

SUB-COMMITTEE ON RADIOCOMMUNICATIONS AND SEARCH AND RESCUE 9th session Agenda item 19 COMSAR 9/19 23 February 2005 Original: ENGLISH

REPORT TO THE MARITIME SAFETY COMMITTEE

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1 GENERAL

1.1 The Sub-Committee on Radiocommunications and Search and Rescue held its ninth session from 7 to 11 February 2005 at the Headquarters of the Organization under the chairmanship of Mr. U. Hallberg (Sweden).

1.2 The session was attended by delegations from the following countries:

ALGERIA	ITALY
ANGOLA	JAPAN
ARGENTINA	LATVIA
AUSTRALIA	LIBERIA
BAHAMAS	LITHUANIA
BAHRAIN	MALTA
BELGIUM	MARSHALL ISLANDS
BRAZIL	MEXICO
BULGARIA	MOROCCO
CANADA	NETHERLANDS
CHILE	NIGERIA
CHINA	NORWAY
COLOMBIA	PANAMA
COTE D'IVOIRE	PERU
CROATIA	PHILIPPINES
CUBA	POLAND
CYPRUS	PORTUGAL
DEMOCRATIC PEOPLE'S	REPUBLIC OF KOREA
REPUBLIC OF KOREA	ROMANIA
DEMOCRATIC REPUBLIC	RUSSIAN FEDERATION
OF THE CONGO	SAUDI ARABIA
DENMARK	SINGAPORE
ECUADOR	SOUTH AFRICA
EGYPT	SPAIN
ESTONIA	SWEDEN
FINLAND	TUNISIA
FRANCE	TURKEY
GERMANY	TUVALU
GREECE	UKRAINE
ICELAND	UNITED KINGDOM
INDONESIA	UNITED STATES
IRAN, (ISLAMIC REPUBLIC OF)	URUGUAY
IRELAND	VANUATU
ISRAEL	VENEZUELA

and by the following Associate Member of IMO:

HONG KONG, China

1.3 The following United Nations specialized agencies were also represented:

OFFICE OF THE UN HIGH COMMISSIONER FOR REFUGEES (UNHCR) INTERNATIONAL TELECOMMUNICATION UNION (ITU)

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 COSPAS-SARSAT PROGRAMME AGREEMENT (COSPAS-SARSAT) EUROPEAN CONFERENCE OF POSTAL AND TELECOMMUNICATIONS ADMINISTRATIONS (CEPT) INTERNATIONAL MOBILE SATELLITE ORGANIZATION (IMSO) **INTERNATIONAL CHAMBER OF SHIPPING (ICS)** 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 PORTS AND HARBORS (IAPH) INTERNATIONAL ASSOCIATION OF CLASSIFICATION SOCIETIES (IACS) **OIL COMPANIES INTERNATIONAL MARINE FORUM (OCIMF)** INTERNATIONAL FEDERATION OF SHIPMASTERS' ASSOCIATIONS (IFSMA) INTERNATIONAL LIFEBOAT FEDERATION (ILF) INTERNATIONAL COUNCIL OF CRUISE LINES (ICCL) INTERNATIONAL SAILING FEDERATION (ISAF) THE INTERNATIONAL MARINE CONTRACTORS ASSOCIATION (IMCA) WORLD NUCLEAR TRANSPORT INSTITUTE (WNTI) INTERNATIONAL MARITIME HEALTH ASSOCIATION (IMHA) WORLD MARITIME UNIVERSITY

Secretary-General's opening address

1.5 In welcoming the participants, the Secretary-General referred to the image of shipping among the general public and politicians and expressed the opinion that the contribution shipping made to the global economy and the community as a whole was being overlooked, even though shipping was largely safe, secure, efficient and environmentally friendly. He called on all those who cared about shipping to work together to reverse this wrong perception and to endorse the theme for this year's World Maritime Day 2005: "International Shipping – Carrier of World Trade", which had been chosen to highlight the role of shipping today and the progress that had been made by shipping in terms of safety and the environment.

The Secretary-General referred to the adoption, by MSC 78, of amendments to the SOLAS and SAR Conventions and the associated Guidelines on the treatment of persons rescued at sea, as prepared by COMSAR 8, complementing the obligation of masters to render assistance to persons in distress at sea by obliging Governments to co-ordinate and co-operate so that ships providing assistance by embarking persons in distress are released from their further obligations with minimum deviation from the ship's intended voyage. The Secretary-General expressed the view that these amendments and the associated Guidelines, the adoption of a revised NAVTEX Manual as well as the proposed amendments to the IAMSAR Manual were milestones in IMO's endeavours to maintain up-to-date operational standards for the safety of life at sea and to provide sound advice to Governments, shipowners and seafarers in all their corresponding activities.

In the context of measures to enhance maritime security, the Secretary-General stated that the Sub-Committee was expected to consider technical matters related to the development of long-range identification and tracking systems for ships, which would assist the Committee, at its May session, to progress the consideration of the issue before it adopted relevant amendments to SOLAS chapter XI-2. In the same context and of particular importance for masters and seafarers was the ship security alert system priority signal and the development of a protocol for testing such alert systems.

Recalling that, in the context of its work on passenger ship safety, the MSC had approved casualty threshold criteria for return to port, including a time to remain habitable for evacuation and a time to recover, the Secretary-General emphasized that these criteria were of key importance as they would guide the Sub-Committee in developing, from its own perspective, relevant requirements for passenger ships to enable them to maintain their essential systems and return safely to a port.

The Secretary-General acknowledged that since its establishment in 1993, the Joint ICAO/IMO Working Group on Harmonization of Aeronautical and Maritime SAR had played a significant role to the further development of a mutually supportive regulatory and administrative framework for a global SAR system by preparing amendments to the Maritime SAR Convention, the IAMSAR Manual and Annex 12 to the ICAO Convention, as well as to the development of a number of associated guidelines.

In response to the recommendation of the 2000 Florence Conference on SAR and the GMDSS that regional maritime RCCs should be established at strategic locations around the African coastline facing the Atlantic and Indian Oceans, the Secretary-General reminded delegates that an International SAR Fund had been established last year as a multi-donor trust fund pursuant to the proposal of the Sub-Committee as endorsed by the MSC and the Council. The Secretary-General took the opportunity to thank all donors and those who have pledged contributions for their generosity; also to add his voice to that of the Council in inviting potential donors to come forward to enable the Organization to further assist developing countries to enhance their maritime SAR capability and thus be in a stronger position to contribute to the effective implementation of the Global SAR Plan. He specifically mentioned the recent commitment of Inmarsat Ltd. to provide the Mombasa regional MRCC and its two subordinate MRSCs in the Seychelles and Tanzania with valuable communications equipment. The Secretary-General also thanked Inmarsat Ltd. for their further financial pledges to the Fund.

In his concluding remarks referring to the tsunami disaster in the Indian Ocean, the Secretary-General recalled that, from the outset, IMO had joined the rest of the world in expressing the shock and sadness at those dreadful events and took the opportunity, once again, to convey the Organization's deepest compassion to all those caught up in this tragedy. The Secretary-General informed the Sub-Committee that a Tsunami Maritime Relief Fund, through which the contributions of the Organization and the shipping industry as a whole could be channelled to the UN disaster relief agency, had been established and that, to date, some £35,000 had been collected, for which he thanked the donors, including the staff and interpreters, for their generosity.

The Secretary-General informed the Sub-Committee that, subsequent to the above activities, IMO had developed a joint plan for future actions to be undertaken together with the International Association of Marine Aids to Navigation and Lighthouse Authorities and the International Hydrographic Organization. And, as the crisis moved into the recovery and restoration phases, the three organizations, together with the World Meteorological Organization, would be focusing their attention principally on ensuring the integrity of the maritime

navigational infrastructure to ensure the safe navigation of ships, including those carrying urgently needed relief supplies. He also reported that IMO had agreed to a request from the United Nations Environment Programme to send two IMO experts to help set up an environmental crisis centre in Indonesia – and stood ready to play a role in the development of an early tsunami warning system in the Indian Ocean.

The Secretary-General noted the full support of the entire shipping sector and its willingness to provide further help wherever practical and appropriate – not only to restore and rehabilitate the stricken region but, more importantly, to restore, among the peoples of the countries affected, faith in humanity and hope, among their children, that they were not and would not be left alone.

Chairman's remarks

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

Adoption of the agenda and related matters

1.7 The Sub-Committee adopted the agenda (COMSAR 9/1) amending agenda item 13 "Passenger ship safety", as approved by MSC 79, and agreed, in general, that the work of the Sub-Committee should be guided by the annotations to the provisional agenda and timetable (COMSAR 9/1/1), as amended. The agenda of the session, as adopted, with the list of documents submitted under each agenda item, is set out in document COMSAR 9/INF.16.

2 DECISIONS OF OTHER IMO BODIES

2.1 The Sub-Committee noted the decisions and comments pertaining to its work made by MSC 78, FAL 31, NAV 50, C 92, C 93 and MSC 79, as reported in documents COMSAR 9/2, COMSAR 9/2/1 and COMSAR 9/2/2; the outcome of STW 36, as orally presented by the Secretariat; and took them into account in its deliberations when dealing with relevant agenda items.

Method of work related to new work programme items

2.2 As reported in paragraph 32 of document COMSAR 9/2/2, the Sub-Committee noted that MSC 78 had agreed that a decision to include a new item in a Sub-Committee's work programme did not mean that the Committee had agreed with the technical aspects of the proposal. Therefore, if the Committee decided to include the item in the Sub-Committee's work programme, detailed consideration of the technical aspects of the proposal and the development of appropriate requirements and recommendations would be left to the sub-committee concerned.

Trial reporting systems

2.3 With respect to the new reporting system, the Sub-Committee noted that MSC 79, taking into account the views of MEPC 52 and their endorsement by C 93, had decided to halt the trial of the new reporting procedure and re-establish the previous reporting procedure with immediate effect.

Outcome of C 92

2.4 The Sub-Committee noted that C 92 session had:

- .1 approved Guidelines for media access to meetings of Committees and their subsidiary bodies;
- .2 instructed IMO bodies to follow the above Guidelines when applying their Rules of Procedure on requests from the news media to attend their meetings;
- .3 noted that an accreditation system would be established to allow automatic access to IMO meetings to representatives of the specialist maritime media; and requested the Secretary-General, when proceeding with the establishment of such a system, to take into account similar systems applying elsewhere (e.g. in the United Nations);
- .4 decided that the distribution of hard copies of meeting documents to IMO Member States be limited to one copy per delegation, as from 1 July 2004, subject to some flexibility in recognition of the fact that some Member States may have difficulties in accessing the documents on the IMODOCS website; and
- .5 decided that non-governmental organizations would not receive meeting documents in hard copy as from 1 July 2004.

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 2004, the Secretariat had issued Corr.10 to amend GMDSS/Circ.8 (Master Plan) in July 2004. Countries providing information for that circular were: Brazil, Mexico, Norway, Romania, the Russian Federation, Sweden, Ukraine and the United States.

3.2 The Secretariat informed the Sub-Committee that since issuing GMDSS/Circ.8/Corr.10, it had received updated information from Ecuador, Estonia, Greenland (Denmark), Hong Kong, China, Norway, South Africa and Uruguay mostly regarding installation of sea areas A1/A2 and NAVTEX facilities. The Secretariat planned to issue GMDSS/Circ.8/Corr.11 in March 2005.

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 noted that MSC 78 had:
 - .1 adopted the proposed revised NAVTEX Manual and approved the associated MSC/Circ.1122, having decided that the revised Manual should enter into force on 1 January 2006; and
 - .2 approved COMSAR/Circ.34 on Clarification on the use of NAVTEX $B_3 B_4$ characters = 00 and NAVTEX service areas.

3.5 The Sub-Committee noted with appreciation information provided by the Chairman, NAVTEX Co-ordinating Panel (COMSAR 9/INF.7) summarizing the current issues being addressed by the Panel and its actions/activities since COMSAR 8.

REPORT OF THE 14TH SESSION OF THE BALTIC/BARENTS SEA REGIONAL CO-OPERATION ON THE GMDSS (BBRC/GMDSS-14)

3.6 The Sub-Committee noted information provided by Latvia (COMSAR 9/INF.5) on the report of the 14th session of the Baltic/Barents Sea Regional Co-operation on the GMDSS (BBRC/GMDSS-14).

USE OF MF AND HF NBDP

3.7 The Sub-Committee briefly discussed document COMSAR 9/3 (Denmark), listing a number of aspects concerning operation and functionality of NBDP and indicating the need for retaining NBDP as an element of the GMDSS, and decided to refer it to the GMDSS Working Group for detailed consideration with a view to advise Plenary accordingly.

Report of the Working Group

3.8 In considering the relevant parts of the GMDSS Working Group report (COMSAR 9/WP.4, section 3), the Sub-Committee noted that the Working Group had considered the four options suggested by Denmark (COMSAR 9/3, paragraph 18) concerning retaining NBDP as an element of the GMDSS, namely:

- .1 keeping NBDP as an element of the GMDSS and making no change to the existing carriage requirements;
- .2 keeping NBDP as an optional element of the GMDSS for example for use onboard special SAR-ships, but change capabilities for NBDP to be non-mandatory in the carriage requirements concerning MF/HF installations for the GMDSS;
- .3 replacing NBDP by another appropriate communication systems offering basically the same or similar functional capabilities as the existing NBDP system, including FEC broadcasting mode of operation; and
- .4 suppressing the use of NBDP on MF and HF totally as an element of the GMDSS.

3.9 However, owing to the complexity of the issue, the Sub-Committee agreed that none of the aforementioned options could provide a complete solution. Regarding the current use of NBDP, the Sub-Committee also agreed that NBDP was currently used for broadcasting of MSI, ship reporting, weather forecasts and for business communications, e.g. by fishing fleets. It was noted that all these functions could in principle be provided by alternative data communications technology. However, the issue of GMDSS compliance would need to be addressed before the NBDP requirement could be removed completely.

3.10 The Sub-Committee further agreed that NBDP was not used for distress communications in sea areas A1, A2 and A3. It also noted that there were no reports of language difficulties in distress situations.

3.11 The Sub-Committee concurred that NBDP would be useful for providing distress communications in certain situations in sea areas A4 when other means of communication are no longer reliable. However, this functionality could be preserved using the dedicated HF distress and safety frequencies only.

3.12 As to the replacement of NBDP for general communications, the Sub-Committee recognized that modern digital technologies could provide many advantages with respect to the types of service that could be made available. However, these new services would make more intensive use of the present spectrum available, thus making it necessary to ensure that the present designated use within Appendices 17 and 25 of the Radio Regulations is reviewed and other avenues explored with respect to spectrum sharing with other radiocommunication services.

3.13 With a view to providing guidance for the future work of IMO and ITU on the use of NBDP and its implications on spectrum use, the Sub-Committee concluded that:

- .1 there was no need to retain NBDP for the original reason, i.e. to overcome language difficulties;
- .2 an HF system able to transmit data from shore to ship was necessary for dissemination of MSI in sea areas A4;
- .3 there was a need for an HF general communications system able to transmit data for transmission of observations and position reports from ships in sea areas A4;
- .4 NBDP carriage requirements in sea areas A3 could be deleted provided that a suitable transition period was used and that current installations were not immediately invalidated by the deletion;
- .5 due to the more robust propagation of NBDP compared to voice, NBDP could not immediately be discontinued in sea areas A4 as a distress follow up communications;
- .6 the development of new technology for systems able to transmit data in the MF/HF bands was supported; and
- .7 it was acceptable that this new technology would make use of the frequencies currently being used for NBDP (for the time being excluding the dedicated distress communications frequencies).

3.14 The Sub-Committee further noted that in the aforementioned points, the term "system able to transmit data" included both new technology systems as well as the current NBDP and that the points above include, but are not limited to, actual SOLAS chapter IV carriage requirements. The Sub-Committee approved the liaison statement to ITU Working Party 8B, on Developments in maritime radiocommunication systems and technology, given at annex 1, in order to guide the further work of ITU Working Party 8B, and instructed the Secretariat to convey it to the April meeting of ITU Working Party 8B. The Committee was invited to endorse the action taken.

3.15 The Sub-Committee also agreed that if changes were to be done concerning NBDP, this might require amendments to the Radio Regulations and it would be necessary to complete inputs to the ITU-R Study Groups working on WRC issues by summer 2006. The Sub-Committee noted that the Committee's approval was necessary prior to revising SOLAS chapter IV with

respect to NBDP requirements and that inputs from Administrations to the Committee requesting such revisions would be required.

3.16 The Sub-Committee further recommended that the Member States take early action to review the future role of the NBDP systems and to provide inputs to the appropriate technical bodies in IMO and ITU taking due note of the conclusions listed in paragraph 3.13 above.

SPECIAL SESSION ON RESPONSE TO THE INDIAN OCEAN TSUNAMI DISASTER

3.17 Following the catastrophic events after the tsunami in the Indian Ocean on 26 December 2004, a special session on the response to the disaster was held on Wednesday, 9 February 2005, under the chairmanship of the Chairman of the COMSAR Sub-Committee, Mr. Hallberg.

3.18 In accordance with the relaxed deadline on items related to the tsunami which was agreed by the Secretary-General at the interagency meeting on 12 January 2005, the Sub-Committee had several documents for consideration, COMSAR 9/3/1 and COMSAR 9/3/2 (Secretariat), COMSAR 9/3/3 (IHO), COMSAR 9/3/4 (Japan), COMSAR 9/3/5 (Chairman of the COMSAR Sub-Committee), COMSAR 9/3/6 (United Kingdom), COMSAR 9/3/7 (ILF), COMSAR 9/INF.13 (Secretariat), COMSAR 9/INF.14 (IALA) and COMSAR 9/INF.15 (Japan).

- 3.19 The objectives of this session were to:
 - .1 provide information on the actions taken by IMO and several organizations and maritime authorities following the tsunami, including the outcomes of the United Nations World Conference on Disaster reduction;
 - .2 facilitate further discussion on the joint action plan, in relation to hydrographic survey and navigational aids requirements;
 - .3 discuss proposals for amendments to WWNWS and other guidance documents; and
 - .4 discuss appropriate maritime contributions to the establishment of the tsunami early-warning system in the Indian Ocean.

3.20 In a summary of the disaster, the Sub-Committee recalled that on 26 December 2004, a large undersea earthquake measuring 9.0 on the Richter scale occurred off the west coast of Indonesia's northern Sumatra Island, triggering a massive tsunami across the north Indian Ocean, which had brought devastation to several countries in the North Indian Ocean, Bay of Bengal region and a total death toll so far nearing 300,000.

3.21 Tsunami-related deaths were recorded in Sri Lanka, India, Indonesia, Thailand, Malaysia, Myanmar, Maldives, Bangladesh, Somalia, Tanzania and Kenya. The loss of life was particularly severe in Indonesia, Sri Lanka, India and Thailand. The toll for the dead and missing in Indonesia alone has climbed to more than 240,000, with tens of thousands still unaccounted for. The death toll in Sri Lanka climbed to 38,000 and was expected to go higher. In India, at least 10,672 had died in Tamil Nadu State and the Andaman and Nicobar Islands. The death toll on Thailand's west coast had climbed to 5,400, including some 1,765 foreigners from at least 36 countries. More than 400 combined deaths had been reported in the other countries.

3.22 The Sub-Committee expressed deepest condolences to the countries concerned for the many lives lost and profound sympathy with all those who have been affected by the catastrophe, over such a large area of the Indian Ocean region.

Presentations

3.23 The Director, Maritime Safety Division gave a presentation in which he detailed the actions undertaken by IMO including the establishment of the Tsunami Maritime Relief Fund and the inter-agency meeting held on 12 January 2005 with representatives from IHO and IALA, which resulted in a joint action plan for the Organizations (COMSAR 9/3/1). Following a request from the United Nations Environment Programme, IMO had also despatched two staff members to help set up an environmental crisis centre in Indonesia.

He also described the attendance by IMO at the UN World Conference on Disaster Reduction, held in Kobe, Japan, from 18 to 22 January 2005, during which he had described the actions undertaken by IMO and pledged IMO's willingness to contribute to the establishment of a tsunami early-warning system for the Indian Ocean and other regions as required.

That Conference had adopted:

- the Hyogo Declaration; and
- the Hyogo Framework for action 2005-2015,

to renew the commitment of the international community towards disaster risk reduction, taking concrete measures in line with the Yokohama Strategy adopted by the 1994 Yokohama Conference. The Conference had also released the "Common Statement of the Special Session on Indian Ocean Disaster" (A/CONF.206/L.6/Rev.1). In that statement, the Conference recommended establishing and strengthening the regional disaster reduction mechanism for all relevant natural hazards and outlines elements of a strategy for establishing an Indian Ocean tsunami early-warning system (COMSAR 9/3/2).

3.24 The Secretariat gave further information to the Sub-Committee in regard to the response by IMO including a graphic first hand account from one of the experts who had visited the devastated areas. The damage to Indonesia's transport infrastructure was reported to be considerable. 14 port facilities in Aceh and five in North Sumatra had sustained heavy damage.

3.25 The Secretariat reported that much of the maritime-related damage had been inflicted on the fishing industries in the affected areas. As a result, it had made preliminary contact with the Fisheries and Agriculture Organization (FAO) of the United Nations to see how the long established collaborative relationship between the two Organizations in the areas of fishing vessel safety and the training of personnel might be extended in the context of the tsunami. FAO had reported that up to 60,000 fishermen may have lost their lives in the tragedy.

3.26 In addition, IMO's Regional Co-ordinator for the East Asian region had conducted meetings with the Indonesian maritime authorities. From these discussions, it had emerged that there was no major concern regarding possible changes of water depths at the country's ports, although coastal radio stations and maritime safety offices in Aceh province had been destroyed.

3.27 The Secretariat re-iterated its readiness to field needs' assessment missions, in co-operation with other agencies and organizations where appropriate, to countries affected by the tsunami, and that discussions with representatives of those countries had begun. It was,

however, noted from those discussions that few were yet in a position to request assistance from the Organization due to difficulties in ascertaining requirements at this stage.

3.28 In addition to acknowledging the aforesaid joint action plan, the representative from IHO presented general information on IHO and described the importance of accurate hydrographic surveys to the safe navigation of ships. He described initial reports from IHO Member States in the affected areas, for instance that the Malacca Strait appeared to be unaffected and was open to traffic; that Sri Lanka had reported the loss of a survey vessel and important survey equipment, but that other areas appeared to be unaffected, however, full details remained sketchy from the region. IHO Member States both in the region and externally, had provided offers of assistance and a detailed survey was underway at present in relation to the ocean floor near the epicentre of the earthquake as considerable differences in depths in the area had been reported.

The IHO would be holding the North Indian Ocean Hydrographic Commission in Jeddah, Saudi Arabia, 28 February to 1 March 2005, where it was expected that IHO Member States would detail the requirements of the hydrographic services throughout the affected area.

3.29 The representative from IALA also acknowledged the joint action plan in relation to the evaluation of the damage to navigational aids in the affected area. He described damage reports received from Member States in the affected areas but again the detailed information was somewhat sketchy. He stated that while offers from IALA Member States for donations of equipment had been received, funding and transportation was a problem. The lack of buoy tenders in particular was a source of concern. Unused navigational aids such as buoys had been donated by several Member States, but the means to deliver and lay them out was not yet secured. At present Indonesia had requested assistance in the recovery and restoration of navigational aids and IALA intended to despatch a team of probably 8 experts to assist in the restoration of navigational aids in the region. IALA was willing to participate in any joint assessment mission to the affected areas, with the approval of the Member States concerned, which could be timely and valuable.

3.30 The delegation of Japan gave a presentation by using a video produced by the Japan Meteorological Agency which described the phenomena of a tsunami in simple but very effective terms, as part of a package given in Japan for the purpose of education and promotion of public awareness on tsunami. This also showed actual footage of such a tsunami and how it is generated. He also described the programme of prevention and public preparation and awareness carried out over many years in Japan. The World Conference on Disaster Reduction, which was held, in January 2005, in Kobe where a large-scale earthquake struck ten years ago, had recognized the importance of international co-operation to tackle the prevention and minimization of tsunami disasters.

The delegation of Japan proposed possible actions to be taken by the Organization in conjunction with the COMSAR Sub-Committee and other operational aspects, as follows:

- .1 to establish ways of sending tsunami warning messages through established maritime systems such as NAVAREA, NAVTEX, MSI, etc.;
- .2 to consider the establishment of necessary systems for receiving tsunami warnings by ships, if possible, including coastal trading ships, fishing vessels and pleasure crafts; and
- .3 to develop ship emergency action plans for ships and ports and a necessary scheme of drills against tsunami.

The delegation stated that the Government of Japan recognized the importance and necessity of the activities of IMO for tsunami preparedness and response, and was keen to support these activities. Japan, was a country with technical knowledge and expertise accumulated through experience of these kinds of disasters. Therefore, Japan was ready to provide support for preparative activities to the countries affected by the tsunami, for example training courses on immediate response, including the emergency evacuation of ships, as well as training courses on port development planning to cope with earthquakes and tsunamis. A statement by the delegation of Japan is attached in annex 2.

3.31 The representative from IAPH advised the Sub-Committee of the resolution adopted by its Executive Committee at its recent meeting in Yokohama, Japan on "Action to strengthen preparedness of ports for earthquake and tsunami disasters" (COMSAR 9/INF.13, annex 2). IAPH would make every effort to implement as soon as possible measures and actions such as:

- .1 improving awareness among the member ports about the importance of the preparedness for earthquake and tsunami disasters;
- .2 sharing and/or transferring experiences and know-how among member ports by holding seminars and workshops in collaboration with UN agencies and other international organizations; and
- .3 working together with such international organizations to develop guidelines on effective preparedness for earthquake and tsunami disasters and mitigating their consequences.

3.32 A presentation from the Intergovernmental Oceanographic Commission of UNESCO (IOC) was given, in their absence, by the Secretariat, providing details of the implementation plan "Towards a Tsunami Warning and Mitigation System in the Indian Ocean". This plan gave details of regional meetings planned by IOC and of their strategy in involving national organizations and authorities in the establishment of the system, based on the Pacific Ocean Tsunami-warning system which had been operating successfully since 1968. IOC advised that they intended to have the structural requirements for an Indian Ocean system within 6 months and would be engaged in capacity building and training in the region.

3.33 The representative from ICCL made a statement in relation to a donation of \$25,000 to the Tsunami Maritime Relief Fund, which would be presented to the Secretary-General. A statement by the observer from ICCL is attached in annex 2.

3.34 The Sub-Committee expressed appreciation to ICCL for their generosity and the Secretary-General for organizing the special session on the tsunami response at such short notice and also appreciated the information provided by the various organizations and the delegation of Japan.

Documents submitted

3.35 The Sub-Committee acknowledged the extraordinary circumstances that led to the extended deadline for papers referring to tsunami issues and appreciated the efforts of the Secretary-General in extending the deadline, but recognized that as this deadline was very close to the opening of the session that many delegations had not had sufficient time to fully analyse the documents, particularly those which included substantive policy aspects.

