrographic Organization and World Meteorological Organization, and the active participation of other bodies, should be sought according to the nature of the proposed amendments.

ANNEX 7

COMSAR/Circ.28 of 12 June 2001

INTERNATIONAL NAVTEX SERVICE

1 The Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its fifth session (11 to 15 December 2000), agreed to a number of recommendations (reproduced at annex) aimed at reducing interference and volume of information in the International NAVTEX Service.

2 In addition, COMSAR 5 agreed that it was important to encourage Administrations to migrate non-English language broadcasts and broadcasts of information provided specifically for non-SOLAS vessels from 518 kHz to 490 kHz or 4209.5 kHz, as appropriate.

3 The Maritime Safety Committee, at its seventy-fourth session (30 May to 8 June 2001), approved the recommendations made by COMSAR 5 and urged Administrations to complete this migration by 1 January 2005.

4 Member Governments are invited to bring this circular to the attention of all Maritime Safety Information (MSI) providers and National Telecommunication Administrations for consideration and action as appropriate.

Annex

Interference between stations and the use of 490 kHz

1 Although NAVTEX continues to be generally reliable and an effective medium for the promulgation of Maritime Safety Information, the world-wide infrastructure continues to expand and the volume of information that each Administration disseminates through a NAVTEX service on 518 kHz continues to increase. There is now a real danger that in some geographical areas, without firm management, both the system and system users may become overloaded with information on this frequency.

2 Many stations are filling their allotted 10 minute time slots and an increasing number are over-running. Instances of interference with neighbouring stations, as a result of over-running the time allocation, are also increasing. Where adjacent stations have B_1 characters which follow alphabetically (i.e. time slots abut), if the first station over runs, it may mask the phasing signal of the second station such that, to the user, it seems as if the second station is off the air. Safety-critical information from the second station, although broadcast, may not be received by the system users. Over-run is usually caused by one or more of the following:

.1 a significant increase in safety-critical activity such as cable laying. Navigational warnings promulgating such activity often include numerous waypoints which are listed by Latitude and Longitude;

.2 meteorological information provided in a manner which is not concise and easily assimilated by the system user or for a much wider area than is covered by the NAVTEX station;

.3 additional information provided for non-SOLAS system users e.g. longer-range weather forecasts for fishing and recreational vessels (see paragraph 3 below); and

.4 information to meet specific national requirements. This includes national language broadcasts and other information which is sometimes required to be broadcast by national statute rather than IMO resolutions.

3 As the GMDSS spreads to non-SOLAS mariners, their requirements for information are often different from the SOLAS ships and may be determined at a national level. SOLAS ships trading internationally usually pass through the area of coverage of a NAVTEX transmitter in a day; for them a 24-hour weather forecast usually suffices. However, fishing vessels and recreational vessels often remain in the same vicinity for several days and may require much longer range forecasts which take up more transmission time.

4 In order to keep the quantity of information that is broadcast on 518 kHz to manageable levels and to reduce avoidable interference on this frequency, it is recommended that:

.1 Administrations monitor the volume of data broadcast and, together with adjacent Administrations, actively manage the system to ensure that interference caused by over-running allocated time slots, is minimised; and

.2 Administrations migrate non-English language broadcasts, and broadcasts of information provided specifically for non-SOLAS vessels from 518 kHz to a national broadcast on 490 kHz or 4209.5 kHz as required. B_1 characters for these frequencies will be allocated by the International NAVTEX Co-ordinating Panel, on request.

5 Interference between stations with the same B_1 character/time slot, but located in different regions is also increasing, particularly at night, as the number of operational NAVTEX stations increases. This is occasionally caused by atmospheric conditions, but is generally caused by excessive power output from one of the stations. It is recommended that Administrations restrict the power output from their transmitters to that required to cover the designated area, particularly at night, in order to avoid interference. As a general rule, transmitter power should never exceed 1 kW by day and 300 watts by night; use of as much as 7 kW has been noted in extreme cases of reported interference.

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ANNEX 2

DRAFT COMSAR CIRCULAR

CLARIFICATION ON THE USE OF NAVTEX B_3B_4 CHARACTERS =00 AND NAVTEX SERVICE AREAS

1 The Maritime Safety Committee, [at its seventy-eighth session (12 to 21 May 2004)], recognizing the need for guidance on the issues of the incorrect use of B_3B_4 characters =00 and clarification of NAVTEX Service Areas, approved the annexed Clarification on the use of NAVTEX B_3B_4 characters =00 and clarification of NAVTEX Service Areas prepared by the Sub-Committee on Radiocommunications and Search and Rescue (COMSAR) at its eighth session (16 to 20 February 2004).

2 Member Governments are invited to bring this circular to the attention of all Maritime Safety Information (MSI) providers and National Telecommunication Authorities for consideration and action, as appropriate.

ANNEX

CLARIFICATION ON THE USE OF NAVTEX B_3B_4 CHARACTERS =00 AND NAVTEX SERVICE AREAS

The following information is provided for the guidance of Member Governments:

1 Use of NAVTEX characters B_3B_4 = 00

It has been reported that, contrary to the guidelines in the IMO NAVTEX Manual (1994 and 2001 Editions, paragraphs 7.1, 7.4 and 9.1.51), some international NAVTEX stations are sending test messages and weather warnings with NAVTEX B_3B_4 characters = 00, thereby triggering unnecessary Alarm Functions in the receiver. The principal cause of these "false alarms" appears to be a combination of the incorrect use of B_3B_4 characters = 00 together with an interpretation of the original NAVTEX performance standards by some manufacturers that receipt of B_3B_4 characters = 00 should trigger the alarm. The new performance standards clarify that the appropriate B_2 character (D) should trigger the alarm and not the B_3B_4 characters. However, receivers manufactured to old specifications will be in use for some time to come, and it is therefore important that Administrations use B_3B_4 characters = 00 only for the re-broadcasting of Initial Distress Messages.

2 NAVTEX Service Areas

Many international NAVTEX stations do not have defined Service Areas as recommended in annex 4 to resolution A.801(19) – Criteria for use when providing a NAVTEX Service. These should have been established as part of the preliminary discussions between Member States wishing to establish International NAVTEX Services and the appropriate NAVAREA Co-ordinator prior to the formal application to establish the service*. Where this is not the case, Administrations are requested to undertake the necessary co-ordination to ensure these requirements are met for both existing and new NAVTEX services.

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* IHO/IMO Special Publication No. 53, paragraph 6.2.1.16.

ANNEX 3

ESTABLISHMENT OF A JOINT IMO/ITU EXPERTS GROUP ON MARITIME RADIOCOMMUNICATIONS AND ITS TORs

Purpose

To develop the future requirements for maritime radiocommunications taking into account the operational needs as defined by the IMO and the regulatory needs as defined by the ITU.

Structure

An experts group will be established from people active in IMO and ITU with a representative range of viewpoints.

Contact points:

IMO Secretariat – Mr. V. Lebedev
ITU Secretariat – Mr. W. Frank

The Secretariats will liaise with each other and interested administrations to determine the optimum composition of the group, regarding representation of various interests, geographic distribution and efficiency of working. IMO is prepared to provide the group leader.

Terms of reference

- To analyse the outcome of WRC 2003 in line with the IMO position submitted to the Conference.
- To prepare advice on a draft IMO position to WRC 2007 Agenda items 1.3, 1.13, 1.14, 1.16, 2, 4 & 7.2, with particular emphasis on:
  - future frequency provisions for maritime radiocommunications; and
  - possible simplification of DSC equipment and procedures

Suggested method of working

To meet in IMO London for 2/3 days in June 2004 to:

- consider the outcome of COMSAR 8
- prepare briefing for ITU-R WP8B in September 2004
- prepare advice on a draft IMO position paper for COMSAR 9 in 2005 on WRC-07 issues

Work by correspondence and meet again, if necessary.

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ANNEX 4

COMSAR/Circ….
... May 2004

DRAFT COMSAR CIRCULAR

RECOMMENDATIONS ON MEDIUM FREQUENCY/HIGH FREQUENCY DIGITAL SELECTIVE CALLING TEST CALLS TO COAST STATIONS

1 The Maritime Safety Committee, at its seventy-eighth session (12 to 21 May 2004), endorsed the view of the Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), which held its eighth session from16 to 20 February 2004, that the regular use of DSC equipment as described in COMSAR/Circ.17 should be encouraged. However, the International Telecommunications Union Sector for Radiocommunications had indicated that excessive test calls on DSC distress and safety frequencies were overloading the system to the point where interference to distress and safety calls had become a cause for concern.

2 In view of the above, and as a matter of urgency, Administrations concerned are urged to co-operate in managing and reducing the number of test calls on the MF/HF DSC distress and safety frequencies.

3 To achieve this, live testing on DSC distress and safety frequencies with coast stations should be limited to once a week. A background on the need for DSC test calls is described in COM/Circ.106.

4 Member Governments and international organizations are invited to bring the above to the attention of their national search and rescue (SAR) Authorities, RCCs, shipowners, shipping companies and shipmasters.

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ANNEX 5

QUESTIONNAIRE FOR ASSESSMENT OF ACTUAL LOADING ON THE DSC CHANNELS

IMO requests its Members to provide the following data on MF/HF loading:

1) name of coast station;
2) station geographic position;
3) station MMSI;
4) sample period data is collected;
5) summary data tables for all calls and test calls (Tables 1 and 2); and
6) your administration's policy on making MF/HF DSC test calls to coast stations.

TABLE 1

For all received calls from ships stations

Frequency kHz	**2 187.5**	**4 207.5**	**6 312**	**8 414.5**	**12 577**	**16 804.5**
Total calls*						
Distress						
Urgency						
Safety (other than test)						
Test						
Routine						
Other						
Calls received with errors						

* Received without checksum errors

TABLE 2

For test calls

Frequency kHz	**2 187.5**	**4 207.5**	**6 312**	**8 414.5**	**12 577**	**16 804.5**
Total test calls received from ship stations						
Number of ship stations calls are received from						

***

ANNEX 6

LIAISON STATEMENT TO IEC TC 80

and ITU-R WP.8B

Complexity of DSC Operation

1 The Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its eighth session (16 to 20 February 2004), expressed its concern about the unnecessary complexity of Digital Selective Calling (DSC) equipment. Feedback from users indicates strongly a negative attitude to the use of DSC - almost invariably voice calls are made rather than use of DSC. Reasons given for this reluctance to use DSC include:

.1 menu trees too complicated and difficult to use;
.2 significant variations between different manufacture's equipment; and
.3 no perceived benefit over voice calling except for distress alerting.

2 With the recent improvements to ITU-R Recommendations regarding DSC and the ongoing work by IEC TC 80 to revise DSC technical standards, an opportunity exists to simplify the operation of new DSC equipment and rectify problems perceived by operators.

3 In the revision of DSC technical standards, IMO requests IEC TC 80 and WP.8B to consider:

.1 a simplified user interface, using a minimum of menu trees;
.2 incorporation of ITU-R recommended DSC operational procedures into equipment software wherever possible;
.3 incorporation, if practicable, of MH/HF automated propagation prediction into equipment software to simplify equipment operation by users unfamiliar with prediction of propagation conditions;
.4 inclusion of a standard user interface;
.5 the development of a Class E standard similar to that of Class D; and
.6 common actuating arrangements for the dedicated distress button (MSC/Circ.862).

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ANNEX 7

Ref. …

MSC/Circ.…
… May 2004

DRAFT MSC CIRCULAR

GUIDELINES ON ANNUAL TESTING OF L-BAND SATELLITE EPIRBs

1 The Maritime Safety Committee, at its seventy-eight session (12 to 21 May 2004), approved the annexed Guidelines on annual testing of L-band satellite EPIRBs, as required by SOLAS regulation IV/15.9, which entered into force on 1 July 2002.

2 These guidelines complement those given in MSC/Circ.1040 for annual testing of 406 MHz satellite EPIRBs.

3 Member Governments are invited to bring these Guidelines to the attention of shipping companies, shipowners, ship operators, equipment manufacturers, classification societies, shipmasters and all parties concerned.

ANNEX

GUIDELINES ON ANNUAL TESTING OF L-BAND SATELLITE EPIRBs

1 The annual testing of L-band satellite EPIRBs is required by new SOLAS regulation IV/15.9 which entered into force on 1 July 2002.

2 The testing should be carried out using suitable test equipment capable of performing all the relevant measurements required in these guidelines. All checks of electrical parameters should be performed in the self-test mode, if possible.

