INTERNATIONAL MARITIME ORGANIZATION

E

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REPORT TO THE MARITIME SAFETY COMMITTEE

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1 GENERAL

1.1 The Sub-Committee on Safety of Navigation held its fifty-sixth session from 26 to 30 July 2010 at the Headquarters of the Organization, under the chairmanship of Mr. J. M. Sollosi (United States). The Vice-Chairman, Mr. Raja Datuk Malik (Malaysia), was also present.

1.2 The session was attended by representatives of the following countries:

ARGENTINA
AUSTRALIA
AZERBAIJAN
BAHAMAS
BANGLADESH
BELGIUM
BOLIVIA (PLURINATIONAL STATE OF)
BRAZIL
CANADA
CHILE
CHINA
COLOMBIA
COOK ISLANDS
CROATIA
CYPRUS
DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA
DENMARK
ECUADOR
EGYPT
FINLAND
FRANCE
GEORGIA
GERMANY
GHANA
GREECE
ICELAND
INDONESIA
IRELAND
ITALY
JAPAN
KENYA
LATVIA
LIBERIA
LIBYAN ARAB JAMAHIRIYA
MALAYSIA
MALTA
MARSHALL ISLANDS
MEXICO
NETHERLANDS
NIGERIA
NORWAY
OMAN
PANAMA
PERU
PHILIPPINES
POLAND
REPUBLIC OF KOREA
RUSSIAN FEDERATION
SAUDI ARABIA
SENEGAL
SIERRA LEONE
SINGAPORE
SOUTH AFRICA
SPAIN
SWEDEN
THAILAND
TRINIDAD AND TOBAGO
TURKEY
TUVALU
UKRAINE
UNITED KINGDOM
UNITED REPUBLIC OF TANZANIA
UNITED STATES
URUGUAY
VANUATU
VENEZUELA (BOLIVARIAN REPUBLIC OF)

and of the following Associate Member of IMO:

HONG KONG, CHINA

1.3 The session was attended by representatives from the following United Nations and specialized agency:

WORLD METEOROLOGICAL ORGANIZATION (WMO)

1.4 The following intergovernmental and non-governmental organizations were also represented:

INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO)
EUROPEAN COMMISSION (EC)
INTERNATIONAL MOBILE SATELLITE ORGANIZATION (IMSO)
INTERNATIONAL CHAMBER OF SHIPPING (ICS)
INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)
INTERNATIONAL UNION OF MARINE INSURANCE (IUMI)
INTERNATIONAL TRANSPORT WORKERS' FEDERATION (ITF)
INTERNATIONAL ASSOCIATION OF MARINE AIDS TO NAVIGATION AND LIGHTHOUSE AUTHORITIES (IALA)
COMITÉ INTERNATIONAL RADIO-MARITIME (CIRM)
BIMCO
INTERNATIONAL ASSOCIATION OF CLASSIFICATION SOCIETIES (IACS)
OIL COMPANIES INTERNATIONAL MARINE FORUM (OCIMF)
INTERNATIONAL MARITIME PILOTS' ASSOCIATION (IMPA)
INTERNATIONAL ASSOCIATION OF INSTITUTES OF NAVIGATION (IAIN)
INTERNATIONAL COUNCIL OF MARINE INDUSTRY ASSOCIATIONS (ICOMIA)
INTERNATIONAL FEDERATION OF SHIPMASTERS' ASSOCIATIONS (IFSMA)
INTERNATIONAL ASSOCIATION OF INDEPENDENT TANKER OWNERS (INTERTANKO)
INTERNATIONAL MARITIME RESCUE FEDERATION (IMRF)
CRUISE LINES INTERNATIONAL ASSOCIATION (CLIA)
INTERNATIONAL SAILING FEDERATION (ISAF)
INTERNATIONAL MARINE CONTRACTORS ASSOCIATION (IMCA)
WORLD NUCLEAR TRANSPORT INSTITUTE (WNTI)
INTERNATIONAL HARBOUR MASTERS' ASSOCIATION (IHMA)
THE NAUTICAL INSTITUTE (NI)

Opening address of the Secretary-General

1.5 The Secretary-General welcomed the participants and delivered his opening address, the full text of which is reproduced in document NAV 56/INF.17.

1.6 The Chairman, in responding to the Secretary-General's opening remarks, thanked him for highlighting the importance of honouring the seafarer. Therefore, it was equally important to remember the contributions that the men and women who pursue that noble profession made to society. The recent comprehensive review of the STCW Convention and Code had a direct link to the technological advancement in shipping, advances in e-navigation and the importance of adapting the technology to the needs of the seafarer and not forcing the seafarer to adapt to the technology. The Chairman also noted the reference to the environmental tragedy unfolding in the Gulf of Mexico. Whilst this incident was not necessarily related to navigation or shipping, nevertheless it focused the world's attention on offshore activities that were taking place in areas that were once the exclusive domain of seafarers but were now occupied by a variety of commercial activities. This called attention to the Sub-Committee's work on ships' routeing measures, in general, and particularly to the Sub-Committee's discussion on safety zones around artificial islands, installations and structures in the EEZ. The Chairman concluded by noting that the Sub-Committee had a heavy agenda ahead and it would endeavour to pursue its work in the usual IMO spirit including a renewed dedication to the seafarer. He further confirmed that the Secretary-General's guidance and recommendations would be taken into account in the deliberations of the Sub-Committee and its Working and Drafting groups.

2 DECISIONS OF OTHER IMO BODIES

2.1 The Sub-Committee noted, in general, decisions and comments pertaining to its work by A 26, STW 41, SLF 52, DE 53, COMSAR 14, FP 54 and MSC 87 (NAV 56/2 and NAV 56/2/1) and considered them under the appropriate agenda items.

Outcome of MSC 87

Consideration of the human element in the rule-making process

2.2 The Sub-Committee noted that MSC 87 had agreed that an appropriate amendment to the Committee's Guidelines (MSC-MEPC.1/Circ.2) would need to be developed at the next session of the Joint MSC/MEPC Working Group on the Human Element, scheduled to be convened at MSC 88, and invited Member Governments and international organizations to submit comments and proposals for consideration at its next session.

Formal Safety Assessment amendments to the FSA Guidelines and the guidance on the use of HEAP and FSA

2.3 The Sub-Committee further noted that:

.1 MSC 87 had endorsed the FSA Experts Group's recommendation, based on its experience on the review of FSA studies, to further consider the FSA Guidelines and the Guidance on use of HEAP and FSA, with a view to future amendments. Subsequently, MSC 87 had agreed to establish a Correspondence Group on Formal Safety Assessment (FSA), under the coordination of Japan, and instructed it, taking into account the comments made and decisions taken by the Committee, based on documents MSC 87/18 (paragraphs 40 to 49) and MSC 87/WP.7 (paragraph 21), to:

.1 prepare draft revised FSA Guidelines (MSC/Circ.1023-MEPC/Circ.392, as amended);

.2 prepare draft revised Guidance on the use of HEAP and FSA relating to the review of FSA studies (MSC-MEPC.2/Circ.6); and

.3 submit the report to MSC 89.

.2 MSC 87 had also observed that, since the review task assigned to the group was finalized at this session, the FSA Expert Group might need to be re-established at future sessions to review possible FSA studies to be submitted to the Organization, when instructed by the Committees.

Follow-up to the twenty-sixth session of the Assembly

2.4 The Sub-Committee also noted that MSC 87 had been requested by A 26:

.1 in the context of resolution A.1012(26) – *High-level Action Plan of the Organization and priorities for the 2010-2011 biennium*:

.1.1 when reporting on its work to the Assembly at its twenty-seventh regular session and to the Council at its sessions during the 2010-2011 biennium, to ensure that it reports progress towards fulfilling the Organization's aims and objectives using the

framework of the strategic directions, high-level actions and planned biennial outputs;

.1.2 when considering proposals for unplanned outputs, to ensure that, in accordance with this resolution and the Committee's Guidelines on the organization and method of work, as appropriate, the issues to be addressed are those which fall within the scope of the Strategic Plan and the High-level Action Plan;

.1.3 to submit to the Council, for endorsement, the unplanned outputs the Committee may approve during the 2010-2011 biennium, for inclusion in the High-level Action Plan for that biennium;

.1.4 to ensure that the high-level actions and related outputs, especially those involving amendments to existing conventions (particularly those which have been in force for a short period) take fully into account the directives in resolution A.500(XII); and that due attention is given to the requirement that a well-documented compelling need must be demonstrated for the development and adoption of new or revised standards;

.1.5 to review and revise, during the 2010-2011 biennium, the Committee's Guidelines on the organization and method of work in the light of this resolution; and

.1.6 when making recommendations for Committee's biennial agendas, to bear in mind the desirability of not scheduling more than one diplomatic conference in each year, save in exceptional circumstances; and

.2 in the context of resolution A.1013(26) – *Guidelines on the application of the Strategic Plan and the High-level Action Plan* to keep, to review and revise**,** during the 2010-2011 biennium, the Committee's Guidelines on the organization and method of work, taking account of the Guidelines on the application of the Strategic Plan and the High-level Action Plan.

3 ROUTEING OF SHIPS, SHIP REPORTING AND RELATED MATTERS

3.1 The Chairman recalled that NAV 51 supported a proposal of the previous Chairman, recommending that for future sessions of the Sub-Committee, a preliminary assessment of proposals would be made by the Chairman in consultation with the Secretariat and the Chairman of the Ships' Routeing Working Group. Such a preliminary assessment would follow the general criteria in MSC/Circ.1060 and MSC.1/Circ.1060/Add.1 and would not address the technical aspects of the proposal. The results of the assessment would then be made available to the Sub-Committee by means of a working paper.

3.2 The Chairman informed the Sub-Committee that accordingly, he had, in cooperation with the Secretariat, prepared document NAV 56/WP.1 outlining a preliminary assessment of the ships' routeing and ship reporting proposals. In general, the proposals were in conformity with the criteria outlined in MSC/Circ.1060 and MSC.1/Circ.1060/Add.1.

New Traffic Separation Schemes (TSSs)

New Traffic Separation Schemes "Off the western coast of Norway"

3.3 The Sub-Committee briefly considered a proposal by Norway (NAV 56/3/3) for the establishment of four new traffic separation schemes "Off the western coast of Norway".

New Traffic Separation Schemes "Off the southern coast of Norway"

3.4 The Sub-Committee briefly considered a proposal by Norway, Denmark and Sweden (NAV 56/3/4) for the establishment of four new traffic separation schemes "Off the southern coast of Norway".

Amendments to existing Traffic Separation Schemes (TSSs)

Amendments to the existing Traffic Separation Scheme "Off Feistein"

3.5 The Sub-Committee briefly considered a proposal by Norway (NAV 56/3/5) for the cancellation of the existing Traffic Separation Scheme "Off Feistein" because since 1979 considerable changes in traffic and traffic patterns had taken place.

Amendments to the existing Traffic Separation Scheme "In the Strait of Dover and adjacent waters"

3.6 The Sub-Committee briefly considered a proposal by France and the United Kingdom (NAV 56/3/8) to amend the "Warnings" section, paragraph 3 of the existing traffic separation scheme "In the Strait of Dover and adjacent waters" intended to reduce risk and thus preserve navigational safety and protection of the marine environment.

Amendments to the existing Traffic Separation Scheme "Off the south-west coast of Iceland"

3.7 The Sub-Committee briefly considered a proposal by Iceland (NAV 56/3/12) to amend the "Notes" section, paragraph 1.1 relating to the existing Traffic Separation Scheme "Off the south-west coast of Iceland".

Routeing measures other than Traffic Separation Schemes (TSSs)

Establishment of four new Areas To Be Avoided in the Campeche Sound

3.8 The Sub-Committee briefly considered a proposal by Mexico (NAV 56/3) to establish four new Areas To Be Avoided in the Campeche Sound.

3.9 The Sub-Committee was of the view that the Mexican proposal had not been drafted sufficiently clearly and needed to be re-drafted. At MSC 87, the delegation of Mexico had been advised of this fact but no information/response has yet been forthcoming.

3.10 The delegation of Mexico informed the Sub-Committee that it had decided to withdraw its existing proposal (NAV 56/3) and would submit a suitably revised proposal for consideration by NAV 57 in June 2011.

Amendments to the Rules for Vessels Navigating through the Straits of Malacca and Singapore

3.11 The Sub-Committee briefly considered a proposal by Indonesia, Malaysia and Singapore (NAV 56/3/1) for amendments to the Rules for Vessels navigating through the Straits of Malacca and Singapore for the addition of a new Rule 12 and an Appendix relating to procedures for night signals to be displayed by vessels crossing the Traffic Separation Scheme (TSS) in the Singapore Strait.

3.12 There was a substantial exchange of views on the proposal by Indonesia, Malaysia and Singapore. The Sub-Committee was divided on the issue with some delegations stating that an FSA study and cost benefit analysis was necessary to assess the feasibility of the proposal whilst other delegations, recognizing the unique traffic characteristics of the Strait of Singapore, were of the view that it was a valid proposal and supported it, preferably if it was adopted universally.

Establishment of a new Area To Be Avoided in the Atlantic Ocean, off the coast of Ghana

3.13 The Sub-Committee briefly considered a proposal by Ghana (NAV 56/3/2) to establish a new Area To Be Avoided in the Atlantic Ocean, off the coast of Ghana.

Establishment of a new Deep-water route and an associated precautionary area in the approaches to the new port of King Abdullah Economic City Port (KAP Port) in the northern Red Sea

3.14 The Sub-Committee briefly considered a proposal by Saudi Arabia (NAV 56/3/9) to establish a new deep-water route and an associated precautionary area in the approaches to the new port of King Abdullah Economic City port (KAP Port) in the northern Red Sea.

Amendments to the existing eastern Area To Be Avoided, off the south-west coast of Iceland

3.15 The Sub-Committee briefly considered a proposal by Iceland (NAV 56/3/11) for amendments to the existing eastern Area To Be Avoided, off the south-west coast of Iceland. The amendment relates to the addition of a new paragraph 3 to the "Notes" section.

Amendments to the existing Deep-water route forming part of the "In the Strait of Dover and adjacent waters" Traffic Separation Scheme (TSS)

3.16 The Sub-Committee briefly considered a proposal by France and the United Kingdom (NAV 56/3/13) to amend the "Notes" section relating to "Warnings", paragraph 3 of the existing Deep-water route forming part of the "In the Strait of Dover and adjacent waters" Traffic Separation Scheme (TSS) intended to reduce risk and thus the preservation of navigational safety and protection of the marine environment.

Mandatory ship reporting systems

Establishment of a new mandatory ship reporting system "In the Sound between Denmark and Sweden (SOUNDREP)"

3.17 The Sub-Committee briefly considered a proposal by Denmark and Sweden (NAV 56/3/7) to establish a new mandatory ship reporting system "In the Sound between Denmark and Sweden (SOUNDREP)". The aim of this proposed mandatory ship reporting system was to ensure a safe and efficient traffic flow in the Sound between Denmark and Sweden.

3.18 Some delegations had concerns regarding the extra burden the proposed new mandatory ship reporting system "In the Sound between Denmark and Sweden (SOUNDREP)" would impose on the officer of the watch. The majority of the delegations supported it, recognizing that Denmark and Sweden had proposed an automated reporting system based on the use of AIS technology and linked to both the Danish and Swedish national shore-based AIS network, which could continually receive messages broadcast by ships with transponders to gain information on their identity and position.

Amendments to the existing mandatory ship reporting system "In the Torres Strait region and the Inner Route of the Great Barrier Reef (REEFREP)"

3.19 The Sub-Committee briefly considered a proposal by Australia (NAV 56/3/6) for amending the existing mandatory ship reporting system "In the Torres Strait region and the Inner Route of the Great Barrier Reef (REEFREP)". This involved extension of the area covered by the existing mandatory ship reporting system.

Amendments to the existing mandatory ship reporting system "Off the south and south-west coast of Iceland (TRANSREP)"

3.20 The Sub-Committee briefly considered a proposal by Iceland (NAV 56/3/10) for amendments to the existing mandatory ship reporting system "Off the south and south-west coast of Iceland (TRANSREP)".

Review of adopted mandatory ship reporting systems

3.21 The Chairman recalled again that at previous sessions, his predecessor and subsequently himself took the initiative as Chairman to bring to the attention of Members the need for carrying out an evaluation of adopted mandatory ship reporting systems and had appealed to Members to undertake this exercise.

3.22 The Chairman stated that he was pleased that at least one Member Government had submitted the result of their experiences to this session of the Sub-Committee.

3.23 The Sub-Committee noted with appreciation the useful information provided by Denmark (NAV 56/INF.8) giving details of their experience gained with respect to the existing mandatory ship reporting "In the Storebælt (Great Belt) traffic area (BELTREP)".

3.24 The Chairman thanked Denmark for taking the initiative in carrying out this review and suggested once again that Members should undertake a similar review and re-evaluation of their existing mandatory ship reporting systems and take action, as appropriate.

Proposed new routeing measures in the eastern part of the Gulf of Finland, off Rodsher and Gogland Islands

3.25 The Sub-Committee noted with interest the information provided by the Russian Federation (NAV 56/INF.5) giving details of amendments to the existing traffic separation scheme in the Gulf of Finland and new routeing measures which were planned to be implemented in the near future. All routeing measures were geographically located within the territorial sea of the Russian Federation.