3.36 The Sub-Committee considered document COMSAR 9/3/5 (Chairman of the COMSAR Sub-Committee) which proposed measures that could be taken by IMO to achieve a closer harmonization and more economical use of facilities and human resources when providing maritime operational services (MOS) as defined in IMO instruments. While some delegations had some sympathy for the proposals, it was considered that it contained many aspects that should be discussed at Committee level first. The Chairman was therefore advised to re-submit the paper to MSC 81 in accordance with the Committee's guidelines. However, in re-building the infrastructure affected by the disaster, Member Governments should consider the rationalization of available facilities.

3.37 The Sub-Committee noted the draft resolution of the UN General Assembly and the resolution of the International Association of Ports and Harbours (IAPH) concerning strengthening, rehabilitation, reconstruction and prevention in the aftermath of the Indian Ocean tsunami disaster (COMSAR 9/INF.13).

3.38 The Sub-Committee also noted documents COMSAR 9/3/1 and COMSAR 9/3/2 (Secretariat) which gave details of the outcomes of the inter-agency meeting held at IMO on 12 January 2005 and of the United Nations World Conference on Disaster Reduction held at Kobe, Japan, from 18 to 22 January 2005.

3.39 In addition, the Sub-Committee noted information provided by IALA (COMSAR 9/INF.14) in relation to a project called the Aids to Navigation Information Service (ANIS) with the objective to provide automatically real-time information to ships on the status of aids to navigation that are critical for the safety of navigation and the protection of the marine environment.

3.40 The Sub-Committee also noted information provided by Japan (COMSAR 9/INF.15) relating to activities of the Japan Coast Guard, as the competent authority for hydrographic survey in Japan, who had established a "Tsunami Information Map", which showed the predicted motion of a tsunami or tidal wave at sea in detail, including Japanese ports and harbours based on a tsunami simulation.

3.41 The Sub-Committee considered document COMSAR 9/3/7 (ILF), which, in the aftermath of the recent tsunami disaster in the Indian Ocean, identified some shortcomings in existing arrangements for the deployment and ongoing management of specialized maritime SAR assistance teams within disaster zones. Some conceptual ideas in relation to international SAR arrangements were proposed and some delegations expressed some affinity with the proposals in principle. The Sub-Committee decided to refer the document to the next session of the Joint ICAO/IMO Working Group for consideration and advice.

3.42 The delegation of Venezuela proposed that IMO should consider developing guidance on action to be taken by relevant international organizations and individual States following a maritime catastrophe or natural disaster, or where seafarers were affected. Such guidance could cover topics such as preventive measures, including public education and early warnings to seafarers and ports, action to be taken by ships in ports, at anchorage or at sea and dissemination of early warnings by ships at sea, damage assessment and reconstruction. A statement by the delegation of Venezuela is attached in annex 2.

3.43 In relation to operational and technical co-ordination provisions of maritime safety information (MSI) services, including the review of the related documents, the Sub-Committee considered documents COMSAR 9/3/3 (IHO), COMSAR 9/3/4 (Japan) and COMSAR 9/3/6 (United Kingdom) which contained proposals for amendments to the NAVTEX, SafetyNET and

World-Wide Navigational Warning Service manuals and guidance documents that may be necessary in respect to the promulgation of tsunami and other urgent natural disaster warnings.

3.44 The Sub-Committee agreed to establish a small drafting group for the amendments, to provide advice to the Sub-Committee and Committee, bearing in mind that, in accordance with the procedures of the WWNWS, the amendments had first to be evaluated and approved by the IHO Commission on Promulgation of Radio Navigational Warnings (CPRNW), which was scheduled to meet in September 2005. In the interim, NAVAREA Co-ordinators would be advised to utilize existing text messages to promulgate natural disaster warnings as exceptional circumstances and should immediately broadcast such warnings using the highest priority and all existing means as appropriate. In this regard, the delegation of the United Kingdom, the Chairman of the IMO NAVTEX Co-ordinating Panel considered that there was enough flexibility in the present text to allow for a NAVAREA Co-ordinator to issue such warnings on natural disasters.

3.45 In considering how to achieve greater liaison and co-operation between the tsunami warning service of the Intergovernmental Oceanographic Commission, or other warning services that may be established, the national co-ordinators and NAVAREA Co-ordinators so that the established infrastructure for the promulgation of maritime safety and meteorological information to ships is used to optimum effect, the Sub-Committee recognized that due to the characteristics of a tsunami, ships on deep sea passage were not usually affected by a tsunami, or even aware of its passing, but that ships and small vessels in shallow coastal waters or in ports, where the tsunami obtains its greatest height and power, were potentially in great danger. The Sub-Committee, while recognizing that the issue was complex, initially considered ways and means by which tsunami warning information could be forwarded to those ships and non-SOLAS vessels that were in coastal waters or ports, especially in regard to local craft.

3.46 The Sub-Committee established a drafting group and instructed it, taking into account documents COMSAR 9/3/3 (IHO), COMSAR 9/3/4 (Japan) and 9/3/6 (United Kingdom) and the discussions and conclusions made in Plenary, to:

- .1 evaluate the promulgation of maritime safety information via the World-Wide Navigational Warning Service in respect to tsunami and other natural disaster warnings to all ships;
- .2 exchange views on any consequential amendments which may be necessary to the existing base manuals and guidance documents of the World-Wide Navigational Warning Service, the International SafetyNET and the NAVTEX systems; and
- .3 develop terms of reference for a Correspondence Group to consider:
 - .1 the promulgation of tsunami and other natural disaster warnings for vessels which are not subject to the provisions of the 1974 SOLAS Convention (SOLAS regulation I/3(a)); and
 - .2 the development of guidelines for disaster emergency preparedness and response for ships at sea and in coastal areas.

3.47 Having received the report of the drafting group, the Sub-Committee took action as set out in the ensuing paragraphs.

Promulgation of tsunami warnings and of other natural disaster warnings

3.48 The Sub-Committee noted that the guidance provided in resolution A.706(17) on World-Wide Navigational Warning Service did not apply to purely national warnings services. World-Wide Navigational Warning Service (WWNWS) coastal warnings and NAVAREA warnings promulgate hazards to seaward of the fairway buoy or pilot station. These warnings should be broadcasted using the International SafetyNET and/or the NAVTEX systems where available. Local warnings for port and inshore areas had not, until now, been considered appropriate for inclusion in SafetyNET and/or NAVTEX broadcasts.

3.49 The Sub-Committee agreed that although tsunami warnings were currently included within the scope of the WWNWS as coastal navigational warnings they needed to be broadcasted also to port and inshore areas. Hence, the Sub-Committee concluded that a complete review of resolution A.706(17) together with the associated WWNWS guidance documents^{*} was required. The Sub-Committee agreed that the IHO Commission for the Promulgation of Radio Navigational Warnings (CPRNW) should, as a first step, review the WWNWS guidance documents together with the proposals and suggestions contained in documents COMSAR 9/3/3 (IHO), COMSAR 9/3/4 (Japan) and 9/3/6 (United Kingdom) and taking into account the conclusions of COMSAR 9. Once CPRNW had completed its review, it would be able to establish the recommended actions. The Organization would then be able to consider the report of CPRNW and to pursue the matter further.

3.50 In the interim the Sub-Committee approved COMSAR/Circ.36 on Broadcast of warnings for tsunami and other natural disasters and invited the Committee to endorse this action.

Amendments to the World-Wide Navigational Warning Service, the SafetyNET and the NAVTEX system documents

3.51 In view of the discussion and conclusion recorded in paragraph 3.49 above, the Sub-Committee concluded that it was not prudent at this stage to embark on any discussions of the amendments which may be necessary to the existing base manuals and WWNSW guidance documents.

Correspondence Group

3.52 The Sub-Committee agreed to establish the Correspondence Group under the co-ordination of Japan^{**} and instructed it to consider the issue of:

^{*} The WWNWS guidance documents include the IMO International SafetyNET Manual, the IMO NAVTEX Manual, the Joint IMO/IHO/WMO Manual on Maritime Safety Information, the IHO/IMO World-Wide Navigational Warning Service Guidance Document – Special Publication No. 53, and the Joint IMO/IHO/WMO Manual on Maritime Safety Information – Special Publication S-53 – Appendix 1.

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- .1 the promulgation of tsunami and other natural disaster warnings for vessels which are not subject to the provisions of the 1974 SOLAS Convention (i.e. passenger and cargo ships engaged on domestic voyages, cargo ships engaged on international voyages whose gross tonnage is less than 300, fishing vessels, ships of primitive build and pleasure yachts not engaged in trade); and
- .2 the development of guidelines for disaster emergency preparedness and response for ships at sea and in coastal areas, as proposed by the delegation of Japan.

4 ITU MARITIME RADIOCOMMUNICATION MATTERS

RADIOCOMMUNICATION ITU-R STUDY GROUP 8 MATTERS

General

4.1 The Sub-Committee recalled that COMSAR 8 had:

- .1 approved the questionnaire (COMSAR 8/18, annex 5) which should be used to assess the actual loading on the DSC channels; and
- .2 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 (Denmark) for collation and presentation to COMSAR 9.

4.2 The Sub-Committee noted that MSC 78 had approved COMSAR/Circ.35 on Recommendations on MF/HF DSC test calls to coast stations, prepared by COMSAR 8.

4.3 The Sub-Committee also noted that MSC 78 had endorsed the Sub-Committee's action in instructing the Secretariat to convey:

- .1 a liaison statement concerning simplification of DSC operation to the IEC TC 80 and the ITU-R WP.8B; and
- .2 a liaison statement on Developments in maritime radiocommunication systems and technology to the ITU-R WP.8B, for consideration.

4.4 The Sub-Committee briefly considered document COMSAR 9/4 (Secretariat) containing three liaison statements from WP.8B on:

- .1 developments in maritime radiocommunication systems and technology;
- .2 issues concerning the preliminary draft revision of recommendation ITU-R M.1467; and
- .3 the issue of DSC complexity,

and document COMSAR 9/4/2 (Denmark) providing information on the actual DSC channel loading reported by Administrations and collected by Denmark, as a co-ordinator, and referred them to a GMDSS Working Group, to be established, for detailed consideration.

ITU WORLD RADIOCOMMUNICATION CONFERENCE MATTERS

General

4.5 The Sub-Committee noted that, in order to prepare a draft IMO position on maritime related matters to the World Radiocommunication Conference to be held in 2007 (WRC-07), COMSAR 8 had proposed and MSC 78 had approved the establishment of a Joint IMO/ITU experts group with the terms of reference given in annex 3 to COMSAR 8/18, to meet in London, United Kingdom, in June 2004, to commence the work and then to continue its activity by correspondence via e-mail. Subsequently the meeting was endorsed by the ninety-second session of the Council.

4.6 The Sub-Committee also noted that the meeting of the Joint IMO/ITU Experts Group was held from 23 to 24 June 2004, at IMO Headquarters, and its report was issued as document COMSAR 9/4/1.

Establishment of a working group

4.7 In order to consider documents submitted under this agenda item in detail, the Sub-Committee established the GMDSS Working Group and instructed it to consider documents COMSAR 9/4, COMSAR 9/4/1, annex 3, COMSAR 9/4/2 and, taking into account the decisions made at Plenary, to:

- .1 prepare a draft MSC resolution on Adoption of amendments to resolution A.801(19), annex 4 concerning Criteria for providing a NAVTEX service;
- .2 further develop the draft IMO position on maritime issues to WRC-07 and, if recommended that the matter should be further considered at an IMO/ITU experts group meeting, prepare appropriate justification and TOR;
- .3 prepare, if deemed appropriate, liaison statements to WP.8B on matters of the Organization's interest and, in particular, concerning the simplification of DSC operational procedures; and
- .4 provide appropriate comments and/or recommendations,

for consideration by Plenary.

Report of the Working Group

4.8 Having received and considered the report of the GMDSS Working Group (COMSAR 9/WP.4, section 4), the Sub-Committee approved it, in general, and took action as indicated hereunder.

Radiocommunication ITU-R Study Group 8 matters

4.9 The Sub-Committee concurred with the recommendations of ITU-R WP.8B concerning NAVTEX (COMSAR 9/4, annex 2 – see paragraph 4.2.2) and endorsed the draft MSC resolution on Adoption of amendments to resolution A.801(19) – Provision of Radio Services for the Global Maritime Distress and Safety System (GMDSS), given at annex 3, for submission to MSC 80 with a view to adoption.

4.10 The Sub-Committee also approved the liaison statement to ITU-R WP.8B, given at annex 4, concerning the technical characteristics of NAVTEX and reliability predictions for MF communications in sea area A2, and instructed the Secretariat to convey it to WP.8B April meeting for consideration. The Committee was invited to endorse the action taken.

4.11 The Sub-Committee further approved the liaison statement to ITU-R WP.8B and IEC TC80 addressing the issue of DSC complexity, given at annex 5. There was some concern in the Sub-Committee that the proposed actions to expand the guidance contained in Recommendation ITU-R M.493-11 in respect of DSC acknowledgements to the various categories of DSC calls, was not precisely delineated and could cause confusion. One view was that the procedures should have been based on the simpler class D equipment. However, due to the lack of time to provide a response to the February 2005 meeting of IEC TC80 the immediate points of concern were incorporated into the liaison statement. It was further recognized that this work was still at an initial stage at ITU-R. The Secretariat was instructed to convey the liaison statement to IEC in time for the TC80 meeting in February 2005 and to ITU-BR for consideration. The Committee was invited to endorse the action taken.

ITU World Radiocommunication Conference matters

4.12 The Sub-Committee reviewed the outcome of the meeting of a Joint IMO/ITU experts group on preparation of an IMO position to WRC-07 (COMSAR 9/4/1) by the Secretariat.

4.13 The Sub-Committee noted, in particular, the complex spectrum issues involved in WRC-07 agenda item 1.13 and the contentious nature of discussions on how to handle the pre GMDSS distress and safety procedures contained in Appendix **13** to the Radio Regulations which is addressed under WRC-07 agenda item 1.14.

4.14 The Sub-Committee also noted that its discussions on NBDP (see section 3) and its possible replacement had implications on spectrum requirements, which would need to be addressed at the WRC-07.

4.15 In recognition of the above and that further debate had taken place in ITU-R and regional telecommunications organizations, the Sub-Committee agreed that the work was best carried forward by the Joint IMO/ITU Experts Group. Accordingly, the Sub-Committee agreed the revised Terms of Reference for the Joint IMO/ITU Experts Group, given at annex 6, and invited the Committee to approve the re-establishment of the Joint IMO/ITU Experts Group on maritime radiocommunication matters and its meeting from 13 to 15 June 2005 at IMO Headquarters.

4.16 The Sub-Committee further noted that the following list of issues needs further detailed consideration by the Joint IMO/ITU Experts Group, namely:

Agenda item 1.13:

- Continue to monitor the studies in ITU-R Working Party 8B concerning the introduction of new maritime technologies in the HF bands.
- Participate in the ITU-R studies concerning the spectrum requirements for new technologies.
- Address, under the scope of this agenda item, some new spectrum requirements noted in the bands 9 and 10 MHz in order to facilitate the introduction of new technologies in the

mobile maritime service, by overcoming the large gap between the 8 and 12 MHz maritime mobile bands.

- Address the additional spectrum needs between 10 to 18 MHz foreseen for new maritime data communications technologies as a future agenda item for WRC.

Agenda item 1.14:

- Advise on how Appendix 13 should be treated. For the time being, opinions are split between the establishment of a new WRC Resolution, a new ITU-R Recommendation or incorporation of the still relevant material in chapter VII of the Radio Regulation.
- Consider possible amendments to Appendix **15**, taking into account any decision of the MSC regarding the carriage of NBDP on ships sailing in sea areas A1, A2 and A3.
- Update the position regarding Resolution **342** (**Rev. WRC-2000**), and develop a position concerning alternative methods for alleviating channel congestion in the maritime VHF bands, for example, by splitting duplex channels of Appendix **18** into simplex and/or by the implementation of 12,5 kHz channel spacing.
- Develop a position regarding the protection of the AIS frequencies in Appendix **18**, for polling through a satellite system; one solution could be to treat them in the same way as the reserved VHF maritime and aeronautical distress and safety frequencies 156.8 MHz and 121.5 MHz respectively.

Agenda item 7.2:

- Update the IMO position regarding a new agenda item in respect of the spectrum requirements for new maritime services at HF through a revision of Appendix 25.
- Continue to develop IMO positions under this agenda item for the development of new agenda items for future WRCs for the benefit of the maritime community.

DSC channel loading statistics

4.17 The Sub-Committee noted the information on DSC channel loading statistics and thanked Denmark for its efforts in providing this information. The original purpose of the exercise was to investigate concerns expressed at COMSAR 8 that system performance was being degraded by an excessive number of test calls from individual ship stations. The statistics demonstrated that these fears were unfounded and that ships made only one test call per month on an average.

4.18 The Sub-Committee therefore considered it unnecessary to implement additional initiatives to limit test calls at this time.

4.19 The Sub-Committee also noted that the present level of loading while not excessive was not low enough to allow routine calling on the HF DSC distress and safety frequencies. Because this had important implications on HF spectrum requirements it was decided that the information should be made available through the e-mail reflector of the IMO/ITU Experts Group.

4.20 The delegation of Denmark undertook to relay the latest information, which would include additional reports received after 1 December 2004 including all latest reports received, to COMSAR 10.

5 SATELLITE SERVICES (Inmarsat and COSPAS-SARSAT)

L-BAND SATELLITE EPIRB MATTERS

5.1 The Sub-Committee noted that MSC 78 had approved MSC/Circ.1123 on Guidelines on annual testing of L-band satellite EPIRBs.

5.2 The Sub-Committee also noted that, by resolution MSC.152(78) the Committee, among others, had adopted amendments to SOLAS regulation IV/15.9 concerning annual testing of satellite EPIRBs, and had agreed that the amendments should be deemed to have been accepted on 1 January 2006 and should enter into force on 1 July 2006.

5.3 In considering the relevant parts of document COMSAR 9/2/2 (Secretariat) providing the outcome of MSC 79 on the issue, the Sub-Committee noted that, having considered document MSC 79/22/7 (IMSO) on the future viability of the Inmarsat L-band EPIRB system, MSC 79, after some discussion, had agreed with the conclusion of IMSO that, based upon a realistic analysis of the comprehensive information received from Inmarsat Ltd., there was no reasonable justification for requiring Inmarsat Ltd. to make the considerable investment needed to ensure continued provision of the Inmarsat-E service beyond 1 December 2006 and had also agreed that the service should be closed on that date, subject to the commitments given by the company. The delegation of Germany had reserved its position on this decision.

Accordingly, MSC 79 requested IMSO to oversee the orderly closure of the Inmarsat-E service, ensuring that no existing L-band EPIRB user was left without equivalent EPIRB cover at any time. The Secretariat was instructed to communicate this to IMSO and inform the Committee accordingly.

MSC 79 agreed that, in line with the above decision, consequential amendments would be required to SOLAS chapter IV and instructed COMSAR 9 to consider documents MSC 79/22/7 and MSC 79/22/10 (Germany) and prepare appropriate draft amendments to chapter IV, a draft MSC circular on the closure of the Inmarsat-E service and recommendations concerning the status and use of the dedicated frequencies in the L-band, and any technical or operational aspects and to report to MSC 80.

5.4 After brief discussion of the issue, the Sub-Committee instructed the GMDSS Working Group to consider documents MSC 79/22/7, MSC 79/22/10 and COMSAR 9/2/2, paragraphs 12 to 21 and, taking into account the decisions made at Plenary, to:

- .1 prepare a draft MSC circular on the closure of the Inmarsat-E service;
- .2 prepare appropriate draft amendments to SOLAS chapter IV; and
- .3 prepare recommendations concerning the status and use of the dedicated frequencies for the Inmarsat-E service in L-band, and any technical or operational aspects,

for consideration at Plenary.

Report of the Working Group

5.5 In considering the relevant part of the GMDSS Working Group (COMSAR 9/WP.4, section 5) referring to the above issue, the Sub-Committee endorsed the draft MSC circular on Closure of Inmarsat-E services by Inmarsat Ltd., set out in annex 7, for submission to MSC 80 for approval.

5.6 The Sub-Committee endorsed the draft proposed amendments to SOLAS regulations IV/7, IV/9 and IV/10 to remove reference to Inmarsat-E services, as given at annex 8, for submission to the Committee for approval and adoption, as appropriate. In this connection, the Sub-Committee noted that the definitions and references to Polar Orbiting satellites no longer accurately reflected the services offered by COSPAS-SARSAT.

5.7 The Sub-Committee noted that for Inmarsat-E services, Inmarsat Ltd. uses a small proportion of two dedicated 1 MHz SAR bands at L-Band (1544 - 1545 MHz and 1645.5 - 1646.5 MHz), which were associated with the satellites comprising its communications network. The use of these bands was limited to distress and safety operations by Nos.5.356 and 5.375 of the Radio Regulations. The filings for these satellites had been notified to the ITU and had been co-ordinated through the ITU with other users. Inmarsat Ltd. was required by its Public Service Agreement (PSA) with IMSO to maintain the availability of these SAR band frequency assignments in full.

5.8 The Sub-Committee further noted that the cessation of the Inmarsat-E services on 1 December 2006 would not release any spectrum for re-allocation.

5.9 The Sub-Committee invited IMSO, in consultation with Inmarsat Ltd. and the United Kingdom's regulatory authority for telecommunications (OFCOM), to provide COMSAR 10 with a comprehensive report on the status of these bands and how they may best be used to serve distress and safety and SAR communication requirements in the future.

COSPAS-SARSAT SERVICES

5.10 The Sub-Committee noted with appreciation document COMSAR 9/5 (COSPAS-SARSAT) reporting on the status of the COSPAS-SARSAT Programme, including system operations, space and ground segments status, beacon population, false alert statistics, interference in the 406.0 - 406.1 MHz frequency band and MEOSAR systems.

INMARSAT SERVICES

5.11 The Sub-Committee also noted with appreciation document COMSAR 9/5/4 (IMSO) providing an analysis and assessment of the performance by Inmarsat Ltd. of the company's public service obligations for the provision of maritime services within the GMDSS, as overseen by IMSO.

REVISION OF RESOLUTION A.888(21)

5.12 The Sub-Committee recalled that MSC 77:

.1 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; and

.2 had approved MSC/Circ.1077 on Procedure for evaluation and possible recognition of mobile-satellite systems notified for use in the GMDSS.

5.13 The Sub-Committee also recalled that COMSAR 8 had started consideration of the issue based on the document by the United States (COMSAR 8/5/1) and had invited Member States to provide their comments and proposals to COMSAR 9 for further consideration.

5.14 The Sub-Committee noted that MSC 79 had confirmed that IMSO was the appropriate organization to carry out an oversight of future providers of mobile-satellite communication system services for the GMDSS.

5.15 The delegation of Argentina reserved its position regarding any proposal to amend resolution A.888(21) by removing from Governments the responsibility for ensuring the suitability of services used in the GMDSS and placing it exclusively in the hands of private interests.

5.16 Having considered documents:

- .1 COMSAR 9/5/1 (IMSO) proposing principles for reviewing resolution A.888(21);
- .2 COMSAR 9/5/2 (United States) suggesting to establish a correspondence group to review resolution A.888(21) and other relevant documents; and
- .3 COMSAR 9/5/3 (Denmark and Liberia) proposing that basic principles be established to reflect the policy of the Organization before a review of resolution A.888(21) is undertaken,

the Sub-Committee, after some discussion, established a correspondence group co-ordinated by IMSO^{*} to review resolution A.888(21) with the terms of reference, as set out in annex 9.

PORTABLE 406 MHZ BEACON TESTER

5.17 The Sub-Committee noted information document COMSAR 9/INF.2 (Canada) informing on a small, hand held 406 MHz beacon tester suitable for testing EPIRBs, ELTs and PLBs.

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6 EMERGENCY RADIOCOMMUNICATIONS, INCLUDING FALSE ALERTS AND INTERFERENCE

6.1 The Sub-Committee recalled that MSC 75 had approved circulars proposed by COMSAR 6, such as:

- .1 MSC/Circ.1039 on Guidelines for shore-based maintenance of satellite EPIRBs;
- .2 MSC/Circ.1040 on Guidelines on annual testing of 406 MHz satellite EPIRBs; and
- .3 COMSAR/Circ.29 on Guidance for the voluntary use of the standardized questionnaires and formats for reporting false alerts in collecting data on false alerts.
- 6.2 The Sub-Committee also recalled that MSC 77 had:
 - .1 approved MSC/Circ.1078 Guidelines to Administrations on reporting false alerts, prepared by COMSAR 7; and
 - .2 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 extended likewise the target completion date of the high priority item "Emergency radiocommunications, including false alerts and interference" to 2006.

6.3 The Sub-Committee further recalled that no documents under this agenda item had been received at its last session. However, after some discussion on the issue, COMSAR 8 had agreed that VGEs should be established in the near future for analysing the GMDSS from the false alerts, interference and other disadvantages point of view. However, it had decided first to establish the correspondence group on false alerts under the co-ordination of Norway with the terms of reference, as set out in paragraph 6.4 of COMSAR 8/18.

6.4 The Sub-Committee briefly discussed the proposal by Norway (COMSAR 9/6) on a simplified format on false alert reporting by ships, and referred the issue to the GMDSS Working Group for comments and proposals. The Group was instructed, taking into account comments made at Plenary, to:

- .1 consider document COMSAR 9/6 in line with provisions of MSC/Circ.1078 and COMSAR/Circ.29;
- .2 advise, if appropriate, how and where the proposed simplified false alert reporting format might be used;
- .3 provide any comments and proposals how to deal with the issue;
- .4 advise if the matter should be considered further and a correspondence group on false alerts with appropriate TOR, to be prepared, should be re-established to report to COMSAR 10; and
- .5 submit its report to Plenary for consideration.

Report of the Working Group

6.5 Having received and considered the relevant parts of the GMDSS Working Group report (COMSAR 9/WP.4, section 6) referring to the above issue, the Sub-Committee agreed that, with the progress made in reducing the incidence of false alerts through equipment design and published guidance, there was no further need to keep this item in the Sub-Committee's work programme. With real distress incidents at a mercifully low level, it is an inevitable outcome, observed across many low incidence statistical phenomena, that false positives will outweigh real events.

6.6 The Sub-Committee agreed with the Working Group's conclusion that reports of false alerts might best be handled at the national level. The RCC should report incidents to the relevant national Authority, who should contact the offending party and ask for a report using the form developed by the COMSAR Sub-Committee. The national Authority should then take any necessary disciplinary or remedial action. Member States should however report to future Sub-Committee meetings on issues of a systematic nature, where changes in equipment design or operator procedure are deemed necessary.