3 The examination of the installed L-band satellite EPIRB should include:

.1 checking position and mounting for float-free operation;

.2 verifying the presence of a firmly attached lanyard in good condition; the lanyard should be neatly stowed, and must not be tied to the vessel or the mounting bracket;

.3 carrying out visual inspection for defects;

.4 carrying out the self-test routine;

.5 checking that the EPIRB identification (installed (9-digit) system code and other required information) is clearly marked on the outside of the equipment;

.6 decoding the EPIRB installed system code and other information from the transmitted signal, checking that the decoded information is identical to the identification marked on the beacon;

.7 checking registration through documentation or through the point of contact associated with that installed system code;

.8 checking the battery expiry date;

.9 checking the hydrostatic release and its expiry date, as appropriate;

.10 checking the emission at L-band using the self-test mode or an appropriate device to avoid transmission of a distress call to the satellites;

.11 if applicable, checking emission on the 121.5 MHz frequency using the self-test mode or an appropriate device to avoid activating the satellite system;

.12 checking that the EPIRB has been maintained by an approved shore-based maintenance provider at intervals required by the Administration;

.13 after the test, remounting the EPIRB in its bracket, checking that no transmission has been started; and

.14 verifying the presence of beacon operating instructions.

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ANNEX 8

TERMS OF REFERENCE AND PROVISIONAL AGENDA FOR THE ELEVENTH SESSION OF THE ICAO/IMO JWG

1 This Joint Working Group (JWG) is established to develop recommendations and information to support the IMO Sub-Committee on Radiocommunications and Search and Rescue and/or ICAO, as appropriate, on any matters pertinent to harmonization of international maritime and aeronautical SAR.

2 The JWG will meet as necessary, subject to approval of the IMO Maritime Safety Committee and ICAO, with meetings hosted and supported by IMO and ICAO on an alternating basis.

3 Invitations to participate in the JWG will be submitted to respective Member States by both IMO and ICAO.

4 Language services will not be provided during JWG meetings.

5 JWG meetings will generally take place annually about midway between meetings of the IMO Sub-Committee on Radiocommunications and Search and Rescue.

6 The JWG will provide an active interface between IMO and ICAO for harmonization of maritime and aeronautical SAR plans and procedures in accordance with the 1985 MOU between IMO and ICAO, and with resolution 1 of the 1979 International Conference on Maritime Search and Rescue.

7 The JWG will review and develop proposals relating to harmonization in various matters including:

a) provisions of conventions, plans, manuals and other documents affecting SAR;

b) SAR operational principles, procedures and techniques;

c) SAR system administration, organization and implementation methods;

d) RCC/RSC equipment and facility designations and standards;

e) SAR communications; and

f) SAR personnel staffing and training.

The need for JWG continuation will be reviewed by IMO and ICAO on an ongoing basis; the JWG will be discontinued when either organization concludes the work is no longer cost effective, and formally informs the other of its decision to discontinue.

PROVISIONAL AGENDA FOR THE ELEVENTH SESSION OF THE ICAO/IMO JWG

1 Adoption of the agenda

2 Consideration of terms of reference - future work of the Joint Working Group and priorities:

1) briefing of the outcome of the COMSAR 8 and MSC 78

2) briefing on outcome of ICAO activities related to the JWG work

3) JWG role in facilitating improved subregional co-operation

3 Provisions of conventions, plans, manuals and other documents affecting SAR:

1) status of the Maritime SAR Convention

2) progress report on the possible alignment of the IMO Area SAR Plans, GMDSS Master Plan and ICAO Regional Air Navigation Plans

3) progress report on work by the Air Navigation Commission in reviewing ICAO Annex 12 amendment proposals for closer aeronautical maritime harmonization

4) further work on the IAMSAR Manual, availability for training - institutions, priority items for amendments

5) list of references electronic index to the IAMSAR Manual

4 SAR operational principles, procedures and techniques:

1) safety of large passenger ships

2) mass rescue operations, taking account of experiences from the major disasters

3) medical assistance in SAR services

4) effects of measures to enhance maritime and aeronautical security on SAR services

5) development of procedural strategies for the practical provision of SAR services

5 SAR system administration, organization and implementation methods:

1) regional SAR database i.e. SDP, facilities

2) development of guidelines for subregional arrangements

3) quality/improvement, needs assessment, risk management, (subregional) and resource allocation

4) implementation and operation of the "International SAR fund"

5) evaluate the effect of various "Technical co-operation projects" in co-operation with relevant Governments, organizations and agencies with a view to assess their impact on implementing and maintaining SAR services

6 RCC/RSC equipment and facility designations and standards:

1) establishment of RCCs and in particular JRCCs

2) status of AIS and related systems in aeronautical and maritime SAR

7 SAR communications:

1) status of the GMDSS

2) status of aeronautical communications systems for distress and SAR

3) future trends in SAR communications

4) minimum communications needs for RCCs

8 SAR personnel staffing and training:

1) development of a RCC Operators Certificates

2) development of joint SAR courses based on the IAMSAR Manual

9 Any other business

10 Report to ICAO and the COMSAR Sub-Committee

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ANNEX 9

TERMS OF REFERENCE FOR GLOBAL SAR DEVELOPMENT ADVISORY GROUP

Recognizing the spirit of the Chicago Convention, Annex 12 and the 1979 SAR Convention to establish co-ordination between SAR systems;

Bearing in mind the limited availability of ICAO, ILF and IMO Technical Co-operation Funds and the necessity for their effective and efficient use;

Recognizing further that the responsible international organizations are complemented in their work by non-governmental organizations and other agencies which also contribute to the development of a co-ordinated global SAR system;

A Global SAR Development Advisory Group (GSDAG) is established to assist these independent organizations in fulfilling their responsibilities with the following Terms of Reference:

To assist administrating authorities in:

.1 the co-ordination of SAR development projects;
.2 establishing mechanisms for prioritising such projects;
.3 identifying and making available the expertise and resources required to implement these projects;
.4 identifying the parties necessarily affected by proposed SAR project activity and facilitating co-operative working arrangements between them all; and
.5 facilitating mechanisms for safe handling of funds to ensure absolute security of deposits, integrity of management and proper allocation directly to SAR providers in accordance with recognized international accounting and auditing arrangements.

In conforming to the above Terms of Reference, the GSDAG recognises the established, separate and appropriate roles of the various sections within the Secretariats of IMO, ILF and ICAO and seeks not to interrupt or intervene in any existing processes. The GSDAG is aware, however, of the benefits to be derived from regionalisation and harmonisation in the work of building SAR institutions in which all are involved. The SAR Convention, the SOLAS Convention, the Chicago Convention and the IAMSAR Manual all place emphasis on the need for inter-agency co-operation in the construction of global SAR systems, SAR co-ordinating committees, common procedures, interoperability of equipment and integrated work forces.

For these recommendations to find practical expression in operational arrangements within States and regions and thus to have a positive impact in the development of the Global SAR Plan, it is essential that the organisations responsible for the development of SAR provisions and the dissemination of guidance material themselves co-operate in the missions they undertake to Member/Contracting States from time to time. For mission planning, evaluation and formulation of recommendations to be done jointly will obviate any duplication, contradiction and confusion that may result from uncoordinated, independent mission activity.

Viewed from the positive perspective, the synergy of cross-domain expertise offered by the GSDAG can be expected to result in cohesive plans for cost-efficient SAR plans whereby a greater degree of standardisation will arise across regions. States less able to meet their obligations will be given greater prospect of compliance, the extent of geographic coverage of SAR services will widen and the lives of more travellers in distress, whether on the high seas, in in-shore waters or in the air, will be saved.

It is foreseen that the advice offered by the GSDAG will be at a relatively high level. The whole ambit of institution building activities, ranging from drafting legislation to procurement of accommodation and equipment to the recruitment, training and emplacement of staff, will far exceed the capacity of the respective Secretariats and will require, as is proper, the on-going involvement of the respective technical co-operation entities. It is intended, however, that the legitimate and specialist functions of all concerned participating in SAR development will be more effectively focused as a result of input from the GSDAG.

The composition of the GSDAG has been deliberately limited to the minimum number of participants for ease of administration and co-ordination while providing for the necessary degree of cross-domain expertise. It is intended that there be no allocation of funds for the purpose of GSDAG meetings. Meetings will be timed to be concurrent with other planned activities at which the participants will, in any case, attend like meetings of the ICAO/IMO JWG and the IMO COMSAR Sub-Committee. No call, therefore, will be made on any existing or anticipated SAR development funds.

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ANNEX 10

DRAFT RESOLUTION MSC.[ ](78)
(adopted on [... May 2004])

GUIDANCE ON THE TREATMENT OF PERSONS RESCUED AT SEA

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

NOTING resolution A.920(22) entitled "Review of safety measures and procedures for the treatment of persons rescued at sea",

RECALLING ALSO the provisions of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended relating to the obligation of:

- shipmasters to proceed with all speed to the assistance of persons in distress at sea; and

- Governments to ensure arrangements for coast watching and for the rescue of persons in distress at sea round their coasts,

RECALLING FURTHER the provisions of the International Convention on Maritime Search and Rescue (SAR), 1979, as amended relating to the provision of assistance to any person in distress at sea regardless of the nationality or status of such person or the circumstances in which that person is found,

NOTING ALSO article 98 of the United Nations Convention on the Law of the Sea, 1982, regarding the duty to render assistance,

NOTING FURTHER the initiative taken by the Secretary-General to involve competent United Nations specialized agencies and programmes in the consideration of the issues addressed in this resolution, for the purpose of agreeing on a common approach which will resolve them in an efficient and consistent manner,

REALIZING the need for clarification of existing procedures to guarantee that persons rescued at sea will be provided a place of safety regardless of their nationality, status or the circumstances in which they are found,

HAVING ADOPTED, as its [seventy-eighth session], by resolution MSC.[ ](78) amendments to the SOLAS Convention, proposed and circulated in accordance with article VIII(b)(i) thereof, and by resolution MSC.[ ](78) amendments to the SAR Convention proposed and circulated in accordance with article III(2)(a) thereof,

REALIZING FURTHER that the intent of the new paragraph 1-1 of SOLAS regulation V/33, as adopted by resolution MSC.[ ](78) and paragraph 3.1.5 of the Annex to the SAR Convention as adopted by resolution MSC.[ ](78), is to ensure that in every case a place of

safety is provided within a reasonable time. It is further intended that the responsibility to provide a place of safety, or to ensure that a place of safety is provided, falls on the Contracting Government/Party responsible for the SAR region in which the survivors were recovered,

1. ADOPTS Guidance on the treatment of persons rescued at sea the text of which is set out in the Annex to the present resolution;

2. INVITES Governments, rescue co-ordination centres and masters to establish procedures consistent with the annexed Guidance as soon as possible;

3. INVITES Governments to bring the annexed Guidance to the attention of authorities concerned and to ship owners, operators and masters;

4. REQUESTS the Secretary-General to take appropriate action in further pursuing his inter-agency initiative, informing the Maritime Safety Committee of developments, in particular with respect to procedures to assist in the provision of places of safety for persons in distress at sea, for action as the Committee may deem appropriate;

5. REQUEST ALSO the Maritime Safety Committee to keep this resolution under review.

ANNEX

GUIDANCE ON THE TREATMENT OF PERSONS RESCUED AT SEA

1 PURPOSE

1.1 The purpose of this resolution is to provide guidance to Governments[1] and to shipmasters with regard to humanitarian obligations and obligations under the relevant international law relating to treatment of persons rescued at sea.

1.2 The obligation of the master to render assistance should complement the corresponding obligation of IMO Member Governments to co-ordinate and co-operate in relieving the master of the responsibility to provide follow up care of survivors and to deliver the persons retrieved at sea to a place of safety. This resolution is intended to help Governments and masters better understand their obligations under international law and provide helpful guidance with regard to carrying out these obligations.

2 BACKGROUND

IMO Assembly resolution A.920(22)

2.1 The IMO Assembly, at its twenty-second session, adopted resolution A.920(22) on the review of safety measures and procedures for the treatment of persons rescued at sea. That Resolution requested various IMO bodies to review selected IMO Conventions to identify any gaps, inconsistencies, ambiguities, vagueness or other inadequacies associated with treatment of persons rescued at sea. The objectives were to help ensure that:

- survivors of distress incidents are provided assistance regardless of nationality or status or the circumstances in which they are found;

- ships, which have retrieved persons in distress at sea, are able to deliver the survivors to a place of safety; and

- survivors, regardless of nationality or status, including undocumented migrants, asylum seekers and refugees, and stowaways, are treated, while on board, in the manner prescribed in the relevant IMO instruments and in accordance with relevant international agreements and long-standing humanitarian maritime traditions.