Establishing the Ships' Routeing Working Group

3.26 After a preliminary discussion, as reported in paragraphs 3.1 to 3.23 above, the Sub-Committee re-established the Ships' Routeing Working Group and instructed it, taking into account any decisions of, and comments and proposals made in, Plenary as well as relevant decisions of other IMO bodies (item 2), to:

.1 consider all documents submitted under agenda item 3, except NAV 56/3, regarding routeing of ships and related matters and prepare routeing and reporting measures, as appropriate, and recommendations for consideration and approval by Plenary;

.2 consider all documents submitted under agenda item 4 regarding safety zones and prepare recommendations for consideration and approval by Plenary, in addition, review the issue with respect to the continued need for safety zones longer than 500 metres and provide proper justification and support for continuing work beyond 2010 including proposed TOR for a correspondence group to progress the issue;

.3 consider the background weather information with respect to the status of the current seasonal zone, wind velocities/direction, wind data areas including routeing measures, proposed seasonal zone and wave heights and direction and provide comments and recommendations with respect to extending the Summer Load Line 50 miles southward off Cape Agulhas for consideration and approval by Plenary (agenda item 14);

.4 take into account the role of the human element guidance as updated at MSC 75 (MSC 75/24, paragraph 15.7) including the Human Element Analysing Process (HEAP) given in MSC/Circ.878-MEPC/Circ.346 in all aspects of the items considered; and

.5 submit a report to Plenary on Thursday, 29 July 2010 for consideration at Plenary.

Report of the Ships' Routeing Working Group

3.27 Having received and considered the Working Group's report (NAV 56/WP.3), the Sub-Committee approved it in general and, in particular (with reference to paragraphs 3.1 to 8.1 and annexes 1 to 13), took action as summarized hereunder.

New Traffic Separation Schemes

New Traffic Separation Schemes "Off the western coast of Norway" and "Off the southern coast of Norway"

3.28 The Sub-Committee noted the discussions of the Working Group regarding the proposed new TSSs "Off the western coast of Norway" and "Off the southern coast of Norway", including recommended routes, and approved the new Traffic Separation Schemes "Off the western coast of Norway" and "Off the southern coast of Norway", as set out in annex 1, which the Committee is invited to adopt.

3.29 The delegations of the Bahamas, the Marshall Islands and Panama remained concerned that the proposed recommendatory new TSSs and routes would be ineffective in their stated aims as it might be expected that some vessels would not use the routeing

schemes as they would sail closer to the coast applying Rule 10(h) of the International Convention on Regulations for Prevention of Collisions at Sea (COLREG). Furthermore, vessels would not be able to take advantage of coastal currents to reduce their greenhouse gas emissions as might be required by their shipboard energy efficiency management plan (SEEMP). Additionally, the TSS "Off Ryvingen" could encourage close quarters situations between vessels. Finally, as the Norwegian authorities had stated that the VTS would strongly encourage vessels to use the routeing measures, this recommendatory scheme would, in the opinion of these delegations, become mandatory. The delegations reserved their position with respect to the approval of the new TSSs "Off the western coast of Norway" and "Off the southern coast of Norway".

3.30 The Norwegian delegation emphasized the extensive work that had been carried out with regard to the proposals. It was believed that ships following the proposed routeing system, as risk assessments had shown, would contribute to a significant reduction in risk for collisions, groundings and pollution. This would also enhance the safety of life at sea. However, after adoption and implementation, the changes in traffic and traffic patterns would be closely monitored. If the concerns raised by the delegations of the Bahamas, the Marshall Islands and Panama were found to be true, Norway would make the necessary changes and come back to IMO with an amendment.

Amendments to existing Traffic Separation Schemes

Amendments to the existing Traffic Separation Scheme "Off Feistein"

3.31 The Sub-Committee approved the cancellation of the existing Traffic Separation Scheme "Off Feistein", which the Committee is invited to revoke.

Amendments to the existing Traffic Separation Scheme "In the Strait of Dover and adjacent waters"

3.32 The Sub-Committee approved the amendments to the existing Traffic Separation Scheme "In the Strait of Dover and adjacent waters", as set out in annex 1, which the Committee is invited to adopt.

Amendments to the existing Traffic Separation Scheme "Off the south-west coast of Iceland"

3.33 The Sub-Committee approved the amendments to the existing Traffic Separation Scheme "Off the south-west coast of Iceland", as set out in annex 1, which the Committee is invited to adopt.

Routeing measures other than Traffic Separation Schemes

Establishment of a new Area To Be Avoided in the Atlantic Ocean, off the coast of Ghana

3.34 The Sub-Committee approved the establishment of a new Area To Be Avoided in the Atlantic Ocean, off the coast of Ghana, as set out in annex 2, which the Committee is invited to adopt.

Establishment of a new Deep-water route and an associated Precautionary area in the approaches to the new port of King Abdullah Port (KAP Port) in the northern Red Sea

3.35 The Sub-Committee approved the establishment of a new Deep-water route in the approaches to the new port of King Abdullah Port (KAP Port) in the northern Red Sea and a Precautionary area in the approaches to the new port of King Abdullah Port (KAP Port) in the northern Red Sea, as set out in annex 2, which the Committee is invited to adopt.

Amendments to the existing eastern Area To Be Avoided, off the south-west coast of Iceland

3.36 The Sub-Committee approved the amendments to the existing eastern Area To Be Avoided off the south-west coast of Iceland, as set out in annex 2, which the Committee is invited to adopt.

Amendments to the existing Deep-water route forming part of the "In the Strait of Dover and adjacent waters" Traffic Separation Scheme

3.37 The Sub-Committee approved the amendments to the existing Deep-water route forming part of the "In the Strait of Dover and adjacent waters" Traffic Separation Scheme, as set out in annex 2, which the Committee is invited to adopt.

Amendments to the Rules for vessels navigating through the Straights of Malacca and Singapore – Interim recommendatory measure in the Singapore Strait

3.38 The Sub-Committee noted the discussions of the Working Group on the proposal by Indonesia, Malaysia and Singapore (NAV 56/3/1) for amendments to the Rules for Vessels Navigating through the Straits of Malacca and Singapore and endorsed an Interim recommendatory measure in the Singapore Strait, as set out in annex 2, which the Committee is invited to approve.

3.39 The Sub-Committee also invited Contracting Parties to the International Convention on Regulations for Prevention of Collisions at Sea (COLREG), if they so wished, to propose amendments in relation to the procedures and carriage requirements for night signals to be displayed by vessels crossing Traffic Separation Schemes, following the provisions of Article VI of COLREG.

3.40 The Sub-Committee confirmed that the approval of this interim recommendatory measure would have no impact on the statutory survey and certification regime in respect of navigation lights for cargo and passenger ships.

Implementation of new and amended Traffic Separation Schemes and other routeing measures

3.41 The new Traffic Separation Schemes and amendments to the existing Traffic Separation Schemes and other routeing measures mentioned in above paragraphs 3.28 to 3.35 will be implemented at a date, not less than six months after adoption by the Committee.

Mandatory ship reporting systems

Establishment of a new mandatory ship reporting system "In the Sound between Denmark and Sweden (SOUNDREP)"

3.42 The Sub-Committee approved a new mandatory ship reporting system "In the Sound between Denmark and Sweden (SOUNDREP)", as set out in annex 3, which the Committee is invited to adopt.

Amendments to the existing mandatory ship reporting system "In the Torres Strait region and the Inner Route of the Great Barrier Reef (REEFREP)"

3.43 The Sub-Committee approved the amendments to the existing mandatory ship reporting system "In the Torres Strait region and the Inner Route of the Great Barrier Reef (REEFREP)", as set out in annex 4, which the Committee is invited to adopt.

Amendments to the existing mandatory ship reporting system "Off the south and south-west coast of Iceland (TRANSREP)"

3.44 The Sub-Committee approved the amendments to the existing mandatory ship reporting system "Off the south and south-west coast of Iceland (TRANSREP)", as set out in annex 5, which the Committee is invited to adopt.

Implementation of new and amended Mandatory Ship Reporting Systems

3.45 The new Mandatory Ship Reporting System and amendments to the existing Mandatory Ship Reporting Systems mentioned in above paragraphs 3.39 to 3.41 will be implemented at a date, not less than six months after adoption by the Committee.

4 GUIDELINES FOR CONSIDERATION OF REQUESTS FOR SAFETY ZONES LARGER THAN 500 METRES AROUND ARTIFICIAL ISLANDS, INSTALLATIONS AND STRUCTURES IN THE EEZ

4.1 The Sub-Committee recalled that NAV 53 had considered a proposal by Brazil (NAV 53/3) supplemented by a study carried out by DNV and PETROBRAS (NAV 53/INF.2), which aimed at designating an Area To Be Avoided in waters off the Brazilian south-east coast, in the Campos Basin region, in order to reduce the risk of collision in an area with a high concentration of oil rigs, production systems and FPSOs. Part of the proposal was to extend the safety zones around the units which constituted this oil production system to a distance greater than 500 metres, taking into consideration the peculiarities of each one of them, with a view to avoiding environmental damage caused by any collision of a vessel. There was general support for the proposal by Brazil, but some delegations were concerned by the extension of the designated safety zones to more than 500 metres, noting that there were no established procedures and guidelines for determining if any such extension was warranted. It was therefore proposed that the Sub-Committee should develop uniform procedures, and guidelines by which safety zone proposals for distances greater than 500 metres should be considered. Otherwise, the Sub-Committee might find itself having to consider proposals for safety zones greater than 500 metres on an *ad hoc* basis without guidelines, standards or objective measures by which to make a judgement. The development of uniform procedures would, therefore, ensure that safety of navigation was taken consistently into account and that the size of any adopted safety zone was no larger than the minimum necessary to achieve safety of navigation.

4.2 The Sub-Committee also recalled that NAV 53 had subsequently approved the proposed new Area To Be Avoided "Off the Brazilian south-east coast, in the Campos Basin region" and observed that the majority of the Ships' Routeing Working Group had recommended that the Sub-Committee should invite the Committee to establish a high-priority work programme item on the development of guidelines, principles and standards for the evaluation extended safety zones larger than 500 metres, which is the limit provided for in UNCLOS. UNCLOS Article 60(5) provides, *inter alia*, that such safety zones "shall not exceed a distance of 500 metres around them, measured from each point of their outer edge, except … as recommended by the competent international organization", which is understood to mean the Organization.

4.3 The Sub-Committee further recalled that MSC 84 had subsequently considered document MSC 84/22/4 (Brazil and the United States), proposing to develop comprehensive guidelines for the consideration of requests for safety zones larger than 500 metres in Exclusive Economic Zones and to provide an example of such guidelines, and agreed to include, in the work programme of the NAV Sub-Committee, a high-priority item on "Guidelines for consideration of requests for safety zones larger than 500 metres around artificial islands, installations and structures in the EEZ", with two sessions needed to complete the item. In this regard, MSC 84 noted the views of several delegations that other issues (e.g., safety zones around offshore wind farms, notification areas, etc.) should be considered under this new work item and instructed the Sub-Committee to take these views into account.

4.4 Although no proposals had been submitted to NAV 55, the Sub-Committee, recognizing that this was a high-priority item, had decided to proceed on this issue without delay and established a correspondence group to work intersessionally and report to NAV 56. Members were invited to submit relevant proposals for consideration at NAV 56.

4.5 The Sub-Committee briefly considered document NAV 56/4 (United Kingdom) summarizing the work and recommendations of the Correspondence Group regarding the development of Guidelines and inviting the Sub-Committee to consider two options, namely:

.1 approve the draft amendments to the General Provisions on Ships' Routeing (resolution A.572(14)), as amended, relating to the proposed Guidelines and forward them to the Committee for adoption (NAV 56/4, annex 1); and

.2 consider as an alternative or supplement to the above a draft SN circular on "Safety zones and safety of navigation around offshore installations and structures" (NAV 56/4, annex 2).

4.6 The Sub-Committee briefly considered document NAV 56/4/1 (United States) providing comments on the report of the Correspondence Group. The delegation of the United States recalled that they had been one of the proponents for the development of these guidelines. After careful and thorough consideration, the United States believed there was no demonstrated need, at present, for safety zones larger than 500 metres or the development of guidelines for such safety zones. Rather than continuing the work to develop guidelines, the Sub-Committee should focus instead on the Organization's existing guidance on safety zones that perhaps had not been followed over time and on the available measures that individually or in combination with others had demonstrated their effectiveness in providing for the safety both of navigation and of artificial islands, installations or structures in the exclusive economic zone.

Finally, important questions about the nature of these expanded safety zones and the mechanism for adopting new guidelines had arisen but had not been answered in the course of the Correspondence Group's work. Some participants had observed that safety zones were not actually routeing measures and, thus, might not be a proper subject to include in the General Provisions on Ships' Routeing (GPSR).

As such, rather than developing guidelines in a new Annex to the GPSR, the United States proposed an appropriate SN circular pertaining to safety zones and the safety of navigation around offshore installations and structures which attempted to capture the important points and observations that the Group made in its work and was intended to be a way to provide guidance.

4.7 The Sub-Committee briefly considered document NAV 56/4/2 (ISAF) providing general comments on the Guidelines proposed by the Correspondence Group. ISAF was of the view that in the wider interests of all ships including small vessels the needs of such classes of ships must be fully considered in each application, their representatives consulted, and exclusion recommended only when there is a compelling safety case.

4.8 The Chairman invited the Sub-Committee to provide general comments on the issue and specific comments on any of the recommendations of the Correspondence Group.

4.9 Several delegations spoke on the issue. Some delegations were in favour of amending the General Provisions on Ships' Routeing (GPSR) whilst the majority were of the opinion that safety zones were not routeing measures and should therefore not be addressed under GPSR. A majority were also of the view that an SN circular would be the more appropriate way to address the issue. However, it was also recognized that the need for extension of safety zones beyond 500 metres might be necessary in the future due to the unique nature of offshore installations, wind farms, aqua culture sites and energy exploitation activities.

4.10 At the invitation of the Chairman, the representative of the Legal Office offered observations concerning the procedural aspects of the Organization's role in accommodating safety zones of over 500 metres around artificial islands, installations and structures. He noted that article 60(5) of UNCLOS offered two options by providing that such safety zones shall not exceed a distance of 500 metres, except (a) "as authorized by generally accepted international standards", or (b) "as recommended by the competent international organization". Neither of these options referred to an "adoption" procedure. This could be distinguished from other UNCLOS provisions which require an adoption process (such as article 53(9) for archipelagic sea lanes; and article 41(4) for sea lanes and traffic separation schemes). It could also be compared to article 60(3) concerning the Organization's role in establishing international standards for removal of abandoned or disused platforms which did not require an adoption process (see resolution A.672(16)).

As a legal basis for an adoption procedure, reference could be made to other international instruments such as SOLAS regulation V/10 on ships' routeing (along with COLREG's Rule 10 for TSS's); however, in order for the adoption of safety zones to be encompassed within SOLAS regulation V/10, it would be necessary for the Parties to SOLAS to agree that such zones fell within the term "routeing systems". This did not historically seem to be the case. Safety zones had primarily been used as a measure to protect the safety of the offshore installation, and a clear distinction had been made between such zones and routeing systems (see resolution A.671(16), operative paragraph 1(c)). No reference had been made to SOLAS regulation V/10 in the draft guidelines being proposed in document NAV 56/4 to address enlarged safety zones. In the view of the Legal Office representative, the Organization should avoid an "adoption" processes using mandatory

language such as "shall" except where an adoption was required by UNCLOS or another convention.

4.11 Following debate, the Sub-Committee referred documents NAV 56/4, NAV 56/4/1 and NAV 56/4/2 to the Ships' Routeing Working Group for consideration and advice.

Report of the Ships' Routeing Working Group

4.12 Having received and considered the Ships' Routeing Working Group's report (NAV 56/WP.3), the Sub-Committee (with reference to paragraphs 9.1 to 9.5 and annex 14) took action as summarized hereunder.

4.13 The Sub-Committee agreed to a draft SN circular, as amended, on Guidelines for safety zones and safety of navigation around offshore installations and structures, as set out in annex 6, which the Committee is invited to approve.

4.14 The Sub-Committee also invited the International Hydrographic Organization to note the contents of the above draft SN circular, in particular, paragraphs 4.1.3 and 4.1.4, relating to the use of legends, symbols and notes recommended for the standard representation on navigation charts for the designation of safety zones around offshore artificial islands, structures or installations, as well as for development areas and anchors and cables, as a warning to mariners navigating in the vicinity of offshore resource and exploitation areas.

4.15 The Sub-Committee further noted that there was no demonstrated need, at present, to establish safety zones larger than 500 metres around artificial islands, installations and structures in the exclusive economic zone or to develop guidelines to do so and that the continuation of the work beyond 2010 for a Correspondence Group on Safety Zones was, at present, no longer necessary.

4.16 The Committee was invited to consequently delete the item "Guidelines for consideration of requests for safety zones larger than 500 metres around artificial islands, installations and structures in the EEZ" from the Sub-Committee's biennial agenda, as the work on this item had been completed.

4.17 The delegation of Cyprus pointed out that the draft SN circular prepared by the correspondence group on Safety Zones, as set out in annex 2 to document NAV 56/4 (United Kingdom), had included references to UNCLOS which the Working Group had decided to remove, making only reference to international law.