6.7 The Committee was invited to delete the high priority item "Emergency radiocommunications, including false alerts and interference" from the Sub-Committee's work programme, as the work on this item had been completed.

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

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

7.1 The Sub-Committee noted that, as requested by COMSAR 8, MSC 78 had extended the target completion date for the work programme agenda item "Harmonization of aeronautical and maritime search and rescue procedures, including SAR training matters" to 2005.

7.2 The Sub-Committee also noted that, as approved by MSC 78 and endorsed by C 92, the eleventh meeting of the International Civil Aviation Organization/International Maritime Organization (ICAO/IMO) Joint Working Group (JWG) on the Harmonization of Aeronautical and Maritime Search and Rescue had been held on board the Bahamas flag passenger ship *Adventure of the Seas* owned by Royal Caribbean International, sailing from and returning to San Juan, Puerto Rico, United States, from 19 to 26 September 2004.

7.3 The Sub-Committee further noted that MSC 78:

- .1 had instructed the Secretariat to establish a validation panel to validate the GMDSS Coast Station Operator's Certificate (CSOC) model course; and
- .2 had endorsed the Sub-Committee's action in issuing COMSAR/Circ.33 on GMDSS Coast Station Operator's Certificate (CSOC) model course in the interim and,

the Secretariat had made the necessary arrangements for the validation panel to be formed and was awaiting the submission of the Model course for the GMDSS Coast Station Operator's Course (CSOC) in the appropriate format.

7.4 The Sub-Committee took note of information provided by Norway (COMSAR 9/INF.9) regarding the training of coast radio personnel in Norway in accordance with the provisional guidelines given in COMSAR/Circ.33. Norway was invited, based on the experience gained, to provide any comments and recommendations on the issue to the validation panel.

7.5 The Sub-Committee briefly considered documents submitted by the Secretariat (COMSAR 9/2, paragraph 1.5 and COMSAR 9/7) and decided to refer them to a SAR Working Group, to be established, for detailed consideration.

Establishment of a Working Group

7.6 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 analyse recommendations 5 and 7 made by the Joint Working Group and provide comments:
 - .1 on the potential for confusion between maritime security alerts and SAR alerts; and
 - .2 concerning the statistics on EPIRB models consistently causing malfunctions;
- .2 review the proposed amendments to COMSAR/Circ.18 contained in Appendix F to document COMSAR 9/7, with a view to issuing an updated version of the circular following the proposed withdrawal of the Inmarsat-E service;
- .3 prepare appropriate justification if there is a need for extending the target completion date of the work programme item "Harmonization of aeronautical and maritime search and rescue procedures, including SAR training matters" to 2006;
- .4 prepare appropriate justification for conducting the next session of the ICAO/IMO JWG, and the draft agenda, and review its terms of reference; and
- .5 prepare any recommendations or proposals for harmonization of aeronautical and maritime SAR procedures.

Report of the Working Group

7.7 Having received the report of the Working Group (COMSAR 9/WP.3, section 3 and Add.1, section 7), the Sub-Committee approved the report in general and took action as indicated hereunder.

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

7.9 In considering recommendation 5 of the JWG 11, the Sub-Committee agreed that there may be some potential confusion between maritime security alert and SAR alerts and decided that, with maritime security issues being somewhat in an embryonic state at the moment, the

situation should be monitored so that ongoing solutions could be found in the light of experience gained.

7.10 In considering recommendation 7 of the JWG 11, the Sub-Committee expressed its concern at the large number of false alerts and, having agreed that some of these could well be the result of a design fault, instructed the Secretariat to communicate with COSPAS-SARSAT inviting them to publish details of those models or manufacturers which are found to be causing false alerts.

7.11 The Sub-Committee reviewed the proposed amendments to COMSAR/Circ.18 given in Appendix F to document COMSAR 9/7 and agreed to issue COMSAR/Circ.37 superseding COMSAR/Circ.18. The Committee was invited to endorse the action taken.

7.12 The Sub-Committee agreed on the continuation of the Joint ICAO/IMO Working Group for the next session planned to be held in Stockholm, Sweden, for 5 days in August 2005, 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 2006.

7.13 The Sub-Committee reviewed and agreed the terms of reference and provisional agenda for JWG 12, as given in annex 10.

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

International SAR Fund

7.14 The Sub-Committee noted that, as decided by MSC 78 and C 92, the International SAR Fund had been established under the auspices of the Secretary-General as a multi-donor trust fund, which should be used initially for the establishment of the MRCCs and MRSCs, as well as for providing continuing maintenance of an effective global system for the distribution of distress alert data and appropriate operational information via publicly accessible or dedicated communication networks; databases for the operation of the GMDSS and SAR professional and technical training resources; and other resources deemed necessary for the effective implementation of the Global SAR Plan.

7.15 The Sub-Committee also noted that C 93, having noted the information on the establishment of the International SAR Fund, provided by the Secretary-General, had consequently invited potential donors to contribute generously in order that the Organization might further assist developing countries to enhance their maritime search and rescue capability with a view to the effective implementation of the Global SAR Plan.

Current availability of SAR services worldwide

7.16 The Sub-Committee noted that MSC 78 had endorsed the issue, on 24 February 2004, of SAR.8/Circ.1 on Global SAR Plan, containing information on the current availability of SAR services in loose-leaf format with a display on the IMO website.

7.17 The Sub-Committee also noted that MSC 78 had urged Member Governments to respond to COMSAR/Circ.27 on Data format for a new combined SAR.2 and SAR.3 circular, attaching the questionnaire on the current availability of SAR services world-wide, as soon as possible if they had not already done so.

7.18 The Sub-Committee further noted that MSC 78 had also 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.

7.19 The Sub-Committee was informed by the Secretariat that, as instructed by the Sub-Committee and using the information provided by Governments, the Secretariat had issued SAR.8/Circ.1 and SAR.8/Circ.1/Corr.1 in February and August 2004, respectively. The countries which had provided information for those circulars included: Argentina, Australia, Belgium, Brazil, Bulgaria, Canada, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, People's Republic of China, Iran (the Islamic Republic of), Italy, Jamaica, Lithuania, the Netherlands, New Zealand, Spain, Thailand, Turkey and Uruguay.

7.20 The Sub-Committee was also informed by the Secretariat that, since issuing SAR.8/Circ.1/Corr.1, the Secretariat had received information and amendments from Brazil, Chile, Ecuador, Estonia, Finland, Georgia, Greece, Hong Kong, China, Iran (the Islamic Republic of), Lithuania, Morocco, the Republic of Korea, Romania, the Russian Federation, Slovenia, Ukraine and the United Kingdom. The Secretariat was planning to issue SAR.8/Circ.1/Corr.2 in March 2005 reflecting the information and amendments received from the above-mentioned Member States.

Use of SART

7.21 The Sub-Committee noted that NAV 50, while considering the performance standards for radar equipment, had instructed the Secretariat to draw the attention of the COMSAR Sub-Committee to the restrictions on new radar design imposed by the continued use of SARTs developed to work with pulsed radars using traditional techniques.

7.22 The Sub-Committee agreed to consider this matter at its next session when reviewing SART performance standards.

MEDICAL ASSISTANCE IN SAR SERVICES

7.23 The Sub-Committee recalled that COMSAR 8 had 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, had instructed the Secretariat to issue them as MSC/Circ.1105.

7.24 The Sub-Committee noted that MSC 78 had endorsed the identification of passenger ships, other than ro-ro passenger ships, which should benefit from being equipped with the emergency medical kit/bag (EMK). These were passenger ships not carrying a medical doctor on board but carrying more than 100 passengers on a route that would make the response time for a medical intervention from ashore longer than 30 minutes. MSC 78 had authorized the Sub-Committee to amend MSC/Circ.1042 accordingly.

7.25 The Sub-Committee briefly considered the document submitted by the Secretariat (COMSAR 9/2, paragraph 1.5.1) and instructed SAR Working Group to prepare:

.1 amendments to MSC/Circ.1042 reflecting the decision of MSC 78; and

.2 appropriate justification, if there was a need for extending the work programme item "Medical assistance in SAR services" to 2006.

Report of the Working Group

7.26 In considering the relevant parts of the SAR Working Group report (COMSAR 9/WP.3/Add.1, section 7) referring to the above issue, the Sub-Committee agreed on the draft MSC circular on "Identification of passenger ships, other than ro-ro passenger ships, which should benefit from being equipped with the emergency medical kit/bag (EMK)", set out in annex 11, and invited the Committee to approve it.

7.27 The Sub-Committee agreed that there was a need for extending the work programme item "Medical assistance in SAR services" to 2006, and invited the Committee to approve the proposed extension.

8 DEVELOPMENTS IN MARITIME RADIOCOMMUNICATION SYSTEMS AND TECHNOLOGY

8.1 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*.

The Committee was invited, taking into account the Sub-Committee's views above, to extend the target completion date for the high priority item "*Developments in maritime radiocommunication systems and technology*" to 2005.

- 8.2 The Sub-Committee also recalled that:
 - .1 MSC 77 had approved MSC/Circ.1091 on Issues to be considered when introducing new technology on board ship; and
 - .2 a liaison statement on a need in developing technical characteristics for HF e-mail communication systems was agreed by COMSAR 8 and conveyed to the ITU-R WP.8B for consideration. A response by WP.8B was submitted under agenda item 4.

8.3 The Sub-Committee considered in general documents COMSAR 9/8 (CIRM) and COMSAR 9/8/1 (Japan) concerning the future spectrum requirements for HF e-mail systems and new technologies based on an Internet Protocol (IP) network systems, which might be used in the GMDSS, accordingly, and instructed the GMDSS Working Group, taking into account comments/decisions made at Plenary, to:

- .1 consider documents COMSAR 9/8 and COMSAR 9/8/1 with a view as to whether digital terrestrial communications, including e-mail, could cover the public correspondence and/or distress communications required under the GMDSS and what the future spectrum requirements should be for such maritime services;
- .2 prepare a liaison statement to WP.8B concerning the future spectrum requirements for HF maritime digital services, if necessary;

- .3 prepare a draft IMO position to WRC-07 on the matter; and
- .4 provide relevant comments/recommendations on the use of IP network systems for the GMDSS and on any further action concerning this agenda item, including a need for any extension of the target completion date,

for consideration at Plenary.

Report of the Working Group

8.4 In considering the relevant parts of the GMDSS Working Group report (COMSAR 9/WP.4, section 7) referring to the above matter, the Sub-Committee agreed that the main substantive issues involved the future spectrum requirements for HF maritime digital services and the consequential impact on WRC-07. These issues were dealt with under agenda items 3 and 4 (paragraphs 3.8 to 3.16 and 4.16 refer).

8.5 The Sub-Committee also agreed that the other issue of land based infrastructure and the use of IP networks for data distribution and GMDSS functions was considered to be insufficiently defined at this point in time for the Group to make any definite recommendations. However, recognizing the importance of the issue, the Sub-Committee invited the Committee to extend the target completion date of this item to 2006 and requested Members to submit suitable proposals to COMSAR 10.

9 **REVISION OF THE IAMSAR MANUAL**

9.1 The Sub-Committee noted that, in accordance with the procedures prescribed in the annex to resolution A.894(21) and, being advised that ICAO had already approved the proposed draft amendments, MSC 78 had adopted the amendments to the IAMSAR Manual proposed by COMSAR 8, for dissemination by means of MSC/Circ.1124, having decided that the amendments should enter into force on 1 July 2005.

- 9.2 The Sub-Committee recalled that COMSAR 8 had instructed the JWG to:
 - .1 incorporate paragraphs 5.3 and 5.4 of the annex to document COMSAR 8/8/1, concerning the difficulties in recovering persons in distress at sea, when considering new amendments to the IAMSAR Manual; and
 - .2 further consider the proposal by Italy (COMSAR 8/11/1) to include information on their ship reporting system ARES in the IAMSAR Manual, Volume III, noting the concerns expressed by the SAR working group at COMSAR 8 that this would set a precedent and as a result, the IAMSAR Manual could become bulky and potentially confusing if all national authorities wished to incorporate their ship reporting systems into the Manual.

9.3 The Sub-Committee briefly discussed documents submitted by the Secretariat (COMSAR 9/7, sections 3.4, 4.1, 4.5 and 5.2 and appendices D and E), Denmark (COMSAR 9/9) and the United States (COMSAR 9/WP.2) and instructed the SAR Working Group to consider them in detail 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

9.4 In considering the relevant part of the SAR Working Group report (COMSAR 9/WP.3, section 4 and COMSAR 9/WP.3/Add.1, paragraph 8.1) referring to the issue, the Sub-Committee endorsed the draft MSC circular on Adoption of amendments to the IAMSAR Manual, set out in annex 12, for submission to ICAO for approval and to MSC 80 for adoption with an entry into force date of 1 June 2006.

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

9.6 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.

9.7 The Sub-Committee noted the views of the Joint Working Group that potentially frequently changing information such as telephone numbers, addresses and similar, should not be listed in the Manual due to the potential for being out of date, but that the Manual should give advice where such additional information may be obtained, and a similar or same database to the IMO's new web-database regarding information related to the International Ship and Port facility Security Code (ISPS Code), which allows each State to update their own information, could be used to facilitate the needs of the SAR community. The Secretariat was instructed to consider the proposal and report to COMSAR 10.

9.8 The Sub-Committee also noted that the Working Group had reviewed document COMSAR 9/WP.2 (United States) providing 21 proposals to amend the IAMSAR Manual with a view to advise the ICAO/IMO Joint Working Group at its 12th session. The Working Group agreed that no change was required for points 1, 13, 15, 16, and 17. The points listed in annex 2 to COMSAR 9/WP.3 is the advice given by the Working Group to the Joint Working Group.

9.9 JWG 12 was instructed to consider COMSAR 9/WP.2 taking into account the advice given in paragraph 9.8 above and annex 2 to COMSAR 9/WP.3.

10 REVIEW OF THE OSV GUIDELINES

10.1 The Sub-Committee noted that MSC 75 had agreed to a proposal by Australia (MSC 75/22/2) that the Guidelines for the design and construction of offshore supply vessels (resolution A.469(XII)) be reviewed but not be made mandatory under the 1974 SOLAS Convention. Accordingly the Committee decided to include, in the work programmes of the FP, COMSAR, NAV, DE and SLF (co-ordinator) Sub-Committees, a high priority item on "Review of the OSV Guidelines", with three sessions needed to complete the item.

10.2 Having recalled that COMSAR 8 had proposed to include this agenda item in the provisional agenda for COMSAR 9, the Sub-Committee noted that MSC 78 and MSC 79 had subsequently agreed to the proposal.

"7 RADIOCOMMUNICATIONS

The vessel should comply with the <u>relevant</u> provisions for cargo ships of chapter IV of the <u>1974 SOLAS</u> Convention, as modified by the <u>1981 amendments thereto</u>, in force, as <u>determined by the Administration</u>."

10.4 The Secretariat was instructed to convey the above Sub-Committee's deliberations on the matter to SLF 48.

10.5 The Committee was invited to delete the item "Review of the OSV Guidelines" from the Sub-Committee's work programme, as the work on this item had been completed.

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

11.1 The Sub-Committee noted that MSC 75 had considered a proposal by Australia (MSC 75/12/2) that amendments should be made to the DSC Code and the 1994 HSC Code to align their requirements with those of the 1974 SOLAS Convention and the 2000 HSC Code at the earliest reasonable opportunity, namely as part of the next revision of the 1994 HSC Code scheduled for 2005.

In this regard, MSC 76 approved MSC/Circ.1057 on Proposed amendments to update the DSC Code and the 1994 HSC Code, having agreed to some modifications to the cover of the circular.

MSC 76 also agreed that the work programme item should be renamed "Review of the 2000 HSC Code and amendments to the DSC Code and 1994 HSC Code" and be assigned to the DE (co-ordinator), FP, COMSAR, NAV and SLF Sub-Committees, with two sessions needed to complete the item, commencing the work in 2004 as part of the next scheduled review of the 2000 HSC Code.

11.2 The Sub-Committee recalled that, at its last session, it had considered the issue based on document COMSAR 8/12 (Secretariat) concerning the essence of MSC/Circ.1057 on Proposed amendments to update the DSC Code and the 1994 HSC Code and an application of Codes.

11.3 The Sub-Committee also recalled that, taking into account comments and proposals made during the discussion on the above issue, COMSAR 8 was of the opinion that SOLAS chapter IV, as amended, should apply to all Codes and, with a view to progressing the matter further, established a correspondence group under the co-ordination of Singapore. The correspondence group was instructed to prepare draft amendments on radiocommunications which should apply to all Codes and report to COMSAR 9.

11.4 Having been provided by the Secretariat with an additional information on the issue, the Sub-Committee noted that:

.1 the 2000 HSC Code and the 1994 HSC Code were mandatory Codes and had the same format and structure;

- .2 the DSC Code had a recommendatory status and was structured in a different way than the 2000 and 1994 HSC Codes; and
- .3 chapter 14 Radiocommunications of the 2000 HSC Code was equivalent to SOLAS chapter IV, as amended (up to and including resolutions MSC.69(69) and MSC.123(75)) and should also be amended in line with resolution MSC.152(78) and be incorporated into the 1994 HSC Code, as indicated in MSC/Circ.1057.
- 11.5 Having discussed the information provided, the Sub-Committee:
 - .1 agreed to amend regulation 14.15.10 of the 2000 HSC Code in line with resolution MSC.152(78), as given in annex 13;
 - .2 recommended to the DE Sub-Committee to incorporate chapter 14 of the 2000 HSC Code, as amended, into the 1994 HSC Code; and
 - .3 recommended to the DE Sub-Committee to:
 - .3.1 amend paragraph 13.1 of chapter 13 of the DSC Code, as indicated in MSC/Circ.1057, in particular:

"Craft should have a capacity of distress and safety communications in accordance with the provisions of chapter IV of the Safety Convention, as amended (*up to and including resolutions MSC.69(69), MSC.123(75) and MSC.152(78)*)"; or

.3.2 change the structure of the Code and incorporate chapter 14 of the 2000 HSC Code, as amended, changing the words "shall" to "should" throughout the whole text.

11.6 The Secretariat was instructed to convey this section of the report and annex 13 to the DE Sub-Committee.

11.7 The Committee was invited to delete the high-priority item "Review of the 2000 HSC Code and amendments to the DSC Code and the 1994 HSC Code" from the work programme of the Sub-Committee, as the work had been completed.

12 MEASURES TO ENHANCE MARITIME SECURITY

General

12.1 The Sub-Committee recalled that, at its eighth session, it had considered matters relating to the outcomes of the Conference of Contracting Governments to the International Convention for the Safety of Life at Sea, 1974 (the 2002 SOLAS Conference) which had adopted special measures to enhance maritime security which entered into force on 1 July 2004.

12.2 The Sub-Committee considered documents COMSAR 9/12 and COMSAR 9/12/1 (Secretariat) relating to the outcomes of MSC 78 and MSC 79, respectively, before referring matters raised therein to the Working Group on Maritime Security (the Working Group).

12.3 The Sub-Committee further considered documents COMSAR 9/12/2 (France), COMSAR 9/12/3 (Brazil), COMSAR 9/12/4 and COMSAR 9/12/5 (Republic of Korea),

MSC 79/5/6 and COMSAR 9/12/6 (Italy), COMSAR 9/12/7 (Cyprus, Luxembourg, Netherlands, Spain and Sweden), COMSAR 9/12/8 (United States), COMSAR 9/INF.4 (Norway), COMSAR 9/INF.6 (IALA), COMSAR 9/INF.8 (United States), COMSAR 9/INF.11 (Italy) and COMSAR 9/INF.12 (Marshall Islands).

12.4 The Sub-Committee considered, in the context of the special measures to enhance maritime security, matters relating to:

- .1 long-range identification and tracking of ships;
- .2 priority of ship security alerts;
- .3 development of a test message protocol for testing ship security alert systems;
- .4 instruments to be reviewed and amended so as to include appropriate security-related provisions;
- .5 proposed amendments to resolution A.706(17) on World-Wide Navigational Warning Service; and
- .6 revision of MSC/Circ.623/Rev.3 on Guidance to ship owners and ship operators, shipmasters and crews on preventing and suppressing acts of piracy and armed robbery against ships.

LONG-RANGE IDENTIFICATION AND TRACKING OF SHIPS

Work done by COMSAR 8

12.5 The Sub-Committee noted that MSC 78 had considered and noted (MSC 78/26, paragraph 7.31), in general, the work of COMSAR 8 on long-range identification and tracking of ships (LRIT) and, in particular, the work-in-progress on the draft of the proposed new regulation for SOLAS chapter XI-2 on LRIT and the view of COMSAR 8 that considerable work needed to be done before the Sub-Committee would be in a position to advise the Committee on the issue of LRIT.

12.6 The Sub-Committee further noted that MSC 78 had concurred (MSC 78/26, paragraphs 7.32 and 7.98) with the views of COMSAR 8 in relation to LRIT and, in particular, that:

- .1 there was a need to develop a phased-in implementation scheme with respect to those ships to which chapter XI-2 applies;
- .2 ships operating exclusively within sea area A1 which were fitted with automatic identification systems (AIS) did not need to be fitted with additional equipment to provide the LRIT data;
- .3 each Administration should be able to receive the LRIT data for all the ships entitled to fly its flag irrespective of where such ships may be;
- .4 port States should be able to receive the LRIT data for the ships which have indicated to that port State their 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 SOLAS Contracting Government;

- .5 it would be necessary to develop and agree:
 - .1 the functional requirements which the LRIT systems have to meet;
 - .2 the criteria for the assessment of such systems;
 - .3 the security requirements to be complied with by such systems;
 - .4 the procedures for the recognition and acceptance of such systems; and
 - .5 the procedures and arrangements for the oversight of LRIT data service providers;
- .6 it would be necessary to develop and agree to various security-related aspects to be complied by the LRIT data service providers;
- .7 the LRIT system should be designed to ensure the integrity of the data and to prevent the intentional or accidental transmission of false information;
- .8 the provision of the LRIT data should be at no cost to the ship and that the total cost of obtaining LRIT data should be paid by the user SOLAS Contracting Government to the LRIT data service provider; and
- .9 the LRIT data may be provided by a SOLAS Contracting Government to Search and Rescue Services.

Purpose and scope of LRIT

- 12.7 The Sub-Committee also noted that:
 - .1 MSC 78 had noted that a number of delegations were putting forward proposals to expand the scope of the LRIT from being a security tool to a tool which may be used for safety and pollution prevention and that, in this respect, the Committee had agreed to consider the purpose and scope of LRIT further during MSC 79 so as to enable COMSAR 9 to proceed with its assigned work and had invited interested parties to make submissions to this end;
 - .2 MSC 79 had agreed (MSC 79/23, paragraph 5.68) that the purpose and scope of LRIT should be extended ultimately to include safety and environmental protection applications, subject to the resolution of the technical issues by the Sub-Committee. However, before being able to embark on the detailed technical consideration of the extension of LRIT by the Sub-Committee it would be necessary for the Committee to define the safety applications and for the Marine Environment Protection Committee to define the environmental protection applications for which LRIT would be used; and
 - .3 MSC 79 had agreed (MSC 79/23, paragraph 5.72) that COMSAR 9 should be advised to bear in mind that the ultimate objective was to extend, at the appropriate time, the purpose and scope of LRIT to include safety and

environmental protection applications. Nevertheless, MSC 79 had agreed that COMSAR 9 should proceed, as instructed by MSC 78, with the development of LRIT as a tool which SOLAS Contracting Governments may use for the enhancement of maritime security. In addition, and as agreed by MSC 78, the ability of any SOLAS Contracting Government to use, or to seek to obtain, LRIT data for the rescue of persons at sea should be retained.

The role of the Organization

12.8 The Sub-Committee recalled that COMSAR 8, as a result of concerns related to the possible abuse of information collected through LRIT or the misuse of LRIT data, following consideration of the various alternatives which had been put forward by the Correspondence Group established by MSC 77 and which had reported to COMSAR 8, had suggested to MSC 78 that the Organization should assume the role of collecting, storing and disseminating the LRIT data.

- 12.9 The Sub-Committee noted that MSC 78 had:
 - .1 noted (MSC 78/26, paragraph 7.103) that if the Organization was to assume any role in relation to LRIT, there would be a need to develop and agree a legal, administrative and financial framework for its involvement which would add another layer of complexity and may even require the approval of the Council and of the Assembly. The Committee, following discussion of the issue within the Maritime Security Working Group, had agreed that the Organization should not be involved in collecting, storing and disseminating the LRIT data;
 - .2 agreed (MSC 78/26, paragraph 7.104) that the LRIT data service providers should be approved by the Committee and that SOLAS Contracting Governments should be able to purchase the LRIT data directly from the approved LRIT data service providers. In this context, the delegation of Brazil stressed that, as suggested by COMSAR 8, the LRIT data service providers should be recognized by the Committee rather than approved by the Committee as suggested by the Maritime Security Working Group; and
 - .3 decided (MSC 78/26, paragraph 7.105) to instruct the COMSAR Sub-Committee to develop and propose conditions which the Committee may impose on an LRIT data service provider when considering its approval. The Committee also instructed the Sub-Committee to develop and propose a robust intergovernmental oversight scheme for the approved LRIT data service providers through which the adherence of the LRIT data service providers to the conditions imposed on them, at the stage of their approval, could be verified in a transparent manner to the satisfaction of all SOLAS Contracting Governments.

Provision of the LRIT data to a coastal State

12.10 The Sub-Committee noted that MSC 78 (MSC 78/26, paragraph 7.101), following discussion of the issue within the Maritime Security Working Group, had concluded that SOLAS Contracting Governments were not yet ready to reach an agreement on the provision of LRIT data to a coastal State and had instructed the Sub-Committee to develop the system in such a way that it envisaged three classes of users, each one of them entitled to receive different LRIT data. With respect to port States and coastal States, the criterion to be used may either be a distance off

the coast of a SOLAS Contracting Government or the period of time a ship may require to reach the coast of a SOLAS Contracting Government.

Additional functional requirements established by MSC 78

12.11 The Sub-Committee noted that MSC 78 had also decided (MSC 78/26, paragraph 7.101) to instruct the Sub-Committee to ensure that the LRIT system:

- .1 was capable of being switched off on board in cases where the Administration considers that the receipt of LRIT data by another SOLAS Contracting Government may compromise the safety or security of the ship or of the Administration; and
- .2 was capable of preventing a named coastal State from receiving the LRIT data, where requested by the Administration, even if the coastal State is otherwise entitled to receive that information.

Priority of LRIT signal

12.12 The Sub-Committee noted that MSC 78 had decided (MSC 78/26, paragraph 7.111) to instruct the Sub-Committee to consider and address the priority of the LRIT signal.

Impact assessment on LRIT

12.13 The Sub-Committee further noted that MSC 79 (MSC 79/26, paragraph 5.101) had agreed that the conduct of an impact study on LRIT had been overtaken by events and as such was no longer necessary.