2.2 Pursuant to resolution A.920(22), the Secretary-General brought the issue of persons rescued at sea to the attention of a number of competent United Nations specialized agencies and programmes highlighting the need for a co-ordinated approach among United Nations agencies, and soliciting the input of relevant agencies within the scope of their respective mandates. Such an inter-agency

[1] *Where the term Government is used in this guidance, it should be read to mean Contracting Government to the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended, or Party to the International Convention on Maritime Search and Rescue, 1979, as amended, respectively.*

effort focusing on State responsibilities for non-rescue issues, such as immigration and asylum that are beyond the competence of IMO, is an essential complement to IMO efforts.

SOLAS and SAR Convention amendments

2.3 At its seventy-eighth session, the Maritime Safety Committee (MSC) adopted pertinent amendments to chapter V of the Safety of Life at Sea (SOLAS) Convention and to chapter 3 of the International Convention on Maritime Search and Rescue Convention (SAR Convention). These amendments are expected to enter into force on 1 January 2006. At the same session the MSC adopted the current guidance; these amendments provide for the development of such guidelines. The purpose of these amendments and the current guidance is to help ensure that persons in distress are assisted, while minimizing the inconvenience to assisting ships and ensuring the continued integrity of SAR services.

2.4 Specifically, paragraph 1-1 of SOLAS regulation V/33 and paragraph 3.1.9 of the Annex to the SAR Convention, as amended, impose upon Governments an obligation to co-ordinate and co-operate to ensure that masters of ships providing assistance by embarking persons in distress at sea are released from their obligations with minimum further deviation from the ship's intended voyage.

2.5 As realized by the MSC in adopting the amendments, the intent of new paragraph 1-1 of SOLAS regulation V/33 and paragraph 3.1.9 of the Annex to the International Convention on Maritime Search and Rescue, 1979, as amended, is to ensure that in every case a place of safety is provided within a reasonable time. The responsibility to provide a place of safety, or to ensure that a place of safety is provided, falls on the Government responsible for the SAR region in which the survivors were recovered.

2.6 Each case, however, can involve different circumstances. These amendments give the responsible Government the flexibility to address each situation on a case-by-case basis, while assuring that the masters of ships providing assistance are relieved of their responsibility within a reasonable time and with as little impact on the ship as possible.

2.7 Some comments on relevant international law are set out at THE appendix.

3 PRIORITIES

3.1 When ships assist persons in distress at sea, co-ordination will be needed among all concerned to ensure that all of the following priorities are met in a manner that takes due account of border control, sovereignty and security concerns consistent with international law:

Lifesaving

All persons in distress at sea should be assisted without delay.

Preservation of the integrity and effectiveness of SAR services

Prompt assistance provided by ships at sea is an essential element of global SAR services; therefore it must remain a top priority for shipmasters, shipping companies and flag States.

Relieving masters of obligations after assisting persons

Flag and coastal States should have effective arrangements in place for timely assistance to shipmasters in relieving them of persons recovered by ships at sea.

4 INTERNATIONAL AERONAUTICAL AND MARITIME SEARCH AND RESCUE MANUAL

4.1 The three-volume *International Aeronautical and Maritime Search and Rescue Manual* (IAMSAR Manual) has been developed and is maintained to assist Governments in meeting their SAR needs, and the obligations they have accepted under the SOLAS Convention, the SAR Convention and the Convention on International Civil Aviation. Governments are encouraged to develop and improve their SAR services, co-operate with neighbouring States, and to consider SAR services to be part of a global system.

4.2 Each Volume of the IAMSAR Manual is written with specific SAR system duties in mind, and can be used as a stand-alone document, or, in conjunction with the other guidance documents as a means to attain a full view of the SAR system.

4.3 Volume I – *Organisation and Management* discusses the global SAR system concept, establishment of national and regional SAR systems and co-operation with neighbouring States to provide effective and economical SAR services.

4.4 Volume II – *Mission Co-ordination* assists personnel who plan and co-ordinate SAR operations and exercises; and

4.5 Volume III – *Mobile Facilities* – is intended to be carried aboard ships, aircraft and rescue units to help with performance of search, rescue or on-scene co-ordinator functions and with aspects of SAR that pertain to their own emergencies.

5 SHIPMASTERS

General guidance

5.1 SAR services throughout the world depend on ships at sea to assist persons in distress. It is impossible to arrange SAR services that depend totally upon dedicated shore-based rescue units to provide timely assistance to all persons in distress at sea. Shipmasters have certain duties that must be carried out in order to provide for safety of life at sea, preserve the integrity of global SAR services of which they are part, and to comply with humanitarian and legal obligations. In this regard, shipmasters should:

- understand and heed obligations under international law to assist persons in distress at sea (such assistance should always be carried out without regard to the nationality or status of the persons in distress, or to the circumstances in which they are found);

- do everything possible, within the capabilities and limitations of the ship, to treat the survivors humanely and to meet their immediate needs;

- carry out SAR duties in accordance with the provisions of Volume III of the IAMSAR Manual;

- in a case where the RCC responsible for the area where the survivors are recovered cannot be contacted, attempt to contact another RCC, or if that is impractical, any other Government authority that may be able to assist, while recognizing that responsibility still rests with the RCC of the area in which the survivors are recovered;

- keep the RCC informed about conditions, assistance needed, and actions taken or planned for the survivors (see paragraph 6.10 regarding other information the RCC may wish to obtain);

- seek to ensure that survivors are not disembarked to a place where their safety would be further jeopardized; and

- comply with any relevant requirements of the Government responsible for the SAR region where the survivors were recovered, or of another responding coastal State, and seek additional guidance from those authorities where difficulties arise in complying with such requirements.

5.2 In order to more effectively contribute to safety of life at sea, ships are urged to participate in ship reporting systems established for the purpose of facilitating SAR operations.

6 GOVERNMENTS AND RESCUE CO-ORDINATION CENTRES

Responsibilities and preparedness

6.1 Governments should ensure that their respective rescue co-ordination centres (RCCs) and other national authorities concerned have sufficient guidance and authority to fulfill their duties consistent with their treaty obligations and the guidance contained in this resolution.

6.2 Governments should ensure that their RCCs and rescue units are operating in accordance with the standards and procedures in the IAMSAR Manual and that all ships operating under their flag have on board Volume III of the IAMSAR Manual.

6.3 A ship should not be subject to undue delay, financial burden or other related difficulties after assisting persons at sea; therefore coastal States should relieve the ship as soon as practicable.

6.4 Normally, any SAR co-ordination that takes place between an assisting ship and any coastal State(s) should be handled via the responsible RCC. States may delegate to their respective RCCs the authority to handle such co-ordination on a 24-hour basis, or may task other national authorities to promptly assist the RCC with these duties. RCCs should be prepared to act quickly on their own, or have processes in place, as necessary, to involve other authorities, so that timely decisions can be reached with regard to handling survivors.

6.5 Each RCC should have effective plans of operation and arrangements (interagency or international plans and agreements if appropriate) in place for responding to all types of SAR situations. Such plans and arrangements should cover incidents that occur within its associated SAR region, and should also cover incidents outside its own SAR region if necessary until the RCC responsible for the region in which assistance is being rendered (see paragraph 6.7) or another RCC better situated to handle the case accept responsibility. These plans and arrangements should cover how the RCC could co-ordinate:

- a recovery operation;
- disembarkation of survivors from a ship;
- delivery of survivors to a place of safety; and
- its efforts with other entities (such as customs and immigration authorities, or the ship owner or flag State), should non-SAR issues arise while survivors are still aboard the assisting ship with regard to nationalities, status or circumstances of the survivors; and quickly address initial border control or immigration issues to minimize delays that might negatively impact the assisting ship, including temporary provisions for hosting survivors while such issues are being resolved.

6.6 Plans of operation, liaison activities and communications arrangements should provide for proper co-ordination in advance of and during a rescue operation with shipping companies and with national or international authorities that may need to be involved in response or disembarkation efforts.

6.7 When appropriate, the first RCC contacted should immediately begin efforts to transfer the case to the RCC responsible for the region in which the assistance is being rendered. When the RCC responsible for the SAR region in which assistance is needed is informed about the situation, that RCC should immediately accept responsibility for co-ordinating the rescue efforts, since related responsibilities, including arrangements for a place of safety for survivors, fall primarily on the Government responsible for that region. The first RCC, however, is responsible for co-ordinating the case until the responsible RCC or other competent authority assumes responsibility.

6.8 Governments and the responsible RCC should make every effort to minimize the time survivors remain aboard the assisting ship.

6.9 Responsible State authorities should make every effort to expedite arrangements to disembark survivors from the ship; however, the master should understand that in some cases necessary co-ordination may result in unavoidable delays.

6.10 The RCC should seek to obtain the following information from the master of the assisting ship:

- information about the survivors, including name, age, gender, apparent health and medical condition, and any special medical needs;
- the master's judgment about the continuing safety of the assisting ship;
- actions completed or intended to be taken by the master;
- assisting ship's current endurance with the additional persons on board;
- assisting ship's next intended port of call;
- the master's preferred arrangements for disembarking the survivors;
- any help that the assisting ship may need during or after the recovery operation; and
- any special factors (e.g., prevailing weather, time sensitive cargo).

6.11 Potential health and safety concerns aboard a ship that has recovered persons in distress include insufficient lifesaving equipment, water, provisions, medical care, and accommodations for the number of persons on board, and the safety of the crew and passengers if persons on board might become aggressive or violent. In some cases it may be advisable for the RCC to arrange for SAR or other personnel to visit the assisting ship to better assess the situation onboard, to help meet needs on board, or to facilitate safe and secure disembarkation of the survivors.

Place of safety

6.12 A place of safety (as referred to in the Annex to the 1979 SAR Convention, paragraph 1.3.2) is a location where rescue operations are considered to terminate. It is also a place where the survivors' safety of life is no longer threatened and where their basic human needs (such as food, shelter and medical needs) can be met. Further, it is a place from which transportation arrangements can be made for the survivors' next or final destination.

6.13 An assisting ship should not be considered a place of safety based solely on the fact that the survivors are no longer in immediate danger once aboard the ship. An assisting ship may not have appropriate facilities and equipment to sustain additional persons on board without endangering its own safety or to properly care for the survivors. Even if the ship is capable of safely accommodating the survivors and may serve as a temporary place of safety, it should be relieved of this responsibility as soon as alternative arrangements can be made.

6.14 A place of safety may be on land, or it may be aboard a rescue unit or other suitable vessel or facility at sea that can serve as a place of safety until the survivors are disembarked to their next destination.

6.15 The Conventions, as amended, indicate that delivery to a place of safety should take into account the particular circumstances of the case. These circumstances may include factors such as the situation on board the assisting ship, on scene conditions, medical needs, and availability of transportation or other rescue units. Each case is unique, and selection of a place of safety may need to account for a variety of important factors.

6.16 Governments should co-operate with each other with regard to providing suitable places of safety for survivors after considering relevant factors and risks.

6.17 The need to avoid disembarkation in territories where the lives and freedoms of those alleging a well-founded fear of persecution would be threatened is a consideration in the case of asylum-seekers and refugees recovered at sea.

6.18 Often the assisting ship or another ship may be able to transport the survivors to a place of safety. However, if performing this function would be a hardship for the ship, RCCs should attempt to arrange use of other reasonable alternatives for this purpose.

Non-SAR considerations

6.19 If survivor status or other non-SAR matters need to be resolved, the appropriate authorities can often handle these matters once the survivors have been delivered to a place of safety. Until then, RCCs are responsible for co-operation with any national or international authorities or others involved in the situation. Examples of non-SAR considerations that may require attention include oil spills, onscene investigations, salvage, survivors who are migrants or asylum seekers, needs of survivors once they have been delivered to a place of safety, or security or law enforcement concerns. National authorities other than the RCC typically have primary responsibility for such efforts.

6.20 Any operations and procedures such as screening and status assessment of rescued persons that go beyond rendering assistance to persons in distress should not be allowed to hinder the provision of such assistance or unduly delay disembarkation of survivors from the assisting ship(s).

6.21 Although issues other than rescue relating to asylum seekers, refugees and migratory status are beyond the remit of IMO, and beyond the scope of the SOLAS and SAR Conventions, Governments should be aware of assistance that international organizations or authorities of other countries might be able to provide in such cases, be able to contact them rapidly, and provide any instructions that their RCCs may need in this regard, including how to alert and involve appropriate national authorities. States should ensure that their response mechanisms are sufficiently broad to account for the full range of State responsibilities.