4.18 The Sub-Committee noted that the reference to UNCLOS had been removed because not all Member Governments were Contracting Parties to UNCLOS and the reference to international law provided in the draft SN circular had been considered sufficient.

4.19 The delegation of Cyprus reserved its position on the approval and publication of the aforesaid circular.

5 AMENDMENTS TO THE PERFORMANCE STANDARDS FOR VDR AND S-VDR

5.1 The Sub-Committee recalled that MSC 83 had considered:

.1 document MSC 83/25/4, wherein Germany proposed an improvement of the VDR performance standard since the evaluation of data retrieved from existing VDR installations had shown that in many cases the audio

recordings were of bad quality and sensor signals were not recorded because the sensor failure had not been recognized during operation, which had, in certain cases, made it impossible to use the stored data for the intended purpose;

.2 documents MSC 83/25/8 and MSC 83/25/9, in which Egypt had proposed that a second radar, a second VHF radio and closed-circuit TV (CCTV) cameras should be connected to the voyage data recorder (VDR) and new design requirements to facilitate VDR capsule retrieval during recovery operations, should be developed respectively;

.3 document MSC 83/25/18, in which India, commenting on the proposal by Egypt (MSC 83/25/9), provided further information on ways to improve VDR capsule retrieval during recovery operations,

and agreed to include, in the work programme of the Sub-Committee, a high-priority item on "Amendments to the Performance standards for VDR and S-VDR", with two sessions needed to complete the item, and referred the aforementioned documents to the Sub-Committee for detailed consideration.

5.2 The Sub-Committee further recalled that MSC 84 had also agreed to expand the existing work programme item on "Amendments to the Performance standards for VDR and S-VDR" to consider the proposal contained in document MSC 84/22/18 (Egypt), and increased the number of sessions needed to complete this work item to three sessions.

5.3 The Sub-Committee also recalled that NAV 55 had prepared a draft text of revised performance standards for voyage data recorders (VDRs) (NAV 55/WP.4, annex 4, as amended) and concurred that only the existing performance standards for VDRs needed to be amended as the proposed amendments were not intended to be retroactive. Secondly, since the performance Standard for S-VDRs (resolution MSC.163(78)) would not apply after 1 July 2010, no changes were proposed to the performance standards for S-VDRs.

5.4 The Sub-Committee considered document NAV 56/5 (Germany) containing the draft amended performance standards for shipborne voyage data recorders (VDRs), taking into account the issues highlighted by NAV 55 (NAV 55/21, paragraphs 16.17.1 to 16.17.7).

5.5 The delegation of the United Kingdom welcomed Germany's work on the development of draft amended performance standards for shipborne voyage data recorders (VDRs) and also recalled the work done at NAV 55 by the Technical Working Group (NAV 55/WP.4, annex 4) with respect to the float-free capsule.

5.6 There was general support for the German proposal. Some delegations were of the opinion that a cost-benefit analysis should also be undertaken. Other delegations were of the view that the amended performance standards should not apply retroactively but only to new ships.

5.7 The Sub-Committee agreed to refer document NAV 56/5 to the Technical Working Group for further development/finalization with a view to approval by Plenary.

Establishing the Technical Working Group

5.8 Having also considered agenda items 6 and 7, which were deemed to be within its remit, the Sub-Committee re-established the Technical Working Group and instructed it to consider all relevant documents submitted under these agenda items and, taking into

account any decisions of, and comments and proposals made in, Plenary, undertake the following tasks:

.1 consider documents NAV 56/5 and further develop/finalize revised performance standards for VDR (resolution A.861(20)), taking into account document NAV 55/WP.4, section 4 and annex 4 (agenda item 5);

.2 consider document NAV 55/21, annex 9 and the relevant outcome of COMSAR 14 and finalize a draft MSC circular on Guidance on procedures for updating shipborne navigation and communication equipment (agenda item 6);

.3 consider document NAV 56/6 and finalize a draft SN circular on Maintenance of Electronic Chart Display and Information System (ECDIS) software and provide comments to address subsequent updating of the guidance (agenda item 6);

.4 consider document NAV 56/7 and develop a liaison statement to ITU, concerning definitions of the Navigation Status parameter of AIS Messages 1, 2, and 3, as appropriate (agenda item 7);

.5 develop a liaison statement to ITU based on the decision of MSC 87 (MSC 87/26, paragraphs 9.20 to 9.21), inviting ITU to incorporate AIS Application-Specific messages as given in SN.1/Circ.289, as deemed appropriate, within their technical standards; and develop clarifying guidance on technical implementation, should the need arise (agenda item 7);

.6 take into account the role of the human element guidance as updated at MSC 75 (MSC 75/24, paragraph 15.7) including the Human Element Analysing Process (HEAP) given in MSC/Circ.878-MEPC/Circ.346 in all aspects of the items considered; and

.7 submit a report to Plenary on Thursday, 29 July 2010 for consideration at Plenary.

Report of the Technical Working Group

5.9 Having received and considered the Technical Working Group's report (NAV 56/WP.4), the Sub-Committee (with reference to paragraphs 3.1 to 3.12 and annexes 1 and 2) took action as summarized hereunder.

5.10 The Sub-Committee invited:

.1 Members and interested parties to submit more information on initial and operational costs of voyage data recorders (VDRs) in order to justify whether a float-free recording medium, in addition to a fixed recording medium, should be included in the performance standards; and

.2 Members to submit proposals on the revised performance standards for VDRs to the next session of the Sub-Committee with the view to finalizing them at that session, noting that the draft amended recommendation on performance standards for voyage data recorders (VDRs) was set out in annex 2 to document NAV 56/WP.4/Rev.1.

6 DEVELOPMENT OF PROCEDURES FOR UPDATING SHIPBORNE NAVIGATION AND COMMUNICATION EQUIPMENT

6.1 The Sub-Committee recalled that MSC 83 had considered document MSC 83/25/7 (Australia and the United Kingdom), proposing to develop, in view of the increasing complexity of processor-based electronic systems, formal procedures to address firmware, operating systems and software updates for shipborne navigation and communication systems and equipment, and agreed to include, in the work programmes of the NAV and COMSAR Sub-Committees, a high-priority item on "Development of procedures for updating shipborne navigation and communication equipment", with two sessions needed to complete the item, and assigned the Sub-Committee as a coordinator.

6.2 The Sub-Committee also recalled that NAV 55 had considered document NAV 55/7 (CIRM) providing comments on the consideration given in document MSC 83/25/7 and suggesting that SN.1/Circ.266, providing guidance on the maintenance of ECDIS software, was appropriate to be used as a model in general for updating shipborne navigation and communication equipment and address firmware, operating systems and software updates for shipborne navigation and communication equipment.

6.3 The Sub-Committee further recalled that NAV 55 had further endorsed a draft MSC circular on Guidance on procedures for updating shipborne navigation and communication equipment (NAV 55/21, annex 9), for review/comments by COMSAR 14 and a final review by NAV 56 prior to approval by MSC 88.

6.4 The Sub-Committee noted that COMSAR 14 had endorsed the draft MSC circular with the following comments:

.1 a minor amendment to insert the following words "and firmware" after the word "software" in the second line of paragraph 1 of the draft circular; and

.2 footnotes to be included in SOLAS chapter IV, regulation 15.5 and chapter V, regulation 16, given below:

.1 in chapter IV, regulation 15.5, add footnote: "Refer to Guidance on Procedures for Updating Shipborne Navigation and Communication Equipment (MSC.1/Circ.[…])"; and

.2 in chapter V, regulation 16, add footnote: "Refer to Maintenance of Electronic Chart Display and Information System (ECDIS) Software (SN.1/Circ.266), and Guidance on Procedures for Updating Shipborne Navigation and Communication Equipment (MSC.1/Circ.[...])",

and instructed the Secretariat to inform NAV 56 accordingly for consideration and action, as appropriate.

6.5 The Sub-Committee observed that MSC 87 had noted the progress made and the comments by COMSAR 14.

6.6 The Sub-Committee considered document NAV 56/6 (IHO and CIRM) proposing amendment to SN.1/Circ.266 regarding the maintenance of ECDIS software.

6.7 The Sub-Committee agreed to refer documents NAV 55/21, annex 9 and NAV 56/6 to the Technical Working Group for finalization of:

.1 a draft MSC circular on Guidance on procedures for updating shipborne navigation and communication equipment; and

.2 a draft SN circular on Maintenance of Electronic Chart Display and Information System (ECDIS) software,

with a view to approval by MSC 88.

Report of the Technical Working Group

6.8 Having received and considered the Technical Working Group's report (NAV 56/WP.4), the Sub-Committee (with reference to paragraphs 4.1 to 4.13 and annexes 3 and 4), took action as summarized hereunder.

6.9 The Sub-Committee endorsed:

.1 SN.1/Circ.266/Rev.1 on Maintenance of Electronic Chart Display and Information System (ECDIS) software (annex 7); and

.2 the draft MSC circular on Guidance on procedures for updating shipborne navigation and communication equipment (annex 8),

with a view to approval by MSC 88.

6.10 The Sub-Committee authorized the Secretariat to issue a future revision of SN.1/Circ.266 upon receipt from IHO of updated information relevant to paragraph 6 and the footnotes, informing the Sub-Committee of the action taken, and invited the Committee to endorse this action.

6.11 The Sub-Committee instructed the Secretariat, with regard to the draft MSC circular on Guidance on procedures for updating shipborne navigation and communication equipment, to include the proposed footnotes in SOLAS chapter IV, regulation 15.5 and chapter V, regulation 16 at the next publication of the SOLAS Consolidated edition.

6.12 The Committee was invited to consequently delete the item "Development of procedures for updating shipborne navigation and communication equipment" from the Sub-Committee's biennial agenda, as the work on this item had been completed.

7 ITU MATTERS, INCLUDING RADIOCOMMUNICATION ITU-R STUDY GROUP MATTERS

7.1 The Sub-Committee noted that MSC 87 had extended the target completion date of this agenda item to 2011.

7.2 The Sub-Committee recalled that NAV 55 had considered document NAV 55/8/5 (Secretariat) containing the liaison statement from WP 5B to IALA, IMO, CIRM and IEC TC 80, concerning a revision of Recommendation ITU-R M.1371-3.

7.3 The Sub-Committee recalled also that NAV 55 had considered document NAV 55/10/1 (IALA) proposing amendments to the technical clarification of ITU Recommendation ITU-R M.1371-1 and that NAV 55 had noted concerns expressed by

several delegations with regard to the descriptions proposed. It was, at the time, also noted that there were differences in the terminology and philosophy used in ITU-R Recommendation 1371-3 and the COLREGs. IALA had been invited to take the comments made by the Sub-Committee into account when preparing their submission to ITU on this issue.

7.4 The Sub-Committee noted that IALA had sent a submission on this issue to ITU, Working Party 5B.

7.5 The Sub-Committee considered document NAV 56/7 (Secretariat) containing a resulting liaison statement from the meeting of ITU-R Working Party 5B, (23 November to 3 December 2009), to IMO (COMSAR and NAV) and IALA concerning draft revision of Recommendation ITU-R M.1371-3.

7.6 The observer from IALA fully supported the contents of document NAV 56/7 (Secretariat).

7.7 The Sub-Committee agreed to refer document NAV 56/7 to the Technical Working Group for detailed consideration and development of a liaison statement on this matter to ITU, proposing revised definitions of the Navigation Status parameter of AIS Messages 1, 2, and 3 and comments on other matters, as appropriate**.**

Other AIS issues

AIS Binary messages

7.8 The Sub-Committee recalled that NAV 55 had developed a draft SN circular on Guidance on the use of AIS Application-Specific Messages and instructed the Secretariat to consolidate further clarifications to be submitted by interested delegations after NAV 55 and to finalize the revised draft SN circular for the consideration of and approval by MSC 87.

7.9 The Sub-Committee noted that MSC 87 had considered a proposal by Australia (MSC 87/9/3) suggesting the addition of a new paragraph 5 to the cover note of the draft SN circular. Since ITU Recommendation ITU-R M.1371 provided the reference for technical characteristics of the AIS, it was necessary for clarifications to be published with regard to the technical elements of the ITU Recommendation. Hence, it would, in Australia's view, seem appropriate that the ITU should be invited to incorporate these messages, as deemed appropriate, within their technical standards; and to develop clarifying guidance on technical implementation, should the need arise.

7.10 The Sub-Committee observed further that MSC 87 had noted that there was, in general, no support for the Australian proposal to amend the draft circular and subsequently approved SN.1/Circ.289 on Guidance on the use of AIS Application-Specific Messages, revoking SN/Circ.236 as from 1 January 2013. However, the Secretariat was instructed to prepare the relevant liaison statement for forwarding to ITU.

7.11 The Sub-Committee agreed to refer this issue also to the Technical Working Group for developing the relevant liaison statement to ITU.

Satellite detection of AIS

7.12 The Sub-Committee recalled that NAV 55 had noted the Preliminary draft new report ITU-R M. [SAT-AIS] on Improved satellite detection of AIS and approved the draft liaison statement on this matter to ITU-R.

7.13 The Sub-Committee noted that the Preliminary draft new report ITU-R M. [SAT-AIS] on Improved satellite detection of AIS had been approved by Study Group 5 as Report ITU-R M.2169. This ITU-R Report had been developed giving a technical background for the utilization of channels 75 and 76 of RR Appendix 18 in order to improve the satellite detection of AIS messages.

7.14 The Sub-Committee noted also that ITU's Working Party 5B had noted the liaison statement, sent by NAV 55 on Satellite detection of AIS, at its meeting from 23 November to 4 December 2009. Working Party 5B, at its last session, noted that Recommendation ITU-R M.1371-3 had been revised in order to introduce a new Message 27 for AIS. This message had been designed for the purpose of AIS satellite detection.

Future spectrum requirements with respect to e-navigation and Spectrum requirements within future maritime systems

7.15 The Sub-Committee recalled that NAV 55, at the request of COMSAR 13, had agreed that:

.1 e-navigation would require a stable broadband VHF, HF and satellite data communications system;

.2 maritime frequency spectrum should not be given up;

.3 e-navigation would probably require additional frequency allocation which would be communicated to COMSAR in due course for onward transmission to ITU; and

.4 ITU should be informed accordingly.

7.16 The Sub-Committee noted that COMSAR 14 had taken the advice of NAV 55 into account and had included in the draft IMO position on WRC-12 that "Initial consideration by IMO technical bodies have identified that e-navigation could not be deployed without additional frequency allocations for these advanced maritime systems. Based on respective future studies both in IMO and ITU, spectrum requirements will be refined and validated."

7.17 The Sub-Committee noted further that after COMSAR 14 the draft IMO position for WRC-12 had been submitted to ITU Working Party 5B and Working Party 5B had taken the information into account at its last meeting (10 to 21 May 2010). Working Party 5B had also considered information provided by IALA on this matter and sent a liaison statement to IMO and IALA advising on the status of studies in ITU-R. Working Party 5B had informed IMO and IALA that e-navigation was one of several essential topics, which were initially addressed under WRC-12 Agenda item 1.10, but had proved to be too complex to reach a stage which could result in action by WRC-12. This meant that ITU-R would not further study this matter in preparation for WRC-12. The Joint IMO/ITU Experts Group, scheduled to meet from 14 to 16 September 2010, was instructed to further develop the draft IMO Position for WRC-12.

Report of the Technical Working Group

7.18 Having received and considered the Technical Working Group's report (NAV 56/WP.4), the Sub-Committee (with reference to paragraphs 5.1 to 5.14 and annexes 5 and 6) took action as summarized hereunder.

7.19 The Sub-Committee invited interested parties to make proposals for the future use of 3 of the 13 Navigation Status parameters which were available for future definition, as defined in Recommendation ITU-R M.1371-4.

7.20 The Sub-Committee approved the draft liaison statements to ITU-R WP 5B on:

.1 the future revision of Recommendation M.1371-4 (annex 9); and

.2 the use of AIS application-specific messages (annex 10),

and instructed the Secretariat to send it to ITU and invited the Committee to endorse this action.

8 DEVELOPMENT OF AN E-NAVIGATION STRATEGY IMPLEMENTATION PLAN

8.1 The Sub-Committee recalled that MSC 86 had instructed NAV 55 to:

.1 consider future spectrum requirement with respect to e-navigation and advise COMSAR 14 accordingly; and

.2 taking into account the user needs and current work on e-navigation, provide advice on the correct generic term to replace the terms "Decca" and "Loran" to STW 41.

8.2 The Sub-Committee recalled also that NAV 55 had established a Working Group to progress the issue and a Correspondence Group to work intersessionally and report to COMSAR 14 and NAV 56.

8.3 The Sub-Committee recalled further that NAV 55 had considered the report of the Working Group (NAV 55/WP.5) and:

.1 noted the preliminary detailed shipboard user needs;

.2 agreed to establish a correspondence group to further progress the work intersessionally to:

.1 review the preliminary detailed shipboard user needs, as developed by NAV 55, and update them as appropriate, and to consider priorities;

.2 develop detailed shore-based user needs, taking into account input provided by IALA, IHO and other relevant organizations and to consider priorities; and

.3 identify functions and services to support the shipboard and shore-based user needs in a harmonized and holistic manner; and

.3 agreed that it would be necessary to verify and update the user needs, as and when necessary during the implementation process of the Organization's e-navigation strategy.