Introduction of documents and summary of discussions

12.14 The delegation of Argentina reserved its position with respect to any proposal to prevent a littoral State from receiving information generated by the long-range identification and tracking of ships (LRIT) system, even when it is entitled to do so. In Argentina's view the guiding principle in this matter was that a littoral State had the right to know about activities carried out by third-country flagged ships in its territorial and jurisdictional waters in the context of freedom of navigation and of other rights and freedoms granted to such vessels under international law in those maritime areas.

12.15 Brazil (COMSAR 9/12/3) proposed that the LRIT system should be decentralized in its execution by making use of a co-ordinating and planning intergovernmental central body and of the existing ship reporting systems for search and rescue purposes, as prescribed in chapter 5 of the 1979 SAR Convention. In particular, Brazil suggested that a central body should be responsible for technical oversight, the security of information, and the various ship reporting systems for the identification and tracking of ships within specific areas. Before leaving port, the ship should provide the central body with its voyage plan. Upon departure, the ship should give its position to the reporting system responsible for that area, and as the ship changed area, it should be required to inform both reporting systems. This information should be required on a daily basis and transmitted once only to the destination area. Whenever a SOLAS Contracting Government would request that information from the central body, which should verify the validity of the request. The central body should then advise the ship reporting system in charge of tracking a ship at the time to do the "polling" and pass the information to the requesting State. Information among

data systems would only be exchanged upon request of the ship, the Company, the flag State or in case of a search and rescue incident. Brazil stated that the proposal was intended as an alternative to the suggestions submitted so far and centred on the effort for sharing safety and security resources, decentralizing the execution of existing search and rescue dedicated ship reporting systems.

12.16 The Sub-Committee referred document COMSAR 9/12/3 (Brazil) to the Working Group for further consideration.

12.17 The Republic of Korea (COMSAR 9/12/5) informed the Sub-Committee that it had established, as a part of its General Information Centre on Maritime Safety and Security project, the Korean Vessel Monitoring System (KVMS). The KVMS collects from ships under the flag of the Republic of Korea, a variety of information transmitted by the ship's Inmarsat-C Ship Earth Stations. The Republic of Korea suggested that the existence and the benefits of national ship reporting or vessel monitoring systems. In addition, they suggested that arrangements needed to be made to allow the transfer of data between any national ship reporting or vessel monitoring system and the LRIT system and for covering the associated costs.

12.18 The Sub-Committee referred document COMSAR 9/12/5 (Republic of Korea) to the Working Group for further consideration.

12.19 Cyprus, Luxembourg, the Netherlands, Spain and Sweden (COMSAR 9/12/7) proposed to fully integrate the LRIT principles into the IMO safety of navigation policy while maintaining, in addition, the security aspects of this item. In their view while maintaining the LRIT as an important and integral element of maritime security, the definition of the international scheme for LRIT should take into account the previous developments concerning exchange of information in the maritime safety field. Spain *et al* suggested that the implementation of LRIT should also be beneficial to maritime search and rescue and should therefore be part of the global radiocommunication requirements for enhancing the global SAR coverage. They proposed to introduce the main principles of LRIT into SOLAS chapter V to cover safety, pollution prevention and security as this would be in line with the decisions of the 2002 SOLAS Conference relating to AIS, which was intended both for safety and security purposes, and which was now fully covered by SOLAS chapter V. Finally, they suggested that in parallel, SOLAS chapter IV should also be amended to reflect such requirements.

12.20 There was an extensive discussion on the issue. Some delegations expressed the view that the scope of LRIT should be extended to address safety and environmental protection issues, but only after the security issues were addressed, however the majority of delegations supported the proposals of Spain *et al*, expressing the view that the technical specifications needed to be agreed before the carriage requirements could be finalized, and that not restricting the use of LRIT would not delay the implementation of LRIT and *vice versa*.

12.21 The Sub-Committee referred document COMSAR 9/12/7 (Cyprus *et al*) to the Working Group for further consideration.

12.22 The United States (COMSAR 9/12/8) addressed the functional requirements, communications, infrastructure, oversight and funding issues in relation to LRIT. The United States offered to develop and fund initial LRIT data service provider functions and to host the LRIT system based on the design of Amver until the Organization can develop more permanent arrangements.

12.23 During the ensuing discussion the observers from ICS, ICCL, ICFTU and IFSMA recalled that MSC 78 had stated that satellite tracking should require no intervention from ships and that there should be no cost to ships. This appeared to be not consistent with the United States' proposal to use Amver.

12.24 The Sub-Committee referred document COMSAR 9/12/8 (United States) to the Working Group for further consideration.

12.25 The Sub-Committee noted the information provided by Norway (COMSAR 9/INF.4) on the results of a feasibility study on Maritime Traffic Monitoring Using a Space-based AIS receiver conducted by the Norwegian Defence Research Establishment and referred document COMSAR 9/INF.4 to the Working Group for its consideration.

12.26 The Sub-Committee noted the information provided by the United States (COMSAR 9/INF.8) on Argos long-range identification and tracking technology and services that are currently available to coastal, port and flag States and other nominated users and referred document COMSAR 9/INF.8 to the Working Group for its consideration.

12.27 The Sub-Committee noted the information provided by the Marshall Islands (COMSAR 9/INF.12) in relation to the LRIT Operations Feasibility Study which they had commenced for the purpose of evaluating the applicability of Inmarsat-C and D+ to LRIT through the voluntary participation of several Marshall Islands flagged shipping fleets currently using mobile-satellite fleet tracking systems for commercial operational aspects associated with the wider scope of LRIT including but not limited to system functionality, data security and data exchange with duly authorized SOLAS Contracting Governments. The Marshall Islands also indicated that it was anticipated that the study results would be submitted to MSC 80 along with a demonstration.

12.28 The Sub-Committee noted the information provided by IALA (COMSAR 9/INF.6) on the conclusion of a seminar on the possibilities of increased safety, security and environmental protection through long-range tracking of vessels which IALA had organized in November 2004 and referred document COMSAR 9/INF.6 to the Working Group for its consideration.

PRIORITY OF SHIP SECURITY ALERTS

12.29 The Sub-Committee noted that:

- .1 during MSC 78, the Maritime Safety Working Group whilst discussing the issue of the priority of the LRIT signal, had noted that the current performance standards for ship security alert systems did not envisage any priority for the ship security alert signal and thus it recommended, and MSC 78 had instructed, the Sub-Committee to consider and address this issue (MSC 78/26, paragraph 7.111);
- .2 during MSC 79, Italy (MSC 79/5/6) had raised the issue of priority for the ship security alert signal and pointed out that, thus far, the ship security alert signal had been assigned no routing priority. Thus, MSC 79 had expressed appreciation to Italy for raising the matter anew and referred document MSC 79/5/6 to COMSAR 9 for consideration (MSC 79/23, paragraphs 5.60 to 5.62); and
- .3 MSC 78 (MSC 78/26, paragraph 7.42) had reiterated the invitation of COMSAR 8 (COMSAR 8/18, paragraph 15.7.4) to those SOLAS Contracting Governments

that had yet to establish criteria for the delivery of ship security alerts, to do so as a matter of priority.

12.30 Italy (MSC 79/5/6 and COMSAR 12/9/6) pointed out that, so far, no routing priority had been assigned to the ships security alert (SSA) signals and highlighted potential difficulties that may be experienced as a result, unless satellite ship security alerts are assigned a priority higher than routine. They also pointed out that some countries did not accept distress priority as appropriate for SSAs.

12.31 The Sub-Committee recalled that article 53 on Order of priority of communications of the ITU Radio Regulations provides that:

"§1 All stations in the maritime mobile service and the maritime mobile-satellite service shall be capable of offering four levels of priority in the following order:

- .1 Distress calls, distress messages and distress traffic.
- .2 Urgency communications.
- .3 Safety communications.
- .4 Other communications.

§2 In a fully automated system, where it is impracticable to offer all four levels of priority, category 1 shall receive priority until such time as intergovernmental agreement¹ remove exemptions granted for such systems from offering the complete order of priority."

12.32 During the ensuing discussion it was noted that as there was no global standardized protocol for SSAs, it would be impossible to establish a priority system. The Sub-Committee referred documents COMSAR 9/12/6 (Italy) and MSC 79/5/6 (Italy) to the Working Group for further consideration with a view to developing guidance, if appropriate.

12.33 The Sub-Committee noted the information provided by Italy (COMSAR 9/INF.11) in relation to the kinds of errors and the problems experienced in handling SSAs.

DEVELOPMENT OF A TEST MESSAGE PROTOCOL FOR TESTING SHIP SECURITY ALERT SYSTEMS

12.34 The Sub-Committee noted that MSC 78 (MSC 78/26, paragraph 7.43) had agreed with the view of COMSAR 8 (COMSAR 8/18, paragraph 13.5) that there was a need to develop a test message protocol for testing ship security alert systems and instructed COMSAR 9 to develop such protocols and submit them to the Committee for approval.

12.35 The Republic of Korea (COMSAR 9/12/4) presented a test procedure in which a programme in a server computer system for ship security alerts would automatically identify test messages and send acknowledgements. The automatic acknowledgement of the end-to-end test was sent, on behalf of the competent authority, via Inmarsat, since the Republic of Korea considered that most of the ships were equipped with an Inmarsat-C Ship Earth Station. The automatic acknowledgement by the Company Security Officer (CSO) of the end-to-end test would be dependent on whether the CSO had access to the server computer system. However, if the CSO had no access to such a system, alternative arrangements could be made for the acknowledgement of the test manually.

¹ Requirements and performance standards for radio systems and equipment for maritime distress and safety radiocommunications are developed and adopted by the International Maritime Organization (IMO).

12.36 During the ensuing discussion it was again noted that the lack of a standardized protocol for SSAs somewhat precluded the development of definitive standards for testing SSAs. The Sub-Committee referred document COMSAR 9/12/4 (Republic of Korea) to the Working Group for further consideration.

INSTRUMENTS TO BE REVIEWED AND AMENDED SO AS TO INCLUDE APPROPRIATE SECURITY-RELATED PROVISIONS

12.37 The Sub-Committee noted that MSC 78, recalling operative paragraph 1 of resolution A.924(22) on Review of measures and procedures to prevent acts of terrorism which threaten the security of passengers and crew and the safety of ships, which directed the Committee, under the direction of the Council, to review "(any other) relevant IMO instrument under (its) scope and/or to adopt other security measures and, in the light of such a review, to take prompt action as appropriate", had instructed (MSC 78/26, paragraph 7.97) the various sub-committees, under their existing work programme and agenda item on "Measures to enhance maritime security", to identify the various instruments under their responsibility, which may need to be reviewed and amended so as to include appropriate security-related provisions. In this respect, MSC 78 had advised the sub-committees to bear in mind the functional requirements of the ISPS Code and, in particular, those relating to access control and handling of cargo. The sub-committees were asked to consider the need to amend each of the instruments which they would be identifying; to prioritize the work they will be suggesting; and to indicate, bearing in mind their other work load and priorities, the time (number of sessions) needed to amend each of the instruments.

12.38 The Sub-Committee, based on the revised terms of reference for the Sub-Committee which COMSAR 8 had put forward (COMSAR 8/18, paragraphs 15.1 to 15.3 and annex 17), identified the instruments, which, for the purposes of resolution A.924(22), were under the responsibility of the Sub-Committee, as:

- .1 the relevant chapters III, IV and V of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended; and
- .2 the International Convention on Maritime Search and Rescue, 1979, as amended.

12.39 The Sub-Committee, bearing in mind the provisions of SOLAS chapter XI-2 and of the ISPS Code, agreed that, at this stage, there was no need to review or amend the provisions of the aforesaid instruments with a view of including therein security-related provisions.

12.40 The Sub-Committee also agreed that the various performance standards, guidelines, recommended practices and model courses under the purview of the Sub-Committee provided a subordinate role and as such did not warrant, at this stage, any review or amendment.

PROPOSED AMENDMENTS TO RESOLUTION A.706(17) ON WORLD-WIDE NAVIGATIONAL WARNING SERVICE

12.41 France (COMSAR 9/12/2), considering paragraph B/4.13 of the ISPS Code, which provided that SOLAS Contracting Governments should consider how information on changes in security levels should be promulgated rapidly and indicated that Administrations may wish to use NAVTEX messages or Notices to Mariners as the method for notifying such changes in security levels to ship and company and ship security officers, suggested that changes of the security level in a territorial sea may be the subject of navigational warning and proposed security-related

12.42 The Sub-Committee recalled that resolution A.706(17) specified in annex 2 the procedure to be followed for amending Annex 1 to the resolution. The IMO Procedure for amending the World-Wide Navigational Warning Service provided that:

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

2 Amendment 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 proposals for amendment have been examined in substance, the Maritime Safety Committee will entrust the Sub-Committee on Radiocommunications 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."

12.43 The Sub-Committee also recalled that resolution A.706(17) had been adopted in association, and closely related to, resolution A.705(17) on Promulgation of Maritime Safety Information. Paragraph 7 of the Recommendation on Promulgation of Maritime Safety Information, annexed to resolution A.705(17), prescribed a procedure for amending the resolution which was similar to that stipulated for resolution A.706(17). Thus, if resolution A.706(17) was to be amended with a view of including security-related provisions therein, it was probable that the Committee would need to look at the need of revising, at the same time, resolution A.705(17) to include security-related provisions therein.

12.44 The Sub-Committee referred documents COMSAR 9/12/2 (France) to the Working Group for further consideration.

REVISION OF MSC/CIRC.623/REV.3

12.45 The Sub-Committee recalled that MSC 77 (MSC 77/26, paragraph 6.88), in considering the review of MSC/Circ.967 on Directives for MRCCs in the context of the proposal of France (MSC 77/6/6), had noted that the discussions by the Maritime Security Working Group had focused on the different means of notifying MRCCs of incidents taking place and had concluded that, rather than focussing on the type of attack, the method of raising the alarm should be at the master's discretion, that a ship issuing an overt alarm should expect an overt response from the MRCC and that ships issuing a covert alarm required a covert response. The text of MSC/Circ.967 had been amended and approved as MSC/Circ.1073 on Guidelines for maritime rescue co-ordination centres on acts of violence reflecting these conclusions. MSC 77, in approving MSC/Circ.1073, had instructed COMSAR 8 to consider whether corresponding

amendments needed to be made to MSC/Circ.623/Rev.3 on Piracy and Armed Robbery: Guidance to shipowners and ship operators, shipmasters and crews on preventing and suppressing acts of piracy and armed robbery against ships.

12.46 The Sub-Committee noted that:

- .1 MSC 78 (MSC 78/26, paragraph 7.44) had noted that COMSAR 8, in the light of the absence of specific submissions relating to the revision of MSC/Circ.623/Rev.3 so as to ensure consistency with the guidance given in MSC/Circ.1073, had considered it prudent not to embark on any discussion on this issue; and
- .2 MSC 78 had invited those parties having an interest in the revision of MSC/Circ.623/Rev.3 to make relevant submissions to COMSAR 9 so as to enable the COMSAR Sub-Committee to consider the matter and to carry out the task assigned to it.

12.47 The Sub-Committee instructed the Working Group to review, in the context of MSC/Circ.1073, paragraphs 25 to 31 on Radio watchkeeping and responses of MSC/Circ.623/Rev.3 with a view of advising the Sub-Committee of the recommended action.

ESTABLISHMENT OF THE WORKING GROUP

12.48 The Sub-Committee established the Working Group on Maritime Security, with the following terms of reference. The Working Group on Measures to enhance Maritime Security, taking into account decisions of, and comments and proposals made in Plenary, should:

Long-range identification and tracking of ships

- .1 continue the development of the draft of the proposed new regulation of SOLAS chapter XI-2 on LRIT, taking into account the decisions and instructions of MSC 78 and MSC 79 and bearing in mind that the ultimate objective is to extend, at the appropriate time, the purpose and scope of LRIT to include safety and environmental protection applications. In this respect, the Working Group should, *inter alia*, ensure that the LRIT system is capable of:
 - .1 having three classes of users, each one of them entitled to receive different LRIT data;
 - .2 being switched off on board 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; and
 - .3 preventing a named coastal State from receiving LRIT information, where requested by the Administration, even if the coastal State is otherwise entitled to receive that information;
- .2 develop conditions which the Committee may impose on a LRIT data service provider when considering its approval;

- .3 develop a robust intergovernmental oversight scheme for the approved LRIT data service providers through which the adherence of LRIT data service providers to the conditions imposed on them, at the stage of their approval, can be verified manner to the satisfaction of all SOLAS Contracting Governments;
- .4 consider the proposals of Brazil (COMSAR 9/12/3) and advise the Sub-Committee on the recommended actions;
- .5 consider the proposals of the Republic of Korea (COMSAR 9/12/5) and advise the Sub-Committee on the recommended actions;
- .6 consider the proposal of Cyprus *et al* (COMSAR 9/12/7) and advise the Sub-Committee on the recommended actions;
- .7 consider the proposals of the United States (COMSAR 9/12/8) and advise the Sub-Committee on the recommended actions;

Related documents: COMSAR 9/12/3 (Brazil), COMSAR 9/12/5 (Republic of Korea), COMSAR 9/12/7 (Cyprus *et al*), COMSAR 9/12/8 (United States), COMSAR 9/INF.4 (Norway), COMSAR 9/INF.6 (IALA) and COMSAR 9/INF.8 (United States)

Priority of ship security alerts

.8 consider the priority of ship security alerts with a view to advising the Sub-Committee on the required actions;

Related documents: SOLAS regulation XI-2/6, resolutions MSC.136(76) and MSC.147(77), MSC 79/5/6 (Italy) and COMSAR 9/12/6 (Italy)

Development of a test message protocol for testing ship security alert systems

.9 develop a test message protocol for testing ship security alert systems;

Related documents: SOLAS regulation XI-2/6, ISPS Code, resolutions MSC.136(76) and MSC.147(77), COMSAR 9/12/4 (Republic of Korea)

Proposed amendments to resolution A.706(17) on World-Wide Navigational Warning Service

.10 consider the proposal for amending resolution A.706(17) for the purpose of including therein security-related provisions with a view to advising the Sub-Committee on the recommended actions;

Related documents: Resolutions A.705(17) and A.706(17) and COMSAR 9/12/2 (France)

Revision of MSC/Circ.623/Rev.3 on Guidance to shipowners and ship operators, shipmasters and crews on preventing and suppressing acts of piracy and armed robbery against ships

.11 review, in the context of MSC/Circ.1073, paragraphs 25 to 31 on Radio watchkeeping and responses of MSC/Circ.623/Rev.3 with a view to advising the Sub-Committee on the recommended action; and

Related documents: MSC/Circ.623/Rev.3 and MSC/Circ.1073

Reporting

.12 submit its report for the consideration of the Sub-Committee on Thursday, 10 February 2005.

Report of the working group

12.49 Having received the report of the Working Group on Maritime Security (COMSAR 9/WP.5), the Sub-Committee approved it in general and took action as summarized hereunder.

12.50 The Sub-Committee:

- .1 noted the discussion in connection with the priority of SSA messages; agreed that as the message priority requirement applied to satellite communications, and given the diversity of SSA systems, there was no need to develop a message priority requirement for ship security alerts; and invited the Committee to consider issuing appropriate guidance to Contracting Governments, to the effect that:
 - .1 Ship Security Alert System (SSAS) communication service providers should deliver Ship Security Alert (SSA) messages without delay so as to permit the relevant Competent Authorities to take appropriate action;
 - .2 an SSA should be transmitted to more than one recipient, as recognized by the Administration, in order to enhance the resilience of the Ship Security Alert System; and
 - .3 the Administration should ensure that its designated proper recipients of SSA are capable of processing the information received with the highest priority. This may require the recipients to have a twenty-four hour, seven day a week system of operation in place;
- .2 agreeing that although there was a need for SSAS to be subject to testing, given the multiplicity of SSA systems, it would be impractical to develop a test protocol to cover all systems; noting that many systems already in use had test procedures in place; and concluding that test procedures should not be prescriptive; concurred with the view of the Working Group that test procedures for SSAS were a matter for individual Administrations;
- .3 noting the IMO Procedure for amending the World-Wide Navigational Warning Service (paragraph 12.42 above), agreed with the Working Group's decision not to propose amendments to resolution A.706(17) on World-Wide Navigational Warning Service;

- .4 agreed with the conclusion of the Working Group that there was no need to amend MSC/Circ.623/Rev.3 in the context of MSC/Circ.1073;
- .5 noted, in general the Working Group's discussions in connection with long-range identification and tracking of ships;
- .6 noted the offer by the United States to develop and fund initial LRIT data service provider functions and to host the LRIT system based on the design of Amver until the Organization can develop more permanent arrangements, as a means of "jump starting" the process;
- .7 in the context of the discussion on signal priority for LRIT information (COMSAR 9/WP.5, paragraph 54), noted that an existing provision of the ITU Radio Regulations confers safety priority for ship reporting communications;
- .8 noted, as a basis for further discussion and development by the Sub-Committee and its Correspondence Group, the proposed preliminary draft amendments to the SOLAS Convention and the draft performance standards and operation of the International long-range identification and tracking system for ships, set out in annexes 14 and 15, respectively, and invited the Committee to note the work in progress;
- .9 established a Correspondence Group, under the co-ordination of the United States^{*} to address the outstanding issues and to report back to the Sub-Committee at its tenth session, taking into account any further instructions of the Committee;
- .10 approved the proposed terms of reference for the Correspondence Group on LRIT, set out in annex 16; and
- .11 invited the Committee to extend the target completion date of the work programme item "Measures to enhance maritime security" to 2006.

13 PASSENGER SHIP SAFETY

13.1 The Sub-Committee recalled that MSC 77 had approved MSC/Circ.1079 on the Guidelines for preparing plans for co-operation between search and rescue services and passenger ships (in accordance with SOLAS regulation V/7-3), combining and revoking MSC/Circs.1000 and 1041, and had concurred with the opinion of COMSAR 7 that there was no need to amend or adjust the rescue co-operation plans developed in accordance with MSC/Circs.1000 and 1041, as reflected in MSC/Circ.1079.

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13.2 The Sub-Committee noted that MSC 78 had considered the outcome of COMSAR 8 and other relevant sub-committees in conjunction with the tasks assigned in the updated work plan (MSC 75/WP.12) and, after having concluded its discussions on the issue, the Committee had approved the revised work plan, as set out in annex 4 to MSC 78/WP.14, and had forwarded it to the relevant sub-committees for action as appropriate.

13.3 The Sub-Committee also noted that MSC 79, having considered and updated the work plan revised by MSC 78, had approved the updated work plan, as set out in annex 3 to document MSC 79/WP.13, and had forwarded it to the COMSAR, DE, FP, NAV, SLF and STW Sub-Committees for action, as appropriate. MSC 79 had also conveyed the group's report, in its entirety, to the relevant sub-committees for background purposes and further instructed the relevant sub-committees to keep the Committee informed of their progress on matters assigned.

13.4 The Sub-Committee further noted the decisions taken by MSC 79, in particular:

- .1 in considering the definition of the expression "large passenger ship", the Committee had agreed that the word "large" should be deleted from the title of this agenda and that the working group and subsidiary bodies should continue to develop relevant parameters, as necessary, for application purposes of any proposed requirements and recommendations, bearing in mind that a "one size fits all approach" should be avoided since each area of safety (i.e. fire, machinery, stability, lifesaving, search and rescue, etc.) has different concerns;
- .2 in considering matters related to the "time to recover", the Committee had agreed to a five day maximum timeframe for which persons should be expected to stay in survival craft, taking into account the humanitarian needs of those aboard such craft and the hazards to life and health of persons on such craft. The Committee had also agreed that more time is necessary to resolve the matter related to the time to rescue and had instructed the Sub-Committee to prepare a "time to rescue" timeframe and related criteria and advise MSC 81 accordingly;
- .3 in considering the relevant parameters, the Committee had identified those that should be used by sub-committees to specify design and operational characteristics for application purposes of any proposed recommendations, if appropriate, as set out in the revised work plan, as contained in annex 3 to document MSC 79/WP.13. The Committee had emphasized that the subsidiary bodies should remember not to lose sight of the original intent of the guiding philosophy, in particular that future passenger ships should be designed for improved survivability so that, in the event of a casualty, persons can stay safely on board as the ship proceeds to port. Therefore, the Committee had reiterated that casualty thresholds should stipulate the amount of damage a ship must be able to withstand and still safely return to port under its own power and, if a casualty threshold is exceeded, then a ship is to remain habitable for a minimum time of 3 hours to allow for safe and orderly abandonment, as agreed at MSC 78. Any departure from the above concepts and timeframes should be appropriately justified as part of any proposed recommendations; and
- .4 in considering information by the Secretariat (MSC 79/4/4) that the World Maritime University was, as requested by MSC 78, studying the possibility of it taking a role in co-ordinating SAR research project to assist the Organization in its work on passenger ship safety, the Committee had requested the Secretariat to

provide information on the cost implication of such co-ordinating work to be carried out by WMU, for consideration at MSC 80.

13.5 The Sub-Committee finally noted that MSC 79 had agreed to the revised guiding philosophy, strategic goals and objectives, as set out in annex 1 to document MSC 79/WP.13, and had expressed the view that, taken as a total package, including the group's reports from previous sessions, there was enough information to allow the sub-committees to complete their assigned tasks by 2006.

13.6 The Sub-Committee briefly discussed documents submitted by the Secretariat (COMSAR 9/2, paragraph 1.9 and COMSAR 9/13), the United Kingdom (COMSAR 9/13/1, COMSAR 9/13/2 and COMSAR 9/13/3) and referred the issue to the SAR Working Group for detailed consideration.

13.7 The Sub-Committee agreed that, due to the huge amount of tasks, as indicated in the work plan contained in annex 3 to MSC 79/WP.13, a Correspondence Group should be established to consider the tasks which would not be finalized in this session of the Sub-Committee.

13.8 The Sub-Committee instructed the SAR Working Group, taking into account the comments and decisions made at Plenary, to:

- .1 consider documents COMSAR 9/13, COMSAR 9/13/1, COMSAR 9/13/2, COMSAR 9/13/3 and the revised work plan contained in annex 3 to MSC 79/WP.13;
- .2 prioritize the tasks allocated to the Sub-Committee, as given in the revised work plan contained in annex 3 to MSC 79/WP.13, with a view to:
 - .1 identifying tasks to be commenced at this session of the Sub-Committee;
 - .2 identifying tasks to be allocated to the Correspondence Group;
 - .3 prepare Terms of Reference for the Correspondence Group; and
 - .4 carry out the tasks identified to be finalized at this session.

Report of the Working Group

13.9 In considering the parts of the SAR Working Group report (COMSAR 9/WP.3/Add.1, section 9), referring to the issue, the Sub-Committee took action as summarized hereunder.