6.22 Authorities responsible for such matters may request that RCCs obtain from the assisting ship certain information about a ship or other vessel in distress, or certain information about the persons assisted. Relevant national authorities should also be made aware of what they need to do to co-operate with the RCC (especially with regard to contacting ships), and to respond as a matter of urgency to situations involving assisted persons aboard ships.

APPENDIX

SOME COMMENTS ON RELEVANT INTERNATIONAL LAW

A shipmaster's obligation to render assistance at sea is a longstanding maritime tradition. It is an obligation that is recognized by international law. Article 98 of the United Nations Convention on the Law of the Sea, 1982 (UNCLOS) codifies this obligation in that every "State shall require the master of a ship flying its flag, in so far as he can do so without serious danger to the ship, the crew, or the passengers . . . to render assistance to any person found at sea in danger of being lost…" in addition to imposing an obligation on States to "promote the establishment, operation and maintenance of an adequate and effective search and rescue service regarding safety on and over the sea…".

The SAR Convention defines *rescue* as "an operation to retrieve persons in distress, provide for their initial medical or other needs, and deliver them to a place of safety." SAR services are defined as "the performance of distress monitoring, communication, co-ordination and search and rescue functions, including provision of medical advice, initial medical assistance, or medical evacuation, through the use of public and private resources including co-operating aircraft, vessels and other craft and installations." SAR services include making arrangements for disembarkation of survivors from assisting ships. The SAR Convention establishes the principle that States delegate to their rescue co-ordination centres (RCCs) the responsibility and authority to be the main point of contact for ships, rescue units, other RCCs, and other authorities for co-ordination of SAR operations. The SAR Convention also discusses, with regard to obligations of States, the need for making arrangements for SAR services, establishment of RCCs, international co-operation, RCC operating procedures, and use of ship reporting systems for SAR.

The SAR Convention does not define "place of safety". However, it would be inconsistent with the intent of the SAR Convention to define a place of safety solely by reference to geographical location. For example, a place of safety may not necessarily be on land. Rather, a place of safety should be determined by reference to its characteristics and by what it can provide for the survivors. It is a location where the rescue operation is considered to terminate. It is also a place where the survivors' safety of life is no longer threatened and where their basic human needs (such as food, shelter and medical needs) can be met. Further, it is a place from which transportation arrangements can be made for the survivors' next or final destination.

The SOLAS Convention regulation V/33.1 provides that the "master of a ship at sea which is in a position to be able to provide assistance, on receiving information from any source that persons are in distress at sea, is bound to proceed with all speed to their assistance, if possible informing them or the search and rescue service that the ship is doing so." Comparable obligations are contained in other international instruments. Nothing in this resolution is intended in any way to affect those obligations. Compliance with this obligation is essential in order to preserve the integrity of search and rescue services. The SOLAS Convention, Article IV (cases of *force majeure*) protects the shipmaster insofar as the existence of persons on board the ship by reason of *force majeure* or due to the obligation for the master to carry shipwrecked or other persons, will not be a basis for determining application of the Convention's provisions to the ship. The SOLAS Convention also addresses in chapter V, regulation 7, the responsibility of Governments to arrange rescue services.

As a general principle of international law, a State's sovereignty allows that State to control its borders, to exclude aliens from its territory, and to prescribe laws governing the entry

of aliens into its territory. A State's sovereignty extends beyond its land territory and internal waters to the territorial sea, subject to the provisions of UNCLOS and other rules of international law. Further, as provide in Article 21 of UNCLOS, a coastal State may adopt laws and regulations relating to innocent passage in the territorial sea to prevent, among other things, the infringement of that coastal State's immigration laws.

Pursuant to Article 18 of UNCLOS, a ship exercising innocent passage may stop or anchor in the coastal State's territorial sea "only in so far as the same are incidental to ordinary navigation or are rendered by *force majeure* or distress or for the purpose of rendering assistance to persons, ships or aircraft in danger or distress." UNCLOS does not specifically address the question of whether there exists a right to enter a port in cases of distress, although under customary international law, there may be a universal, albeit not absolute, right for a ship in distress to enter a port or harbour when there exists a clear threat to safety of persons aboard the ship. Such threats often worsen with time and immediate port entry is needed to ensure the safety of the vessel and those onboard. Nevertheless, the right of the ship in distress to enter a port involves a balancing of the nature and immediacy of the threat to the ship's safety against the risks to the port that such entry may pose. Thus, a coastal State might refuse access to its ports where the ship poses a serious and unacceptable safety, environmental, health or security threat to that coastal State after the safety of persons onboard is assured.

The Refugee Convention's prohibition of expulsion or return "refoulment" contained in Article 33.1 prohibits Contracting States from expelling or returning a refugee to the frontiers of territories where his or her life or freedom would be threatened on account of the person's race, religion, nationality, membership of a particular social group or political opinion. Other relevant international law also contains prohibition on return to a place where there are substantial grounds for believing that the person would be in danger of being subjected to torture.

Other relevant provisions, not all of which are under the competence of IMO, inter alia, include the following:

International Convention on Maritime Search and Rescue, in entirety

Safety of Life at Sea Convention, chapter V, regulation 33

Facilitation Convention, in particular Section 6.C, Standards 6.8-6.10

International Convention on Salvage, Article 11

United Nations Convention on the Law of the Sea, Article 98

United Nations Convention relating to the Status of Refugees, 1951 and the 1967 Protocol

UN Convention against Transnational Organized Crime and its Protocol against the smuggling of migrants by land, sea and air

Resolution A.773(18) on Enhancement of safety of life at sea by the prevention and suppression of unsafe practices associated with alien smuggling by ships

Resolution A.871(20) on Guidelines on the allocation of responsibilities to seek the successful resolution of stowaway cases

Resolution A.867(20) on Combating unsafe practices associated with the trafficking or transport of migrants by sea

IMO Global SAR Plan – SAR.8/Circ.1 and addenda addresses (the Admiralty List of Radio Signals, Volume 5, is a practical alternative)

MSC/Circ.896/Rev.1 on Interim measures for combating unsafe practices associated with the trafficking or transport of immigrants by sea

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ANNEX 11

RECOMMENDATIONS RELATING TO LARGE PASSENGER SHIP SAFETY

1 General

1.1 SAR will be a factor in major emergencies into the foreseeable future, at least as a measure of last resort, and must therefore be planned for with due attention. Even the best-equipped SAR services do not have enough dedicated SAR facilities to deal with thousands of people. In the worst-case scenario, if a large passenger ship is evacuated or abandoned, the SAR services will be obliged to rely, to a greater or lesser extent, on additional facilities such as other shipping in the area – and all types of shipping will encounter difficulties when asked to take on this task.

1.2 At least in terms of radiocommunications and SAR, the review of safety provisions for all passenger ships worldwide – existing, building or planned, and whatever their trade – should be continued. The attempt to define what is a 'large' passenger ship in this context is unnecessary.

1.3 The common problems and crucial importance of good communication and proper co-ordination between those responding to major incidents should be noted, and consideration given to means of improvement by all parties. Continued SAR co-operation planning, and co-ordination of contingency planning in general, is encouraged as a means to this end.

1.4 Attention is drawn to the existing requirements of MSC/Circ.1079 in regard to co-operation between SAR services and the passenger shipping industry, which are intended to enhance mutual understanding and improve interaction between them.

1.5 Relevant research projects, analyses, case studies, and incident and exercise reports should be collated to inform the review and to form a 'reference library' for further work. The material collated in the COMSAR correspondence group's two reports (COMSAR 8/9 & COMSAR 7/10/1) should be included. The work done on the trial GIS model intended to assist with assessing SAR service ability and adequacy is noted, and all parties are encouraged to assist in its further development.

2 High priority recommendations

2.1 Recommendation (1)

2.1.1 Cruise industry best practices as outlined in MSC 77/4/1 should be considered for wider application.

2.1.2 Advice: this accords with the Committee's recommendation that the work of the Cruise Ship Safety Forum should be borne in mind. However, wider application of this work should be considered on its merits, not applied automatically. The majority of these best practices are issues for the MSC and/or other sub-committees. One session of the COMSAR Sub-Committee may be required for further work.

2.2 Recommendation (2)

2.2.1 The collation of recovery experience and techniques (including video footage where available) should be encouraged, for publication as a comprehensive guide for all seafarers, pending any enhancement of SOLAS requirements.

2.2.2 Advice: although generated by the COMSAR Sub-Committee, this matter is considered to be one for the STW Sub-Committee to progress. No further work is thought to be required of the COMSAR Sub-Committee.

2.3 Recommendation (3)

2.3.1 Further work should be undertaken on the problem of how to recover persons from survival craft and from the water into ships, considering in particular the general applicability of recovery systems required under SOLAS for ro-ro passenger ships to ships of all other types (including fishing vessels); taking cognisance of the experience of others and the results of relevant simulations and research; and, as regards 'means of rescue', encouraging the development of innovative, practical and functional designs. Measures and techniques to transfer persons from survival craft and from the water into assisting ships must be effective for all those who may be at risk, in conditions to be determined by the Organization and with due regard to the medical implications.

2.3.2 Advice: in order to facilitate this work the COMSAR Sub-Committee has developed the following example of a functional requirement for recovery, with a view to proposing to the Committee that such a requirement be adopted for all SOLAS ships, and to FAO and Coastal States that they consider it too for non-SOLAS vessels, pending further work on the items in square brackets:

> "All SOLAS ships must be equipped to actively recover persons from the water and/or survival craft and fast rescue craft at a rate and in conditions to be determined by the Organization."
>
> "As a minimum, the rate shall be [twice] the number of the ship's [operating crew] per hour, and in conditions of [3.5] metre significant wave height."
>
> "The capability of the recovery system must be demonstrated under actual conditions of minimum sea state and other minimum conditions determined by the Organization."

2.3.3 The COMSAR Sub-Committee considers that this is one of its most important recommendations. It is no exaggeration to say that lives depend upon its successful implementation. The rationale behind the draft functional requirement is as follows. The COMSAR Sub-Committee considers that the development of suitable recovery systems is a matter for the DE Sub-Committee, States, and technical experts in industry. The COMSAR Sub-Committee has proposed a functional requirement as a basis for this work. The items in square brackets are yet to be determined. As a working definition, the term 'operating crew' was taken to mean those members of the crew trained and certificated in the use of lifesaving equipment. If the MSC require the COMSAR Sub-Committee to develop a functional requirement further, one session will be required.

2.4 Recommendation (4)

2.4.1 The fitting of maritime band radio equipment on maritime SAR aircraft should be encouraged, and the carriage of air band equipment by ships reviewed.

2.4.2 Advice: air band equipment is currently only required on ro-ro passenger ships. Communications between On Scene Co-ordinator, Aircraft Co-ordinator, and surface and airborne SAR facilities will be more efficient and effective if common frequencies can be used for communications. It is considered that the fitting of maritime band equipment on maritime SAR aircraft is a better solution than fitting air band to a limited number of ships. The ICAO/IMO Joint Working Group is requested to consider this item: one further session of the COMSAR Sub-Committee will be required.

2.5 Recommendation (5)

2.5.1 The provision of on-board support should be considered further, with a view to enhancing this aspect of SAR service assistance world-wide: how the SAR services may best provide on-board support as an aid to incident containment should be considered, as well as how to enhance their capability of doing so.

2.5.2 Advice: 'on-board support' includes the provision of medical, firefighting, damage control, salvage, and/or engineering support teams to a ship in difficulties, with the aim of enabling passengers and crew to remain aboard in safety rather than having to evacuate the ship. While evacuation will always be a possibility, it should be regarded as a strategy of last resort. The provision of effective on-board support renders it less likely to be necessary, and should be made more widely available than at present. It would be beneficial if guidelines on the subject of on-board support were developed by the Organization. At least one session of the COMSAR Sub-Committee will be required.

2.6 Recommendation (6)

2.6.1 In its original guidance to the COMSAR Sub-Committee, the MSC asked, *inter alia*, that the Sub-Committee consider "whether there are any other techniques or requirements a coastal State can reasonably employ to reduce the potential SAR effort caused by a large passenger ship operating in an area remote from SAR facilities".

2.6.2 It is recommended that:

.1 the meaning of "an area remote from SAR facilities" should be carefully defined;

.2 there should be further discussion of how to provide adequate SAR facilities locally, proportional to the risk involved in passenger ship operations in such areas. Such provision may include, but need not be limited to, the temporary stationing of dedicated SAR facilities in such areas while passenger ships are operating in them, the temporary or permanent provision of caches of SAR equipment, the 'pairing' of passenger ships in such areas so as to provide mutual support in the event of an accident, etc.; and

.3 guidelines should be developed by the Organization on specific contingency planning between companies operating passenger ships in such areas and relevant SAR services.