8.4 The Sub-Committee noted that COMSAR 14 had endorsed the views of the e-navigation working group that:

.1 the conceptual e-navigation architecture as depicted in Figure 2 of document COMSAR 14/12 was a good basis for further development and simplification by the Correspondence Group;

.2 figure 1 of document COMSAR 14/12 relating to the structure of the process for the development of the e-navigation concept should be further developed by the Correspondence Group;

.3 the criteria for the selection of hardware and the development of the corresponding software should be further developed by the Correspondence Group with input from other organizations involved;

.4 tables identifying current related communication equipment, performance standards including test standards and possible future communication equipment systems, respectively had been developed, which should be further developed by the Correspondence Group;

.5 the satellite detection of ships' automatic identification systems could become part of the e-navigation concept; however, there were numerous issues which still had to be studied and discussed, including the protection of the frequencies reserved for AIS, which was a matter of concern;

.6 the Committee had not taken any decision as yet on the issue of satellite detection of ships' automatic identification systems, pending the outcome of relevant studies under the framework of ITU;

.7 the principles relating to bridge design, design and arrangement of navigational systems and equipment and bridge procedures in SOLAS regulation V/15 would be useful in identifying navigational system functions;

.8 the World-Wide Radionavigation System was a central part of the e-navigation system, as it provided position and timing information for the whole system;

.9 the issues of a terrestrial electronic position fixing system as a back-up system and user needs for security required further consideration by the Correspondence Group with input from other organizations involved;

.10 the Correspondence Group should further consider the issue of common data structure for information exchange and requested IALA and IHO to provide the relevant input;

.11 specific criteria for reliability, in support of the user needs stated in the e-navigation strategy, should be addressed within the gap analysis;

.12 preliminary user needs analysis with respect to SAR should be further developed by the Correspondence Group as well as other relevant fora; and

.13 the development of e-navigation and the scoping exercise to establish the need for a review of the elements and procedures of the GMDSS should be harmonized and there should also be an identification of user needs for

GMDSS. In addition, further consideration should be given as to which basic communication capabilities should be a part of the developing e-navigation concept.

8.5 The Sub-Committee noted further that COMSAR 14 had, in particular:

.1 endorsed the proposed methodology for carrying out the initial gap analysis;

.2 noted the proposed methodologies for cost-benefit analysis and risk analysis; and

.3 supported the proposal by Ukraine (COMSAR 14/7) identifying user needs and being an example of the benefits that could be obtained by integrating VHF DSC operation with the AIS-ECDIS; noting that this proposal was fully compatible with the e-navigation development strategic direction which envisaged further development of means of radiocommunications and navigation and the implementation of modern digital information technologies in navigation.

8.6 The Sub-Committee noted also that MSC 87 had noted the progress made to date.

8.7 The Sub-Committee also recalled the Secretary-General's opening remarks on the importance of staying focused on the task in hand and making progress in the further development of an e-navigation strategy implementation plan.

8.8 The Sub-Committee considered document NAV 56/8 (Norway) providing a comprehensive report of the work done by the Correspondence Group.

8.9 A number of delegations supported the work of the Correspondence Group. Some delegations voiced concern about the concept of Vessel Traffic Management (VTM), as reflected in annex 1 of document NAV 56/8.

8.10 The observer from the European Commission stated that, whilst IMO was developing e-navigation, the European Commission was simultaneously developing e-Maritime. ON the question whether e-navigation and e-Maritime were the same and whether there was any conflict, the simple answer was "no". In essence, IMO's e-navigation focused primarily on the shipborne navigation and on the development of electronic technology, processes and services to get a ship quickly and safely from berth to berth. Europe's e-Maritime focused primarily on the shore-based facilitation and on the development of electronic technology, processes and services to facilitate the flow of goods over sea – and consequently the ships that carry these goods – to, from and around Europe. The European Commission intended to develop applications for administrations, ship operations, ports/terminals, transport logistics and improving life at sea and promoting seafaring. Of course, both developments partly made use of the same electronic technology, processes and service, and in the e-Maritime concept development, the European Commission wanted to make use of those being developed by IMO for e-navigation, wherever possible. The European Commission intended to lay out a framework for e-Maritime in 2011 for adoption by the European Union (EU) Member States in 2013 with the intention to have the supporting electronic technology processes and services in operation around Europe in 2018.

There was already a vast amount of Research & Development studies carried out within Europe on this issue, sponsored by the EU, lastly in the MARNIS project. This had already been made available for the development of e-navigation within IMO where relevant and

appropriate, mostly through the gained expertise and insights by the involved experts of the European Member States who had also participated in the development of e-navigation in IMO and would continue to do so.

8.11 The delegation of the Netherlands informed the Sub-Committee that a VTM concept was under development by IALA and further suggested that VTM should be put on the biennial agenda of the Sub-Committee through the Maritime Safety Committee.

8.12 The delegation of the Russian Federation suggested that automated voyage planning should be highlighted in the development of e-navigation and that organizational standards for route planning should also be developed.

8.13 The Chairman, in his summing up, advised the Working Group to be established not to address the VTM concept for the time being and concentrate instead of user needs both afloat and ashore.

8.14 The Sub-Committee agreed that document NAV 56/8 should be used as the basic document for further work during the current session and that it would be advisable to instruct the anticipated e-navigation Working Group to be established under this item to undertake a thorough review of the document before the Sub-Committee takes the requested relevant actions detailed in paragraphs 71.1 to 71.10.

8.15 The Sub-Committee considered documents NAV 56/8/1, NAV 56/8/2, NAV 56/8/3, NAV 56/8/4 and NAV 56/8/6 (IALA) providing the result of the work done to identify the user needs for e-navigation, details of the IALA maritime radio Communication Plan to assist in the selection of radio communication systems required to support e-navigation, details of the IALA World-Wide Radio Navigation Plan, details of the e-navigation architecture from a shore-based perspective as recommended for the IALA Members and guidance on the standards for the exchange and presentation of aids to navigation information as a component of a proposed internationally agreed common data structure.

8.16 The delegations of the United Kingdom, the Bahamas, the Marshall Islands and others thanked IALA for document NAV 56/8/3, outlining that one of the key elements of e-navigation was a robust electronic position, navigation and timing system with redundancy in order to provide a viable terrestrial back-up to GNSS.

8.17 The delegation of Australia, with reference to document NAV 56/8/2, invited the Sub-Committee to support the continued use of existing Maritime channels for general analogue and digital communication; more specifically the spectrum around 500 kHz and Appendix 17 channels.

8.18 The observer from ICS expressed concern about the need for additional AIS channels on the grounds that a compelling need for them had not been demonstrated.

8.19 The Sub-Committee noted that all these inputs by IALA had already been taken into account by the Correspondence Group.

8.20 The Sub-Committee noted with interest the information provided by IHO (NAV 56/8/7), in line with the Sub-Committee's request to IHO, at its fifty-fourth session, on the progress made in worldwide ENC coverage based on available data as of 16 April 2010 and expressed its appreciation for keeping the Members updated.

8.21 The delegation of South Africa, with reference to paragraph 3 of document NAV 56/8/7, requested IHO to indicate where the gaps would be in 2010. The observer from IHO clarified that the updated information could be obtained from the IHO website.

8.22 The Sub-Committee considered document NAV 56/8/8 (Singapore) proposing the use of multi-hop wireless networks to provide communication services for safety, e-navigation, Internet Access, and ship-to-ship communications.

8.23 The Sub-Committee supported the concept of the multi-hop network and agreed that it should be considered for inclusion as a component of e-navigation.

8.24 The Sub-Committee agreed to refer document NAV 56/8/8 to the e-navigation Working Group for consideration and advice.

8.25 The Sub-Committee considered document NAV 56/8/9 (Japan) explaining the necessity for the establishment of a methodology to assess usability of navigational equipment and also summarizing the result of Japan's study on the methodologies used in the other sectors. Japan was of the opinion that the Organization should develop a methodology in association with the development of an e-navigation strategy implementation plan.

8.26 The Sub-Committee agreed that it was necessary to establish a methodology to assess usability of navigational equipment. The delegation of Germany was of the view that other existing instruments, such as MSC/Circ.982, could also be used for the same purpose.

8.27 The Sub-Committee agreed to refer document NAV 56/8/9 to the e-navigation Working Group for consideration and advice.

8.28 The Sub-Committee noted the information provided by IALA (NAV 56/INF.3) on Frequently Asked Questions as it appeared on the IALA website.

8.29 The Sub-Committee noted the information provided by Canada (NAV 56/INF.6) on the findings of a comprehensive e-navigation user needs survey conducted in Canada. Shipborne and shore-based user needs were assessed throughout Canada from May to October 2009 using the questionnaire developed jointly by Germany and Canada for the worldwide survey. Canada's survey reinforced the findings of other user needs surveys; however, evolving user needs and preferences would still need to be taken into account as e-navigation progresses.

8.30 The Sub-Committee noted the information provided by Singapore (NAV 56/INF.7) on research results on the characteristics of radio signal propagation and the performance of broadband mesh data transmission in the maritime environment.

8.31 The Sub-Committee noted the information provided by the Nautical Institute (NAV 56/INF.7) on the need for the creation of a common data infrastructure or framework for e-navigation, which should be a collaborative effort across the various relevant international organizations involved to ensure the e-navigation demand for data access and information services are harmonized and interoperable.

8.32 The Sub-Committee noted the information provided by the Republic of Korea (NAV 56/INF.10) on the considerations for the gap analysis in view of mariner's working procedure recommended by ICS, which included technology, system automation and updates of relevant regulations.

8.33 The Sub-Committee noted the information provided by Japan (NAV 56/INF.13) for the development of preliminary draft guidelines for usability evaluation of navigational equipment, identifying five points to be addressed in usability evaluation.

8.34 The Sub-Committee noted the information provided by Japan (NAV 56/INF.14) identifying eight services and functions of e-navigation that Japan considered would enhance safety at sea, some of which had been included in the report of the Correspondence Group.

Establishing the e-navigation Working Group

8.35 After preliminary discussion, as reported in paragraphs 8.1 to 8.18 above, the Sub-Committee re-established the e-navigation working Group and instructed it to consider the relevant documents submitted under agenda item 8, in particular, NAV 56/8 (Norway), NAV 56/8/8 (Singapore) and NAV 56/8/9 (Japan) including the information provided in documents NAV 56/INF.6 (Canada), NAV 56/INF.7 (Singapore), NAV 56/INF.9 (Nautical Institute), NAV 56/INF.10 (Republic of Korea), NAV 56/INF.13 and NAV 56/INF.14 (Japan), plus the outcome of NAV 55, COMSAR 14 and documents submitted by IALA in support of the Correspondence Group and taking into account any decisions of, and comments and proposals made in, Plenary, undertake the following tasks:

.1 review the report of the Correspondence Group and provide comments and recommendations with respect to the actions requested in paragraphs 71.2 to 71.10 of document NAV 56/8;

.2 review and finalize the user needs (NAV 56/8, annexes 2, 3, 4 and 5);

.3 review and consolidate the process of completing initial gap analysis and provide comments and recommendations including methodology for addressing future user needs;

.4 review and consolidate the process of completing the initial cost/benefit and risk analysis and provide comments and recommendations;

.5 review and revise the terms of reference for a correspondence group to progress work intersessionally for reporting to STW 42, COMSAR 15 and NAV 57, based on the joint plan of work approved by MSC 86;

.6 take into account the role of the human element guidance as updated at MSC 75 (MSC 75/24, paragraph 15.7) including the Human Element Analysing Process (HEAP) given in MSC/Circ.878-MEPC/Circ.346 in all aspects of the items considered; and

.7 submit a report to Plenary on Thursday, 29 July 2010 for consideration at Plenary.

Report of the e-Navigation Working Group

8.36 Having received and considered the e-navigation Working Group's report (NAV 56/WP.5), the Sub-Committee (with reference to sections 3 to 9, and annexes 1 to 7) took action as summarized hereunder.

Actions related to the report of the correspondence group

8.37 The Sub-Committee endorsed the recommendations of COMSAR 14 concerning the various components of the e-navigation architecture with the understanding that these should be reviewed as the work on e-navigation progresses.

8.38 The Sub-Committee endorsed the concept of the functional architecture, as outlined in the report of the correspondence group and recommended by COMSAR 14, taking into account that the outcome of various analyses (gap, cost and risk) would lead to the identification of a proposed technical architecture for e-navigation.

8.39 The Sub-Committee endorsed the initial gap analysis prepared by the correspondence group.

8.40 The Sub-Committee endorsed the initial cost benefit and risk analyses.

8.41 The Sub-Committee endorsed that the identified user needs of e-navigation should be taken into account with regard to the scoping exercise concerning an eventual review of GMDSS.

8.42 The Sub-Committee noted that the common maritime information and data structure, which could contain IALA's Universal Maritime Data Model (UMDM), IHO's Universal Maritime Data Model (UHDM), etc., would require some form of overarching coordination to ensure the ongoing management and maintenance of the structure.

8.43 The Sub-Committee supported the identification of areas of services of e-navigation.

User needs

8.44 The Sub-Committee agreed that:

.1 the information relating to e-navigation on the IMO website should be updated;

.2 users, in particular seafarers, should continue to be involved during the development of an e-navigation strategy implementation plan;

.3 Member States and international organizations holding e-navigation promotion events should be encouraged to provide feedback reports to the Sub-Committee; and

.4 "Frequently Asked Questions" relating to e-navigation should be posted on the IMO website and updated on a regular basis.

8.45 The Sub-Committee noted the discussions of the Group relating to the development of the methodology to assess the usability of navigational equipment.

8.46 The Sub-Committee approved the user needs prepared by the Group, as set out in annexes 2 to 5 to document NAV 56/WP.5.

Initial gap analysis

8.47 The Sub-Committee invited IALA and IHO to finalize the gap analysis on shore-side aspects and report to COMSAR 15 and NAV 57.

8.48 The Sub-Committee noted the discussions of the Group relating to initial gap analysis.

500 kHz band to support e-navigation

8.49 The Sub-Committee invited the Joint IMO/ITU Expert Group on Maritime Radiocommunication Matters, at its next meeting from 14 to 16 September 2010, to consider further use of the 500 kHz band to support e-navigation.

Cost benefit and risk analyses

8.50 The Sub-Committee noted the discussions of the Group relating to cost benefit and risk analyses.

Re-establishment of the correspondence group

8.51 The Sub-Committee re-established the correspondence group under the coordination of Norway[1] and instructed it to take into account document MSC 86/23/4 (Secretariat), relating to the joint work plan for COMSAR, NAV and STW Sub-Committees for the period 2009-2012, the comments and general views expressed at NAV 56 and, decisions taken by NAV 52 including the guidance in MSC/Circ.1091 on Issues to be considered when introducing new technology on board ship and MSC/Circ.878-MEPC/Circ.346 on Human Element Analysing Process (HEAP); the Correspondence Group on e-navigation should undertake the following tasks:

.1 consider documents NAV 56/8, MSC 85/26 (annex 20, paragraph 9.7.2 and annex 21, paragraph 5) and NAV 56/WP.5, annex 1, and finalize the system architecture;

.2 consider documents NAV 53/13 (annex 3), NAV 56/INF.10 (Republic of Korea) and MSC 85/26 (annex 20, paragraph 9.7.3 and annex 21, paragraph 6), and progress the initial gap analyses focusing on technical, regulatory, operational and training aspects;

.3 submit a report to STW 42 (24 to 28 January 2011) raising specific questions, if required, that should be addressed by STW;

.4 submit a report to COMSAR 15 (7 to 11 March 2011) outlining an overall conceptual, functional and technical architecture and the progress made in the initial gap analyses focusing on communication and SAR issues;

.5 submit a consolidated progress report to NAV 57 (6 to 10 June 2011) outlining the further analyses for navigation and related shore-based services issues, the completed and ongoing work including a provisional outline/draft of the Strategy Implementation Plan and progress on the cost benefit and risk analyses; and

.6 based on the requirements stipulated in the e-navigation strategy section 8 (MSC 85/26, annex 20) to identify and describe an enabling data framework to support user needs and ensure maximum interoperability.

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8.52 Bearing in mind that the correspondence group would not be able to meet the bulky document deadline to report the outcome of COMSAR 15 in its report to NAV 57, the Sub-Committee agreed to extend the deadline for submission of its report to 1 April 2011, subject to endorsement by the Committee.

8.53 On behalf of the Secretary-General, the Director of the Maritime Safety Division reiterated that the framework for developing the e-navigation strategy implementation plan was found in document MSC 86/23/4. This framework provided a structured approach that included user needs, a system architecture, gap analyses and a cost benefit analysis. It was important that the focus remained on this framework in order to progress development of e-navigation within the time allowed. He referred to the Secretary General's concern that extraneous issues were being introduced into the e-navigation deliberations, which could distract the attention of the correspondence and working groups from the important and immediate tasks at hand. There might be emerging technologies and operational concepts that at some point should be considered within the scope of e-navigation. However, introducing these issues at this juncture introduced added burdens that would serve only to delay the delivery of the all-important strategy implementation plan. He concluded by stating that the Sub-Committee should consider the immediate tasks at hand and the immediate products to be delivered before introducing new topics, concepts or technical solutions.