13.10 The Sub-Committee established a Correspondence Group on Passenger Ship Safety under the co-ordination of the United Kingdom^{*} and agreed its terms of reference, set out in annex 17. The Correspondence Group was invited, in its deliberations on the issue, to take into account the discussions of the Working Group as summarized in annex 10 to COMSAR 9/WP.3/Add.1.

13.11 The Sub-Committee noted that, in considering task 3 contained in the work plan, the Working Group had agreed that it was difficult to define "an area remote from SAR facilities" as there were no analytical tools and had proposed to wait until a better tool would be available. In considering task 5, the Working Group agreed that careful consideration was necessary by the Correspondence Group, in order to ensure that the outcome of the Correspondence Group will provide for effective application of its recommendations to SOLAS ships.

13.12 The Sub-Committee also noted that the Working Group had considered task 6 and the outcome of the ICAO/IMO Joint Working Group's discussions on the recommendation to fit marine band radio equipment on maritime SAR aircraft and require the carriage of air band equipment on all SOLAS ships and had pointed out that this had been an ongoing problem and, in particular, as explained by ICAO it was difficult to mandate carriage of such equipment on aircraft not normally covered by the ICAO provisions. Therefore, the Sub-Committee recommended voluntary fitment of air band radio equipment on SOLAS ships other than passenger ships, Maritime Search and Rescue vessels and other Government owned vessels.

13.13 The Sub-Committee further noted that, taking into account the five day "time to recover" and the explanation for "place of safety" and "time to rescue" agreed by MSC 79, the Working Group had identified factors that could be used by the Correspondence Group to validate "time to recover" criteria, as set out in annex 11 to COMSAR 9/WP.3/Add.1.

13.14 Member Governments were invited to actively participate on the work of the Correspondence Group on Passenger ship safety with a view to achieve significant progress on the issue at COMSAR 10.

14 REVIEW OF THE FAL AND SALVAGE CONVENTION PROVISIONS REGARDING THE TREATMENT OF PERSONS RESCUED AT SEA

14.1 The Sub-Committee noted that MSC 78, following the adoption of amendments to the SOLAS and SAR Conventions, and associated Guidelines for the treatment of persons rescued at sea, (resolutions MSC.153(78), MSC.155(78) and MSC.167(78)), had requested that the outcome of MSC 78 be brought to the attention of the other agencies, and also requested the inter-agency group to consider what other supplementary guidance may need to be developed for the post-rescue phase.

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14.3 Having considered document COMSAR 9/2/1 (Secretariat), the Sub-Committee noted that, after a lengthy discussion of the issue, FAL 31 had approved draft amendments to the FAL Convention, supported by the majority of delegations, as set out in the annex to COMSAR 9/2/1, with a view to formal adoption at FAL 32 in July 2005.

14.4 The Sub-Committee further noted that no documents on the issue had been submitted to its last three consequential sessions and, taking into account comments made, invited the Committee to delete the low priority agenda item "Review of the FAL and SALVAGE Convention provisions regarding the treatment of persons rescued at sea" from the Sub-Committee's work programme.

15 RECOMMENDATIONS ON HIGH-RISK OCEANIC CROSSINGS BY ADVENTURE CRAFT

15.1 The Sub-Committee noted that Chile had presented a proposal to MSC 76 (MSC 76/20/4) calling for the development of guidelines on minimum safety requirements for high-risk ocean voyages by non-conventional adventure craft which, in the event of an emergency, potentially involve high cost maritime search and rescue operations using various resources. MSC 76 had therefore decided to include in the work programmes of the NAV (co-ordinator) and COMSAR Sub-Committees, a low priority item on "Recommendations on high-risk oceanic crossings by adventure craft", with one session needed to complete the item.

15.2 The Sub-Committee also noted that NAV 50 had considered document MSC 76/20/4 (Chile) including the draft MSC circular on Measures to be considered during an oceanic crossing by adventure craft but, due to lack of time, was unable to finalize its work on the draft MSC circular to be able to refer it to COMSAR 9 for consideration. NAV 50 therefore invited the delegation of Chile to resubmit the draft MSC Circular on Guidance on the Minimum Safety Measures for High-risk Oceanic Voyages by non-conventional craft to COMSAR 9, taking into account the comments and views expressed by the NAV Sub-Committee.

15.3 The Sub-Committee briefly discussed document COMSAR 9/15 (Chile) proposing minimum safety measures be taken by non-conventional craft for high-risk oceanic crossings, pointing out that there was not a clear definition of "non-conventional craft", and instructed the SAR Working Group to consider this issue in detail and, taking into account the decisions made in Plenary, prepare:

- .1 the draft MSC circular; and
- .2 any appropriate comments/recommendations,

for consideration in Plenary.

Report of the Working Group

15.4 Having considered the relevant part of the SAR Working Group report (COMSAR 9/WP.3, section 5) referring to the matter, the Sub-Committee endorsed the draft MSC circular on Basic safety guidance for oceanic voyages by non-regulated craft, set out in annex 18, for submission to MSC 80 for approval.

15.5 The Committee was invited to delete the low priority item "Recommendations on high-risk oceanic crossings by adventure craft" from the Sub-Committee's work programme, as the work on this item had been completed.

16 WORK PROGRAMME AND AGENDA FOR COMSAR 10

Terms of reference of the Sub-Committee

16.1 The Sub-Committee noted that, following its discussion on the issue, MSC 79 had instructed the Secretariat to revise the terms of reference of the sub-committees in consultation with their respective Chairmen, taking into account the points agreed by the Chairmen's Meeting (MSC 78/WP.9, paragraph 5), the views of MEPC 52, as well as its own views, and submit them to MSC 80 and, as a consequence, to the next Chairmen's Meeting, for final consideration and approval by that session of the Committee and by MEPC 53.

16.2 The Sub-Committee also noted that, recalling its earlier decision that there was no immediate need to change the existing structure of the sub-committees, as subsequently noted also by the Council and the Assembly, MSC 79 had endorsed the recommendation of the Chairmen's Meeting (MSC 78/WP.9, paragraph 7) that, at this stage, it should not pursue any further the consolidation under one sub-committee (i.e. DE, FP or COMSAR Sub-Committee) of the responsibility for escape, evacuation and recovery, or the proposed change of name for the COMSAR Sub-Committee.

Work programme and agenda for COMSAR 10

16.3 The Sub-Committee noted that MSC 79, in considering the work programmes of the sub-committees and provisional agendas for their forthcoming sessions, had recalled that, at MSC 78, the Chairman, in addressing the Committee's method of work relating to the consideration of proposals for new work programme items, had clarified that the objective of the Committee when discussing these proposals was to decide, based upon justification provided by Member Governments in accordance with the Guidelines on the organization and method of work, whether the new item should or should not be included in the sub-committee's work programme. A decision to include a new item in a sub-committee's work programme did not mean that the Committee had agreed with the technical aspects of the proposal. If it was decided to include the item in a sub-committee's work programme, detailed consideration of the technical aspects of the proposal and the development of appropriate requirements and recommendations should be left to the sub-committee concerned.

16.4 Taking into account the progress made during the session and the provisions of the agenda management procedure, the Sub-Committee reviewed its work programme and agenda for its next session (COMSAR 9/WP.1) and prepared a proposed revised work programme and draft provisional agenda for COMSAR 10. While doing so, the Sub-Committee agreed to invite the Committee to:

- .1 delete the following work programme items, as work on them has been completed:
 - .1.1 item H.3 Emergency radiocommunications, including false alerts and interference;
 - .1.2 item H.4 Review of the OSV Guidelines;

- .1.3 item H.5 Review of the 2000 HSC Code and amendments to the DSC Code and the 1994 HSC Code;
- .1.4 item L.2 Recommendations on high-risk oceanic crossings by adventure craft;
- .2 delete the following work programme item, as no submissions had been received on such item for its last three consecutive sessions:
 - .2.1 item L.1 Review of the FAL and SALVAGE Convention provisions regarding the treatment of persons rescued at sea;
- .3 extend the target completion dates of the following work programme items:
 - .3.1 item 6.1 Harmonization of aeronautical and maritime search and rescue procedures, including SAR training matters, to 2006;
 - .3.2 item 6.4 Medical assistance in SAR services, to 2006;
 - .3.3 item H.2 Developments in maritime radiocommunication systems and technology, to 2006;
 - .3.4 item H.6 Measures to enhance maritime security, to 2006;
- .4 replace the number of sessions needed for completion by the target completion date for the following work programme items:
 - .4.1 item H.7 Review of the SPS Code 2007;
 - .4.2 item H.8 Revision of the performance standards for SART 2007;
- .5 renumber the work programme items accordingly; and
- .6 approve the proposed revised work programme of the Sub-Committee together with the proposed revised target completion dates and other editorial changes.

16.5 The Committee was also invited to approve the proposed revised work programme of the Sub-Committee and provisional agenda for COMSAR 10, as set out in annex 19.

Arrangements for the next session

16.6 The Sub-Committee tentatively agreed to establish, at COMSAR 10, working and drafting groups on the following items:

- .1 search and rescue;
- .2 GMDSS operational and technical, including MSI matters; and
- .3 maritime security.

16.7 The Sub-Committee recalled that, following consideration of agenda items 3, 4, 5, 12 and 13, it had agreed to establish correspondence groups on the following high priority items:

- .1 tsunami warnings and disaster preparedness and response;
- .2 ITU Radiocommunication matters;
- .3 revision of resolution A.888(21);
- .4 maritime security; and
- .5 passenger ship safety.

16.8 The Sub-Committee noted that its tenth session had been tentatively scheduled to take place from 6 to 10 March 2006.

17 ELECTION OF CHAIRMAN AND VICE-CHAIRMAN FOR 2006

17.1 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 2006.

18 ANY OTHER BUSINESS

UNIFICATION OF DISTRESS BUTTONS FOR EFFECTIVE DISTRESS COMMUNICATIONS

18.1 In considering the document by the Republic of Korea (COMSAR 9/18/1) suggesting to develop a standard for the unified distress button system to be used on VHF DSC, MF/HF DSC and Inmarsat equipment, the Sub-Committee recalled that, with a view to eliminate/reduce false alerts and in order to unify distress button requirements, the following standards had been developed and applied to VHF DSC, MF/HF DSC and Inmarsat equipment installed on or after 1 February 1999:

- "2.5 A distress alert should be activated only by means of a dedicated distress button. This button should not be any key of an ITU-T digital input panel or an ISO keyboard provided on the equipment.
- 2.6 The dedicated distress button should:
 - .1 be clearly identified; and
 - .2 be protected against inadvertent operation.
- 2.7 The distress alert initiation should require at least two independent actions.
- 2.8 The equipment should indicate the status of the distress alert transmission.
- 2.9 It should be possible to interrupt and initiate distress alerts at any time."

18.2 The Sub-Committee also recalled that MSC/Circ.862 of 22 May 1998 had been issued to provide clarifications on certain requirements in IMO performance standards for GMDSS equipment, in particular, concerning activation of distress alerts. Therefore, the Sub-Committee

18.3 However, after some discussion, the Sub-Committee agreed that for new developments in maritime radiocommunication systems and technology, detailed standards for unified distress alerting procedures and buttons could be developed in the future.

AIS MATTERS

18.4 The Sub-Committee recalled that, as instructed by MSC 77, COMSAR 8 had discussed document MSC 77/10/5 (Germany and United States) suggesting that AIS be connected to the radio station's reserve power source, and also discussed document COMSAR 8/17, submitted by a group of Member States and IALA, pointing out problems regarding the installation and use of AISs and had referred the issue to the Technical Working Group for detailed consideration.

Having considered the report of the Technical Working Group, COMSAR 8:

- .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;
- .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;
- .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;
- .4 invited the NAV Sub-Committee to consider COMSAR 8/17 and take appropriate action; and
- .5 invited the Committee to concur with the Sub-Committee's view on connection of AISs to the ship's power supply.

In this context the delegation of Sweden stated that AIS connections to the ship's power supply "shall allow connection of radio systems, such as AISs to be connected to the GMDSS powering system according to SOLAS regulation IV/13."

18.5 The Sub-Committee noted that MSC 78 had concurred with the Sub-Committee's view that the AIS should ideally be connected through an uninterruptible power supply (UPS) to the ship's power supply as defined in SOLAS chapter II-1 and had instructed NAV 50 to take into account the COMSAR Sub-Committee's view on the matter and incorporate it in the appropriate Guidelines on installation of AISs (SN/Circ.227).

18.6 The Sub-Committee also noted that NAV 50 had prepared amendments regarding the above, which were approved by MSC 79 for dissemination by SN/Circ.245.

18.7 The Sub-Committee considered document COMSAR 9/18 (Latvia and Sweden) suggesting that:

- .1 the tracking and identification of ships in the Baltic Region and Europe would rely on AIS and therefore, the reliability of the tracking information is of outmost importance in order to protect the environment as well as to receive accurate information concerning safety and security situations;
- .2 for the purpose of better reliability and use of existing AISs and its further developments and in order to strengthen the quality of the AIS information, it is suggested that:
 - .1 standards for the AIS should be revised in order to:
 - .1.1 amend the processes for controlling the accuracy of the data; and
 - .1.2 increase the mandatory data in the AIS since the system is accepted not only as an anti-collision tool but as a tool for maritime safety, security and environmental tracking and monitoring; and
 - .2 AIS as a system should also be included in the ship's radio installation and subjected to survey and certification along with the GMSDSS equipment.

18.8 With a view to amending AIS performance standards, as suggested, the Sub-Committee agreed that an appropriate work programme proposal should be submitted to the MSC and the NAV Sub-Committee in line with the existing Guidelines and work programme management procedures.

REPORT OF THE VITH COMBINED ANTARCTIC NAVAL PATROL

18.9 The Sub-Committee noted information by Argentina and Chile (COMSAR 9/INF.3) (Spanish only) providing a report on the VIth combined Antarctic Naval Patrol.

REVISION OF THE PERFORMANCE STANDARDS FOR SEARCH AND RESCUE RADAR TRANSPONDER (SART)

18.10 The Sub-Committee noted that MSC 78, following consideration of document MSC 78/24/4 (Japan) proposing, in order to improve the effectiveness of search and rescue operations, to revise the Performance standards for SART (resolution A.802(19)) taking into account the SART using a signal of circular polarization; and document MSC 78/24/19 (Norway) proposing, when revising the Performance standards, to also include therein, provisions for the AIS search and rescue transponder (one for 9 GHz SART and one for AIS-SART) and, if necessary, to develop appropriate amendments to SOLAS chapters III and IV, had decided to:

- .1 include, in the COMSAR Sub-Committee's work programme, a high priority item on "Revision of the performance standards for SART", with two sessions needed to complete the item; and
- .2 instruct the DE and NAV Sub-Committees to contribute, as necessary, when requested by the COMSAR Sub-Committee.

18.11 The Sub-Committee noted information by Japan (COMSAR 9/INF.10) stressing the need to revise the performance standards for SART and, taking into account paragraph 18.10 above, decided to include the corresponding item into the provisional agenda for COMSAR 10. Member States were invited to submit their comments and proposals for consideration.

PERFORMANCE OF GMDSS OPERATOR'S CERTIFICATE HOLDERS

18.12 The Sub-Committee noted that MSC 78 had noted its concern on the performance of GMDSS operator's certificate holders on board ships and, in this context, had requested the STW Sub-Committee to further consider revalidation matters in line with the existing provisions of the STCW Code.

18.13 The Sub-Committee was informed by the Secretariat that at STW 36 the delegation of Norway had provided information that for more than four years, the Norwegian Administration, during radio surveys, had investigated systematically the competency of radio operators certified for the GMDSS. The results of the investigation indicated that more than 80% of the radio operators lacked the competence necessary to operate the equipment correctly in all respects, including distress, urgency and safety. Recognizing that the GMDSS is a vital part for the safety of life at sea and noting this lack of competency, Norway was of the opinion that the STW Sub-Committee would need to consider whether or not the present requirements were adequate. In this context, after considerable discussion of the issue and recalling the request by COMSAR 8, which had been endorsed by MSC 78, STW 36 had agreed to recommend to the Committee to add a new work programme item "Performance of GMDSS operator's certificate holders" as a new work programme item and to include it in the agenda for STW 37.

18.14 Taking into account the information provided in paragraph 18.13 above, the Sub-Committee invited MSC 80 to change the title of the work programme item proposed by STW 36 to "Revalidation of GMDSS operator's certificate".

EXPRESSIONS OF APPRECIATION

18.15 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:

- Admiral Sergio Chagasteles (Brazil), (on transfer home);
- Mr. Kim Fisher (United Kingdom), (on retirement); and
- Mr. George Olmstead (Canada), (on retirement).

19 ACTION REQUESTED OF THE COMMITTEE

- 19.1 The Maritime Safety Committee is invited to:
 - .1 endorse the issuing of COMSAR/Circ.36 on Broadcast of warnings for tsunami and other natural disasters (paragraph 3.50);
 - .2 endorse the action taken by the Sub-Committee in instructing the Secretariat to convey the liaison statement on Developments in maritime radiocommunication systems and technology to ITU-R WP.8B (paragraph 3.14 and annex 1);
 - .3 adopt the draft MSC resolution on Adoption of amendments to resolution A.801(19) Provision of Radio Services for the Global Maritime Distress and Safety System (GMDSS) (paragraph 4.9 and annex 3);

- .4 endorse the action taken by the Sub-Committee in instructing the Secretariat to convey the liaison statement concerning the technical characteristics of NAVTEX and reliability predictions for MF communications in sea area A2 to ITU-R WP.8B (paragraph 4.10 and annex 4);
- .5 endorse the action taken by the Sub-Committee in instructing the Secretariat to convey the liaison statement addressing the issue of DSC complexity to ITU-R WP.8B and IEC TC 80 (paragraph 4.11 and annex 5);
- .6 approve the re-establishment of the Joint IMO/ITU Experts Group on Maritime Radiocommunication Matters, with the agreed TORs, for further development of an IMO position to WRC-07 (paragraph 4.15 and annex 6);
- .7 approve the draft MSC circular on Closure of Inmarsat-E services by Inmarsat Ltd. (paragraph 5.5 and annex 7);
- .8 approve the draft proposed amendments to SOLAS chapter IV Radiocommunications with a view to adoption at MSC 81 (paragraph 5.6 and annex 8);
- .9 endorse the issuing of COMSAR/Circ.37 Guidance on minimum communication needs of Maritime Rescue Co-ordination Centres (MRCCs), superseding COMSAR/Circ.18 (paragraph 7.11);
- .10 approve the convening of the 12th meeting of the ICAO/IMO JWG on Harmonization of Aeronautical and Maritime SAR intersessionally (paragraph 7.12 and annex 10);
- .11 approve the draft MSC circular on Identification of passenger ships, other than ro-ro passenger ships, which should benefit from being equipped with the emergency medical kit/bag (EMK) (paragraph 7.26 and annex 11);
- .12 adopt the draft MSC circular on Adoption of amendments to the IAMSAR Manual (paragraph 9.4 and annex 12);
- .13 note that the Sub-Committee agreed the proposed draft revised text of section 7 Radiocommunications of the OSV Guidelines and conveyed it to the SLF Sub-Committee, as co-ordinator (paragraphs 10.3 to 10.5);
- .14 note that the Sub-Committee agreed the draft amendments to the 2000 HSC, 1994 HSC and DSC Codes and conveyed them to the DE Sub-Committee, as co-ordinator (paragraphs 11.5 to 11.7 and annex 13);
- .15 take into account and consider the Sub-Committee's view on long-range identification and tracking of ships and related ship security matters (paragraph 12.50 and annexes 14 and 15);
- .16 note, as a basis for further discussion and development by the Sub-Committee and its Correspondence Group, the proposed preliminary draft amendments to the SOLAS Convention and the draft performance standards and operation of the

International long-range identification and tracking system for ships (paragraph 12.50.8 and annexes 14 and 15);

- .17 note that a Correspondence Group under the agreed Terms of Reference was established to address the outstanding issues and to report back to COMSAR 10, taking into account any further instructions of the Committee (paragraph 12.50.9 and annex 16);
- .18 approve the draft MSC circular on Basic safety guidance for oceanic voyages by non-regulated craft (paragraph 15.5 and annex 18);
- .19 approve the proposed revised work programme of the Sub-Committee and provisional agenda for COMSAR 10 (paragraphs 16.4 and 16.5 and annex 19);
- .20 change a new work programme item "Performance of GMDSS operator's certificate holders" proposed by STW 36 to "Revalidation of GMDSS operator's certificate" (paragraph 18.14); and
- .21 approve the report in general.

LIAISON STATEMENT TO THE ITU-R WP.8B

DEVELOPMENTS IN MARITIME RADIOCOMMUNICATION SYSTEMS AND TECHNOLOGY

The IMO would like to thank the ITU-R for the liaison statement Document 8B/TEMP/50(Rev.1) concerning developments in maritime radiocommunication systems and technology.

The Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its ninth session (7 to 11 February 2005), whilst considering the issue of the future service functions and spectrum requirements for data communications in the HF bands and the future use of the VHF maritime mobile band governed by Appendix 18 of the Radio Regulations, was of the opinion that:

- .1 the channel plans and sub-band division of Appendices 17 and 25 of the Radio Regulations do not allow for sufficient flexibility of use or sufficient spectrum for introducing new HF data communication technologies while maintaining the current designation for NBDP;
- .2 the role of NBDP in maritime radiocommunications is declining rapidly and the associated mandatory carriage requirements should be reduced to the minimum necessary to support distress communications in locations and circumstances where other methods are not reliable;
- .3 the growing popularity of alternative HF data communications technologies will result in more intensive use of the available spectrum, which may be better accommodated using adaptive control techniques and broadening the HF band allocations to allow for generalized use wherever appropriate; and
- .4 action is necessary to reduce congestion in the VHF maritime mobile band using existing technology and to increase flexibility of use to accommodate new technologies.

Although it is not possible to predict at this time what the eventual outcome on the SOLAS chapter IV carriage requirements for NBDP equipment will be, or the consequential impact on spectrum requirements, a summary of COMSAR 9 conclusions on these issues is attached at annex.

SUMMARY CONCLUSIONS OF THE NINTH SESSION OF THE SUB-COMMITTEE ON RADIOCOMMUNICATIONS AND SEARCH AND RESCUE CONCERNING THE FUTURE OF THE NBDP SYSTEM

The following points are of relevance:

- .1 there is no need to retain NBDP for the original reason, i.e. to overcome language difficulties;
- .2 an HF system able to transmit data from shore to ship is necessary for dissemination of MSI in sea area A4;
- .3 there is a need for an HF general communications system able to transmit data for transmission of observations and position reports from ships in sea area A4;
- .4 NBDP carriage requirements in A3 could be deleted provided that a suitable transition period is used and that current installations are not immediately invalidated by the deletion;
- .5 due to the more robust propagation of NBDP compared to voice, NBDP could not immediately be discontinued in A4 as a distress follow-up communication;
- .6 that development of new technology for systems able to transmit data in the MF / HF bands is supported; and
- .7 it is acceptable that this new technology would make use of the frequencies currently being used for NBDP (for the time being excluding the dedicated distress communications frequencies).

It should be noted that in the above points the term "systems able to transmit data" includes both new technology systems as well as the current NBDP. It should also be noted that the points above include but are not limited to actual SOLAS chapter IV carriage requirements.

STATEMENTS BY DELEGATIONS OF JAPAN, VENEZUELA AND OBSERVER FROM ICCL

JAPAN

On behalf of the Government of Japan, I would like to extend our deepest condolences for the many lives lost in the Sumatra earthquake and consequent tsunami in December last year, and I would also like to express our heartfelt sympathy to all those who have been affected by this devastating disaster. We sincerely hope for their speediest possible recovery from this terrible tragedy.

Last month, The World Conference on Disaster Reduction, which was held in Kobe, where a large-scale earthquake struck ten years ago, recognized the importance of international co-operation to tackle the prevention and minimization of tsunami disasters. Mr. Sekimizu, Director of Maritime Safety Division, attended this Conference, and reported on IMO's activities in response to the tsunami, including the consideration of this Sub-Committee.

The government of Japan recognizes the importance and necessity of the activities of IMO for tsunami preparedness and response, and is keen to support these activities.

Japan is a country with technical knowledge and expertise accumulated through experience of these kinds of disasters. Therefore, Japan is ready to provide support for preparative activities to the countries affected by the tsunami, for example training courses on immediate response, including the emergency evacuation of ships, as well as training courses on port development planning to cope with earthquakes and tsunamis.

The Japanese Prime Minister, Junichiro Koizumi, stated in Jakarta on 6 January that the Government of Japan would provide maximum financial assistance, knowledge and expertise, as well as human resources, for the rehabilitation and reconstruction of the affected countries. With regard to financial support in particular, Japan pledged US\$500 million in grant aid as immediate assistance, and this has already been disbursed. Further activities will also be considered according to specific requests from the countries affected.

Therefore, we would like to ask those countries still suffering from the aftermath of this tsunami disaster, if they have any specific requests, to make an official approach to the Government of Japan through the appropriate diplomatic channels.

Japan is making every effort in assisting the affected countries to receive the help they need at the earliest stage.

COMSAR 9/19 ANNEX 2 Page 2

VENEZUELA

Speech by the Permanent Representative of Venezuela to IMO, made during the special session on the tsunami held on 9 February 2005.

There can be no doubting the importance of the statements made by IMO and specialized maritime bodies during this session, and I believe the moment is right to set up an informal working group to draft a guidance and reference document that would, as a first step, bring together the activities to be carried out by international organizations and the actions and co-ordinated efforts to be undertaken by states in response either to a disaster of a maritime nature or one that involves seafarers.

I propose that the document would concern three areas:

- (1) Preventive measures;
- (2) Damage assessment;
- (3) Reconstruction programmes.

Preventive measures

These are all the actions taken by a state to educate, alert and prepare seafarers with a view to safeguarding and protecting their lives and possessions when faced with a natural disaster.

They would apply to seafarers, ships and ports. The actions developed in that regard might concern what seafarers should do on board ships, be they in port, under way or at anchor when faced with an imminent disaster, and whether the best option is to weigh anchor, sail, or abandon ship, whether a ship under way should broadcast an early warning by means of the communication systems, and other considerations.

Damage assessment

These are all the actions taken by a state to ascertain the effects of a disaster on seafarers, ships, maritime communications, ports, navigational aids and maritime industries.

They would apply to seafarers, ships, maritime communications, port infrastructures, navigational aids and maritime industries. The actions developed in that regard might include: bathymetric measurements taken by ships while sailing, operational assessment of navigational aids together with the reporting of malfunctions to local authorities, assessment of port infrastructures, the effects on marine sporting and fishing facilities, and so on.

Reconstruction programmes

These are all the actions taken by a state to rectify the effects of a disaster on seafarers, ships, marine communications, ports, navigational aids and marine industries.

They would apply to seafarers, ships, marine communications, ports, navigational aids and marine industries, including the rehabilitation of industries concerned with maritime signalling in order to reactivate and reposition navigational aids.