2.6.3 Advice: it is thought that, when the MSC Working Group posed this question, the subject of 'adventure cruising' may have been foremost in their minds – that is, cruise ships trading into areas remote from traditional trade routes, such as the Antarctic or parts of the Arctic Oceans. Before the provision of SAR facilities and detailed contingency planning for such operations can be properly considered, it is necessary to be clear as to the meaning of "an area remote from SAR facilities". Depending on the MSC's clarification of the Working Group's intention and whether the MSC wish to take advice on this matter from, for example, the NAV Sub-Committee, and also assuming that the MSC instructs the COMSAR Sub-Committee to develop a definition of "an area remote from SAR facilities" as a precursor to the other work, at least two sessions of the COMSAR Sub-Committee will be required on this item.

2.7 Recommendation (7)

2.7.1 The prevention and treatment of hypothermia should be reviewed and, if appropriate, revised guidelines developed.

2.7.2 Advice: In accordance with the outcomes of the SARRRAH (Search And Rescue, Resuscitation and Rewarming in Accidental Hypothermia) project as demonstrated during COMSAR 8.

2.7.3 Guidelines for prevention of hypothermia should:

.1 include specific paragraphs for safety instruction cards (protect body with as many layers of cloths as possible; cover head and face, keep passengers as close as possible; in water reduce movements to the minimum…….);

.2 provide for specific education of crew members of how to instruct passengers in a situation of danger and/or before leaving the ship; and

.3 consider the provision of thermal protection with suits/bags stored next to each life-jacket;

2.7.4 Secondly, Guidelines for treatment of hypothermia should be developed to:

.1 teach crew members and rescue staff in updated hypothermia treatment procedures;

.2 train hypothermia resuscitation procedures;

.3 encourage the improvement of simple equipment for successful resuscitation in hypothermia; and

.4 facilitate contact with a Telemedical Maritime Advice Service (TMAS)!

3 Low priority recommendations

3.1 Recommendation (8)

3.1.1 The following research projects should be considered:

(a) profile typical passenger ship passenger loads – age, gender, physical capability, etc – and research the condition, behaviour and capabilities over time of a range of people within this profile – including the injured / disabled – in existing lifesaving appliances;

(b) research times for recovery across a range of people within the passenger profile and in various, realistic conditions;

(c) research aspects of the functional recovery requirement with the aim of determining its practical limits – in particular as regards the minimum recovery rate to be expected of SOLAS ships and the sea state in which this rate is to be achievable;

(d) research best vessel orientation(s) for recovery, and interaction between large recovery units and small craft; and

(e) consider offshore oil and gas industry recovery experience – in particular, the use of fast rescue craft – and its applicability to SOLAS ships.

3.1.2 Advice: these items may be considered by the COMSAR Sub-Committee and/or passed to the DE or STW Sub-Committees. However, it is suggested that some or all of this work might be done under the Committee's aegis, partly to ensure a holistic approach. As progress on this work will depend on the progress of the individual research projects, it is not possible to estimate the number of sessions of the COMSAR Sub-Committee required to complete it.

3.2 Recommendation (9)

3.2.1 The suggestion that the recovery equipment of survival craft should be standardised so far as practicable so as to enable interoperability and to enable their recovery in the laden condition should be considered further.

3.2.2 Advice: it has been suggested that, if ships were able to recover each others' survival craft, the overall recovery problem would be reduced. The COMSAR Sub-Committee invites the MSC and, if appropriate, the DE Sub-Committee, to consider the matter further. No further work by the COMSAR Sub-Committee is considered necessary.

3.3 Recommendation (10)

3.3.1 Relevant experts – psychologists and training specialists – should be invited to comment on the human element and training as regards SAR service personnel working in major incidents.

3.3.2 Advice: one session of the COMSAR Sub-Committee will be required for this work.

3.4 Recommendation (11)

3.4.1 ICCL medical guidelines should be more widely adopted, and passenger ships' medical equipment requirements and medical training for ships' staff should be kept under review.

3.4.2 Advice: it is considered that the ongoing work under item 7 on the COMSAR Sub-Committee's agenda covers much of the work recommended under this heading. In order to avoid duplication it is suggested that precedence be given to the work going on under item 7 and that, in the large passenger ship safety context, medical aspects should be kept under general review. Further work of the COMSAR Sub-Committee on this item is expected to fall under agenda item 7.

***

ANNEX 12

LIAISON STATEMENT TO THE INTERNATIONAL TELECOMMUNICATIONS UNION - RADIOCOMMUNICATIONS SECTOR STUDY GROUPS, WORKING PARTY 8B

DEVELOPMENTS IN MARITIME RADIOCOMMUNICATION SYSTEMS AND TECHNOLOGY

1 The IMO Sub-Committee on Radiocommunications and Search and Rescue (COMSAR) has commenced preparation for WRC-07. Regarding agenda item 1.13 and resolution 351 (WRC-03) the COMSAR Sub-Committee has considered two proposals for new technologies within the bands defined in Appendix 17 for transmission and reception of data and e-mail. The COMSAR Sub-Committee understands that agenda item 1.13 gives freedom to explore the frequency bands of appendix 17, identified by footnote (p) or designated for wide band telegraph, Morse telegraphy, facsimile, special data transmission systems and direct-printing telegraphy systems. The attached appendices 1 and 2 describe the systems as presented in IMO.

2 Due to the increased demand for data exchange at HF (currently there is an average of 10,000 ships around the world using such systems and growth is increasing) and the declining use of Narrow Band Direct-Printing (NBDP), IMO is seeking alternatives to NBDP currently used within the GMDSS. The systems described at the appendices may be considered suitable.

3 In order to assist IMO to approve such systems, ITU is invited to develop a Recommendation describing the technical characteristics of such systems, taking into account *resolves* 1 of resolution 351 (WRC-03).

4 Regarding agenda item 1.14 and resolution 342 (Rev.WRC-00) the COMSAR Sub-Committee has noted that systems using digital technology are in use in the bands defined in Appendix 18 for transmission and reception of data and e-mail. The COMSAR Sub-Committee wishes to bring to the attention of the ITU a possible future requirement for harmonization of such systems.

Appendix 1

Globe e-mail HF communication system

Globe e-mail HF communication system (www.globewireless.com).

1 The Globe e-mail HF communication system uses a network of 23 sites in different countries around the world. Communications are fully automated. No radio operator skills are required. Shore based methodology is followed. The ship user needs only to enter or select an email address and click on "SEND" to send an email. The shore-based recipient may reply as they would reply to any other email. It should be noted that:

.1 approximately 4,000 ships, including those of all the major flags, use the system;

.2 availability is pole-to-pole, 24 hours per day;

.3 reliability, as measured by message processing records, shows that the overall system reliability exceeds a six-sigma reliability factor. This high level of reliability is due to the high level of redundancy created by the multiple frequency bands, channels, overlapping coverage, large number of independent sites around the world and the mirrored, doubly backed-up data bases; and

.4 the system can be and is used as a fully automated tracking and reporting system.

2 The capability, availability and reliability of this system makes it an ideal terrestrial wireless option for safety and reporting requirements such as those demanded by IMO requirements of security alerting and long-range AIS.

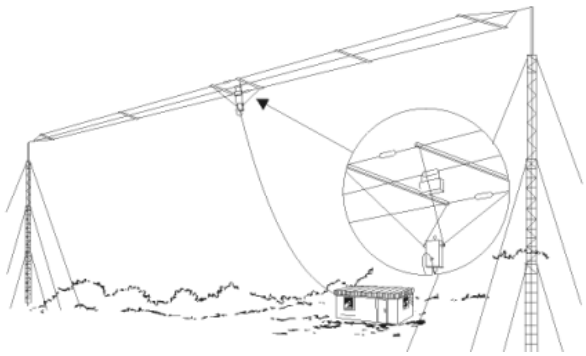
3 Based on the experience gained in the operation of this system over the past nine years, draft minimum performance standards are being proposed as the basic minimum operational standards for overall operational performance and specifically for the radio hardware and associated software.

Appendix 2

Norwegian HF System

Norway has been testing a HF system capable of data communications including e-mail. Such a system may at least cover the public correspondence part of the GMDSS in sea areas A3 and A4. The results so far are very promising. Distress communications may also be considered.

HF-m@il (e-mail via HF-radio)
Sendmail.as



Applications
- supplementing and partly replacing costly satellite systems
- possible future replacement of HF radio telex (NBDP) in the GMDSS

HF-m@il
- is using the software *'WaveMail'* , which is a complete e-mail system
- WaveMail is optimised for use over relative slow links, e.g. HF-radio
- effective and automatic compression/decompression of data
- any type of attachment may be enclosed
- messages may be sent to any valid e-mail address
- easy to use human interface
- each ship client may have 9 unique e-mail addresses

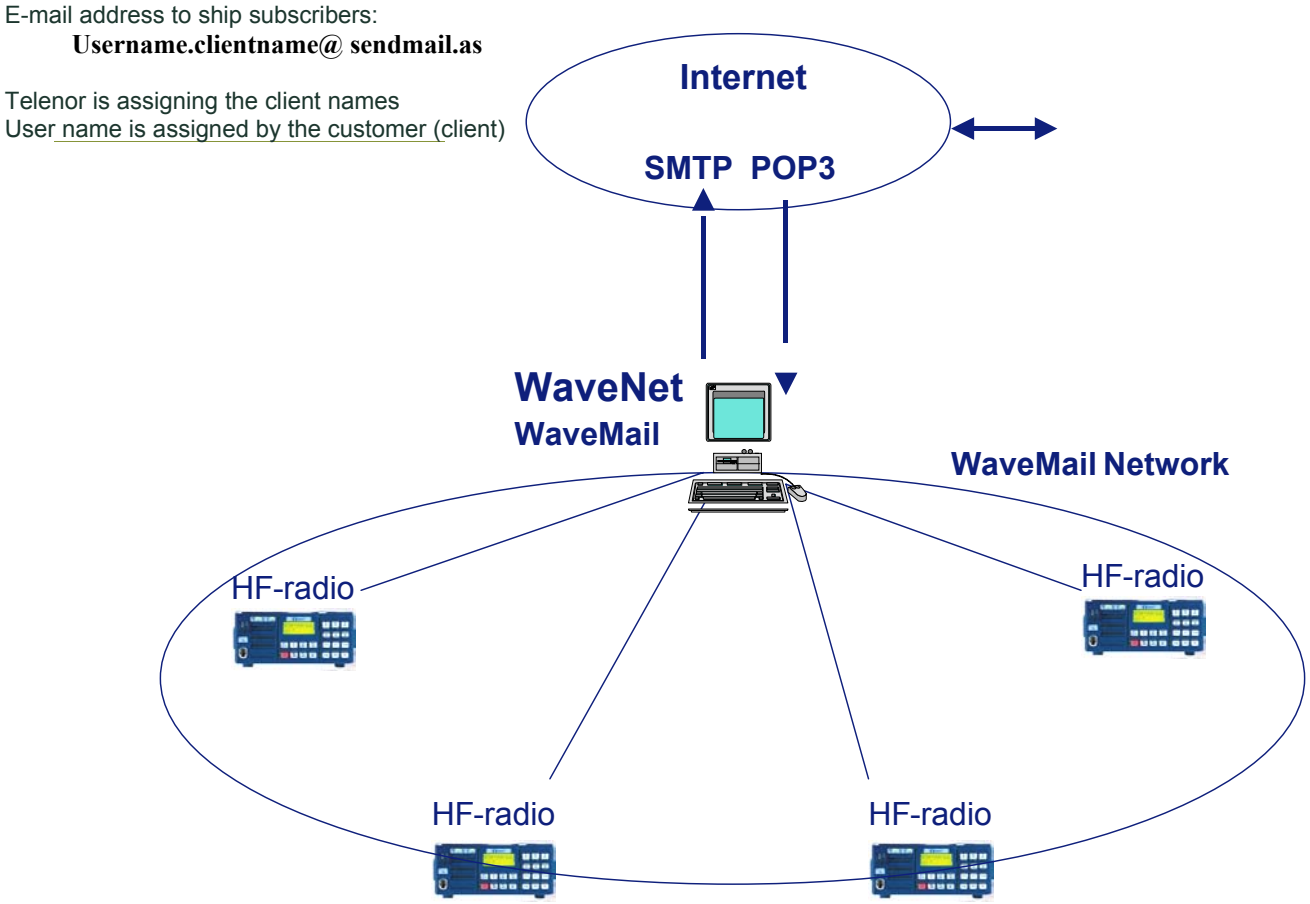
System description
- central mail server *'sendmail.as'* at Rogaland radio
- leased lines to remote radio base stations
- one HF transceiver at each base station
- base stations equipped with broadband HF antennas
- using maritime HF frequencies
- at present the following base stations are operational:
  - Farsund, Florø-I, Florø-II and Vardø

Protocol
The protocol being used is *'Pactor-III'*, which is a high speed radio protocol and offers improved access to professional HF-mail services

Test summary

The system has for some time been tested by some ships sailing in Norwegian an European waters. The test results so far are quite favourable.