8.54 In summing up following the report of the e-navigation working group, the Chairman thanked Mr. John Erik Hagen and all members of the working group for their efforts. However, the Chairman expressed concern that the overall e-navigation effort was becoming over burdened by having to address extraneous information, documents and proposals that were not relevant to their Terms of Reference or to the e-navigation structure outlined in document MSC 86/23/4. The Chairman made it clear that the Sub-Committee had to remain focused on delivering an e-navigation strategy implementation plan as was required by the Committee.

9 GUIDELINES ON THE LAYOUT AND ERGONOMIC DESIGN OF SAFETY CENTRES ON PASSENGER SHIPS

9.1 The Sub-Committee recalled that NAV 55 had considered document NAV 55/12 (CLIA) providing information regarding aspects related to the construction and layout of Safety Centres and making reference to MSC/Circ.982 on Guidelines on Ergonomic Criteria for Bridge Equipment and Layout and SN.1/Circ.265 on Guidelines on the Application of SOLAS regulation V/15 to INS, IBS and Bridge Design. CLIA was of the view that the concepts and guidance outlined in the aforementioned circulars provided excellent guidance, in general and, in particular, as applied in the context of the Safety Centre, and might be applicable to its relevant equipment, function, layout and procedures.

9.2 The Sub-Committee further recalled that NAV 55 had agreed that since no other substantial documents had been submitted on this issue to that session and the input from the FP Sub-Committee would only be available after FP 54 (April 2010), the matter should be postponed for further consideration at NAV 56, inviting Members to submit suitable proposals. Accordingly, the Committee was invited to extend the target completion date of this agenda item to 2010, which it endorsed.

9.3 The Sub-Committee noted that FP 54, recognizing the necessity to make progress on this issue, had instructed the working group on the Explanatory Notes for the Application of the Safe Return to Ports Requirements to finalize the text of the draft Clarifications of SOLAS chapter II-2 requirements regarding interrelation between central control stations and safety centres and the associated MSC circular, based on annexes 4 and 5 of the report of the correspondence group (FP 54/8).

9.4 The Sub-Committee further noted that FP 54 had agreed to the draft Interim Clarifications of SOLAS chapter II-2 requirements regarding interrelation between central control stations and an associated draft MSC circular, for submission to MSC 87 for approval; and requested the Secretariat to inform the STW and NAV Sub-Committees on the outcome of this item for consideration and action, as appropriate.

9.5 The Sub-Committee also noted that MSC 87 had approved the corresponding MSC.1/Circ.1368 to provide additional guidance for the uniform implementation of SOLAS regulation II-2/23, adopted by resolution MSC.216(82), due to enter into force on 1 July 2010.

9.6 The Sub-Committee noted that since MSC 87 had already approved MSC.1/Circ.1368, there was no further action to be taken by the Sub-Committee. Accordingly, the Committee was invited to delete this item from its biennial agenda.

10 REVIEW OF VAGUE EXPRESSIONS IN SOLAS REGULATION V/22

10.1 The Sub-Committee recalled that MSC 82 had considered a proposal by Germany (MSC 82/21/11) to develop, in view of some cases of stowage of containers above the line of visibility, a clarification of SOLAS regulation V/22 (Navigation bridge visibility) or revision of the regulation, to ensure safe navigation and to avoid ship detentions, and agreed to include, in the NAV Sub-Committee's work programme, a high-priority item on "Review of vague expressions in SOLAS regulation V/22". In this respect, MSC 82 had noted a view that rather than developing amendments to the SOLAS Convention, guidance on the implementation of regulation V/22 might be prepared and agreed that it should be left to the Sub-Committee to decide on the course of action to be taken when addressing the issue.

10.2 The Sub-Committee also recalled that NAV 54 had considered document MSC 82/21/11 (Germany), outlining the experience made with stowage of containers above the line of visibility which might present a danger to collision avoidance and the safe operation of a ship, together with document NAV 54/17 (Denmark and Singapore), proposing an amendment of SOLAS regulation V/22, which enabled ships to verify compliance with SOLAS regulation V/22, when loading deck cargo. There was a brief general discussion on the issue. Delegations who spoke were, in general, supportive of the idea of an amendment to SOLAS regulation V/22. However, concerns were raised as to the scope of application to different types of ships, applicability to existing ships, the potential need for new equipment, and the need for flexibility in the application of the proposed draft amendment. The Sub-Committee agreed that it was premature to take any decision at that time and that more detailed consideration was necessary prior to finalization. Member Governments were invited to submit suitable proposals, taking into account the above concerns raised in Plenary, for further consideration at NAV 55.

10.3 The Sub-Committee further recalled that NAV 55 had considered document NAV 55/13/1 (Norway), proposing a series of amendments to SOLAS regulation V/22, namely subparagraphs 22.1.2, 22.1.7, 22.1.8 and 22.1.9.4 in order to clarify the intent of the regulation and ensure uniform understanding of the requirements. Some delegations spoke on the issue, voicing concerns with respect to the proposed amendments related to SOLAS regulation V/22.1.2 – Blind Sectors with respect to the "designated" conning position; SOLAS regulation V/22.1.7 – Height of lower edge of bridge front windows with respect to minimum lower height; meaning of the term "clear view"; conflicted with the calculation of angles of visibility under the dynamic conditions of pitch and roll, and applicability to existing ships.

10.4 The Sub-Committee recalled further that NAV 55 had also considered document NAV 55/13/2 (Denmark) proposing an amendment to SOLAS regulation V/22.5 enabling ships to verify compliance with SOLAS regulation V/22 when loading deck cargo. The Sub-Committee was of the view that the Danish proposal would apply more to containership visibility and that it was premature to take any decision and agreed to invite the Committee to extend the target completion date of this agenda item to 2010, since more time was needed to take a technically sound decision on the matter. Members were invited to submit consolidated proposals for consideration at NAV 56.

Proposed amendments to SOLAS regulation V/22

10.5 The Sub-Committee considered document NAV 56/10 (Norway), proposing the following amendments to SOLAS regulation V/22, in order to clarify the intent of the regulation and to ensure uniform understanding of the requirements:

.1 SOLAS regulation V/22.1.2 relating to blind sectors;

.2 SOLAS regulation V/22.1.7 relating to height of lower edge of bridge front windows;

.3 SOLAS regulation V/22.1.8 relating to height of upper edge of bridge front windows and height of helicopter deck; and

.4 SOLAS regulation V/22.1.9.4 relating to clear view through the bridge front windows.

10.6 The Sub-Committee considered document NAV 56/10/2 (Denmark and the Marshall Islands) proposing amendments to SOLAS regulation V/22 suggesting the addition of a new paragraph 5 to enable ships to verify compliance with SOLAS regulation V/22 when loading deck cargo.

Unified Interpretation of SOLAS regulation V/22

10.7 The Sub-Committee considered document NAV 56/10/1 (Republic of Korea) proposing a draft unified interpretation regarding the application of visibility requirements of SOLAS regulation V/22 (regulations V/22.1.1, 22.1.2, 22.1.3, 22.1.17, 22.1.9.2 and 22.1.9.4) and the development of a corresponding draft MSC circular on the Unified interpretation.

10.8 A number of delegations and observers spoke on the issue. All were in agreement that there was a need to clarify the vague expressions in SOLAS regulation V/22. Some were of the view that the basic threshold for compliance should be ships greater than 300 gross tonnage, whilst others were of the view that the proposed amendments should be performance based and not too prescriptive.

10.9 The delegation of Germany had a particular concern with respect to the height of stacked cargo obscuring the line of sight. Germany was of the view that this high stacking of cargo and the resulting erratic blind sectors had become a regular feature instead of exceptional occurrences.

10.10 The observer from IACS welcomed consideration of this important issue, which IACS had previously brought to the attention of the Sub-Committee in document NAV 53/INF.7. The IACS observer was of the view that instead of developing Unified Interpretations on the issue, it was preferable to develop clear and unambiguous amendments to SOLAS regulation V/22.

10.11 The Sub-Committee, recognizing that there were quite a number of amendments involved, agreed that it would be appropriate to establish a Drafting Group to collate all the proposed amendments into one single document to facilitate consideration by Plenary.

10.12 After preliminary discussion, as reported in paragraphs 10.5 to 10.11 above, the Sub-Committee established a Drafting Group on Review of vague expressions in SOLAS regulation V/22 and instructed it, in accordance with its decision and comments and proposals made in Plenary, to undertake the following tasks:

.1 consider documents NAV 56/10 (Norway) and NAV 56/10/2 (Denmark and the Marshall Islands) [including NAV 56/10/1 (Republic of Korea)] submitted under agenda item 10 regarding the proposed amendments to SOLAS regulation V/22, and prepare a draft text of the proposed amendments to SOLAS regulation V/22 [or a draft MSC circular on Unified interpretation regarding the application of visibility requirements of SOLAS regulation V/22], as appropriate, for consideration and approval by Plenary; and

.2 submit a report to Plenary on Thursday, 29 July 2010 for consideration at Plenary.

Report of the Drafting Group

10.13 Having received and considered the Drafting Group's report (NAV 56/WP.6 and WP.6/Corr.1 (English only)), the Sub-Committee (with reference to paragraphs 3.1 to 3.13 and annex) took action as summarized hereunder.

10.14 The Sub-Committee, after an extensive discussion with regard to proposed amendments to the chapeau of paragraph 1 of regulation V/22, agreed a revised date for application of the proposed amendments to be adopted.

10.15 During the discussion with regard to proposed amendments to paragraph 1.9.4 of regulation V/22, a number of delegations expressed concern with using a reference to paragraph 1.3 of this regulation as a means to specify a requirement for maintaining clear and clean windows through a field of vision of 225 degrees on the bridge, as this would introduce significant structural changes to the design of windows on the bridge, and there was also no clear indication that the means to provide a clear view would be mechanical.

10.16 A number of delegations, in order to clarify the proposed amendments, suggested further amendments to the draft text thereby creating other vague expressions, thus contradicting the intended purpose of amending the regulation which was to eliminate existing vague expressions.

10.17 The Sub-Committee, after a lengthy debate and taking into account the diverse views expressed on the interpretation of the proposed amendments, agreed that any substantive changes to this regulation should be supported by a proper analysis of all related issues including a cost-benefit analysis, in order to remove vague expressions and ensure effective application of the requirements.

10.18 The Sub-Committee considered the draft text of the proposed new paragraph 1.10 (NAV 56/WP.6/Corr.1) related to a definition of "conning position", and in this context agreed to delete the proposed reference to radar and other means as specified in SOLAS regulation V/19.2.3.2 in the proposed amendment, as this would re-introduce the proposal of a dedicated conning position, as the definition of the conning position within the context of new paragraph 1.10 should only be to provide a design parameter from where the field of vision is provided in compliance with paragraph 1.3.

10.19 A number of delegations also expressed concern that the definition of the conning position should be clarified to clearly indicate if the reference was to a single position or a number of positions on the bridge. Therefore, the Sub-Committee agreed that several issues remained requiring further clarification, before the proposed amendments could be finalized.

10.20 Taking into account the above, the Sub-Committee agreed that it was premature to finalize the amendments to SOLAS regulation V/22 at its present session for consideration and approval by the Committee, and that the proposed amendments needed to be considered further in order to clarify outstanding issues prior to finalization of the amendments. In response to a request from the delegation of Denmark to adopt their proposed amendment for a means to verify compliance, the Sub-Committee agreed that this proposed text should not be adopted in isolation.

10.21 Accordingly, the Sub-Committee agreed to the establishment of a correspondence group under the coordination of the United States* and approved the following terms of reference.

10.22 The Correspondence Group should consider documents NAV 56/10 (Norway), NAV 56/10/1 (Republic of Korea) and NAV 56/10/2 (Denmark and the Marshall Islands) outlining the proposed amendments to the existing SOLAS regulation V/22 on navigation bridge visibility, the report of the Drafting Group established at NAV 56 (NAV 56/WP.6 and Corr.1 (English only) as well as document NAV 53/INF.7(IACS), including comments made in Plenary and any other relevant information, review vague expressions in existing SOLAS regulation V/22 and submit a report for consideration and review by the Sub-Committee, at its fifty-seventh session (NAV 57).

10.23 The Committee was requested to extend the target completion year of the biennial agenda "Review of vague expressions in SOLAS regulation V/22" to 2011.

11 NEW SYMBOLS FOR AIS AIDS TO NAVIGATION

11.1 The Sub-Committee recalled that MSC 86, following consideration of document MSC 86/23/7 (Japan), proposing to develop new symbols for AIS aids to navigation and taking into account the comments provided in document MSC 86/23/18 (CIRM), had agreed to include, in the work programme of the NAV Sub-Committee, a high-priority item on "New symbols for AIS aids to navigation", with a target completion date of 2013, and instructed NAV 55 to include the item in the provisional agenda for NAV 56.

11.2 The Sub-Committee also recalled that NAV 55 had noted with interest the information provided by Denmark (NAV 55/INF.7) regarding a Danish study on experiences gathered from AIS AtoN trials. The intention was to summarize the most important experiences gained and issues raised, also with reference to a proposed new work programme item (MSC 86/23/7) for the Sub-Committee to develop new symbols for AIS AtoN. Tools such as virtual or synthetic AIS AtoN, the symbology in SN/Circ.243,

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a diamond with crosshair symbol, were evaluated together with AIS safety-related text message services. The observer from IALA had informed the Sub-Committee that IALA was organizing a workshop on the matter in January 2010 and its outcome would be reported to NAV 56.

11.3 The Sub-Committee considered document NAV 56/11 (Japan) providing examples of draft new symbols for AIS-AtoN, whose design was based on the present symbols for AIS-AtoN defined in SN/Circ.243. The new symbols put top marks defined in the IALA Maritime Buoyage System on the present symbols.

11.4 The Sub-Committee also considered document NAV 56/11/1 (IHO) stating that it was not necessarily opposed to the use of Virtual AtoN, whether on a temporary or permanent basis, but believed that there needed to be a wider discussion and agreement on the matter.

11.5 The Sub-Committee further considered document NAV 56/11/2 (United Kingdom) providing information on the application and display of AIS aids to navigation. The present standard for representation of AIS AtoNs was therefore a diamond with a cross at the actual position. A "V" is superimposed for virtual AtoNs.

11.6 The Sub-Committee took into consideration document NAV 56/11/3 (Denmark) providing comments on the new symbols for AIS Aids to Navigation submitted by Japan. Denmark was of the view that there was a need for clarification on the use of AIS AtoN symbols. While an amendment of SN/Circ.243 based on the proposal from Japan would be useful for improving the graphical display of current AIS AtoN, a number of related issues needed still to be addressed.

11.7 A number of delegations spoke on the issue and expressed their appreciation of the initiative undertaken by Japan in developing examples of draft new symbols for AIS AtoN. However, there was concern that the broader issue of AIS AtoN had not been discussed in detail at IMO. It was therefore necessary to have a wider discussion of the issue relating to policy matters, limitations on use, training of seafarers and limitations of display including information overload.

11.8 The delegation of South Africa was of the view that the scope of the issue was broader than the issue of symbology. There was a need for a joint submission to the Committee for a new biennial agenda item to be put on the Sub-Committee's agenda to address the various concerns related to this issue.

11.9 Accordingly, the Sub-Committee agreed that it was rather premature to establish a Correspondence Group on AIS AtoN symbology. It was first imperative to have a policy in place before any major work was undertaken on this issue.

11.10 The delegation of Japan thanked the Sub-Committee for its valuable comments and stated that Japan intended to submit a document to the Committee to facilitate the policy study.

IALA Recommendation on Virtual Aids to Navigation

11.11 The Sub-Committee noted with interest the information by IALA (NAV 56/INF.2) on the definition and the use of virtual aids to navigation as the result of a workshop organized by IALA in January 2010. The Recommendation (IALA Recommendation O-143) of this workshop offered national members of IALA and other authorities guidance on the use of virtual aids to navigation.

Use of Electronic Chart Systems (ECS) and class B AIS in Chinese domestic ships

11.12 The Sub-Committee noted with interest the information provided by China (NAV 56/INF.11) containing an update on a project to enhance the safety of navigation on the Chinese domestic ships and promote e-navigation in the Chinese waters, China initiated promotion of the use of Electronic Chart Systems (ECS) and class B AIS in domestic ships. The project had completed its trial phase between 2007 and 2009, and would enter its implementation phase on 1 July 2010.

12 AMENDMENTS TO THE WORLD-WIDE RADIONAVIGATION SYSTEM

12.1 The Sub-Committee recalled that MSC 86, following consideration of document MSC 86/23/12 (Netherlands, Sweden, United Kingdom and United States), proposing to develop amendments to the World-wide Radionavigation system (WWRS) (resolution A.953(23)) to take account of developments in radionavigation services, had agreed to include, in the work programme of the NAV Sub-Committee, a high-priority item on "Amendments to the World-wide radionavigation system", with a target completion date of 2011, and instructed NAV 55 to include the item in the provisional agenda for NAV 56.

12.2 The Sub-Committee considered document NAV 56/12 (Netherlands, Sweden, United Kingdom and United States) proposing amendments to resolution A.953(23) in order that more Administrations might be encouraged to submit suitable radionavigation services to IMO as components of the World-wide Radionavigation System (WWRNS). Amendments had been proposed to the Appendix (operational requirements) of resolution A.953(23), as follows:

.1 existing section 1.3 should be amended;

.2 existing sections 2 and 3 should be merged/revised and re-numbered as a new section 3; and

.3 existing section 4 should be amended and re-numbered as a new section 2.