(Signed) GUILLERMO RANGEL JOLLEY

INTERNATIONAL COUNCIL OF CRUISE LINES (ICCL)

Thank you Mr. Chairman, good morning to you, Secretary-General, IMO Staff and distinguished delegates.

The International Council of Cruise Lines and our 16 member lines were deeply saddened by the tragic events of December 26, 2004. The loss of human life is unimaginable and the devastation indescribable.

ICCL wishes to express our deepest sympathies to the people of the Indian Ocean and all the affected nations and of course immediately here to my fellow delegates from the region.

Mr. Secretary-General, ICCL would like to thank and commend you for your swift action and support on behalf of the maritime community to the wider United Nations efforts in the wake of the disaster.

ICCL member lines have heard your call and we also have contributed to the relief efforts.

The Cruise Industry Charitable Foundation, ICCL's member lines charitable arm, will be donating \$25,000 to the Samaritan's Purse tsunami relief efforts which will go to delivering emergency relief aid, building permanent housing and donating fishing boats and nets to help restore the livelihood of a number of victims.

In addition, our member lines have already given combined contributions totalling more than \$4.7 million to charitable organizations assisting in the relief efforts. The contributions, collected from corporate donations, crew and passengers, have aided a number of charities, including the Indonesian, International and American Red Cross; CARE; Save the Children; Habitat for Humanity; and the Salvation Army World Services Office.

Many cruise lines have also offered crew members directly affected by the tsunami free email access and phone calls to family members in Southeast Asia. Crew members were offered counselling services and, in some cases, flights home to be with their families.

Mr. Secretary-General, on behalf of our member lines and the Cruise Industry Charitable Foundation, ICCL would also like to present to you a donation to the Tsunami Maritime Relief Fund in the amount of \$25,000 US Dollars.

DRAFT RESOLUTION MSC.[](80)

(adopted on .. May 2005)

ADOPTION OF AMENDMENTS TO RESOLUTION A.801(19) - PROVISION OF RADIO SERVICES FOR THE GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS)

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 and technical specifications, as well as amendments thereto, shall be performed by the Maritime Safety Committee on behalf of the Organization,

HAVING CONSIDERED amendments to the existing criteria for use when providing a NAVTEX service, set out in Annex 4 to resolution A.801(19) - Provision of Radio Services for the Global Maritime Distress and Safety System (GMDSS), as prepared by the ninth session of the Sub-Committee on Radiocommunications and Search and Rescue,

1. ADOPTS the revised Annex 4 to resolution A.801(19) on Provision of Radio Services for the Global Maritime Distress and Safety System (GMDSS), set out in the Annex to the present resolution;

2. RECOMMENDS Member Governments to ensure that NAVTEX services established on or after [1 January 2006] conform to criteria not inferior to that set out in the Annex to the present resolution.

AMENDMENTS TO RESOLUTION A.801(19) ON PROVISION OF RADIO SERVICES FOR THE GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS)

The existing text of Annex 4 is replaced by the following:

"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 which 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; and
- establish a service area for promulgation to seafarers.

3 The ground-wave coverage may be determined for each coast station by reference to Recommendation ITU-R PN.368-7 and ITU-R Report 322 for the performance of a system under the following conditions:

Frequency	-	518 kHz
Bandwidth	-	500 300 Hz
Propagation	-	ground wave
Time of day	-	1
Season	-	1

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.

Transmitter power -	2
Antenna efficiency -	2
RF S/N in 500 Hz band width-	$8 dB^3$
Percentage of time -	90

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

3

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 (nm) can generally be attained by transmitter power in the range between 100 and 1,000 W during daylight with a 60% reduction at night. The receiver characteristics, particularly as regards the bandwidth response, must be compatible with that of the NAVTEX transmitter.

Bit error rate $1 \ge 10^{-2}$.

LIAISON STATEMENT TO THE ITU-R WP.8B

ISSUES CONCERNING PRELIMINARY DRAFT REVISION OF RECOMMENDATION ITU-R M.1467

The IMO would like to thank the ITU-R for the liaison statement Document 8B/TEMP/57(Rev.1) concerning the preliminary draft revision of Recommendation ITU-R M.1467 and the associated characteristics of the NAVTEX service.

The Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its ninth session (7 to 11 February 2005), concurred with Working Party 8B on these issues and was of the opinion that:

- .1 resolution A.801(19), Annex 4 should be amended in accordance with the proposal of WP.8B to use the actual bandwidth of 300Hz rather than the nominal channel spacing of 500 Hz (a proposed revision is given in the annex to this statement); and
- .2 predictions of MF communications availability in sea area A2 should be based on the more realistic figure of 90% availability against atmospheric noise, the value that has been used in practice, in place of 95%.

IMO intends to revise resolution A.801(19) – Provision of radio services for the Global Maritime Distress and Safety System (GMDSS) accordingly, but needs confirmation that these changes will not affect the accepted values for signal to noise performance.

LIAISON STATEMENT TO ITU-R WP.8B AND IEC TC80

ADDRESSING THE ISSUE OF DSC COMPLEXITY

The IMO would like to thank the ITU-R for the liaison statement Document 8B/TEMP/52(Rev.1) concerning DSC complexity issues.

The Sub-Committee on Radiocommunications and Search and Rescue (COMSAR) at its ninth session (7 to 11 February 2005) whilst considering the issue of DSC complexity was of the opinion that the two draft annexes to recommendation ITU-R M.493 went a long way towards meeting the objectives of IMO in simplifying the operation of DSC, and noting these annexes are still in a draft stage, supports them in principle. There was some discussion regarding possible confusion in the draft recommendation ITU-R M.493, Annex 3 regarding acknowledgements. COMSAR 9 therefore proposes that the following clarifications be considered:

- .1 paragraph 4.5, acknowledgements to distress calls and distress relay calls propose this paragraph be moved to paragraph 5.4, and reworded as follows: "If the operator selects ... only be transmitted if specifically justified or requested to do so by a coast station";
- .2 paragraphs 5.1–5.3 should be preceded by a header such as "Reception of general DSC calls", to distinguish these from paragraph 5.4; and
- .3 paragraph 5.5.1, reword as follows. "On receipt of a DSC acknowledgement from a coast station to the ship's own DSC distress call ...".

TERMS OF REFERENCE FOR THE JOINT IMO/ITU EXPERTS GROUP ON MARITIME RADIOCOMMUNICATION MATTERS

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 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 radionavigation;
 - the future requirements for HF spectrum;
 - possible future requirements for VHF communications, including improved detection and protection of AIS transmissions; and
 - the effect of possible simplification of GMDSS equipment and procedures, particularly as regards DSC, on the operational procedures contained in the Radio Regulations.

Suggested method of working

To meet in IMO London for 2/3 days in June 2005 (preferably 13-15 June) to:

- consider the outcome of COMSAR 9 and of ITU-R WP.8B (April 2005);
- prepare briefing for ITU-R WP.8B in September 2005;
- prepare advice on a draft IMO position paper for COMSAR 10 in 2006 on WRC-07 issues with a view to final approval by MSC 81.

Continue work by correspondence and meet again in Autumn 2005 following the September 2005 meeting of ITU-R WP.8B.

DRAFT MSC CIRCULAR

CLOSURE OF INMARSAT-E SERVICES BY INMARSAT LTD.

1 The Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its ninth session (7 to 11 February 2005), noted that MSC 79 in December 2004 had agreed, in principle, based upon a realistic analysis of the comprehensive information received from Inmarsat Ltd. on the future viability of the Inmarsat L-band EPIRB system, with the conclusion of IMSO that there was no reasonable justification for requiring Inmarsat Ltd. to make the considerable investment needed to ensure continued provision of the Inmarsat-E service beyond 1 December 2006, and had also agreed that the service should be closed on that date, subject to the commitments given by the company. COMSAR 9 further noted that accordingly, MSC 79 had also requested IMSO to oversee the orderly closure of the Inmarsat-E service, ensuring that no existing registered L-band EPIRB user was left without equivalent EPIRB cover at any time.

2 The Maritime Safety Committee, at its [eightieth session (11 to 20 May 2005)], following the recommendation of COMSAR 9 and recognizing the importance of additional information, agreed to circulate the additional information on closure of Inmarsat-E services, given at annex.

3 Member Governments are invited to bring the annexed information to the attention of all parties concerned.

ADDITIONAL INFORMATION ON CLOSURE OF INMARSAT-E SERVICES BY INMARSAT LTD.

1 After in depth consultations between the IMSO Secretariat and the company, Inmarsat has advised IMSO that it will close the L-Band EPIRB service as from 1 December 2006, with the following commitments:

- .1 all existing registered users of L-Band EPIRBs will receive a replacement 406 MHz EPIRB with GPS capability free of charge;
- .2 this replacement programme will be carried out during 2006;
- .3 using its comprehensive registration database, Inmarsat will notify all existing registered L-Band EPIRB users accordingly before 1 December 2005;
- .4 the replacement programme will address **all** registered users of L-Band EPIRBs, including leisure users, not just those within the SOLAS Convention. EPIRBs will be replaced on an equivalent "like-for-like" basis; and
- .5 no existing registered L-Band EPIRB user will therefore be left without equivalent EPIRB cover.
- 2 The orderly closure of the Inmarsat-E service will be overseen by IMSO.

DRAFT PROPOSED AMENDMENTS TO SOLAS CHAPTER IV - RADIOCOMMUNICATIONS

Regulation 7

Radio equipment: General

Amend existing subparagraph 1.6.1 as follows:

".6.1 capable of transmitting a distress alert either through the polar orbiting satellite service operating in the 406 MHz band or, if the ship is engaged only on voyages within Inmarsat coverage, through the Inmarsat geostationary satellite service operating in the 1.6 GHz band;¹"

Regulation 9

Radio equipment: Sea Areas A1 and A2

Amend existing subparagraph 1.3.3 as follows:

".3.3 through the Inmarsat geostationary satellite service by a ship earth station; this requirement may be fulfilled by:

Delete existing subparagraph 1.3.3.1

.3.3.1 the equipment specified in paragraph 3.2; or"

Delete existing subparagraph 1.3.3.2

".3.3.2 the satellite EPIRB, required by regulation 7.1.6, either by installing the satellite EPIRB close to, or by remote activation from, the position from which the ship is normally navigated."

Regulation 10

Radio equipment: Sea Areas A1, A2 and A3

Amend existing subparagraph 1.4.1 as follows:

".4.1 through the polar orbiting satellite service on 406 MHz; this requirement may be fulfilled by the satellite EPIRB, required by regulation 7.1.6, either by installing the satellite EPIRB close to, or by remote activation from, the position from which the ship is normally navigated; or"

¹

Subject to the availability of appropriate receiving and processing ground facilities for each ocean region covered by Inmarsat satellites.

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Amend existing subparagraph 1.4.3 as follows:

".4.3 through the Inmarsat geostationary satellite service, by an additional ship earth station or by the satellite EPIRB required by regulation 7.1.6, either by installing the satellite EPIRB close to, or by remote activation from the position from which the ship is normally navigated."

Amend existing subparagraph 2.3.2 as follows:

".3.2 through the Inmarsat geostationary satellite service by a ship earth station; this requirement may be fulfilled by:"

Delete existing subparagraph 2.3.2.1

".3.2.1 an Inmarsat ship earth station; or"

Delete existing subparagraph 2.3.2.2

".3.2.2 the satellite EPIRB, required by regulation 7.1.6, either by installing the satellite EPIRB close to, or by remote activation from, the position from which the ship is normally navigated; and"

TERMS OF REFERENCE FOR THE CORRESPONDENCE GROUP ON REVISION OF RESOLUTION A.888(21)

1 The correspondence group should be constituted of representatives of IMO Member States, the Secretariat and organizations with an official IMO observer status.

2 The correspondence group should report to the IMO Sub-Committee on Radiocommunications and Search and Rescue at its tenth session.

- 3 The correspondence group should:
 - .1 consider the submissions by IMSO (COMSAR 9/5/1), the United States (COMSAR 9/5/2), Denmark and Liberia (COMSAR 9/5/3) and the report of the Maritime Safety Committee at its seventy-ninth session (MSC 79/23);
 - .2 invite participation, through their national delegations, by potential providers of mobile-satellite services for the GMDSS;
 - .3 review resolution A.888(21) in the light of events that have occurred since its adoption;
 - .4 provide a draft of the resolution suitable for approval by COMSAR 10;
 - .5 incorporate in the draft resolution a complete, expeditious and effective procedure for the evaluation, recognition and oversight of new satellite providers; and
 - .6 co-ordinate its work with IMSO.

TERMS OF REFERENCE AND PROVISIONAL AGENDA FOR THE TWELFTH SESSION OF THE ICAO/IMO JOINT WORKING GROUP

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.

8 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 TWELFTH SESSION OF THE JWG ICAO/IMO

1 Adoption of the agenda

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

- .1 briefing on the outcome of COMSAR 9 and MSC 79 and MSC 80
- .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 further work on the IAMSAR Manual, availability for training institutions, priority items for amendments
- .4 list of references to the IAMSAR Manual

4 SAR operational principles, procedures and techniques:

- .1 safety of passenger ships
- .2 mass rescue operations, taking account of experiences from the major disasters
- .3 medical assistance in SAR services, including SAR response and hypothermia
- .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
- .6 automated SAR planning theories, tools and systems
- .7 SAR over land/inland SAR applicable to aeronautical SAR

5 SAR system administration, organization and implementation methods:

- .1 regional SAR databases *i.e.* SDP, facilities
- .2 development of guidelines for subregional arrangements
- .3 quality assurance, improvement, needs assessment, (subregional) and resource allocation
- .4 development and use of decision support systems, risk management tools, and SAR simulation tools/software
- .5 implementation and operation of the "International SAR fund"
- .6 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

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6 **RCC/RSC** equipment and facility designations and standards:

- .1 establishment of RCCs and in particular JRCCs
- .2 regional RCCs

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
- .5 use of AIS in aeronautical and maritime SAR

8 SAR personnel staffing and training:

- .1 development of RCC Staff 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

DRAFT MSC CIRCULAR

IDENTIFICATION OF PASSENGER SHIPS, OTHER THAN RO-RO PASSENGER SHIPS, WHICH SHOULD BENEFIT FROM BEING EQUIPPED WITH THE EMERGENCY MEDICAL KIT/BAG (EMK)

1 The Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its ninth session (7 to 10 February 2005), agreed that following decision of MSC 78 should be brought to the attention of Member Governments:

"Passenger ships, other than ro-ro 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, should benefit from being equipped with the emergency medical kit/bag (EMK)."

2 The Maritime Safety Committee, [at its eightieth session (11 to 20 May 2005)], adopted the aforementioned additional guidance and invited Member Governments to bring it to the attention of all concerned.

3 This circular supplements MSC/Circ.1042.

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 eightieth session, (11 to 20 May 2005), 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 ninth session (7 to 11 February 2005), adopted the annexed amendments in accordance with the procedure laid down in resolution A.894(21).

2 The Committee decided that the amendments should enter into force on [1 June 2006].

SECTION 1

PROPOSED AMENDMENTS TO THE IAMSAR MANUAL – VOLUME I

1 Abbreviations and Acronyms

- Insert the new line as follows:
 - "MRO Mass rescue operation"

2 Glossary

- Replace the present definition of Aircraft co-ordinator (ACO) by "A person or team who co-ordinates the involvement of multiple aircraft SAR operations in support of the SAR mission co-ordinator and on-scene co-ordinator"
- Insert the new line as follows:

"Mass Rescue Operation (MRO) - search and rescue services characterized by the need for immediate response to large numbers of persons in distress, such that the capabilities normally available to search and rescue authorities are inadequate"

3 Chapter 4

- Insert new paragraph 4.8 as follows:

"4.8 Radio call signs for aircraft involved in a search and rescue operation

- **4.8.1** A prefix call sign makes the task/function of a specific aircraft easier to be understood by other aircraft and participating units in the same area.
- **4.8.2** The prefix call sign can also give the aircraft priority in some situations.
- **4.8.3** State authority responsible for air regulation shall arrange that use of prefix call sign will coincide with other national air regulations.
- **4.8.4** During search and rescue missions and exercises it is recommended that the following prefix call signs be used before the ordinary radio call sign or as a specific mission call sign.

"RESCUE"	for all airborne units involved in a rescue mission
"AIR CO-ORDINATOR"	for the aircraft co-ordinator (ACO)
"SAREX"	for all airborne units involved in international/ national exercises"

4 Chapter 6

- Insert new paragraph 6.5 as follows:

"6.5 Mass Rescue Operations

- **6.5.1** A mass rescue operation (MRO) is one that involves need for immediate assistance to large numbers of persons in distress such that capabilities normally available to SAR authorities are inadequate.
- **6.5.2** MROs are required less frequently than typical rescue efforts, but have high potential consequences. Flooding, earthquakes, terrorism, and large passenger aircraft or ship disasters are examples of scenarios that may involve the need for MROs. Extensive preparations and resources are required to conduct MROs successfully.
- **6.5.3** Such incidents might involve hundreds or thousands of persons in distress in remote and hostile environments. A large passenger ship collision, for example, could call for rescue of thousands of passengers and crew in poor weather and sea conditions, with many of the survivors having little ability to help themselves. Preparedness to mount a large and rapid response would be critical to preventing large-scale loss of lives.
- **6.5.4** MRO plans and exercises are challenging and relatively complex. Effective arrangements for use of national and often international resources beyond those normally used for SAR are essential. Preparations require substantial commitments and partnerships among SAR authorities, regulatory authorities, transportation companies, sources of military and commercial assistance and others.
- **6.5.5** MROs often need to be carried out and co-ordinated within a broader emergency response context that may involve hazards mitigation, damage control and salvage operations, pollution control, complex traffic management, large-scale logistics, medical and coroner functions, accident-incident investigation, and intense public and political attention, etc. Efforts must often start immediately at an intense level and be sustainable for days or weeks.
- **6.5.6** SAR authorities should co-ordinate MRO plans with companies that operate aircraft and ships designed to carry large numbers of persons. Such companies should share in preparations to prevent MROs and to help ensure success if they become necessary.
- **6.5.7** What the media reports may matter more than what SAR services do for shaping of public opinion about MROs. There should be no unwarranted delays in providing information to the media. Information must be readily available, and freely exchanged among emergency service providers and shipping, airline or other primary companies involved.
- **6.5.8** Since opportunities to handle actual incidents involving mass rescues are rare and challenging, exercising MRO plans is particularly important."

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SECTION 2

PROPOSED AMENDMENTS TO THE IAMSAR MANUAL – VOLUME II

1 Abbreviations and Acronyms

Insert the new lines as follows:

"MRO Mass rescue operation

NATO North Atlantic Treaty Organization

SUBSAR Submarine search and rescue"

2 Glossary

- Replace the present definition of Aircraft co-ordinator (ACO) by "A person or team who co-ordinates the involvement of multiple aircraft SAR operations in support of the SAR mission co-ordinator and on-scene co-ordinator"
- Insert the new line as follows:

"Mass Rescue Operation (MRO) - search and rescue services characterized by the need for immediate response to large numbers of persons in distress, such that the capabilities normally available to search and rescue authorities are inadequate"

3 Chapter 1

- Insert a new paragraph **1.8.11** as follows, and renumber the remaining paragraphs in section **1.8**:

"**1.8.11** Additional information on planning and conducting exercises is provided in Chapter 6 with regard to mass rescue operations."

- Insert a new sentence following the first sentence of **1.10.5** as follows:

"... many nationalities. Such an incident may result in the need for mass rescue operations (MROs), which are discussed in Chapter 6. In this case, ..."

- Insert an additional paragraph **1.10.8** as follows:

"1.10.8 Additional information on planning and public and media relations is provided in Chapter 6 with regard to mass rescue operations."

- Insert an additional paragraph **1.12.2** as follows:

"**1.12.2** Additional information on incident management on ICS is provided in Chapter 6 with regard to mass rescue operations."

4 Chapter 2

- Insert new paragraph **2.32** as follows:

"2.32 Radio call signs for aircraft involved in a search and rescue operation

- **2.32.1** A prefix call sign makes the task/function of a specific aircraft easier to be understood by other aircraft and participating units in the same area.
- **2.32.2** The prefix call sign can also give the aircraft priority in some situations.
- **2.32.3** State authority responsible for air regulation shall arrange that use of prefix call sign will coincide with other national air regulations.
- **2.32.4** During search and rescue missions and exercises it is recommended that the following prefix call signs be used before the ordinary radio call sign or as a specific mission call sign.

"RESCUE"	for all airborne units involved in a rescue mission
"AIR CO-ORDINATOR"	for the aircraft co-ordinator (ACO)
"SAREX"	for all airborne units involved in international/ national exercises"

5 Chapter 6

- Delete present section 6.14 and insert the following new sections as 6.14 and 6.15 and renumber sections 6.15, 6.16, 6.17 and 6.18.

"6.14 Underwater search and rescue

- **6.14.1** Many different underwater operations occur within SRRs, such as diving operations or the operation of military or civilian submarines. When accidents occur, survivors may be either on the surface or entrapped in a submarine resting on the seabed. Military submarines trapped under the surface may use international distress signals or specific military pyrotechnics, dye markers or beacons. In addition, submarines may pump out fuel, lubricating oil or release air bubbles to indicate its position.
- **6.14.2** Submarine SAR, (SUBSAR), is a highly specialized and time-critical activity reliant on specific capabilities and training. Medical care requirements for survivors of a submarine accident may also be specialized.
- **6.14.3** Military submarine-operating States have developed standard SUBSAR procedures, capabilities and training, generally under sponsorship of the North Atlantic Treaty Organization (NATO) for the recovery and care of submarine accidents. RCCs may request support of these resources should the need arise. Relevant information may be obtained from the NATO International Submarine Escape and Rescue Liaison Office.

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- **6.14.4** RCCs should be aware if specialized navy or commercial recovery or treatment facilities (such as the ones with decompression chambers) exist within or near their SRRs and arrange in advance for their use at any time on a 24-hour basis. Similarly, RCCs should liaise with the military to determine mutual assistance that could be provided in the event of military submarine accidents.
- **6.14.5** Most SAR personnel are poorly prepared to understand or handle medical problems peculiar to underwater activities, such as decompression sickness, air embolism, and nitrogen narcosis. However, they should be trained to recognize the symptoms and know how to obtain competent medical advice. They should also be trained in handling and transporting victims of such problems without worsening their situations. If possible to aid in the treatment of the victim, obtain information such as time underwater, depth, time at the surface, time of the onset of symptoms, and the symptoms currently being experienced.
- 6.14.6 Medical advice should be sought before air transport of submarine accident victims."

"6.15 Mass Rescue Operations

MRO Overview

- **6.15.1** A mass rescue operation (MRO) is one that involves need for immediate assistance to large numbers of persons in distress such that capabilities normally available to SAR authorities are inadequate.
- **6.15.2** MROs are relatively rare low-probability, high-consequence events compared to normal SAR operations, but major incidents leading to the need for MROs have not been infrequent on a world-wide basis, and can occur anywhere at any time. The nature of such operations may be poorly understood due to limited chances to gain experience with major incidents involving MROs.
- **6.15.3** Flooding, earthquakes, terrorism, casualties in the offshore oil industry, accidents involving releases of hazardous materials and major aircraft or ship incidents are examples which, because of their magnitude, may need to use the same resources as would be needed to carry out mass maritime or aeronautical rescue operations.
- **6.15.4** The sequence of priority in major multi-mission incidents must be lifesaving first, generally followed by environmental protection, and then protection of property. Moral and legal obligations and public and political expectations require preparedness to carry out MROs safely and effectively should they become necessary. Since the need for MROs is relatively rare, it is difficult to gain practical experience to help deal with them. Types of potential MRO scenarios vary, but there are certain general principles that can be followed based on lessons of history.
- **6.15.5** Effective response to such major incidents requires immediate, well-planned and closely co-ordinated large-scale actions and use of resources from multiple organizations. The following are typical MRO demands:

- Intense and sustained high priority lifesaving efforts may need to be carried out at the same time and place as major efforts to save the environment and property;
- Huge amounts of information will need to be readily available at the right times and places to support the response efforts and meet the needs of the media, public and families of the persons in distress, which may number in the hundreds or thousands;
- Many means of communications will need to be available and interlinked amongst organizations at various levels to handle huge amounts of information reliably for the duration of the response;
- A surge in the numbers of competent staffing in all key organizations must be available immediately and be sustainable for up to weeks at a time;
- Equipment and logistics demands will jump to unprecedented levels;
- Successful MROs depend on the advance provision of flexible and all-level contingency plans; and
- Intense integrated planning and operational efforts must also be carried out in real time throughout actual rescue efforts.
- **6.15.6** All involved in the overall multi-agency, multi-jurisdiction, multi-mission and possibly international response to a major incidents must clearly understand who is in charge, how to work with who is in charge, the respective roles of all involved, and how to interact with each other. SAR authorities may be responsible for all or part of the MRO responsibilities, and must be able to co-ordinate their efforts seamlessly with other responders under overall direction of another authority within or outside their agency.
- 6.15.7 The broader response environment may involve activities such as:

hazards mitigation; damage control and salvage operations; pollution control; complex traffic management; large-scale logistics efforts; medical and coroner functions; accident-incident investigation; and intense public and political attention.

- **6.15.8** MRO plans need to be part of and compatible with overall response plans for major incidents. Plans must typically allow for command, control and communications structures that can accommodate simultaneous air, sea and land operations.
- **6.15.9** Potential disastrous consequences of poor preparations for MROs in terms of loss of life and other adverse results are enormous. Major incidents may involve hundreds or thousands of persons in distress in remote and hostile environments. A large passenger ship collision, a downed aircraft, or a terrorist incident could, for example, call for the immediate rescue of large numbers of passengers and crew in poor environmental conditions, with many of the survivors having little ability to help themselves.

- **6.15.10** Preparedness to mount an extraordinarily large and rapid response is critical to preventing large-scale loss of lives. Such preparedness often depends on strong and visionary leadership and unusual levels of co-operation to achieve.
- **6.15.11** There will often be resistance to paying the high price in terms of time, effort and funding that preparedness for major incidents entails, particularly as they are rare events. The required levels of co-operation, co-ordination, planning, resources and exercises, required for preparedness are challenging and do not happen without the requisite commitment of SAR authorities, regulatory authorities, transportation companies, sources of military and commercial assistance and others.
- **6.15.12** MRO planning, preparations and exercises are essential since opportunities to handle actual incidents involving mass rescues are rare. Therefore the exercising of MRO plans is particularly important.
- 6.15.13 Appendix C provides guidance on MRO exercise planning.