Simplified diagram



More information about the system may be obtained from

Steinar Fredheim, Technical Manager
telephone: +47 51 68 36 51
e-mail: steinar.fredheim@telenor.com
or
Kåre Sletten, Marketing Manager
telephone: +47 55 96 83 83
e-mail: kare.sletten@telenor.com

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ANNEX 13

MSC/Circ….
… May 2004

DRAFT MSC CIRCULAR

ADOPTION OF AMENDMENTS TO THE INTERNATIONAL AERONAUTICAL AND MARITIME SEARCH AND RESCUE (IAMSAR) MANUAL

1 The Maritime Safety Committee (MSC), at its seventy-eighth session, (12 to 21 May 2004), having been informed that the International Civil Aviation Organization (ICAO) had approved the amendments to the IAMSAR Manual prepared by the Joint ICAO/IMO Working Group on Harmonization of Aeronautical and Maritime Search and Rescue, and that they had been endorsed by the Sub-Committee on Radiocommunications and Search and Rescue (COMSAR) at its eighth session (16 to 20 February 2004), adopted the annexed amendments in accordance with the procedure laid down in resolution A.894(21).

2 MSC 78 decided that the amendments should enter into force on [1 January 2005].

ANNEX

SECTION 1

PROPOSED AMENDMENTS TO THE IAMSAR MANUAL – VOLUME I

1 Abbreviations and Acronyms

- Instead of the word "Inmarsat" insert the abbreviation "IMSO".

- Insert the new line as follows:

  "Inmarsat…….satellite communication service provider for the GMDSS".

- For the abbreviation "SART" after the word "rescue" insert the word "radar".

- For the abbreviation "TLX" instead of the word "teletype" include the word "telex".

- Delete the line "AMVER……Automated Mutual-assistance Vessel Rescue"

2 Glossary

- Delete the words "International Mobile Satellite Organization" and brackets around the word "Inmarsat".

- Replace the present definition of NAVTEX by "The system for the broadcast and automatic reception of maritime safety information by means of narrow-band direct-printing telegraphy."

- Replace the present definition of SafetyNET by "A service of Inmarsat enhanced group call (EGC) system and was specifically designed for promulgation of maritime safety information (MSI) as a part of the global maritime distress and safety system (GMDSS)."

- Insert the new line as follows:

  "Amver A worldwide ship reporting system for search and rescue"

3 Chapter 2

- Insert new paragraphs 2.6.3 and 2.6.4, as follows:

  "**Aircraft co-ordinator (ACO) joint training**

  2.6.3 The SAR management should provide ACO training between SRU crews from different organizations that might act as ACOs. The ACO training should improve understanding of the ACO role and increase confidence amongst the participating SRUs.

2.6.4 The ACO training can consist of:

- Experience from real SAR missions;
- Legal documents;
- Duties for cooperating organizations;
- Performance characteristics of SRU's;
- Typical cases and methods;
- Role-playing between SMC – ACO; and
- Paper exercises."

4 **Chapter 4**

- On paragraph 4.5.26, change "Automated Mutual-assistance Vessel Rescue (AMVER) to "Amver" and change "AMVER" to "Amver"

5 **Appendix D**

- Update address information, as given in Appendix 1 to this annex.

SECTION 2

PROPOSED AMENDMENTS TO THE IAMSAR MANUAL – VOLUME II

1 **Abbreviations and Acronyms**

- For the abbreviation "gt", instead of the word "ton", insert the word "tonnage".

- Instead of the word "Inmarsat" insert the abbreviation " IMSO".

- Insert the new line as follows:

  "Inmarsat…….satellite communication service provider for the GMDSS".

- "NM" for nautical mile should read "nm".

- For the abbreviation "SART" after the word "rescue" insert the word "radar".

- Delete the line "AMVER……Automated Mutual-assistance Vessel Rescue"

2 **Glossary**

- Delete the words "International Mobile Satellite Organization" and brackets around the word "Inmarsat".

- Replace the present definition of NAVTEX by "The system for the broadcast and automatic reception of maritime safety information by means of narrow-band direct-printing telegraphy."

- Replace the present definition of SafetyNET by "A service of Inmarsat enhanced group call (EGC) system and was specifically designed for promulgation of maritime safety information (MSI) as a part of the global maritime distress and safety system (GMDSS)."

- Insert the new line as follows:

"Amver A world-wide ship reporting system for search and rescue"

3 **Chapter 1**

- Insert new paragraph 1.2.6 as follows:

"1.2.6 Joining entry report. Airborne SRUs shall use a standard joining entry report to the ACO when entering a search and rescue mission area, including:

call sign;
nationality;
type (specify fixed wing or helicopter and type);
position;
altitude (on pressure setting used);
ETA (at relevant point or search area);
endurance on scene; and
remarks (specific equipment or limits)."

- On paragraph 1.3.5, change "Automated Mutual-assistance Vessel Rescue (AMVER)" to "Amver"

- On paragraph 1.11.8, change "AMVER" to "Amver"

4 **Chapter 2**

- On paragraph 2.18.5, change "AMVER" to "Amver"

5 **Chapter 6**

- Insert new paragraph 6.17.7, as follows:

"6.17.7 SAR operations are conducted only for assisting persons who may be living. However, it is wise to consider the capabilities of existing Disaster Victim Identification (DVI) methods and procedures in the instance of a mass casualty accident.

The DVI operation is a criminal police and forensic science operation carried out according to national policies and legislation in accordance with standards established by INTERPOL. As it is not legally a part of the SAR operation, it is not coordinated or supervised by the RCCs.

DVI may be of significant assistance to SAR personnel in those instances where unidentified human remains are recovered in the course of a SAR case, particularly in those instances of multiple casualties. This will assist SAR personnel in accounting for the persons who are the subject of the SAR case, and to verify whether or not additional persons remain missing. This will facilitate closing the SAR case as expeditiously as possible.

SAR and DVI authorities should co-operate in dealing with the families of missing persons. DVI systems can usually be accessed through liaison with local or national police agencies. SAR personnel are encouraged to assist DVI authorities if that is possible based on other operational commitments and organization policies."

6 **Chapter 8**

- Insert section 8.9, as follows:

"**8.9 Incident Debriefings**

8.9.1 Debriefings, feedback sessions, and experience sharing opportunities between the crews of SAR facilities, SMCs, and SCs are methods of quality control and continuous improvement to a SAR system. To benefit from this process, SAR authorities should establish a structured and systematic approach to debriefing. Of particular interest would be the following matters:

(a) extent of the debriefings (what experiences need to be shared);
(b) focus of the debriefing (strive to focus on the most important issues);
(c) determine the level of participation at the debriefing;
(d) ensure each participant defines their needs; and
(e) determine how the information will flow from the debriefing (normally from the bottom up).

Although each level of debriefing targets a specific audience, significant benefits can be derived from conducting simultaneous/joint debriefings. It is important to note that improvements to a SAR system will not be obtained unless recommendations identified by debriefings are reviewed and implemented.

8.9.2 Methods of debriefing can be grouped into three categories: operations, liaison, and administration. Each category deals with specific segments of an operation that normally includes the following:

(a) Operations:
operations/response;
co-ordination;
communications;
reporting;
debriefing; and
logs and documents.

(b) Liaison:

participation in briefings/courses held by various SAR providers;
seminars/workshops/working groups;
RCC staff visits to sub-units/agencies/groups;
joint exercises;
visits to neighbouring countries; and
participation in international events.

(c) Administration:

command, communication, and control structure;
policy and regulations;
personnel; and
administrative support.

8.9.3 The following types of debriefings could be used to assist SAR Authorities to improve their system:

(a) Situation Report (SITREP). As described in chapter 2, this method provides the quickest means to forward issues of concern to the responsible authorities;

(b) SAR Debrief (Search Operation Debriefing Form). As described in chapter 5, this debriefing form is intended to report actual actions and observations of SAR facilities after each tasking. It provides the opportunity to report areas of concern in a more formal way;

(c) SAR Mission Report. This format would require the primary rescue facilities to prepare a quick description of the tasks and actions taken (see Appendix H). This report would provide another avenue for responsible authorities to capture areas of concern not previously provided in other formats. The concerns would most likely involve broader scope issues not necessarily apparent at the time of the event;

(d) Formal Debriefing Session. This debriefing method could be initiated by a participating SAR facility, RCC, or higher authority and would normally involve a more in-depth review of issues of concern. Attendance by representatives of all units that participated in the incident would be highly desired. Findings and proposed changes/amendments to local procedures would be validated and approved by those concerned and promulgated to the responsible authorities for implementation. There would be no requirement for a specific format as the results of this debriefing would be intended for internal use only (distributed among the various emergency service providers); and

(e) SAR Operation Report. This method of debriefing would be required after a significant SAR incident and/or when issues identified in the operation need to be addressed. The report would be prepared by the responsible authority in line with the process

described in section 8.7. The report would be intended for a wider audience, which could include outside agencies, government departments, interested groups, owners, and operators. Consequently, an established format would be needed to ensure adequacy and consistency of the reports (see Appendix H).

8.9.4 The above debriefings are normally conducted for the benefit of certain individuals to meet a defined requirement as described in the following table:

Recipients of Debrief (Category of Debrief)	Situation Report	SAR Debrief	SAR Mission Report	Formal Debrief	SAR Operation Report
SAR Facilities (Operations)	•	•	•	•	
SMCs (Operations/Liaison/Administration)	•	•	•	•	•
SAR managers (Operations/Liaison/Administration)	•	•	•	•	•
SAR co-ordinators (Administration)				•	•
International Audiences (Operations/Administration)				•	•

”

7 **Appendix H**

- On page H-i, add followings:

  SAR Mission Report – Aircraft/Vessel……H7

  SAR Operation Report…….H8

- Add Appendix 2 of this annex to page H7

- Add Appendix 3 of this annex to page H8

8 **Other Corrections**

- Replace “poor” with “normal” where it refers to poor search conditions in the following provisions:

  4.6.14 (*2 places*)

  Footnote, page 4-18

  Data box, Figure 4-13

  4.6.14 (a), (b)

4.6.16 (b)

4.7.5 (b)(1), (2)

5.3.6 (*3 places*)

Page L-1, Line 17

Page L-3, Line 17

Pages N-11 and following in Figures N-5, N-6, N-7, N-8, N-10, N-11, and N-12

SECTION 3

PROPOSED AMENDMENTS TO THE IAMSAR MANUAL – VOLUME III

1 Abbreviations and Acronyms

- For the abbreviation "gt", instead of the word "ton", insert the word "tonnage".

- Instead of the word "Inmarsat" insert the abbreviation " IMSO".

- Insert the new line as follows:

  "Inmarsat…….satellite communication service provider for the GMDSS".

- NM" for nautical mile should read "nm".

- For the abbreviation "SART" after the word "rescue" insert the word "radar".

2 **Glossary**

- Replace the existing text for "Inmarsat" and its definition as follows:

  "**Inmarsat** A system of geostationary satellites for world-wide mobile communications services and which support the Global Maritime Distress and Safety System and other emergency communications systems."

- Replace the present definition of NAVTEX by "The system for the broadcast and automatic reception of maritime safety information by means of narrow-band direct-printing telegraphy."

- Replace the present definition of SafetyNET by "A service of Inmarsat enhanced group call (EGC) system and was specifically designed for promulgation of maritime safety information (MSI) as a part of the global maritime distress and safety system (GMDSS)."

3 **Section 1**

- On pages 1-4 and 1-5:

- change the section title "Automated Mutual-assistance Vessel Rescue (AMVER) System" to "Amver"

- change "AMVER" to "Amver" in these pages(*4 places*)

4 **Section 3**

- On page 3-5, insert new bullet after ACO-duties, as follows:

"■ ***Joint Entry Report***

● Airborne SRUs shall use a standard joining entry report to the ACO when entering a search and rescue mission area, including:

- callsign;
- nationality;
- type (specify fixed wing or helicopter and type);
- position;
- altitude (on pressure setting used);
- ETA (at relevant point or search area);
- endurance on scene; and
- remarks (specific equipment or limits)."