12.3 There was general support for the proposed amendments to the Appendix (operational requirements) of resolution A.953(23) and the Sub-Committee agreed to incorporate the amendments into the draft revised text of resolution A.953(23), as given at annex 11, with a view to forwarding it to the Committee for approval.

Update on eLoran

12.4 The Sub-Committee noted with interest the information provided by the United Kingdom (NAV 56/INF.16) on an update on the status and development of eLoran, as a potential complementary system to GNSS.

12.5 The Sub-Committee further agreed to refer document NAV 56/INF.16 to the e-navigation Working Group for consideration in the context of identifying solutions for a terrestrial complement to the existing Global Navigation Satellite System (GNSS).

12.6 The Committee was consequently invited to delete the item "Amendments to the world-wide radio navigation system" from the Sub-Committee's biennial agenda.

13 REVIEW OF THE PRINCIPLES FOR ESTABLISHING THE SAFE MANNING LEVEL OF SHIPS INCLUDING MANDATORY REQUIREMENTS FOR DETERMINING SAFE MANNING

13.1 The Sub-Committee recalled that, at STW 40, its relevant Working Group had noted that the draft revised text of resolution A.890(21), as amended, should also be reviewed by the NAV Sub-Committee from the operational aspect. Accordingly, STW 40 had invited the Committee to:

.1 instruct NAV 55 to review, on a preliminary basis, the preliminary draft revised Assembly resolution on Principles of Safe Manning (resolution A.890(21), as amended); and

.2 include the work programme item "Review of the principles for establishing the safe manning levels of ships including mandatory requirements for determining safe manning" on the work programme of the NAV Sub-Committee and on the provisional agenda for NAV 56,

which MSC 86 had done accordingly.

13.2 The Sub-Committee further recalled that NAV 55 had reviewed, on a preliminary basis, the preliminary draft revised Assembly resolution on Principles of Safe Manning (resolution A.890(21), as amended) and provided its comments to STW 41.

13.3 The Sub-Committee noted that STW 41 had endorsed the draft Assembly resolution on Principles of Minimum Safe Manning, with a view to approval by MSC 88 and submission to A 27 for adoption, subject to comments made by NAV 56. It had also endorsed the draft amendments to SOLAS regulation V/14 with a view to approval by MSC 88 and adoption by MSC 89, subject to comments made by NAV 56. STW 41 had further requested the NAV Sub-Committee to review the draft Assembly resolution on Priniciples of Minimum Safe Manning and the draft amended text of SOLAS regulation V/14 and forward its comments thereon, if any, to MSC 88 for appropriate action.

13.4 The Sub-Committee also noted that MSC 87 had instructed the Sub-Committee accordingly and to forward its comments thereon, if any, to MSC 88 for appropriate action.

13.5 The delegation of the Bahamas, supported by others, drew the attention of the Sub-Committee to the draft Assembly resolution on Principles of Minimum Safe Manning and the draft amended text of SOLAS regulation V/14 which had been discussed and finalized at STW 41, and they considered that it was not necessary to review them again.

13.6 The ITF observer, supported by IFSMA, was of the opinion that NAV 55 had considered this matter and forwarded the draft with amendments to annex 5 and with general text in the regulations that supported implementation and effective enforcement. Subsequently, amendments to annexes 2 and 5 had removed all wording that would ensure implementation or enforcement of the process to determine minimum manning and any new regulation that would allow it to be auditable and verifiable.

13.7 In this context, ITF supported by IFSMA was of the opinion that this revised regulation V/14 would do nothing to improve safety of navigation and reminded the Sub-Committee that in the Year of the Seafarer, it might lose an opportunity to improve seafarers' safety and called on it to again review the amended text in line with objectives in annex 1 of the draft text.

13.8 The majority of delegations was of the opinion that the draft Assembly resolution on Principles of Minimum Safe Manning and the draft amended text of SOLAS regulation V/14 had been agreed at STW 41 and in as much as no comments or submissions had been received thereon for the current session, there was no need to then review them. The Sub-Committee agreed with the amended text.

13.9 Accordingly, the Sub-Committee decided to forward the finalized draft Assembly resolution on Principles of Minimum Safe Manning and the finalized draft amended text of SOLAS regulation V/14 to MSC 88 with a view to approval.

13.10 The Committee was invited to consequently delete the item "Review of the principles for establishing the safe manning level of ships including mandatory requirements for safe manning" from the Sub-Committee's biennial agenda.

14 AMENDMENTS TO THE 1966 LL CONVENTION AND THE 1988 LL PROTOCOL RELATED TO SEASONAL ZONE

14.1 The Sub-Committee recalled that MSC 86, following consideration of document MSC 86/23/3 (South Africa) in the context of the SLF Sub-Committee's work programme, had agreed to include in the work programme of the NAV Sub-Committee, a high-priority item on "Amendments to the 1966 LL Convention and the 1988 LL Protocol", with a target completion date of 2011, assigning the SLF Sub-Committee as coordinator, and instructed NAV 55 to include the item in the provisional agenda for NAV 56.

14.2 The Sub-Committee recalled also that, in considering document MSC 86/23/3 (South Africa), SLF 52 had noted that, while some delegations had expressed concerns regarding the safety risks incurred by reducing freeboards and, therefore, felt that further meteorological data (e.g., wave heights and swells) was needed before a final decision could be taken on this proposal, other delegations supported South Africa's proposal stating that sufficient data had been submitted against the criteria stipulated in the Load Lines Convention, and that, in other regions, the summer zone went as far South as 47º S (660 nautical miles further into the Southern Ocean), as in the case of New Zealand.

14.3 The Sub-Committee recalled further that in response to the above comments, the delegation of South Africa pointed out that there was no appreciable difference in sea and weather conditions between the current winter seasonal zone and the proposed new zone contained in the annex to document MSC 86/23/3. Following discussion, SLF 52, having noted South Africa's intention to submit further relevant information on the matter, invited Member Governments and international organizations to submit relevant comments and data to SLF 53, with a view to finalizing the item at the next session. In this context, SLF 52 also invited Member Governments and international organizations, if they so wished, to contact South Africa for exchanging data and views.

14.4 The Sub-Committee noted that no document has been submitted to the current session. However, information on the status of the current seasonal zone, including historical data for the period 1930 to 2006/7 regarding wind velocities/direction, wind data areas including routeing measures, proposed seasonal zone and wave heights and direction could be made available for the benefit of the Ships' Routeing Working Group.

14.5 The delegation of the Cook Islands informed the Sub-Committee that it had initially expressed concern for extending the Summer Load Line 50 miles southward off Cape Agulhas because, in their view, to reduce freeboard of laden ships, especially tankers in such dangerous waters, would be detrimental to maritime safety and the protection of the marine environment. However, the delegation, after further investigation and relevant information

received, had found no safety problem with South Africa's proposal and, therefore, now supported it.

14.6 The Sub-Committee agreed on this course of action to enable it to provide the necessary input to the SLF Sub-Committee and accordingly referred this issue to the Ships' Routeing Working Group for consideration and comments, as appropriate.

Terms of reference for the Ships' Routeing Working Group

14.7 The Sub-Committee instructed the Ships' Routeing Working Group to consider the background weather information with respect to the status of the current seasonal zone, wind velocities/direction, wind data areas including routeing measures, proposed seasonal zone and wave heights and direction and provide comments/recommendations with respect to extending the Summer Load Line 50 miles southward off Cape Agulhas for consideration and approval by Plenary.

Report of the Ships' Routeing Working Group

14.8 In considering the relevant part of the Ships' Routeing Working Group's report (NAV 56/WP.3, paragraphs 10.1 to 10.3), the Sub-Committee took action as indicated in the ensuing paragraphs.

14.9 The Sub-Committee noted that there was no appreciable difference in sea and weather conditions between the current winter seasonal zone and the proposed new zone contained in the annex to document MSC 86/23/3 (South Africa) and invited the Committee to agree to the shift of the winter seasonal zone off the southern tip of Africa further southward by fifty miles, as proposed by South Africa.

14.10 The Secretariat was instructed to convey this outcome to the SLF Sub-Committee.

14.11 The Committee was invited to consequently delete the item "Amendments to the 1966 LL Convention and the 1988 LL Protocol related to seasonal zone" from the Sub-Committee's biennial agenda, as the work on this item had been completed.

15 CASUALTY ANALYSIS

15.1 The Sub-Committee recalled that MSC 78 (MSC 78/26, paragraph 24.8) had decided that the item on "Casualty analysis" should remain on the work programme of the sub-committees.

15.2 The Sub-Committee noted that no documents had been either submitted for consideration or referred to by either the FSI Sub-Committee or any other technical body of the Organization for review, and consequently agreed to defer further consideration of the item to NAV 57.

16 CONSIDERATION OF IACS UNIFIED INTERPRETATIONS

16.1 The Sub-Committee recalled that, in order to expedite consideration of IACS unified interpretations being submitted to the Committee on a continuous basis, MSC 78 had decided that IACS should submit them directly and, as appropriate, to the sub-committees concerned. To this effect, MSC 78 had agreed to retain, on a continuous basis, the item on "Consideration of IACS unified interpretations" in the work programmes of the BLG, DE, FP, FSI, NAV and SLF Sub-Committees and to include it in the agenda for their next respective sessions.

16.2 The Sub-Committee recalled that it had considered proposals for IACS Unified Interpretations, at its fifty-second, fifty-third and fifty-fifth sessions. These were subsequently approved as MSC.1/Circ.1224 on Unified interpretations of SOLAS chapter V, MSC.1/Circ.1260 on Unified Interpretations of COLREG and MSC.1/Circ.1350 on Unified Interpretations of SOLAS regulation V/22.1.6 relating to navigation bridge visibility by MSC 82, MSC 84 and MSC 87, respectively.

16.3 The Sub-Committee recalled further that NAV 50 had considered on a preliminary basis the proposal by IACS (MSC 78/22/1, annex 7) regarding the IACS unified interpretation SC 139 relating to bridge visibility and invited Members to submit comments and detailed proposals on the matter for consideration at NAV 51. No document had been submitted by IACS to NAV 51. IACS had submitted two documents to NAV 52, namely NAV 52/14 (UI's COLREG 1, 2, 3 and 4) which had clarified the application of Rules 23(a), 27(b) of the 1972 COLREGs and NAV 52/14/1 (UI SC 203) which had clarified the application of SOLAS regulation V/19.2.2.1 with respect to the gyrocompass. However, IACS had not re-submitted SC 139 (MSC 78/22/1, annex 7). At NAV 55, IACS had informed the Sub-Committee that they would submit any further relevant IACS Unified Interpretation proposals, including SC 139, to NAV 56.

16.4 The Sub-Committee noted that no new proposals had been submitted by IACS to this session.

16.5 The observer from IACS updated the Sub-Committee regarding IACS Unified Interpretation SC 139. This UI was first submitted to this Organization as an annex to document MSC 78/22/1. However, the Sub-Committee had, to date, not had the opportunity to consider this IACS UI. The Sub-Committee was invited to note that Revision 1 of this IACS UI was available on the IACS website. By way of general information, the Sub-Committee was advised that this IACS UI primarily addressed the use of remote camera installations on ships of unconventional design in order to comply with the provisions of SOLAS regulation V/22. The Sub-Committee would be aware that MSC 87, in May this year, had approved MSC.1/Circ.1350. Compared to the version agreed by NAV 55, small changes were made to this circular by MSC 87, based on an IACS submission – document MSC 87/9/2. However, the end of MSC 87 coincided with the deadline for submissions to NAV 56. Consequently, there was insufficient time for IACS to make a submission to NAV 56 regarding IACS UI SC 139 that takes due account of the final approved version of MSC.1/Circ.1350. In particular, what it appears IACS might need to do now was to review the scope of application of UI SC 139 – and the use of remote camera applications – in light of the interpretation provided in MSC.1/Circ.1350. IACS therefore advised the Sub-Committee that it intended to review carefully the outcome of discussions under this agenda item at this session, together with MSC.1/Circ.1350 and consider what, if any, consequences this had on the current version of UI SC 139 and advise NAV 57 accordingly.

16.6 The Sub-Committee invited IACS to submit any further relevant IACS Unified Interpretation proposals to NAV 57.

17 WORK PROGRAMME AND AGENDA FOR NAV 57

17.1 The Sub-Committee recalled 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 agreed with the technical aspects of the proposal; and that 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.

17.2 The Sub-Committee noted also that MSC 87 had considered document MSC 87/24/5 (Republic of Korea), proposing to develop guidelines containing a unified set of specifications for distress alert buttons and safe test functions, and agreed to include, in the post-biennial agenda of the Committee, an output on "Measures to avoid false distress alerts", with two sessions needed to complete the work, assigning the COMSAR Sub-Committee as the coordinating organ, in co-operation with the NAV Sub-Committee, as necessary and when requested by the COMSAR Sub-Committee.

Biennial and post-biennial agendas

17.3 Taking into account the progress made at the current session and the provisions of the Guidelines on the organization and method of work (MSC-MEPC.1/Circ.2, as amended), the Sub-Committee revised its biennial agenda and prepared the provisional agenda for NAV 57 (NAV 56/WP.2), as set out in annexes 12 and 13 for approval by the Committee.

Arrangements for the next session

17.4 The Sub-Committee anticipated that Working and Drafting Groups on the following subjects might be established at NAV 57:

.1 Ships' Routeing;
.2 Technical matters; and
.3 e-navigation,

including a Drafting Group on Review of vague expressions in SOLAS regulation V/22.

Application of the Committee's Guidelines

17.5 The Sub-Committee noted that MSC 87 had endorsed the revised Guidelines on the organization and method of work and requested the Secretariat to take action accordingly and approved, in principle, the draft MSC/MEPC circular on Guidelines on the organization and method of work with a view to further consideration at MEPC 61 and final approval at MSC 88. MSC 87 had also invited Member Governments to use the draft revised Guidelines when submitting proposals for new outputs, pending approval of the Guidelines by MEPC 61 and MSC 88. MSC 87 had decided to further consider whether to make the Guidelines available as a publication that can be downloaded from the IMO website at MSC 88.

Matters related to the High-level Action Plan of the Organization: Status of planned outputs for the 20010-2011 biennium and proposals for the High-level Action Plan of the Organization and priorities for the 2012-2013 biennium

17.6 The Sub-Committee noted that in considering the actions that could be taken by the subsidiary bodies, MSC 87 had agreed that the subsidiary bodies should prepare their respective biennial agendas for the next biennium at their forthcoming sessions, in accordance with the revised Guidelines, taking into account that:

.1 outputs selected for the biennial agenda should be phrased in SMART terms; and

.2 where the target completion year for a specific output went beyond that 2012-2013 biennium, an interim output should placed in the biennial agenda with a target completion year of 2012 or 2013, as appropriate, and a related output should be placed in the Committee's post-biennial agenda with the anticipated completion year,

and requested the Secretariat, in consultation with the Chairmen, to prepare the initial proposals for consideration by the sub-committees accordingly.

17.7 The Sub-Committee noted and agreed to the information on the status of planned outputs of the High-level Action Plan relevant to the Sub-Committee, as set out in annex 14.

17.8 The Sub-Committee noted and agreed to the information on the proposed outputs for the 2012-2013 biennium, including items to be included in the Committees' post-biennial agenda for the 2012-2013 biennium in SMART terms, as set out in annex 15.

Date of the next session

17.9 The Sub-Committee noted that the fifty-seventh session of the Sub-Committee had been tentatively scheduled to be held from 6 to 10 June 2011 at IMO Headquarters.

18 ELECTION OF CHAIRMAN AND VICE-CHAIRMAN FOR 2011

18.1 In accordance with Rule 16 of the Rules of Procedure of the Maritime Safety Committee, the Sub-Committee unanimously re-elected Mr. J.M. Sollosi (United States) as the Chairman and elected Mr. Kostiantyn Billiar (Ukraine) as the new Vice-Chairman for 2011, respectively.

18.2 The Sub-Committee expressed its appreciation to its outgoing Vice-Chairman Mr. Raja Datuk Malik (Malaysia) for his invaluable contribution to the work of the Sub-Committee and wished him all the best for the future.

19 ANY OTHER BUSINESS

Assessment of the degree of risk of coastal maritime traffic

19.1 The Sub-Committee considered document NAV 56/19 (IALA) providing details of the development of different tools to assist IALA Members to assess the risk along their coasts and to meet the requirements of SOLAS regulations V/12 and V/13.

19.2 The delegation of China informed the Sub-Committee that it had used the IALA Risk Management Tool for Ports and Restricted Waterways, specifically the PAWSA tool (a qualitative model) which allowed an authority to measure and quantify the risks of collisions and groundings in any waterway. The assessment revealed that a significant risk was present in Chinese coastal waters due to the high concentration of fishing vessels. Therefore, the Chinese delegation requested Member States to remind ships entitled to fly their flag when navigating in Chinese coastal waters, particularly in the waters congested with fishing vessels, to enhance watchkeeping, navigate carefully and keep safe speed. Furthermore, before entering Chinese ports, ships should obtain adequate safety information from the shipping agents concerned.