General guidance for MROs

- **6.15.14** For a situation involving large numbers or persons in distress, on scene responsibilities for the safety of passengers and crew will be shared by the OSC and the aircraft pilot in command or ship master, with the pilot or master assuming as much of this responsibility as possible before or after the aircraft or ship is abandoned.
- **6.15.15** Pilots and masters are responsible for manoeuvring the aircraft or ship as feasible and appropriate, and also have overall responsibility for safety, medical care, communications, fire and damage control, maintaining order and providing general direction.
- **6.15.16** Unless a ship appears to be in imminent danger of sinking, it is usually advisable for passengers and crew to remain on board as long as it is safe to do so.
- **6.15.17** In the case of a downed aircraft, whether passengers would be safer on board should be assessed for each situation. Usually they should promptly evacuate the aircraft at sea. On land this decision must account for the conditions of the aircraft and the environment, expected time to rescue or aircraft repair, and whether required passenger care can be best provided inside the aircraft.
- **6.15.18** The OSC will normally be designated by an SMC. An OSC may be able to handle certain communications on scene and with appropriate remote authorities to help free the pilot or master to retain the integrity of his or her craft. However, these persons are themselves in need of assistance, and anything the OSC can do to help them should be considered, bearing in mind that the OSC's main duty is co-ordinating SAR facilities and rescue efforts under the SMC's general direction.
- **6.15.19** Unnecessary communications with the master of a ship or pilot in command of an aircraft in distress must be minimized, and this should be taken into account in advance planning.

- **6.15.20** Exchanges of information during joint planning by use of SAR Plans of Cooperation for passenger ships and other means will reduce the need to ask the pilot or master for this information one or more times during a crisis. Persons or organizations that want this information should be directed to a source ashore or on the ground that is prepared to handle many potential requests.
- **6.15.21** High priority should be given to tracking and accounting for all persons on board and all lifeboats and rafts, and efforts to keep them together will help in this regard. Availability of accurate manifests and accounting is critical.
- **6.15.22** The need to relocate survival craft and check for persons in them can waste valuable resources. One option is to sink survival craft once the persons in them have been rescued; however, the potential that other survivors may find and need the craft should be considered.
- **6.15.23** Navy ships and large passenger ships are often better equipped than other vessels for retrieving people who have abandoned a ship or aircraft; use of any such ships should be considered. Ship reporting systems for SAR may help identify commercial ships available to assist.
- **6.15.24** Helicopter capabilities should be used if available, especially for retrieval of weak or immobile survivors. Lifeboat crews should be trained in helicopter hoist operations. Lowering a rescue person from the helicopter to assist survivors may be viable.
- **6.15.25** Ship companies should be encouraged to equip large passenger ships and possibly other types of vessels with helicopter landing areas, clearly marked hoist-winch areas, and onboard helicopters to facilitate more direct transfers of numerous persons.
- **6.15.26** If a ship with a large freeboard cannot safely retrieve survivors from the water or survival craft, it may be possible to first retrieve them onto small vessels, and then transfer them to progressively larger ones.
- **6.15.27** Depending on the circumstances, it may be safer to tow survival craft to shore without removing the occupants at sea. Lifeboats could be designed to support passengers for longer periods of time, and to be able to reach shore on their own from longer distances offshore.
- **6.15.28** To the extent practicable, MROs should be co-ordinated by an SMC in an RCC. However, depending on the magnitude, nature and complexity of an incident, the rescue efforts may be better co-ordinated by an appropriate operations centre higher within the SAR agency or a government. Considerations in this decision might include, among others:
 - extensive rescue support by organizations other than those commonly used for SAR;
 - need for heavy international diplomatic support; and
 - serious problems in addition to potential loss of lives, such as environmental threats, terrorist actions, or national security issues.

6.15.29 The following factors should be considered in MRO planning:

- use the Incident Command System (ICS) discussed below, or other effective means of handling multiagency, multi-jurisdiction, multi-mission scenarios;
- identify situations within the SRR that could potentially lead to the need for MROs, including scenarios that might involve cascading casualties or outages;
- mobilization and co-ordination of necessary SAR facilities, including those not normally available for SAR services;
- ability to activate plans immediately;
- call up procedures for needed personnel;
- need for supplemental communications capabilities, possibly including the need for interpreters; dispatching of liaison officers;
- activation of additional staff to augment, replace or sustain needed staffing levels;
- recovery and transport of large numbers of survivors (and bodies, if necessary), accounting for survivors potentially having injuries and lack of training, age limitation, hypothermia, etc.;
- a means of reliably accounting for everyone involved, including responders, survivors, crew, etc.;
- care, assistance and further transfer of survivors once delivered to a place of safety, and further transfer of bodies beyond their initial delivery point;
- activation of plans for notifying, managing and assisting the media and families in large numbers;
- control of access to the RCC and other sensitive facilities and locations;
- RCC backup and relocation plans, as appropriate; and
- ready availability to all potential users of plans, checklists and flowcharts.
- **6.15.30** The ability of an RCC to continue to effectively co-ordinate the MRO and still handle its other SAR responsibilities may become overwhelmed, and another RCC or a higher authority may need to assume responsibility for their other responsibilities.
- **6.15.31** With these possibilities in mind, MRO plans should provide for various degrees of response, along with criteria for determining which amount of response will be implemented. For example, as local SAR resources are exhausted (or from the outset), SAR resources may need to be obtained from distant national or international sources.
- **6.15.32** Experiences in responding to major incidents have resulted in the following practical guidance:
 - plan and exercise how any agency receiving notification of an actual or potential mass rescue event can immediately alert and conference call other authorities that will potentially be involved, brief them, and enable immediate actions to be taken by all concerned (this will require identification of entities in each agency that can be contacted on a 24-hour basis, and that have authority to immediately initiate actions and commit resources);

- co-ordinate all rescue operations effectively from the very beginning;
- begin quickly with a high level of effort stand down as appropriate rather than begin too late with too little effort;
- use capable resources like cruise ships for taking large numbers of survivors on board;
- ensure that MRO emergency plans address communications interoperability or interlinking;
- retrieve and protect debris as evidence for follow on investigation;
- put security plans in place to limit access to the RCC;
- arrange in advance to involve the Red-Cross, chaplains, critical incident stress experts and other such support for human needs;
- identify senior agency spokespersons to protect the time of workers directly involved in the response and designated a senior official to provide information to families;
- clearly identify the point at which the SAR response (lifesaving) has ended, and the focus shifts to investigation and recovery;
- be prepared to use an ICS when appropriate;
- ensure that air traffic and air space can be and is controlled on scene;
- the SMC can often benefit from assigning additional liaison personnel on scene;
- anticipate development and needs and act early;
- ensure that the scopes of SAR plans and other emergency or disaster response plans are co-ordinated to reduce gaps, overlaps and confusion about who is in charge and what procedures will be followed at various times and places;
- control access to the scene, including access by the media;
- work out in advance how private resources can be appropriately used to supplement other SAR resources;
- ensure that SAR plans provide for logistics support for large numbers of rescuers and survivors, including pre-arranged accommodations, if possible, and availability of food, medical care and transportation;
- consider requesting assistance from airlines and shipping companies other than the one whose aircraft or ship is involved in the incident, and know the types of assistance that such organizations might provide;
- consider use of bar coded bracelets as an effective means of identifying children before, during and after the emergency;
- attempt to reduce the burden on a pilot or master and crews; if safe and appropriate to do so, place a marine casualty officer on board to assist the master and SAR personnel; and
- share capabilities, expertise and assets among government and industry to take maximum advantage of the strengths of each.

Communications for mass rescue operations

- **6.15.33** Communication plans must provide for a heavy volume of communication use, as a major incident will normally involve many responding organizations that need to communicate effectively with each other from the beginning.
- **6.15.34** As necessary, advance arrangements should be made to link means of interagency communications that are not inherently interoperable.

6.15.35 Interagency communications must be based on terminology that all involved understand.

Major incident co-ordination

- **6.15.36** Regardless of the magnitude and priority of the lifesaving efforts involved in responding to a major incident, if any other functions are being carried out concurrently on scene by other than SAR personnel, the overall response involving SAR and the other functions, e.g., firefighting, should be well co-ordinated.
- **6.15.37** If certain basic concepts and terms are recognized and understood by all emergency responders, they will be much better prepared to co-ordinate joint efforts.
- **6.15.38** Standard SAR procedures should typically be followed for the SAR part of the response, but these procedures will be largely independent of other efforts. Companies or authorities handling other aspects of the response will follow command, control and communication procedures developed for their respective organizations and duties.
- **6.15.39** The SAR system can function in its normal manner or use modified SAR procedures established to account for special demands of mass rescues, but it should be appropriately linked and subjected to a scheme for management of the overall incident response.
- **6.15.40** For major incidents, crisis management for the overall response may also be needed. The Incident Command System (ICS) is one simple and effective means of meeting this need. ICS can be used where no equivalent means of overall incident management is in place. SAR and transportation authorities are likely to encounter use of the ICS within emergency response communities.
- 6.15.41 The ICS works best with some advance familiarization and exercising.
- 6.15.42 Appendix C provides general information about ICS.

Industry planning and response

- **6.15.43** SAR authorities should co-ordinate MRO plans with companies that operate ships and aircraft designed to carry large numbers of persons. Such companies should share in preparations to minimize the chances that MROs will be needed, and to ensure success if become necessary.
- **6.15.44** Appendix C provides guidance on industry roles and discusses how companies could arrange for use of field teams and emergency response centres as possible means of carrying out their MRO responsibilities.
- **6.15.45** For passenger ships, SAR Plans of Co-operation required by the *Safety of Life at Sea Convention* and developed by SAR authorities and shipping companies are part of MRO plans.

Public and media relations for MROs

- **6.15.46** Good public and media relations become very demanding and quite important during MROs.
- **6.15.47** What the media reports may matter more than what SAR services do for shaping of public opinion about MROs. The role of the media may be critical in shaping the actions of the public and of those directly involved in the distress situation in a way that contributes to safety, success and panic control. There should be no unwarranted delays in providing information to the media.
- **6.15.48** Information should be readily available, clear, accurate, consistent and freely exchanged among emergency responders and others concerned, such as the public and families of persons on board.
- **6.15.49** Identify spokespersons and outline what they will say, staying factual. If SAR services do not provide a public spokesperson for a major incident, the media likely will.
- **6.15.50** A single spokesperson not directly involved in the incident can be valuable in relieving the IC and SMC of this duty.
- **6.15.51** Spokespersons should be cautious about speculating on causes of accidents and ensure that the media understands that the main focus of current operations is on saving lives.
- 6.15.52 Ensure that the media knows who is in charge of co-ordinating rescue operations.
- 6.15.53 Interviews should be live if possible.
- **6.15.54** Many entities are involved in a major incident, including ships, aircraft, companies and SAR services. Co-ordination is required to ensure that there is one message with many messengers.
- **6.15.55** Prompt establishment of a joint information centre (part of ICS discussed in Appendix C) away from the SMC will help to achieve this goal. The centre can establish proper procedures for establishing what messages will be released to the public and how those messages will be released. Since the messages may be sensitive, it is critical that everyone communicates the same information. The centre can be responsible for co-ordinating information made available via the internet and perhaps establishing and maintaining a public website.
- **6.15.56** The media is a 24-hour global market, with news broadcast worldwide around the clock. The media will find a way to get to the scene for first hand information, pictures and video. By providing transportation to the scene and controlling media access, safety and what is reported can be improved and better controlled.
- **6.15.57** Media outlets often have more resources to mobilize on scene than do SAR authorities, and RCC operating plans should account for how to deal with such situations.

- **6.15.58** Information should be provided to the public on what SAR facilities are being used and, if possible, a web address or list of contact phone numbers should be provided for families, media and others to contact for more information.
- **6.15.59** Preparations should be made so that large numbers of callers can be accommodated without saturating the phone system or crashing the computer server.
- **6.15.60** Advance preparation of standby web pages by transportation companies and SAR authorities can help in responding to floods of requests for information. These pages can be quickly posted to provide general information the media can use. Web information should be timely and accurate.
- **6.15.61** Once posted, these pages can be easily updated with the status of the incident and could also include:

contact information;

basic government or industry facts;

industry and SAR definitions;

photographs and statistics of aircraft, ships and SAR facilities;

answers to frequently asked questions;

links to other key sites;

information on passenger capacity, crew size, vessel plans and firefighting apabilities; and

library footage of a vessel inspection or of the crew performing lifesaving drills.

6.15.62 Besides the media, families and other organizations will also want this information.

MRO follow-up actions

- **6.15.63** It is very important to develop and share lessons learned from actual MRO operations and exercises. However, concerns (often excessive) about legal liability may discourage highlighting matters that could have been done better.
- **6.15.64** Since lessons learned can help prevent recurring serious mistakes, agreement should be reached among principal participants on how lessons learned can be depersonalized and made widely available. Lessons learned from MROs should be shared not just locally, but internationally.
- **6.15.65** Careful accounting for survivors after they have been delivered to a place of safety remains important. They need to be kept informed about plans for them and about the ongoing response operations. With large numbers of persons often

staying in different places, keeping track of and working with them can be difficult.

- **6.15.66** Transportation companies are often best suited to handle and assist survivors during this time.
- **6.15.67** Crewmembers may be placed at various locations to record passenger names and locations. Another possibility is for airlines or passenger ships to attach plastic cards to life vests to give passengers phone numbers for contacting the company. Some companies use bar coded bracelets to track children who are passengers.
- **6.15.68** Communicating with passengers is more difficult in remote areas, where phone service may be inadequate or lacking. If phones do exist, calling the airline or shipping company may be the best way to check in and find out information. In more populated areas, local agencies may have an emergency evacuation or other useful plan that can be implemented.
- **6.15.69** To protect passengers from harassment by interviewers and cameras, survivors might be placed in hotels or other places of refuge. However, triage and landing locations must be established and publicized to all rescue personnel and good Samaritans."

6 Appendix C

- Delete present Appendix C and insert the following as new Appendix C:

"Appendix C

MASS RESCUE OPERATIONS: EXERCISES; INDUSTRY ROLES AND INCIDENT MANAGEMENT

MRO exercises

Since opportunities to handle actual incidents involving mass rescues are rare and challenging, exercising MRO plans are particularly important. Mass evacuation and rescue operations are difficult and costly, leading to a tendency to use simulation excessively during exercises rather than physically exercising on scene efforts.

MRO exercise objectives need not be addressed in a single large exercise, but may be satisfied in part by routine incorporation into multiple drills, some intended mainly to test other systems. However, realistic drills are necessary and costly, and over 1,000 volunteer ship passengers or hundreds of volunteer aircraft passengers will likely be needed to conduct a realistic exercise. Separate rooms can be used to simulate command posts that would normally be in separate locations.

MRO exercises should ideally achieve the following objectives:

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- Account for:
 - Crew and passenger lists
 - Rescued passengers and crew until they can return to their homes. All persons associated with the rescue and aftermath operations
 - Lifeboats, including empty boats or rafts
 - High freeboard issues for likely rescue facilities
- Identify and task available resources:
 - Use of Amver or other ship reporting system
 - Potential resources ashore and afloat
 - Resources from local agencies (medical personnel, hospital facilities, fire department, general community, transportation resources)
 - National and regional military and other resources
- Evaluate notification processes, resource availability, timeliness of initial response, real-time elements, conference capabilities and overall co-ordination
- Ensure all agency roles are sorted out, understood and properly followed
- Test capabilities of potential OSCs and ability to transfer OSC duties
- Evaluate span of control
- Evacuate a ship or aircraft
- Co-ordinate activities and achieve information exchanges
 - Communications (RCC-RCC, government-industry, RCC-OSC, on scene, shore-ship, ground-air, ship-air, SAR facility-survival craft, etc.)
 - Information for all concerned (identify, merge, purge, retrieve and transfer to the right place in the right form at the right time)
 - New communication and information management technologies
 - Media and next-of-kin
- Safely transfer and care for passengers (evacuation, in survival craft, rescue, medical, protection from environment, post-rescue transfers, etc.)
- Test all communication links that may be needed for notification, co-ordination and support
- Conduct medical triage and provide first aid
- Assess ship's safety management system effectiveness
- Exercise co-ordination with local response agencies
- Provide food, water, lifejackets and other protective clothing to survivors
- Test mass rescue plans:
 - SAR services
 - Company (including aircraft and ship plans)
 - Any relevant emergency response organizations, e.g., disaster response, military, firefighting and medical
 - Transportation and accommodations
- Assess how effectively earlier lessons learned have been accounted for in updated plans and how well these lessons were disseminated
- Exercise salvage and pollution abatement capabilities
- Carry out emergency relocation of the disabled craft

- Exercise external affairs, such as international and public relations:
 - Necessary participants involved
 - Joint information centres established quickly and properly staffed
 - Press briefings handled effectively, e.g., consistent information from different sources
 - Notification of the next of kin and family briefings
 - Staff and equipment capacity to handle incoming requests for information
 - Rescued persons tracked, kept informed and needs monitored, and reunited with belongings

The following steps are normally carried out during exercise planning:

- Agree on the exercise scenario, goals and extent
- Assembly a multi-disciplinary planning team and agree on objectives for each aspect of the exercise
- Develop the main events and associated timetables
- Confirm availability of agencies to be involved, including any media representatives or volunteers
- Confirm availability of transportation, buildings, equipment, aircraft, ships or other needed resources
- Test all communications that will be used, including tests of radio and mobile phones at or near the locations where they will be used
- Identify and brief all participants and people who will facilitate the exercise, and ensure that facilitators have good independent communications with person who will be controlling the exercise
- Ensure that everyone involved knows what to do if an actual emergency should arise during the exercise
- If observers are invited, arrange for their safety, and to keep them informed about the exercise progress
- For longer exercises, arrange for food and toilet facilities
- Use "exercise in progress", signs, advance notifications and other means to help ensure that person not involved in the exercise do not become alarmed
- Schedule times and places for debriefs
- Agree and prepare conclusions and recommendations with the entity responsible for handling each recommendation along with the due date for any actions
- Prepare a clear and concise report and distribute it as appropriate to the participating organizations

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• Consider the outcome of this exercise in planning future exercises

MRO industry roles

SAR authorities should co-ordinate MRO plans with companies that operate aircraft and ships designed to carry large numbers of persons. Such companies should share in preparations to minimize the chances that MROs will be needed, and to ensure success if they are. This section provides guidance on industry roles, and discusses how companies could arrange for use of company field teams and emergency response centres as possible means of carrying out their MRO responsibilities.

Early notification of potential or developing MROs is critical, due to the level of effort required to mount a very large-scale response. It is much better to begin the response process and abort it should it become unnecessary, than to begin it later than necessary should the actual need exist. Pilots and masters should be advised and trained to notify SAR services at the earliest indication of a potential distress situation.

Company response organizations should be able to help SAR services by organizing support, equipment, advice and liaison any of their ships or aircraft.

Companies should be prepared to provide information to preclude the need for multiple sources attempting communications with the aircraft pilot in command or ship captain for information that is unavailable or available from another source. Receiving and handling requests for information aboard the distressed craft can interfere with the pilot's or master's ability to handle the emergency and handle critical on scene leadership needs.

Companies operating large aircraft or ships should be advised to be able to field a co-ordinated team that can handle emergency response functions around the clock should the need arise. Such a team might include staff as indicated in the following Table.

Team Leader	Maintains overview, directs operations and keeps management informed
Communicator	Maintains open (and possibly sole) line of communications to craft in
	distress
Co-ordinating	Usually a pilot or master mariner, who co-ordinates with SAR and other
Representative	emergency response authorities, organizes tugs, looks at itineraries,
	arranges to position ships or ground facilities that may be able to assist
	and organizes security and suitable delivery points for passengers crew
	when they are delivered to safety
Technical	Maintains contact with regulatory authorities, classification societies,
Representative	insurers and investigators and provides liaison and advice for firefighting,
	damage control, repairs and other specialized or technical matters
Environmental	Involved with environmental impact and spill response
Representative	
Medical	Gives medical advice, tracks casualties and arranges medical and
Representative	identification services for survivors

Typical company field team

Passenger and	Provides information and support to whoever is designated to care for
Crew	next of kin and keep them informed, identifies transportation needs, and
Representatives	may need to deal with various countries, languages and cultures
Media	Gathers information, co-ordinates public affairs matters with counterparts
Representative	in other organizations, prepares press releases, briefs spokespersons and
	arranges availability of information by phone and web sites
Specialists	From within or outside the company who may facilitate some special
	aspect of the response or follow up

The company may operate an **Emergency Response Centre** (ERC) to maintain communications with the craft in distress, remotely monitor onboard sensors if feasible, and keep emergency information readily available. Such information might include passenger and crew data, aircraft or ship details, incident details, number of survival craft and status of the current situation. Transportation companies should have readily available contacts with tour companies, shore excursion companies, airlines and cruise lines, hotels, etc., since such resources can be used to address many problems experienced with landing large numbers of survivors into a community. Contingency plans for co-operation should be developed between SAR authorities and transportation companies, and these plans should be sufficiently exercised to ensure they would be effective should an actual mass rescue situation arise. Such plans should identify contacts, co-ordination procedures, responsibilities, and information sources that will be applicable for MROs. These plans should be kept up to date and readily available to all concerned.

Respective functions of the ERC and RCC should be covered in co-ordinated pre-established plans, and refined as appropriate for an actual incident. These centres must maintain close contact throughout the SAR event, co-ordinating and keeping each other appraised of significant plans and developments.

There are other steps the transportation industry could be urged to undertake to improve preparedness for MROs. The following are some examples:

- Carry SAR plans on board aircraft or ships
- Provide water and thermal protection for evacuees appropriate for the operating area
- Provide a means of rescue to bring people from the water to the deck of ships
- Use preparation checklists provided by SAR authorities
- Conduct an actual physical exercise in addition to simulations
- Provide the capability to retrieve fully loaded lifeboats and rafts
- Enhance lifeboat lifesaving capabilities
- Provide ways to assist persons in lifeboats who are seasick, injured or weak
- Provide on-board helicopter landing areas and helicopters
- Prepare to assist survivors once they have been delivered to a place of safety
- Have aircraft or ship status and specifications readily available, such as inspection records, design plans, communication capabilities, stability calculations, lifesaving appliances, classification society contacts, passenger and cargo manifests, etc., so that such information will not need to be obtained directly from a pilot or master
- Work with SAR authorities to develop and be able to rapidly deploy air droppable equipment or supplies for survivors, maintain strategically located caches for this purpose

Acceptance of certain responsibilities by industry demonstrates commitment to passenger safety and can free SAR services to handle critical arrangements relating to SAR resources, co-ordination and communications.

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MRO incident management

For major incidents, crisis management for the overall response may also be needed. The **Incident Command System (ICS)**, one widely used means of meeting this need, but works best with some advance familiarization and exercising within and among the transportation and emergency response communities. Since SAR and transportation authorities are likely to encounter use of the ICS within emergency response communities, this Appendix provides general information for familiarization with ICS.

The following terms are relevant to the ICS:

Incident Commander (IC): the primary person functioning as a part of the incident command system, usually at or near the scene, responsible for decisions, objectives, strategies and priorities relating to emergency response;

Incident Command Post (ICP): location at which primary functions are carried out for the Incident Command System;

Incident Command System (ICS): on scene emergency management concept that provides an integrated organizational structure adaptable to the complexity and demands of an major incident involving multiple missions, response organizations or jurisdiction;

Unified Command (UC): the incident commander role of the incident command system expanded to include a team of representatives that manages a major incident by establishing common objectives and strategies and directing their implementation.

The ICS is designed for use when multiple organizations and jurisdictions need to be jointly involved in an emergency response activity and co-ordinate their efforts.

While organizations have their respective systems of command and control or co-ordination, these should be compatible with systems others use so organizations can function well jointly when necessary. Commonality and similarities among crisis management systems locally, regionally and internationally foster effective joint efforts.

The ICS does not take control, responsibility or authority away from SAR services; SAR services remain focused on lifesaving, while the ICS focuses on promoting an effective overall incident response.

The ICS training, advance co-ordination and liaison will be rewarded by better performance and success when a crisis situation arises.

As a tool for managing major incidents, the ICS:

Accommodates all risks and hazards; Is simple, powerful and flexible; Can easily expand or contract as the incident warrants; Relieves the SAR system of co-ordinating non-SAR missions; Enables SMC to use the ICS contacts to draw on additional resources; and Ensures better communication and co-operation between agencies.
The ICS organization can grow or shrink as the situation dictates, and provides a logical process and progression to achieve results. Its organization should be allowed to grow with increased demand and shrink when operations decline, both of which require anticipation.

Advantages of the ICS can be lost when organizations develop their own unique and relatively complex versions of the ICS; it works best when it remains simple, flexible and standardized so everyone on scene from all organizations understands it.

In its basic form a person is designated as the IC to handle overall co-ordination, including setting objectives and priorities.

Support functions (sections supported by one or more persons) can be established *as needed* and on the scale needed to keep the IC informed and assist in certain areas.

The four support sections in the ICS organization are as follows:

Operations Section - helps manage resources to carry out the operations;

Planning Section - helps develop action plans, collect and evaluate information, maintain resource status and arrange to scale up or scale down activities;

Logistics Section - helps provide resources and services needed to support the incident response, including personnel, transportation, supplies, facilities and equipment; and

Finance-Administration Section - assists with monitoring costs, providing accounting and procurements, keeping time records, doing cost analysis and other administrative matters.

Other additions to directly assist the IC might include:

An **Information Officer** - assists the media and others seeking incident information, ensures the IC has appropriate information available, and helps to provide information to the public and families of persons in distress;

A **Safety Officer** - monitors safety conditions and develops measures to ensure safety and reduce risks; and

Liaison Officers - serve as primary contacts for on scene representatives of their respective organizations.

The following Figure illustrates the basic ICS organization:

Incident Command System Organization



The IC usually establishes an **Incident Command Post (ICP)** as a base for ICS activities. For particularly demanding incidents, the ICS organization can be expanded. For example, for operations that are particularly large-scale, sustained or complex, the IC can be augmented by establishment of an actual or virtual (without everyone co-located) **Unified Command (UC)** populated by operational managers representing the primary response organizations involved. If the UC is made up of linked independent command posts, a government post and an industry post for example, ideally there should still be a person from each command post assigned to work at the other post(s) involved.

For a situation like a major passenger aircraft or ship disaster, a **Joint Information Centre (JIC)** should be established, perhaps in association with the Information Officer position, to facilitate and co-ordinate the vast information that will need to be managed internally and shared with the public.

Whether the ICS should be used depends on the duration and complexity of the incident. If it is used, co-ordination of SAR functions with other functions is usually achieved by assigning a representative of the SAR agency or of the SMC to the Operations Section of the ICS organization.

This allows SAR services to be plugged into the ICS and overall operations while still being able to function with relative independence in accordance with normal SAR procedures. The ICS has an overall incident focus, while SAR services must remain focused on lifesaving.

A determination should be made as early as possible on who will be responsible for overall co-ordination, and how the overall response will be organized and managed. Procedures that all involve understand and support should be applied to managing the overall response for mutual support, effort prioritization, and optimal use of available resources, and to enhance on scene safety and effectiveness.