- On page 3-34, at the end of SAR Briefing, Debriefing, and Tasking, add following new bullet:

"● Masters and Pilots-in-command of SAR facilities not designated as search and rescue units should also be contacted by the SMC or OSC for debriefing."

Appendix 1

Information Sources

[The information given on this page is being confirmed by the appropriate organizations. Once it is done, the information will be updated.]

Appendix 2

Appendix H - Operation Briefing and Tasking Forms

SAR Mission Report – Aircraft/Vessel

SAR CASE IDENTIFICATION: _____

DATE: _____

SAR UNIT REPORTING: _____

NARRATIVES

OPERATIONS — (Include narrative account of the conduct of the mission. Amplify factors that affected the mission including location of incident, delay in responding, terrain/sea and environmental conditions, procedures used, problems encountered during incident, etc.)

MEDICAL — (Description of the patient's condition to include vitals, diagnosis and treatment given, etc on scene and on arrival/release to other medical authority. Attach medical reports if applicable. Note - distribution of medical reports and any personal information should be classified)

EQUIPMENT REPORT — (Comments on the equipment used including inadequacies, malfunctions, etc. If changes recommended, indicate what follow-up action has been taken)

ATTACHMENTS - (maps, photographs, etc.)

DISTRIBUTION LIST

SAR facilities
SMCs
SAR managers

Appendix 3

Appendix H - Operation Briefing and Tasking Forms

SAR Operation Report

TITLE (SAR CASE IDENTIFICATION)

PART I SEARCH OBJECT DETAILS
(Equipment onboard, location of incident, intended route with timings, nature of emergency, weather, etc)

PART II DETAILS OF SAR OPERATION

1. RCC ACTION

   a. Brief narrative of initial actions from log.

   b. SAR facilities tasked, response times.

   c. Basic assumptions regarding the search object.

2. SEARCH OPERATION

   a. Rationale for the search plan.

   b. Explanation of any changes to the search plan.

   c. Brief outline of each day's search activities including areas covered, SAR facilities used and general weather.

   d. If search object is found, a complete explanation of how, to include type of SAR facilities, altitude and/or distance, from what position in SAR facilities, what was visual reference, was spotter trained, phase of flight, time of day, search conditions, distress beacon details, etc.

   e. If search object not found, why (in general terms).

3. RESCUE OPERATION

   a. Condition of survivors.

   b. SAR facilities used.

   c. Evacuation details.

   d. Problems encountered, if any.

PART III TERMINATION/SUSPENSION

1. SEARCH OBJECT LOCATED (Date/time, location, survivors, fatalities, missing etc.)

2. SEARCH SUSPENDED (Authority for suspension, survivors, fatalities, missing, etc.)

PART IV CONCLUSIONS/RECOMMENDATIONS

1. SMC CONCLUSIONS

2. SMC RECOMMENDATIONS (May include recommendations to government departments, agencies, private companies, etc to help prevent future accidents of this kind)

3. RCC CHIEF REMARKS

4. SAR CO-ORDINATOR REMARKS

ATTACHMENTS

1. Weather reports.

2. Sighting reports.

3. SAR maps.

4. SRU utilization (flying/steaming hours).

5. List of objects recovered.

6. Photographs (if applicable).

DISTRIBUTION LIST

SMCs
SAR managers
SCs
International Authorities

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ANNEX 14

PROPOSED PRELIMINARY DRAFT AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

CHAPTER XI-2

SPECIAL MEASURES TO ENHANCE MARITIME SECURITY

1 The following new regulation [XX] is added after existing regulation [XY]:

"**Regulation [XX]**

Long-range identification and tracking of ships

1 All ships, except those specified in paragraph 2, shall be fitted with [means][system] to automatically transmit information to enable, subject to the provisions of paragraph 5, the identification and tracking of the ship by Contracting Governments, as follows:

.1 ships constructed on or after [DD MM YY];

.2 ships constructed before [DD MM YY] and certified for operations in Sea Areas A1 and A2, as defined in regulation IV/2.1.12 and IV/2.1.13**,** not later than the first survey of the radio installation after [DD MM YY];

.3 ships constructed before [DD MM YY], certified for operations in Sea Areas A1, A2 and A3, as defined in regulation IV/2.1.12, IV/2.1.13 and IV/2.1.14**,** and fitted with an Inmarsat ship earth station, as a part of compliance with the provisions of regulation IV/10, which is capable of automatically transmitting identification and tracking information, not later than [DD MM YY];

.4 ships constructed before [DD MM YY] and certified for operations in Sea Areas A1, A2 and A3, as defined in regulation IV/2.1.12, IV/2.1.13 and IV/2.1.14**,** which are not fitted with an Inmarsat ship earth station, as a part of compliance with the provisions of regulation IV/10, not later than the first survey of the radio installation after [DD MM YY]; and

.5 ships constructed before [DD MM YY] and certified for operations in Sea Areas A1, A2, A3 and A4, as defined in regulation IV/2.1.12, IV/2.1.13, IV/2.1.14 and IV/2.1.15**,** not later than the first survey of the radio installation after [DD MM YY]. However, these ships shall comply with the provisions of subparagraph .3 and .4 whilst they operate within Sea Areas A1, A2 and A3 and they do not proceed to Sea Area A4.

2 Ships, irrespective of the date of construction, certified for operations exclusively in Sea Area A1, as defined in regulation IV/2.1.12, shall not be required to comply with the provisions of this regulation.

3 The [means][system] of transmitting information to enable the identification and tracking of a ship:

.1 shall be capable of automatically transmitting the identity of the ship, its position (latitude and longitude) and the date and time position;

.2 shall be capable of providing information that is, at a minimum, current within:

.1 [4] hours when the ship is [300] nautical miles or more from the cost of a Contracting Government; and

.2 [1] hour when the ship is less than [300] miles from the cost of a Contracting Government;

.3 shall be so designed and constructed to prevent:

.1 any form of [unauthorised] intervention leading to the transmission of false or inaccurate information; and

.2 the transmission of any information to a receiver other than those [approved][recognised] by the Organization;

.4 shall not transmit the information to any other ships;

.5 shall be capable of being switched off on board:

.1 where international agreements, rules or standards provide for the protection of navigational information;

.2 in cases where operation is considered by the master to compromise the safety or security of the ship. The [means][system] shall have the capability of providing a secure communication to indicate this action; and

.3 in cases where the Administration considers that the receipt of information by another Contracting Government may compromise the safety or security of the ship or of the Administration. The system should have the capability of providing a secure communication to indicate this action;

[.6 shall be capable of indicating on-board the ship that it malfunctions[;] [The [means][system] shall have the capability of providing a secure communication to indicate that it malfunctions];]

.7 shall ensure that the information transmitted by the ship is protected, during transmission from the ship, from unauthorized access or disclosure;

.8 shall ensure that the ship does not incur any cost when is either requested or is transmitting information for identification and tracking purposes; [and]

.9 shall conform to performance standards not inferior to those adopted by the Organization[;][.]

.10 shall be provided with energy from sources that comply with the provisions of regulation IV/13;]

.11 shall be of a type approved by the Administration in accordance with the performance standards adopted by the Organization.]

4 The communication system and infrastructure used for receiving from ships, storing and disseminating, subject to the provisions of paragraph 5, identification and tracking information shall conform to performance standards not inferior to those adopted by the Organization and shall be [recognised][approved] by the Organization.

5 Contracting Governments, subject to the provisions of paragraphs 6 and 7, shall be able to receive identification and tracking information transmitted by ships as follows:

.1 the Administration shall be able to receive identification and tracking information for all ships entitled to fly its flag irrespective where such ships may be located; [and]

.2 a Contracting Government shall be able to receive identification and tracking information from all ships, irrespective of the flag such ships are entitled to fly, which have indicated to that Contracting Government an intention to enter a port facility under the jurisdiction of the Contracting Government. Contracting Governments shall specify, and shall communicate to the Organization, either the distance from their coast or the period of time prior to the expected time of arrival of the ship in a port facility under their jurisdiction, during which they require the provision of identification and tracking information. The Organization shall circulate the communications received for the information of all Contracting Governments; [and]

.3 in addition to subparagraph .2, a Contracting Government shall be able to receive identification and tracking information from all ships, irrespective of the flag such ships are entitled to fly, navigating within a distance of [100][200][2,000] nautical miles of the its coast.

6 Contracting Governments shall, at all times:

.1 recognize and respect the commercial confidentiality and sensitivity of any identification and tracking information they may receive; and

.2 protect the identification and tracking information they may receive from unauthorised access or disclosure; and

.3 use the identification and tracking information they may receive solely and exclusively for the purpose of enhancing their security; and

.4 use the identification and tracking information they may receive solely and exclusively for peaceful purposes; and

.5 cover all communication cost associated with the provision to them of any identification and tracking information they have requested to receive and shall ensure that these information are provided to them at no cost, whatsoever, to the ship concerned.

7 Contracting Governments may seek to receive or may make use of identification and tracking information they may have received in relation to the rescue of persons in distress at sea.

8 While all reasonable steps shall be taken to ensure to maintain the [means][system] of transmitting identification and tracking information in an efficient working order, malfunctions of the [means][system] of transmitting identification and tracking information shall not be considered as making the ship un-seaworthy or as a reason for delaying the ship in ports where appropriate repair facilities are not readily available, provide suitable arrangement are made by the master to take into account the inoperative [means][system] in the planning and executing a safe voyage to a port where repairs can take place."

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ANNEX 15

ORAL STATEMENT BY THE DELEGATION OF JAPAN

Ship Security Alert System

The delegation of Japan, noting that various kinds of direct and automatic SSAS alert transmission systems, such as the COSPAS-SARSAT SSAS, e-mail transmission by Inmarsat-C, ARGOS, HF-E-Mail and others, are already available, recommended that the Inmarsat-C SSAS which uses priority 3 distribution to the associated MRCC to the Land Earth Station (LES) should not be used because of the facts that the associated MRCCs may have problems when transmitting the alerts to the ship's flag Administration due to the lack of information listing the Competent Authority around the world, and that there are risks of not handled properly at some coastal States. However, bearing in mind that some States have already approved the use of priority 3 Inmarsat-C SSAS, those States which are going to use the priority 3 SSAS are recommended to designate some specific LESs for SSAS transfer after a prior consultation with its associated MRCCs and make necessary arrangement for the Ship Earth Stations to use the designated LESs.

***

ANNEX 16

Proposed draft amendments to Forms of Nuclear Ship Safety Certificates

Form of Nuclear Passenger Ship Safety Certificate

Nuclear Passenger Ship Safety Certificate

~~VII. that the ship complied with the requirements of the regulations as regards radiotelegraph installations, viz.:~~

	~~Requirements of regulations~~	~~Actual provision~~
~~Hours of listening by operator~~	~~……~~	~~……~~
~~Number of operators~~	~~……~~	~~……~~
~~Whether auto alarm fitted~~	~~……~~	~~……~~
~~Whether main installation fitted~~	~~……~~	~~……~~
~~Whether reserve installation fitted~~	~~……~~	~~……~~
~~Whether main and reserve transmitters electrically separated or combined~~	~~……~~	~~……~~
~~Whether direction-finder fitted~~	~~……~~	~~……~~
~~Whether radio equipment for homing on the radiotelephone distress frequency fitted~~	~~……~~	~~……~~
~~Whether radar fitted~~	~~……~~	~~……~~
~~Number of passengers for which certificated~~	~~……~~	~~……~~

VII. that the ship complied with the requirements of the regulations as regards radio installations, viz.:

Item	*Actual provision*
1. Primary systems	
1.1 VHF radio installation:	*……..*
1.1.1 DSC encoder	*……..*
1.1.2 DSC watch receiver	*……..*
1.1.3 Radiotelephony	*……..*
1.2 MF radio installation:	*……..*
1.2.1 DSC encoder	*……..*
1.2.2 DSC watch receiver	*……..*
1.2.3 Radiotelephony	*……..*

(continued)

1.3 MF/HF radio installation:	……...
1.3.1 DSC encoder	……...
1.3.2 DSC watch receiver	……...
1.3.3 Radiotelephony	……...
1.3.4 Direct-printing radiotelegraphy	……...
1.4 INMARSAT ship earth station	……...
2 Secondary means of alerting	……...
3 Facilities for reception of maritime safety information:	
3.1 NAVTEX receiver	……...
3.2 EGC receiver	……...
3.3 HF direct-printing radiotelegraph receiver	…….
4 Satellite EPIRB	
4.1 COSPAS-SARSAT	……...
4.2 INMARSAT	……...
5 VHF EPIRB	……...
6 Ship's radar transponder	……...