19.3 The delegation of South Africa, whilst welcoming the IALA Risk Management Tool for Ports and Restricted Waterways, noted that challenges remained regarding improving AtoN in some parts of the world and recommended that IMO, in partnership with IALA, should intensify efforts in initiating and supporting technical co-operation activities aimed at improving AtoN.

19.4 The Sub-Committee noted the information provided by IALA and also agreed a draft SN circular on Degree of risk evaluation, as set out in annex 16, providing guidance to Member Governments to assess the risks of collisions and groundings along their coasts and

when planning to implement new measures to minimize the risk of coastal maritime traffic, for approval by the Committee.

Progress on standards development by the IEC

19.5 The Sub-Committee considered document NAV 56/19/1 (IEC) providing an update on the progress made in developing various standards for Bridge navigational watch alarm system (BNWAS), AIS search and rescue transmitter (AIS-SART), Digital Interface – Part 450, Integrated Navigation Systems – Part 2 and Class B shipborne equipment of the automatic identification system (AIS) and noted with appreciation the information provided.

19.6 The Sub-Committee requested IEC to keep the Sub-Committee updated on the progress made relating to various IEC standards.

Clarification in relation to carriage requirement for speed log devices for ships of 50,000 gross tonnage and upwards

19.7 The Sub-Committee considered document NAV 56/19/2 (IACS) requesting a clarification in relation to carriage requirement for speed log devices for ships of 50,000 gross tonnage and upwards. SOLAS chapter V, regulations V/19.2.3.4 and V/19.2.9.2 require that speed and distance measuring devices are installed as follows:

.1 Ships of 300 gross tonnage and upwards and passenger ships irrespective of size shall be fitted with a speed log for measuring speed <u>through water</u> (SOLAS regulation V/19.2.3.4); and

.2 Ships of 50,000 gross tonnage and upwards shall be fitted with a speed log for measuring speed <u>over the ground</u> in forward and athwartships direction (SOLAS regulation V/19.2.9.2).

19.8 The IACS observer stated that the following three alternatives had been discussed within IACS:

.1 both regulations to be fulfilled by one device capable of measuring and indicating both speed through water and speed over the ground in forward and athwartships direction. Any single failure in such device may render both functions inoperable;

.2 both regulations to be fulfilled by a combined device (a single transducer) which measures, and indicates, at separate locations both speed through water and speed over the ground in forward and athwartships direction. However, the means to measure and indicate are separated as far as possible such that failure of one means does not lead to the failure of the other means of measurement and indication; and

.3 both regulations to be fulfilled by a separate device, i.e. one speed and distance measuring and indicating device capable of measuring speed through water and one separate speed and distance measuring and indicating device capable of measuring speed over the ground in forward and athwartships direction.

19.9 There was some discussion on the issue; however, opinion seemed to be divided as to which of the three alternatives was the preferred option. Delegations who spoke on the issue either had a preference for alternative one or alternative three. One delegation stated that Members should have the option to utilize any of the three proposed alternatives. However, there was no clear majority for any alternative proposed by IACS.

19.10 The observer from IACS informed the Sub-Committee that IACS would be submitting a document to MSC 88 on this issue.

IHO Publication "Facts about Electronic Charts and Carriage Requirements"

19.11 The Sub-Committee noted with interest the information provided by IHO (NAV 56/INF.4) concerning the 1st edition of the IHO Publication S-66 on Facts about Electronic Charts and Carriage Requirements. This publication provides mariners and others with a range of practical information on ENCs and carriage requirements for ECDIS.

Improvement of Pilot Transfer Arrangements

19.12 The Sub-Committee noted with interest the information provided by IMPA (NAV 56/INF.12) regarding IMPA's Executive's resolve to hold a one-week Safety Campaign at the end of September 2010 involving all of its 8,000 members around the world, the results of which would be tabled at the NAV and DE Sub-Committees. IMPA would also request its members to circulate the resulting information to Port State Control officials in the ports where they provided pilotage services.

Information on Ships Operating with Sky-Sails

19.13 The Sub-Committee noted with interest the information provided by the United Kingdom (NAV 56/INF.15) regarding close sightings of vessels operating with sky-sails in the busy waters of the North Sea. It had recently been observed by the maritime community that commercial and fishing vessels were deploying sky-sails more frequently. Instead of a traditional sail, the sky-sail uses a large towing kite to assist the propulsion and are designed to reduce fuel consumption by up to 15%. Sky-sails operate between 100 m and 600 m above sea level depending on size. According to the details obtained from one manufacturer alone, by the end of 2010, approximately 25 ships equipped with sky-sails would be in service worldwide. The importance of developing appropriate guidance or recommended practices for vessels intending to deploy sky-sails, including notification to other ships and aircraft was highlighted. A coordinated approach from IMO and ICAO to introduce appropriate operational guidance, would be a way forward to avert a potential shipping incident or an aviation mishap.

Safety provisions applicable to tenders operating from passenger ships

19.14 The Sub-Committee noted that DE 53, recalling that the comments of the FP, COMSAR, NAV, SLF and STW Sub-Committees would be needed for the finalization of the Guidelines for tenders operating from passenger ships, had consequently established a drafting group and instructed it to prepare the consolidated draft Guidelines for passenger ship tenders, on the basis of documents DE 53/14 and DE 53/14/1, as well as a draft list of matters to be addressed by DE 54.

19.15 The Sub-Committee noted also that, having received the report of the drafting group (DE 53/WP.3), DE 53 approved it in general and, in particular, noted the consolidated draft Guidelines for passenger ship tenders, as set out in annex 1 to document DE 53/WP.3, which are subject to further input from the co-operating sub-committees, for further

consideration at DE 54. Consequently, the Secretariat was requested to forward the report of the drafting group (DE 53/WP.3), to all cooperating sub-committees, for their consideration and comments, so that such comments could be taken into account in the finalization of the draft Guidelines.

19.16 The Sub-Committee reviewed sections 7, 9, 10 and 11 of Annex 1 relating to the draft guidelines for passenger ship tenders that were of relevance to it and agreed to the following amendments:

"CONSTRUCTION AND EQUIPMENT GUIDANCE

7 Navigational equipment

7.1 The tender should be provided with the following navigational equipment:

.1 compass;
.~~1~~2 required navigation lights and shapes;
.~~2~~3 radar reflector;
.~~3~~4 echo sounder;
.~~4~~5 search light; and
.~~5~~6 electric or manual whistle or equivalent sound signal.

9 Additional ~~E~~equipment

9.1 The following additional equipment should be provided:

.1 anchor and rope;
.2 two boat hooks;
.~~3~~ ~~compass~~;
.~~4~~3 painters or mooring lines;
.~~5~~4 fenders;
.~~6~~5 bailing pump; and
.~~7~~6 paddles or oars for tenders having single means of propulsion.

OPERATIONAL GUIDANCE

10 Preparation

10.1 Appropriate arrangements should be made prior to arrival at a port where tenders will be operated.

10.2 Local chartlets produced from ship's relevant navigational chart or by alternative means, such as a drawing, should be prepared, if the local chart has insufficient detail.

10.3 Local instructions and notices, such as from harbour masters, should be obtained including local rules for avoiding collision (Rules of the road), if applicable.

10.4 Maximum operating range and limiting weather conditions should be established and documented.

10.5 Tender operation briefing prior to commencing operations should be conducted covering, in particular, the following items:

.1 voyage planning and operational restrictions:

.1 local rules for avoiding collision (Rules of the road) as applicable;

.2 currents and tides;

.3 sea conditions, both current and expected;

.4 weather forecast; and

.5 local ships' routeing systems ~~route description~~ and areas to be avoided.

.2 communications plan; and

.3 landing areas and landing areas security arrangements, in accordance with the ISPS Code.

10.6 Operations should be planned so that at any time during tender operations there is at least one other tender or vessel of sufficient capacity immediately available to provide emergency assistance.

11 Log-book and record keeping

11.1 The ship from which the tender is operating should maintain a log of the tender operations with information such as:

.1 arrival/departure time at both ends;

.2 passenger count; and

.3 details of any other significant event."

19.17 The Secretariat was instructed to convey this outcome to the DE Sub-Committee. The Committee was invited to delete this item from the Sub-Committee's biennial agenda as the work had been completed.

Information on casualty investigation

19.18 The Ukrainian delegation informed the Sub-Committee on the outcome of an investigation into a casualty which occurred in March 2008, when the Chinese cargo ship **Yao Hai** collided with the Ukrainian-flagged vessel **Neftegaz-67** in the South China Sea. The latter subsequently sank taking the lives of 18 Ukrainian seafarers. The investigation into the casualty had been performed by Competent Authorities of the Hong Kong Special Administrative Region of the People's Republic of China with Ukrainian Authorities, representing the substantially interested State, participated in it. The results of the investigation had been examined by the Court of the first instance of the Hong Kong Special Administrative Region which adopted its verdict on 15 January 2010 sentencing the Ukrainian Master to imprisonment. Being dissatisfied with the way the results of the investigation into the casualty and certain rules of the 1972 COLREG regulations had been

interpreted by the Court, Ukrainian Authorities addressed the Competent Authorities of the Hong Kong Special Administrative Region of the People's Republic of China and pointed out the discrepancies in the application of these rules in the **Neftegaz-67** case. The Ukrainian delegation expressed the hope that due attention would be given by the parties involved in the **Neftegaz-67** case to ensure coherent application of the 1972 COLREGs.

19.19 The delegation of Hong Kong, China, in response to the statement by the delegation of Ukraine, stated that it was not the intention of Hong Kong, China to provide details of the accident or comment on the Ukraine statement. However, the delegate informed the Sub-Committee that, in early 2010, the two Hong Kong pilots on board the bulk carrier and the two Masters of both vessels were convicted by the Court of the Hong Kong Special Administrative Region Government. It was understood that the two Masters and the two pilots had filed their appeal to the Court. The Marine Department of the Hong Kong Special Administrative Region Government had completed its investigation into the tragic accident some time ago but the investigation report would only be issued to the public when all the legal proceedings were completed. There was no doubt that when all legal proceedings were finished, the Committee or its sub-committees such as FSI or STW and this Sub-Committee would, given the opportunity, look into the causes of the accident at future sessions with a view to identifying if there were lessons to be learned to prevent recurrence of similar accidents; however, this could not be done at this stage on account of the appeal that the hearing was scheduled to commence next year.

19.20 The Sub-Committee took note of the information provided.

Canadian NORDREG reporting system

19.21 The delegation of the United States stated that, on 1 July, the Northern Canada Vessel Traffic Services Zone Regulations had came into effect. Among other things, the new regulations contained provisions on mandatory ship reporting and the regulation of transiting vessels that, in the view of the United States, raised some critical issues with respect to consistency with international law. The United States complimented Canada's efforts to provide for the safety of navigation and protection of the marine environment in the Arctic area. As conditions in the Arctic evolved, all Arctic coastal States would need to consider new ways to protect and preserve this sensitive region. At the same time, the United States wished to note the important role of the Organization in the development of such measures. The United States did not believe that the new Canadian northern zone regulations were consistent with key law of the sea principles related to freedom of navigation, including the right of innocent passage and the right of transit passage through straits used for international navigation. However, the United States supported the stewardship goals of the proposed Canadian NORDREG Zone Regulations. In the view of the United States, Arctic coastal States should propose such measures to the Organization to receive the most solid foundation for them, rather than act unilaterally. The United States welcomed the opportunity to work with Canada and with others on this issue within the Organization.

19.22 The delegation of Canada stated that pursuant to Canada's Northern Strategy for enhancing their stewardship in the Arctic, Canada had replaced its voluntary Arctic reporting system, which had been in place for over 30 years, with a mandatory reporting system. At the same time, it had also formally established the vessel traffic services zone that covered the reporting area, known as NORDREG. Regulations giving effect to these changes had come into force on 1 July 2010. The reporting area covered Canada's northern waters out to the limit of its Exclusive Economic Zone. As provided for in SOLAS regulation V/11.4, Canada intended, in the near future, to submit to the Organization details of the reporting system for recognition and dissemination. The purpose of the new regulations was to promote safe and efficient navigation and protect the Arctic marine

environment. The Marine Communication and Traffic Services of the Canadian Coast Guard provided information that contributed to onboard navigational decision-making, including up-to-date ice routeing information and conditions, and icebreaker assistance. The information from vessel reports and the communication link between vessel traffic services and the vessel were critical to preventing accidents and responding effectively to emergencies including search and rescue and pollution response. The Regulations were consistent with international law. In particular, Article 234 of the 1982 United Nations Convention on the Law of the Sea provides that "Coastal States have the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels in ice-covered areas within the limits of the exclusive economic zone". Moreover, not only are the regulations consistent with SOLAS V, regulations V/11 and V/12, the reporting requirements and format were based on accepted international guidelines for ship reporting systems.

19.23 The BIMCO observer stated that they fully acknowledged the particularly sensitive nature of the Arctic as well as its strategic importance and understood the background for Canada's overall wish for the Arctic marine environment to be properly protected. In February 2010, BIMCO had provided comments on the proposed Canadian Regulation relating to the Northern Canada Vessel Traffic Services Zone. BIMCO had noted that reporting requirements would be based on international principles for ship reporting systems consistent with international law regarding ice-covered areas. In this respect, the consultation undertaken on the proposed regulation appeared to have focused exclusively on national entities and BIMCO found it was relevant to provide input from a global industry perspective. BIMCO had expressed concern that the informal NORDREG zone would be made mandatory and extended to 200 nautical miles. As a consequence, vessels of the prescribed classes would be required to obtain clearance for the NORDREG zone and to make reports. A decision would be taken whether clearance should be granted and, without clearance, a vessel would not be authorized to proceed. The risk of not being granted authorization to proceed in case of non-compliance caused concern, as this could be seen as effectively interfering with the right to innocent passage. From BIMCO's perspective, it would have been desirable if the regulation had been brought forward for evaluation in the Sub-Committee.

19.24 The Sub-Committee took note of the information provided.

Regional marine electronic highway in the East Asian seas

19.25 Recalling that, at previous sessions, the Secretariat had updated the Sub-Committee on the key elements and expected outputs of the new project for the Development of a Regional Marine Electronic Highway (MEH) in the East Asian Seas including the progress made, the Sub-Committee noted that the MEH Demonstration Project was in its fourth year of implementation. Under the GEF/IBRD-funded project, a hydrographic survey of a portion of the Traffic Separation Scheme (TSS) in the Straits of Malacca and Singapore covering approximately 621.3 square kilometres (14.38% of the total TSS area) has been carried out. Apart from the hydrographic survey, other ongoing activities included procurement of goods and services and initiating the operational phase of the Project. The Programme Coordination Officer of the Secretariat's Marine Environment Division had been posted in Indonesia starting 4 February 2010 and was presently overseeing and managing the Project from Jakarta. The project had organized its Third Project Steering Committee (PSC) Meeting in July 2010 to review the progress of the Project implementation and to chart the forthcoming activities of the Project as well as to prepare for the mid-term review to be carried out by the World Bank following the PSC meeting.

Expressions of appreciation

19.26 The Sub-Committee further expressed appreciation to the following delegates 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:

- Captain Peter Hannken (Germany) (on retirement);
- Captain Raja Datuk Malik Saripulazan (Malaysia) (on retirement);
- Mr. Torsten Kruuse (IALA) (on retirement);
- Mrs. Monica Mbanefo (Secretariat) (on retirement);
- Mr. Alexander Petrov (Secretariat) (on retirement); and
- Mr. Nicholas Charalambous (Secretariat) (on retirement).