Inter-agency contingency planning should identify who the IC should be for various scenarios. Typically, the IC will be assigned from the government organization with primary responsibility for the type of function most prominent for the particular incident. However, with appropriate access to experts and information from all agencies concerned, a key consideration in selecting the IC should be familiarity and experience with the IC function, *i.e.*, the IC should be a person who can best handle the responsibility.

The IC should be someone good at managing on scene operations, and will usually be located at or near the scene. Everyone involved, regardless of rank or status, will normally be in a support role for the IC, similar to the way the SMC function is carried out.

The IC function can be transferred as the situation warrants, although such transfers should be minimized as is the case for transfers of SMC functions during a mission. It is important to designate an IC early, in contingency plans if possible, and make a transfer later as appropriate, as delay in designating an IC can be quite detrimental.

Except when functions other than SAR are relatively insignificant to the incident response, the IC should normally be someone other than the SMC. The priority mission will always be lifesaving, and the SMC should normally remain unencumbered by additional non-SAR duties.

Similarly, the IC's command post should normally be at a location other than in the RCC, because the RCC needs to remain focused on, and be vigilant and responsive to, its normal SAR responsibilities in addition to handling SAR aspects of the major incident."

7 Appendix O

- In appendix O page O-4, the corrections should be made as follows:
 - In the entry "Grønland GREENPOS"

The fourth column should read only "Mandatory". In the fifth column the existing text should be replaced by the following "All ships, on voyages to or from Greenland ports and places of call".

- In the entry "Grønland KYSTKONTROL"

The fourth column should read only "Mandatory". In the fifth column the existing text should be replaced by the following "All ships of 20 gross tonnage and more, and fishing vessels, on voyages between Greenland ports and places of call".

SECTION 3

PROPOSED AMENDMENTS TO THE IAMSAR MANUAL – VOLUME III

1 Abbreviations and Acronyms

- Insert the new line as follows:

"MRO Mass rescue operation"

2 Glossary

- Replace the present definition of Aircraft co-ordinator (ACO) by "A person or team who co-ordinates the involvement of multiple aircraft SAR operations in support of the SAR mission co-ordinator and on-scene co-ordinator".

- Insert the new line as follows:

"Mass Rescue Operation (MRO) - search and rescue services characterized by the need for immediate response to large numbers of persons in distress, such that the capabilities normally available to search and rescue authorities are inadequate".

3 Section 1

- Replace present section on Ship Reporting Systems (pages 1-4), as follows:

"Ship Reporting Systems

- Ship reporting systems have been established by several States.
- Ships at sea may be the only craft near the scene of a distressed aircraft or vessel.
- A ship reporting system enables the SMC to quickly:
 - identify vessels in the vicinity of a distress situation, along with
 - their positions, courses, and speeds
 - be aware of other information about the vessels which may be valuable (whether a doctor is aboard, etc.)
 - know how to contact the vessel
 - improved likelihood of rapid aid during emergencies
 - reduced number of calls for assistance to vessels unfavourably located to respond
 - reduced response time to provide assistance
- Masters of vessels are urged or *mandated* to send regular reports to the authority operating a ship reporting system for SAR *and other safety related services*.
- Additional information on operators of ship reporting systems may be obtained from RCCs."
- Replace present section on The Automated Mutual-Assistance Vessel Rescue (pages 1-4), as follows:

"Amver

Amver is one of *many* ship reporting systems. It is a world-wide system operated exclusively to support SAR and make information available to all RCCs.

- There is no charge for vessels to participate in, nor for RCCs to use, Amver.
- Many land-based providers of communications services worldwide relay ship reports to AMVER free of charge.
- Any merchant vessel of 1000 gross tons or more on any voyage of greater than 24 hours is welcome to participate.

- Information voluntarily provided by vessels to AMVER is protected by the US Coastguard as commercial proprietary data and made available only to SAR authorities or others specifically authorized by the ship involved."
- Insert the following text after the section on Aircraft Reporting System (pages 1-5):

"Underwater search and rescue

- In the event a mobile facility has reason to suspect that an underwater accident has occurred, every effort should be made to contact the nearest Rescue Co-ordination Centre. When accidents occur, survivors may be either on the surface or entrapped in a submarine resting on the seabed. Generally, medical care requirements for survivors of an underwater or submarine accident is specialized and competent medical advice is required.
- Vessels believing they have collided with a submarine, as with a collision with another vessel, should anticipate a requirement to provide SAR assistance. Further information on Submarine SAR and its parallel activity, Submarine Escape and Rescue may be found at the website maintained by the International Submarine Escape and Rescue Liaison Office:"

4 Section 2

- Insert following text after the section on Visual (pages 2-51):

"Prefix call sign

• During search and rescue missions and exercises it is recommended that the following prefix call signs be used before the ordinary radio call sign or as a specific mission call sign:

"RESCUE"	for all airborne units involved in a rescue mission		
"AIR CO-ORDINATOR"	for the aircraft co-ordinator (ACO)		
"SAREX"	for all airborne units involved in international/ national exercises."		

- Delete present section on Rescue by Aircraft (pages 2-33) replaced by the text, as follows:

"Rescue by Maritime Facilities

- Recovery of survivors by assisting vessels
- Seafarers should consider how to recover survivors into their own vessels under various environmental conditions. Recovery methods include:

- □ Using throwing rockets or heaving lines to pass lifebuoys and/or lines to survivors
- □ Streaming a rope, with lifebuoys or other flotation attached
- □ Rigging pilot ladders, jacob's ladders or nets, preferably clear of the ship's side, with safety lines. If survivors are unable to climb, ladders or nets may have to be recovered with the survivors secured to them. Where practicable:
 - rig ladders or nets from pilot doors or other low openings
 - deploy safety lines with rescue strops or loops
 - use suitably equipped crew members to assist survivors directly
 - deploy a liferaft with the ladder or net to act as a transfer platform
- D Pulling survivors up suitable marine evacuation systems
- Deploying liferafts or lifeboats for survivors to hold onto, or climb into
- Using rafts or boats as lifts, leaving them on the falls if conditions permit
- □ Lifting survivors using gantries, cranes, davits or derricks, with lines rigged to minimize swinging against the ship's side
- Deploying purpose-built or improvised recovery baskets
- Rigging a boat rope for boats and survival craft to secure alongside
- □ Lowering embarkation ladders
- Any lights in use must not be directed towards helicopters operating in the area.
- Survivors in the water should be lifted in a horizontal or near-horizontal position if possible (for example, in two strops; one under the arms, the other under the knees) to minimize the risk of shock induced by sudden transfer from the water and possible hypothermia.
- Assisting vessels should also be prepared to receive survivors from helicopters: see pages 2-23.
- When the risks involved in recovery operations outweigh the risks of leaving the survivors in life saving appliances, consider the following actions:
 - Using the ship to provide a lee for the survivors
 - Deploying life saving appliances from the assisting vessel
 - □ Maintaining visual and communications contact with the survivors
 - Updating the co-ordinating authority

- Transferring essential survival and medical supplies"
- Insert following after **Immediate Care of Survivors** (pages 2-35):
- "• Once on board, medical care and welfare of the survivors should be attended to. Additional assistance should be sought from the SAR authorities as required;
- Medical advice should be sought from the Telemedical Maritime Advice Service, via the RCC."
- Insert new heading before fourth paragraph (pages 2-36), as follows:

" Recording Information on Survivors

• Survivor information "

PROPOSED DRAFT AMENDMENTS

2000 HSC CODE

CHAPTER 14 RADIOCOMMUNICATIONS

Regulation 14.15 – Maintenance requirements

The existing text of paragraph 14.15.10 is replaced by the following:

- "14.15.10 Satellite EPIRBs shall be:
 - .1 annually tested for all aspects of operational efficiency, with special emphasis on checking the emission on operational frequencies, coding and registration, at intervals as specified below:
 - .1 on passenger ships, within 3 months before the expiry date of the Passenger Ship Safety Certificate; and
 - .2 on cargo ships, within 3 months before the expiry date, or 3 months before or after the anniversary date, of the Cargo Ship Safety Radio Certificate.

The test may be conducted on board the ship or at an approved testing station; and

.2 subject to maintenance at intervals not exceeding five years, to be performed at an approved shore-based maintenance facility."

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 (LRIT) of ships

1 All ships, except those specified in paragraph 2, shall be fitted with [means] a 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 regulations 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 regulations 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 LRIT 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 regulations 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 regulations 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 subparagraphs .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 (hereafter referred to as LRIT information);
- .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 coast of a Contracting Government; and
 - .2 [1] hour when the ship is less than [300] miles from the coast 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 recipients a receiver other than those [approved][recognized by the Organization;
- .4 shall not transmit the information to any other ships;
- .54 shall be capable of being switched off on board or otherwise be capable of preventing access:
 - .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 The master shall send a communication to the Administration which shall inform the central data authority and LRIT tracking service; [and]
 - **1**.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;]
- [.65 shall be capable of indicating on-board the ship that when it malfunctions[;] [The [means][system] shall have the capability of providing a secure communication to indicate that it malfunctions];]
- .76 shall ensure that the information transmitted by the ship is protected, during transmission from the ship, from unauthorized access or disclosure;

- .87 shall ensure that the ship does not incur any cost when it is either requested to transmit or is transmitting information for LRIT identification and tracking purposes; [and]
- .98 shall conform to performance standards not inferior to those adopted by the Organization [;][.] and
- .109 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 LRIT information, 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 [recognized][approved] by the Organization.

5 Contracting Governments, subject to the provisions of paragraphs **5***bis*, 6 and 7, shall be able to receive **LRIT** identification and tracking information transmitted by ships as follows:

.1 the Administration shall be able to receive LRIT 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 LRIT 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 LRIT 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 LRIT identification and tracking information from all ships, irrespective of the flag such ships are entitled to fly, navigating within a distance of [100][2,000] nautical miles of its coast.

5bis Administrations shall be able to prevent a named Contracting Government from receiving LRIT information on ships flying their flag even if the Contracting Government is otherwise entitled to receive that information.

- 6 Contracting Governments shall, at all times:
 - .1 recognize and respect the commercial confidentiality and sensitivity of any LRIT identification and tracking information they may receive;
 - .2 protect the LRIT identification and tracking information they may receive from unauthorized access or disclosure;
 - .3 use the LRIT identification and tracking information they may receive [solely and exclusively] for the purpose of enhancing their security [, or for other purposes recognized by the Organization];
 - .4 use the LRITidentification 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 LRIT 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 The Search and Rescue services of Contracting Governments may seek to receive or may make use of LRIT identification and tracking information they may have received in relation to the rescue of persons in distress at sea.

8 While Aall reasonable steps shall be taken to ensure to maintain that the [means][system] of transmitting LRITidentification and tracking information is maintained in an efficient working order, However, malfunctions of the LRIT [means][system] of transmitting identification and tracking information transmitting equipment 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, provideing that suitable arrangements are made by the master to take into account the inoperative equipment [means][system] in the planning and executing a safe voyage to a port where repairs can take place."

DRAFT PERFORMANCE STANDARDS AND OPERATION OF THE INTERNATIONAL LONG-RANGE IDENTIFICATION AND TRACKING SYSTEM FOR SHIPS

1 Overview [Concept] [Objective] [Scope]

1.1 The international Long Range Identification and Tracking (LRIT) system provides for the global identification and tracking of ships.

1.2 LRIT services are furnished by tracking services recognized by the Organization (LRIT Tracking Services). A ship may use any recognized LRIT Tracking Service acceptable to the Administration.

1.3 LRIT information is supplied to Contracting Governments entitled to receive the information through the co-ordinator designated by the Organization (LRIT Co-ordinator). Administrations [Contracting Governments] may also obtain information [on ships flying their flag] directly from LRIT Tracking Services.

1.4 A ship reports its identity, its position (latitude and longitude) and the time and date of the position, to a recognized LRIT Tracking Service. These reports should be made through an automated system prescribed by the LRIT Tracking Service.

1.5 Ships are responsible for the installation of the prescribed equipment, but do not pay to provide LRIT information. Contracting Governments pay for LRIT information they request and receive.

1.6 In operating the LRIT system, recognition should be given to international conventions, agreements, rules or standards that provide for the protection of navigational information.

2 Functions of the LRIT Co-ordinator

The LRIT Co-ordinator:

2.1 Operates or oversees one or more data centres (LRIT Data Centre) which enables Contracting Governments to obtain LRIT information they are entitled to receive.

2.2 Ensures that Contracting Governments receive only the LRIT information that they are entitled to receive.

2.3 Identifies the format and manner in which LRIT information is provided to Contracting Governments.

2.4 Prescribes the manner in which Contracting Governments pay for LRIT information.

2.5 Recommends recognition of new LRIT Tracking Services to the Organization, based on their abilities to carry out the duties of an LRIT Tracking Service.

2.6 Reviews the performance of LRIT Tracking Services, and reports annually to the Organization on the performance of the system, and the fee structure. The Co-ordinator also recommends withdrawal of recognition of any LRIT Tracking Service which is not performing the duties required of an LRIT Tracking Service.

3 Functions of the LRIT Tracking Services

LRIT Tracking Services:

3.1 Collect and provide LRIT information in the manner identified by the LRIT Co-ordinator.

3.2 Ensure that LRIT information is collected and provided in a secure manner, so that it is received only by recipients entitled to it.

4 Functional requirements of the LRIT Data Centre

The Data Centre:

4.1 Collects LRIT information continuously from all ships, via the LRIT Tracking Services.

4.2 Offers to contract with all Contracting Governments to provide access to LRIT information.

- 4.3 [The Data Centre should have the capability of maintaining data for at least [40] days.]
- 4.4 Maintains databases of:
 - .1 Contracting Governments entitled to receive LRIT information, and their point of contact.
 - .2 The areas within which coastal States are entitled to receive LRIT information.
 - .3 The list of ports for which port States are entitled to receive LRIT information, and either be a distance from the port or the period of time required to reach the port.
 - .4 Information supplied by Administrations naming Contracting Governments which are not entitled to receive LRIT information from ships flying the flag of these Administrations.
 - .5 LRIT information required by Administrations on ships flying the flag of the Administration.
 - .6 Ship's identification, Administration, and LRIT Tracking Service.

4.5 Maintains data connections between the LRIT Data Centre and each Contracting Government.

4.6 Provides to each Contracting Government upon demand and when entitled to the information, provides the location of:

- .1 Each vessel of that flag State;
- .2 Each vessel within a prescribed time or distance of its coastline; and
- .3 Each vessel in transit that has indicated its intention to enter a port in that State.

5 Technical requirements for the shipboard terminal

The shipboard terminal:

5.1 Automatically transmits to the LRIT Tracking Service the ship's LRIT information being, at a minimum, current within:

- .1 [4] hours when the ship is [300] nautical miles or more from the coast of a Contracting Government; and
- .2 [1] hour when the ship is less than [300] miles from the coast of a Contracting Government.

5.2 Has a transmission method which ensures that the information transmitted by the ship is protected, during transmission from the ship, from unauthorized access or disclosure.

5.3 Interfaces directly to global navigation satellite system navigation equipment, or has internal positioning capability.

5.4 Should be tamperproof.

6 Functional requirements of the ship-to-shore communication system

The telecommunication system must be capable of reliably and securely conveying the signals from ship's terminals to the LRIT Tracking Service.

TERMS OF REFERENCE FOR THE CORRESPONDENCE GROUP ON LRIT

The Correspondence Group on Long-range Identification and Tracking of Ships, taking into account the instructions, decisions of, and comments and proposals made by COMSAR 8, MSC 78, MSC 79, COMSAR 9 and MSC 80, should consider and make recommendations on:

- .1 the need for multiple copies of the LRIT international database, widely distributed around the world in order to ensure that the database is robust and able to withstand equipment failure;
- .2 the requirement for provision of data security including data encryption, authentication and physical security;
- .3 whether a Contracting Government should be permitted to request LRIT information directly from an LRIT Tracking Service on any ship for which they are entitled to obtain LRIT information, or whether requests for information directly from LRIT Tracking Services should be limited to Administrations seeking information on ships flying their flag;
- .4 whether the LRIT Data Centre or LRIT Tracking Services should have the capability to archive LRIT information, and if so, for how long;
- .5 protocols for the destruction of archived LRIT material after a time period to be determined;
- .6 whether or not there should be a limitation for LRIT information latency, and if there should be, what that limitation should be (Five minutes? One hour? Near real time?);
- .7 which requirements related to LRIT should be included in the SOLAS provisions and which should be included in the performance standards for LRIT, so as to avoid conflicting or overlapping requirements;
- .8 all system architectures that will meet LRIT performance requirements (potential service providers are encouraged to provide information in this regard); and
- .9 the ability of Contracting Governments to vary the LRIT information reporting rate from ships.

TERMS OF REFERENCE FOR THE CORRESPONDENCE GROUP ON PASSENGER SHIP SAFETY

- 1 The Correspondence Group on Passenger Ship Safety should:
 - .1 prepare a comprehensive guide on recovery techniques; (task 1)
 - .2 prepare guidelines on how the SAR services may best provide on-board support as an aid to incident containment, taking into account any existing memoranda of understanding addressing this subject; (task 2)
 - .3 prepare contingency planning guidelines for co-operation between companies operating passenger ships in areas remote from SAR facilities and relevant SAR services, taking into account the explanation for place of safety. The Correspondence Group should also review MSC/Circ.1079 and suggest amendments, if appropriate; (task 4)
 - .4 develop functional requirements for SOLAS ships on systems used to recover persons from survival craft and the water; (task 5)
 - .5 prepare revised guidelines on the prevention and treatment of hypothermia, including a review of IMO Publication "Pocket Guide To Cold Water Survival (1992 edition)" and recent information such as found at (<u>http://www.tc.gc.ca/MarineSafety/TP/Tp10038/88-emerg-hypothermia.htm</u>); (task 7)
 - .6 identify concerns for SAR training for SAR service personnel working in major incidents and prepare recommendations as appropriation; (task 8) and*
 - .7 consider matter related to training of SAR personnel and seafarers with recovery responsibilities and advise MSC 81 accordingly. (task 9)

2 The Correspondence Group should review the discussion on Passenger ship safety as contained in the report of COMSAR 9 and, with a view to provide more clarifications, should:

- .1 develop criteria for what constitutes an area remote from SAR facilities and advise MSC 81 accordingly; (task 3)
- .2 consider the outcome of the ICAO/IMO joint working group's discussions on the recommendation to fit marine band radio equipment on maritime SAR aircraft and require the carriage of air band equipment on all SOLAS ships and advise MSC 81; (task 6) and
- .3 prepare a criteria to validate the five day "time to recover" decision considering explanations for "place of safety" and "time to rescue" agreed by MSC 79. (task 10)

^{*} NOTE: See paragraphs 13 to 24 of document MSC 79/WP.13 for further guidance. I:\COMSAR\9\19.doc

3 The Correspondence Group should submit its report to COMSAR 10 within the usual timeframes.

DRAFT MSC CIRCULAR

BASIC SAFETY GUIDANCE FOR OCEANIC VOYAGES BY NON-REGULATED CRAFT

1 The Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its ninth session (7 to 11 February 2005), developed Basic safety guidance for oceanic voyages by non-regulated craft, given in the annex.

2 The Maritime Safety Committee, [at its eightieth session (11 to 20 May 2005)], with a view to providing basic safety guidance for oceanic voyages by non-regulated craft to reduce those risks that could lead to loss of life or severe physical injuries to both crew and would-be rescuers, agreed to the annexed Guidance.

3 Member Governments are invited to bring the annexed Guidance to the attention of all parties concerned for consideration and action, as appropriate.

BASIC SAFETY GUIDANCE FOR OCEANIC VOYAGES BY NON-REGULATED CRAFT

I PURPOSE

0.1 The purpose of this circular is to provide basic safety guidance for oceanic voyages by non-regulated craft to reduce those risks that could lead to loss of life or severe physical injuries to both crew and would-be rescuers, and to reduce the need for extended and expensive SAR operations.

II BASIC SAFETY GUIDANCE

1 Type of craft

1.1 The craft should be of suitable construction for the intended voyage, possess adequate buoyancy and stability and carry appropriate high visibility markings.

2 **Provisions and safety equipment in the craft**

- 2.1 Life-raft(s) of an approved type.
- 2.2 Sufficient life jacket(s) of an approved type for all crew members.
- 2.3 Electronic positioning system.
- 2.4 Pyrotechnics, hand flares and other signalling devices.
- 2.5 Radar reflector of an approved type.

2.6 Sufficient food, water and, if required, fuel for the voyage. (Emergency water making kit may be an advantage.)

2.7 Adequate medical equipment.

3 Radiocommunications

3.1 The craft should be equipped with adequate communications and distress alerting systems within the Global Maritime Distress & Safety System, for example:

- .1.1 Two types of alerting systems, e.g. Long-range communications (radio or satellite) and a satellite EPIRB properly registered.
- .1.2 Hand held radios capable of operating on maritime and aeronautical short-range frequencies.

4 Voyage planning

4.1 The person in charge of the craft should prepare a voyage plan and leave that plan with a responsible person ashore together with details of the craft. Normally, the responsible person ashore will be the primary contact with the craft for normal communications throughout the voyage. If the responsible person ashore becomes concerned for the safety of the craft, they should contact the appropriate MRCC. The person in charge of the craft should submit a voyage plan to the Maritime Administration at the port of departure, if required by that Maritime Administration.

5 Crew gear

5.1 Suitable clothing with high visibility markings and survival equipment appropriate for the voyage.

6 Crew training

- 6.1 All members of the crew should have satisfactorily completed appropriate:
 - .1.1 training for the intended voyage, e.g. navigation and communications with appropriate certification where necessary;
 - .1.2 survival course(s); and
 - .1.3 first aid course(s).

III GUIDANCE FOR ADMINISTRATIONS

7.1 A Maritime Administration that becomes aware of a planned oceanic voyage by a non-regulated craft that does not meet the basic safety guidance herein should use its best endeavours to prevent the craft from departing.

7.2 If the craft does depart, then the Maritime Administration should ensure that the MRCC(s) responsible for the SAR Region(s) through which the craft is expected to pass are made aware of the particular voyage.

IV DETAILED GUIDANCE

- 8.1 Further detailed guidance can be obtained from:
 - .1.1 ISAF Offshore Special Regulations <u>www.sailing.org</u>
 - .1.2 International Ocean Rowing Society <u>www.oceanrowing.com/index.htm</u>

PROPOSED REVISED WORK PROGRAMME OF THE SUB-COMMITTEE AND PROVISIONAL AGENDA FOR COMSAR 10

			Target completion date/number of sessions needed for completion	Reference
1	Glol Syst	oal Maritime Distress and Safety em (GMDSS)		COMSAR 8/18, section 3 COMSAR 9/19, section 3
	.1	matters relating to the GMDSS Master Plan	Continuous	COMSAR 8/18, paragraphs 3.1 COMSAR 9/19, paragraphs 3.1 to 3.3
	.2	exemptions from radio requirements	Continuous	COMSAR 4/14, paragraphs 3.38 to 3.41
2	Pron infor with	nulgation of maritime safety mation (MSI) (in co-operation 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 8/18, paragraphs 3.4 to 3.7 COMSAR 9/19, paragraphs 3.4 and 3.5
3	ITU Con	World Radiocommunication ference matters	Continuous	COMSAR 8/18, section 4 ; COMSAR 9/19, paragraphs 4.5, 4.6 and 4.12 to 4.16

Notes:

^{1 &}quot;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 10.

			Target completion date/number of sessions needed for completion	Reference
4	Radio Grou	ocommunication ITU-R Study p 8 matters	Continuous	COMSAR 8/18, section 4 COMSAR 9/19, paragraphs 4.1 to 4.4 and 4.8 to 4.11
5	Satel COS	lite services (Inmarsat and PAS-SARSAT)	Continuous	COMSAR 8/18, section 5 COMSAR 9/19, section 5
6	Matt inclu Conf GME	ers concerning search and rescue, ding those related to the 1979 SAR erence and the implementation of the DSS		
	.1	harmonization of aeronautical and maritime search and rescue procedures, including SAR training matters	2005 2006	COMSAR 8/18, paragraphs 7.1 to 7.7 COMSAR 9/19, paragraphs 7.1 to 7.5 and 7.8 to 7.13
	.2	plan for the provision of maritime SAR services, including procedures for routeing distress information in the GMDSS	Continuous	COMSAR 8/18, paragraphs 7.8 to 7.12 COMSAR 9/19, paragraphs 7.14 to 7.20
	.3	revision of the IAMSAR Manual	Continuous	MSC 71/23, paragraph 20.2; COMSAR 8/18, section 11 COMSAR 9/19, section 9

		Target completion date/number of sessions needed for completion	Reference
	.4 medical assistance in SAR services	2005 2006	MSC 75/24, paragraph 22.29; COMSAR 8/18, paragraphs 7.13 to 7.16 COMSAR 9/19, paragraphs 7.23 to 7.27
7	Casualty analysis (co-ordinated by FSI)	Continuous	MSC 70/23, paragraphs 9.17 and 20.4; MSC 78/26, paragraph 24.8
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 radio- communication systems and technology	2005 2006	MSC 74/24, paragraph 21.25.1; COMSAR 8/18, section 10 COMSAR 9/19, section 8
H.3	Emergency radiocommunications, including false alerts and interference	2006	COMSAR 8/18, section 6
H. 4	Review of the OSV Guidelines (co-ordinated by SLF)	2007	MSC 75/2 4, paragraph 22.4
H.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
Н.6 Н.3	Measures to enhance maritime security	2005 2006	MSC 75/24, paragraph 22.9; COMSAR 8/18, section 13 COMSAR 9/19, section 12
H.7 H.4	Review of the SPS Code (co-ordinated by DE)	2 sessions 2007	MSC 78/26, paragraph 24.9
Н.8 Н.5	Revision of the performance standards for SART	2 sessions 2007	MSC 78/26, paragraph 24.26
<u>Н.9</u> Н.6	Passenger ship safety	2006	MSC 78/26, paragraph 4.45; MSC 79/23, paragraph 4.12; COMSAR 9/19, section 13
L.1	Review of the FAL and SALVAGE Convention provisions regarding the treatment of persons rescued at sea	2005	MSC 75/24, paragraphs 11.53 and 22.30.2; COMSAR 8/18, paragraph 8.6
L.2	Recommendations on high-risk occanic crossings by adventure craft (co-ordinated by NAV)	2005	MSC 76/23, paragraph 20.24; COMSAR 8/18, paragraph 15.4

PROPOSED PROVISIONAL AGENDA FOR COMSAR 10*

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 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
- 7 Developments in maritime radiocommunication systems and technology
- 8 Revision of the IAMSAR Manual
- 9 Review of the SPS Code
- 10 Measures to enhance maritime security
- 11 Passenger ship safety
- 12 Revision of the performance standards for SART

Agenda item numbers do not necessarily indicate priority.

- 13 Work programme and agenda for COMSAR 11
- 14 Election of Chairman and Vice-Chairman for 2007
- 15 Any other business
- 16 Report to the Maritime Safety Committee