Sea areas in which ship is certified to operate (regulation IV/2)……..

Methods used to ensure availability of radio facilities
(regulations IV/15.6 and 15.7)
Duplication of equipment……..

Shore-based maintenance……

At-sea maintenance capability……..

Form of Nuclear Cargo Ship Safety Certificate

Nuclear Cargo Ship Safety Certificate

~~VII. that the ship complied with the requirements of the regulations as regards radiotelegraph installations, viz.:~~

	~~Requirements of regulations~~	~~Actual provision~~
~~Hours of listening by operator~~	~~……~~	~~……~~
~~Number of operators~~	~~……~~	~~……~~
~~Whether auto alarm fitted~~	~~……~~	~~……~~
~~Whether main installation fitted~~	~~……~~	~~……~~
~~Whether reserve installation fitted~~	~~……~~	~~……~~
~~Whether main and reserve transmitters electrically separated or combined~~	~~……~~	~~……~~
~~Whether direction-finder fitted~~	~~……~~	~~……~~
~~Whether radio equipment for homing on the radiotelephone distress frequency fitted~~	~~……~~	~~……~~
~~Whether radar fitted~~	~~……~~	~~……~~

VII. that the ship complied with the requirements of the regulations as regards radio installations, viz.:

Item	*Actual provision*
1 Primary systems	
1.1 VHF radio installation:	……
1.1.1 DSC encoder	……
1.1.2 DSC watch receiver	……
1.1.3 Radiotelephony	……
1.2 MF radio installation:	……
1.2.1 DSC encoder	……
1.2.2 DSC watch receiver	……
1.2.3 Radiotelephony	……

(continued)

1.3 MF/HF radio installation:	*……...*
1.3.1 DSC encoder	*……...*
1.3.2 DSC watch receiver	*……...*
1.3.3 Radiotelephony	*……...*
1.3.4 Direct-printing radiotelegraphy	*……...*
1.4 INMARSAT ship earth station	*……...*
2 Secondary means of alerting	*……...*
3 Facilities for reception of maritime safety information	
3.1 NAVTEX receiver	*……...*
3.2 EGC receiver	*……...*
3.3 HF direct-printing radiotelegraph receiver	*……..*
4 Satellite EPIRB	
4.1 COSPAS-SARSAT	*……...*
4.2 INMARSAT	*……...*
5 VHF EPIRB	*……...*
6 Ship's radar transponder	*……...*

Sea areas in which ship is certified to operate (regulation IV/2)……..

Methods used to ensure availability of radio facilities
(regulations IV/15.6 and 15.7)
Duplication of equipment……..

Shore-based maintenance……

At-sea maintenance capability……..

***

ANNEX 17

DRAFT REVISED TERMS OF REFERENCE OF THE SUB-COMMITTEE*

In order to improve escape, evacuation and recovery procedures, [~~life saving and~~] to ensure effective maritime search and rescue including maritime distress and safety [~~mobile radio~~] communications and procedures, the Sub-Committee on Life-Saving, Search and Rescue and [~~Radio~~] Communications [COMLSR] [(~~LSC~~)] [(~~COMSAR~~)], under the direction of Maritime Safety Committee, should:

.1 consider and develop any technical and operational measures and recommendations on the world-wide implementation of, and amendments to, as appropriate:

a. the International Convention on Maritime Search and Rescue, 1979, as amended ~~(e.g. Global SAR Plan)~~;

b. development and maintenance of the Global SAR Plan;

~~b~~.c. the Global Maritime Distress and Safety System (GMDSS), in particular, matters relating to GMDSS Master Plan; and

~~c~~.d. the provisions of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual in cooperation with the International Civil Aeronautical Organization;

e. operational communications related to maritime security,

.2 consider and agree proposed measures related to relevant chapters [~~III, IV and V~~] of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended, and amendments thereto, as appropriate, in particular;

a. operational safety measures related to maritime [~~mobile radio~~] communications and security;

b. revision or development of relevant [~~radio~~]communication equipment performance standards, maintenance requirements and relevant procedures; ~~and~~

c. revision or development of relevant [~~lifesaving~~] performance standards, for escape evacuation and recovery maintenance requirements and relevant procedures; and

d. revision of relevant search and rescue equipment performance standards, maintenance requirements and relevant procedures;

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* Crossed text means deleted
Shadow text means added

~~e~~.e. any technical measures with respect to the implementation of relevant SOLAS chapters [~~III, IV and V~~], as amended;

.3 consider ITU maritime mobile radiocommunication matters and to liase with ITU technical bodies on the issues;

.4 consider the revision or development of relevant operational guidelines relating to [~~radio~~]communications, escape evacuation and recovery [~~lifesaving appliances~~], search and rescue, maritime security and associated matters; and

.5 act on any other relevant issues referred to it by the Maritime Safety Committee or other technical bodies of the Organization.

***

ANNEX 18

PROPOSED REVISED WORK PROGRAMME OF THE SUB-COMMITTEE AND PROVISIONAL AGENDA FOR COMSAR 9

			Target completion date/number of sessions needed for completion	Reference
1	**Global Maritime Distress and Safety System (GMDSS)**			~~COMSAR 7/23, section 3~~ COMSAR 8/18, section 3
	.1	**matters relating to the GMDSS Master Plan**	Continuous	~~COMSAR 7/23, paragraphs 3.1 to 3.4~~ COMSAR 8/18, paragraphs3.1 to 3.3
	.2	exemptions from radio requirements	Continuous	COMSAR 4/14, paragraphs 3.38 to 3.41
2	Promulgation of maritime safety information (MSI) (in co-operation with ITU, IHO, WMO and IMSO)			
	.1	**operational and technical co-ordination provisions of maritime safety information (MSI) services, including review of the related documents**	Continuous	~~COMSAR 7/23, paragraphs 3.5 to 3.13~~ COMSAR 8/18, paragraphs 3.4 to 3.7
3	**ITU World Radiocommunication Conference matters**		Continuous	~~COMSAR 7/23, paragraphs 4.2 to 4.5~~ COMSAR 8/18, section 4

Notes: 1 "H" means a high priority item and "L" means a low priority item. However, within the high and low priority groups, items have not been listed in any order of priority.

2 Struck-out text indicates proposed deletions and the shaded text shows proposed additions or changes.

3 Items printed in bold letters have been selected for the provisional agenda for COMSAR 9.

		Target completion date/number of sessions needed for completion	Reference
4	**Radiocommunication ITU-R Study Group 8 matters**	Continuous	~~COMSAR 7/23, paragraphs 4.1, 4.6 and 4.7~~ COMSAR 8/18, section 4
5	**Satellite services (Inmarsat and COSPAS-SARSAT)**	Continuous	~~COMSAR 7/23, section 5~~ COMSAR 8/18, section 5
6	**Matters concerning search and rescue, including those related to the 1979 SAR Conference and the implementation of the GMDSS**		
	.1 **harmonization of aeronautical and maritime search and rescue procedures, including SAR training matters**	20045	~~COMSAR 7/23, paragraphs 7.1 to 7.16~~ COMSAR 8/18, paragraphs 7.1 to 7.7
	.2 **plan for the provision of maritime SAR services, including procedures for routeing distress information in the GMDSS**	Continuous	~~COMSAR 7/23, paragraphs 7.17 to 7.25~~ COMSAR 8/18, paragraphs 7.8 to 7.12
	.3 **revision of the IAMSAR Manual**	Continuous	MSC 71/23, paragraph 20.2; ~~COMSAR 7/23, section 12~~ COMSAR 8/18, section 11
	.4 **medical assistance in SAR services**	20045	MSC 75/24, paragraph 22.29; ~~COMSAR 7/23; paragraphs 7.26 to 7.33~~ COMSAR 8/18, paragraphs 7.13 to 7.16

		Target completion date/number of sessions needed for completion	Reference
7	Casualty analysis (co-ordinated by FSI)	Continuous	MSC 70/23, paragraphs 9.17 and 20.4
H.1	Amendments to SOLAS chapter IV pursuant to the criteria set out in resolution A.888(21)	3 sessions	MSC 72/23, paragraph 21.33.1.2
H.2	**Developments in maritime radiocommunication systems and technology**	2005	MSC 74/24; paragraph 21.25.1; ~~COMSAR 7/23, section 11~~ COMSAR 8/18, section 10
~~H.3~~	~~**Large passenger ship safety**~~	~~2004~~	~~MSC 74/24, paragraph 21.4; COMSAR 7/23, section 10~~
H.4~~3~~	**Emergency radiocommunications, including false alerts and interference**	2006	~~COMSAR 7/23, section 6~~ COMSAR 8/18, section 6
H.5~~4~~	**Review of the OSV Guidelines** (co-ordinated by DE)	~~3 sessions~~ 2007	MSC 75/24, paragraph 22.4
H.6~~5~~	**Review of the 2000 HSC Code and amendments to the DSC Code and the 1994 HSC Code** (co-ordinated by DE)	2005	MSC 75/24, paragraph 22.8; MSC 76/23, paragraphs 8.19 and 20.4 COMSAR 8/18, section 12

		Target completion date/number of sessions needed for completion	Reference
~~H.7~~	~~**Review of the SOLAS and SAR Convention provisions regarding the treatment of persons rescued at sea**~~	~~2004~~	~~MSC 75/24, paragraphs 11.53 and 22.30.1; COMSAR 7/23, paragraphs 8.1 to 8.33~~
H.~~8~~6	**Measures to enhance maritime security**	200~~4~~5	MSC 75/24, paragraph 22.9; ~~COMSAR 7/23, section 16~~ COMSAR 8/18, section 13
~~L.1~~	~~**Revision of the forms of nuclear ship safety certificates** (co-ordinated by DE)~~	~~2005~~	~~MSC 75/24, paragraph 22.6; COMSAR 7/23, paragraph 20.6.4.1~~
L.~~2~~1	**Review of the FAL and SALVAGE Convention provisions to address the treatment of persons rescued at sea**	200~~4~~5	MSC 75/24, paragraphs 11.53 and 22.30.2; ~~COMSAR 7/23~~, ~~section 19~~ COMSAR 8/18, paragraph 8.6
L.~~3~~2	**Recommendations on high-risk oceanic crossings by adventure craft** (co-ordinated by NAV)	2005	MSC 76/23, paragraph 20.24

PROVISIONAL AGENDA FOR COMSAR 9

Opening of the session

1 Adoption of the agenda

2 Decisions of other IMO bodies

3 Global Maritime Distress and Safety System (GMDSS)

.1 matters relating to the GMDSS Master Plan

.2 operational and technical co-ordination provisions of maritime safety information (MSI) services, including review of the related documents

4 ITU maritime radiocommunication matters

.1 Radiocommunication ITU-R Study Group 8 matters

.2 ITU World Radiocommunication Conference matters

5 Satellite services (Inmarsat and COSPAS-SARSAT)

6 Emergency radiocommunications, including false alerts and interference

7 Matters concerning search and rescue, including those related to the 1979 SAR Conference and the implementation of the GMDSS

.1 harmonization of aeronautical and maritime search and rescue procedures, including SAR training matters

.2 plan for the provision of maritime SAR services, including procedures for routeing distress information in the GMDSS

.3 medical assistance in SAR services

8 Developments in maritime radiocommunication systems and technology

9 Review of the IAMSAR Manual

10 Review of the OSV Guidelines

11 Review of the 2000 HSC Code and amendments to the DSC Code and the 1994 HSC Code

12 Measures to enhance maritime security

13 Review of the FAL and SALVAGE Convention provisions regarding the treatment of persons rescued at sea

14 Recommendations on high-risk oceanic crossings by adventure craft

15 Work programme and agenda for COMSAR 10

16 Election of Chairman and Vice-Chairman for 2006

17 Any other business

18 Report to the Maritime Safety Committee

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ANNEX 19

ORAL STATEMENT BY THE DELEGATION OF SWEDEN

Regarding: COMSAR 8/WP.4/Add.1 – paragraph 8.13; COMSAR 8/WP.7 – paragraph 18.23 and COMSAR 8/WP.4 paragraph 7.2

Sweden states that we shall allow connection of radio systems such as AIS connected to the GMDSS powering system according to SOLAS IV/13 as is mentioned in the MSC 77/10/5 proposal to connect AIS to the reserve source of energy and make the necessary change in SOLAS chapter IV/13, if needed.

_____