20 ACTION REQUESTED OF THE COMMITTEE

20.1 The Committee, at its eighty-eighth session, is invited to:

.1 in accordance with resolution A.858(20), adopt:

.1 the proposed new traffic separation schemes at "Off the western coast of Norway" and "Off the southern coast of Norway" (paragraph 3.28 and annex 1);

.2 the revocation of the existing traffic separation scheme "Off Feistein" (paragraph 3.31 and annex 1);

.3 the proposed amendments to the existing traffic separation scheme "In the Strait of Dover and adjacent waters" (paragraph 3.32 and annex 1);

.4 the proposed amendments to the existing traffic separation scheme "Off the south-west coast of Iceland" (paragraph 3.33 and annex 1);

.5 the proposed new Area To Be Avoided in the Atlantic Ocean, "Off the coast of Ghana" (paragraph 3.34 and annex 2);

.6 the proposed new deep-water route including an associated precautionary area "In the approaches to the new port of King Abdullah Port (KAP Port) in the Northern Red Sea" (paragraph 3.35 and annex 2);

.7 the proposed amendments to the existing Area To Be Avoided, "Off the south-west coast of Iceland" (paragraph 3.36 and annex 2);

.8 the proposed amendments to the existing deep-water route forming part of the "In the Strait of Dover and adjacent waters" traffic separation scheme (paragraph 3.37 and annex 2);

.9 the new interim recommendatory measure in the Singapore Strait (paragraph 3.38 and annex 2);

.10 the new mandatory ship reporting system "In the Sound between Denmark and Sweden (SOUNDREP)" (paragraph 3.42 and annex 3);

.11 the proposed amendments to the existing mandatory ship reporting system "In the Torres Strait region and the Inner Route of the Great Barrier Reef (REEFREP)" (paragraph 3.43 and annex 4); and

.12 the proposed amendments to the existing mandatory ship reporting system "Off the south and south-west coast of Iceland (TRANSREP)" (paragraph 3.44 and annex 5);

.2 approve the draft SN circular on Guidelines for safety zones and safety of navigation around offshore installations and structures (paragraph 4.13 and annex 6);

.3 approve SN.1/Circ.266/Rev.1 on Maintenance of Electronic Chart Display and Information Systems (ECDIS) software (paragraph 6.9.1 and annex 7);

.4 approve the draft MSC circular on Guidance on procedures for updating shipborne navigation and communication equipment (paragraph 6.9.2 and annex 8);

.5 endorse the action of the Sub-Committee in authorizing the Secretariat to issue a future revision of SN.1/Circ.266 upon receipt from IHO of updated information (paragraph 6.10);

.6 endorse the action by the Sub-Committee in instructing the Secretariat to send a liaison statement to ITU-R WP 5B, concerning the future revision of Recommendation M.1371-4 (paragraph 7.20.1 and annex 9);

.7 endorse the action by the Sub-Committee in instructing the Secretariat to send a liaison statement to ITU-R WP 5B, concerning the use of AIS application-specific messages (paragraph 7.20.2 and annex 10);

.8 note the progress in the development of an e-navigation strategy implementation plan and the re-establishment of a Correspondence Group to progress the work intersessionally (paragraphs 8.37 to 8.51);

.9 endorse the action by the Sub-Committee to invite the Joint IMO/ITU Expert Group on Maritime Radiocommunication Matters, at its next meeting from 14 to 16 September 2010, to consider further use of the 500 kHz band to support e-navigation; (paragraph 8.49);

.10 endorse the decision of the Sub-Committee to extend the deadline for the submission of the e-navigation Correspondence Group's report to 1 April 2011 (paragraph 8.52);

.11 approve the draft revised text of resolution A.953(23), as amended on the World-wide radio navigation system (paragraph 12.3 and annex 11);

.12 note that the Sub-Committee agreed with the draft amended text of the draft Assembly resolution on Principles of Minimum Safe Manning and the draft amended text of SOLAS regulation V/14, as agreed at STW 41 (STW 41/16, annexes 5 and 6), and approve them (paragraphs 13.8 and 13.9);

.13 endorse the decision of the Sub-Committee to the shift of the winter seasonal zone off the southern tip of Africa further southward by fifty miles, as proposed by South Africa including the action of the Secretariat in conveying this outcome to the SLF Sub-Committee (paragraphs 14.9 and 14.10);

.14 approve the draft SN circular on Guidance on degree of risk evaluation (paragraph 19.4 and annex 16); and

.15 approve the report in general.

20.2 In reviewing the biennial agenda of the Sub-Committee, the Committee is invited to consider the biennial agenda and post-biennial agenda items of the Sub-Committee (annexe 12) in general and, in particular, to:

.1 delete "Guidelines for consideration of requests for safety zones larger than 500 metres around artificial islands, installations and structures in the EEZ", as the task has been completed (paragraph 4.16);

.2 delete "Development of procedures for updating shipborne navigation and communication equipment", as the task has been completed (paragraph 6.12);

.3 delete "Guidelines on the layout and ergonomic design of safety centres on passenger ships", as the task has been completed (paragraph 9.6);

.4 delete "Amendments to the world-wide radio navigation system", as the task has been completed (paragraph 12.6);

.5 delete "Review of the principles for establishing the safe manning level of ships including mandatory requirements for safe manning", as the task has been completed (paragraph 13.10); and

.6 delete "Amendments to the 1966 LL Convention and the 1988 LL Protocol related to seasonal zone", as the task has been completed (paragraph 14.11); and

.7 extend the target completion date of the following agenda item, namely:

.1 "Review of vague expressions in SOLAS regulation V/22" with a target completion year of 2011 (paragraph 10.23).

20.3 The Committee is also invited to review and approve the biennial agenda and post-biennial agenda items of the Sub-Committee and the draft provisional agenda for NAV 57 (annexes 12 and 13) and to endorse the report on the status of the Sub-Committee's planned outputs in the High-level Action Plan of the Organization and priorities for the 2010-2011 and 2012-2013 biennia (paragraphs 17.6 to 17.8 and annexes 14 and 15).

***

ANNEX 1

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

OFF THE WESTERN COAST OF NORWAY

(Reference charts: Norwegian Charts No.306, 307 and 308 published by the Norwegian Hydrographic Service.
***Note*:** These charts are based on European Datum 1950 (ED 50). The geographical positions, (1) to (43), listed below are based on World Geodetic System 1984 Datum (WGS 84).)

Categories of ships to which the traffic separation schemes apply

(a) tankers as defined in Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78);

(b) chemical tankers carrying noxious liquid substances in bulk assessed or provisionally assessed as Category X or Y in Annex II to MARPOL 73/78;

(c) ships of 5,000 gross tonnage and upwards, in transit or on international voyages to or from Norwegian ports; and

(d) the routeing schemes do not apply to any size or category of ship in domestic traffic with passengers and/or goods between Norwegian ports.

International voyages to or from ports in Norway

Ships of above categories on international voyages, to or from ports in Norway, should follow the ship's routeing system until a course to port can be clearly set. This also applies to ships calling at Norwegian ports for supplies or service.

Description of the traffic separation schemes

I Off Runde

(a) A separation zone is bounded by a line connecting the following geographical positions:

(1)	62° 59′.95 N	004° 08′.40 E
(2)	62° 55′.17 N	004° 04′.07 E
(3)	62° 49′.98 N	004° 04′.07 E
(4)	62° 49′.98 N	004° 08′.43 E
(5)	62° 54′.78 N	004° 08′.43 E
(6)	62° 59′.18 N	004° 12′.45 E

(b) A traffic lane for southbound traffic is established between the separation zone described in paragraph (a) and a line connecting the following geographical positions:

(7)	63° 01′.12 N	004° 02′.32 E
(8)	62° 55′.78 N	003° 57′.50 E
(9)	62° 50′.00 N	003° 57′.52 E

(c) A traffic lane for northbound traffic is established between the separation zone described in paragraph (a) and a line connecting the following geographical positions:

(10)	62° 58′.05 N	004° 18′.52 E
(11)	62° 54′.20 N	004° 15′.00 E
(12)	62° 50′.00 N	004° 14′.97 E

II Off Stad

(d) A separation zone is bounded by a line connecting the following geographical positions:

(13)	61° 59′.00 N	004° 04′.13 E
(14)	61° 54′.00 N	004° 04′.13 E
(15)	61° 54′.00 N	004° 08′.37 E
(16)	61° 59′.00 N	004° 08′.37 E

(e) A traffic lane for southbound traffic is established between the separation zone described in paragraph (d) and a line connecting the following geographical positions:

(17)	61° 59′.00 N	003° 57′.78 E
(18)	61° 54′.00 N	003° 57′.80 E

(f) A traffic lane for northbound traffic is established between the separation zone described in paragraph (d) and a line connecting the following geographical positions:

(19)	61° 59′.00 N	004° 14′.72 E
(20)	61° 54′.00 N	004° 14′.70 E

III Off Sotra

(g) A separation zone is bounded by a line connecting the following geographical positions:

(21)	60° 20′.00 N	004° 04′.23 E
(22)	60° 15′.00 N	004° 04′.25 E
(23)	60° 15′.00 N	004° 08′.25 E
(24)	60° 20′.00 N	004° 08′.27 E

(h) A traffic lane for southbound traffic is established between the separation zone described in paragraph (g) and a line connecting the following geographical positions:

(25)	60° 20′.00 N	003° 58′.20 E
(26)	60° 15′.00 N	003° 58′.23 E

(i) A traffic lane for northbound traffic is established between the separation zone described in paragraph (g) and a line connecting the following geographical positions:

(27)	60° 20′.00 N	004° 14′.30 E
(28)	60° 15′.00 N	004° 14′.27 E

IV Off Utsira

(j) A separation zone is bounded by a line connecting the following geographical positions:

(29)	59° 05′.00 N	004° 04′.32 E
(30)	58° 59′.83 N	004° 04′.32 E
(31)	58° 57′.72 N	004° 08′.20 E
(32)	59° 05′.00 N	004° 08′.20 E

(k) A traffic lane for southbound traffic is established between the separation zone described in paragraph (j) and a line connecting the following geographical positions:

(33)	59° 05′.00 N	003° 58′.47 E
(34)	58° 58′.50 N	003° 58′.47 E

(l) A traffic lane for northbound traffic is established between the separation zone described in paragraph (j) and a line connecting the following geographical positions:

(35)	59° 05′.00 N	004° 14′.03 E
(36)	59° 01′.73 N	004° 14′.03 E
(37)	58° 58′.50 N	004° 19′.95 E

Description of the recommended routes

(m) A recommended route is established between the traffic separation schemes Off Runde and Off Stad with a central line between the following geographical positions:

(38)	62° 50′.00 N	004° 06′.25 E
(39)	61° 59′.00 N	004° 06′.25 E

(n) A recommended route is established between the traffic separation schemes Off Stad and Off Sotra with a central line between the following geographical positions:

(40)	61° 54′.00 N	004° 06′.25 E
(41)	60° 20′.00 N	004° 06′.25 E

(o) A recommended route is established between the traffic separation schemes Off Sotra and Off Utsira with a central line between the following geographical positions:

(42)	60° 15′.00 N	004° 06′.25 E
(43)	59° 05′.00 N	004° 06′.25 E

Note:

Chart No.	Title	Scale	Datum
306	Skagerrak, vestre blad	1:350 000	ED 50
307	Stavanger - Florø	1:350 000	ED 50
308	Florø - Smøla	1:350 000	ED 50

Typical shift of position co-ordinates referred to the WGS 84 Datum to the ED 50 Datum are:

From Datum	To Datum	Approximate latitude in the area	Datum shift
WGS 84	ED 50	62° 30′ N	99 m (NE-diagonal)
WGS 84	ED 50	59° 00′ N	109 m (NE-diagonal)

OFF THE COAST OF SOUTHERN NORWAY

(Reference charts: Norwegian Charts No.305 (INT 1300) and 306 published by the Norwegian Hydrographic Service.
Note: These charts are based on European Datum 1950 (ED 50). The geographical positions, (1) to (63), listed below are based on World Geodetic System 1984 Datum (WGS 84).)

Categories of ships to which the traffic separation schemes apply

(a) tankers as defined in Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78);

(b) chemical tankers carrying noxious liquid substances in bulk assessed or provisionally assessed as Category X or Y in Annex II to MARPOL 73/78;

(c) ships of 5,000 gross tonnage and upwards, in transit or on international voyages to or from Norwegian ports; and

(d) the routeing schemes do not apply to any size or category of ship in domestic traffic with passengers and/or goods between Norwegian ports.

International voyages to or from ports in Norway

Ships of above categories on international voyages, to or from ports in Norway, should follow the ship's routeing system until a course to port can be clearly set. This also applies to ships calling at Norwegian ports for supplies or service.

Description of the traffic separation schemes

I Off Egersund

(a) A separation zone is bounded by a line connecting the following geographical positions:

(1)	58° 21′.00 N	005° 15′.23 E
(2)	58° 18′.78 N	005° 19′.20 E
(3)	58° 16′.82 N	005° 23′.58 E
(4)	58° 18′.33 N	005° 26′.02 E
(5)	58° 20′.22 N	005° 21′.80 E
(6)	58° 22′.37 N	005° 18′.00 E

(b) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (a) and a line connecting the following geographical positions:

(7)	58° 18′.95 N	005° 11′.08 E
(8)	58° 16′.60 N	005° 15′.27 E
(9)	58° 14′.53 N	005° 19′.90 E

(c) A traffic lane for westbound traffic is established between the separation zone described in paragraph (a) and a line connecting the following geographical positions:

(10)	58° 24′.40 N	005° 22′.17 E
(11)	58° 22′.40 N	005° 25′.75 E
(12)	58° 20′.63 N	005° 29′.70 E

II Off Farsund

(d) A separation zone is bounded by a line connecting the following geographical positions:

(13)	57° 46′.62 N	006° 30′.43 E
(14)	57° 44′.43 N	006° 35′.20 E
(15)	57° 44′.30 N	006° 41′.48 E
(16)	57° 46′.30 N	006° 41′.62 E
(17)	57° 46′.40 N	006° 36′.63 E
(18)	57° 48′.12 N	006° 32′.87 E

(e) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (d) and a line connecting the following geographical positions:

(19)	57° 44′.33 N	006° 26′.80 E
(20)	57° 41′.48 N	006° 33′.03 E
(21)	57° 41′.32 N	006° 41′.25 E

(f) A traffic lane for westbound traffic is established between the separation zone described in paragraph (d) and a line connecting the following geographical positions:

(22)	57° 50′.40 N	006° 36′.52 E
(23)	57° 49′.35 N	006° 38′.80 E
(24)	57° 49′.28 N	006° 41′.85 E

III Off Ryvingen

(g) A separation zone is bounded by a line connecting the following geographical positions:

(25)	57° 42′.80 N	007° 41′.87 E
(26)	57° 42′.55 N	007° 51′.72 E
(27)	57° 44′.87 N	007° 59′.92 E
(28)	57° 44′.55 N	007° 50′.77 E
(29)	57° 44′.78 N	007° 42′.10 E

(h) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (g) and a line connecting the following geographical positions:

(30)	57° 39′.85 N	007° 41′.72 E
(31)	57° 39′.58 N	007° 52′.97 E
(32)	57° 39′.92 N	008° 00′.25 E

(i) A traffic lane for westbound traffic is established between the separation zone described in paragraph (g) and a line connecting the following geographical positions:

(33)	57° 47′.75 N	007° 42′.55 E
(34)	57° 47′.58 N	007° 49′.68 E
(35)	57° 49′.40 N	007° 56′.00 E

IV Off Lillesand

(j) A separation zone is bounded by a line connecting the following geographical positions:

(36)	57° 58′.25 N	008° 46′.92 E
(37)	57° 59′.75 N	008° 52′.25 E
(38)	58° 02′.17 N	008° 56′.22 E
(39)	58° 03′.47 N	008° 53′.38 E
(40)	58° 01′.35 N	008° 49′.88 E
(41)	58° 00′.02 N	008° 45′.15 E

(k) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (j) and a line connecting the following geographical positions:

(42)	57° 55′.60 N	008° 49′.55 E
(43)	57° 57′.37 N	008° 55′.82 E
(44)	58° 00′.18 N	009° 00′.47 E

(l) A traffic lane for westbound traffic is established between the separation zone described in paragraph (j) and a line connecting the following geographical positions:

(45)	58° 02′.67 N	008° 42′.50 E
(46)	58° 03′.73 N	008° 46′.32 E
(47)	58° 05′.45 N	008° 49′.13 E

V Off Risør

(m) A separation zone is bounded by a line connecting the following geographical positions:

(48)	58° 26′.27 N	009° 36′.28 E
(49)	58° 30′.03 N	009° 42′.53 E
(50)	58° 31′.33 N	009° 39′.67 E
(51)	58° 27′.57 N	009° 33′.42 E

(n) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (m) and a line connecting the following geographical positions:

(52)	58° 24′.30 N	009° 40′.60 E
(53)	58° 28′.07 N	009° 46′.85 E

(o) A traffic lane for westbound traffic is established between the separation zone described in paragraph (m) and a line connecting the following geographical positions:

(54)	58° 29′.53 N	009° 29′.08 E
(55)	58° 33′.30 N	009° 35′.33 E

Description of the recommended routes

(p) A recommended route is established between the traffic separation schemes Off Egersund and Off Farsund with a central line between the following geographical positions:

(56)	58° 17′.60 N	005° 24′.85 E
(57)	57° 47′.38 N	006° 31′.65 E

(q) A recommended route is established between the traffic separation schemes Off Farsund and Off Ryvingen with a central line between the following geographical positions:

(58)	57° 45′.33 N	006° 41′.57 E
(59)	57° 43′.82 N	007° 41′.97 E

(r) A recommended route is established between the traffic separation schemes Off Ryvingen and Off Lillesand with a central line between the following geographical positions:

(60)	57° 44′.70 N	007° 55′.23 E
(61)	57° 59′.17 N	008° 46′.03 E

(s) A recommended route is established between the traffic separation schemes Off Lillesand and Off Risør with a central line between the following geographical positions:

(62)	58° 02′.78 N	008° 54′.80 E
(63)	58° 26′.95 N	009° 34′.78 E

Note:

Chart No.	Title	Scale	Datum
306	Skagerrak, vestre blad	1:350 000	ED 50
305 (INT 1300)	Skagerrak	1:350 000	WGS 84

Typical shift of position co-ordinates referred to the WGS 84 Datum to the ED 50 Datum are:

From Datum	To Datum	Approximate latitude in the area	Datum shift
WGS 84	ED 50	62˚ 30′ N	99 m (NE-diagonal)
WGS 84	ED 50	59˚ 00′ N	109 m (NE-diagonal)

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME "IN THE STRAIT OF DOVER AND ADJACENT WATERS"

1 In "WARNINGS" section, the existing paragraph 3 is deleted and the following new paragraphs are added after the existing paragraph 2:

"3 In the area of the deep-water route east of the separation line, ships are recommended to avoid overtaking where traffic and navigation do not allow sufficient sea room and passing distance. If overtaking is performed then a safe distance must be maintained and COLREG Rule 13 observed.

4 Mariners leaving the north east going lane and planning to cross the south west going lane, between the Varne (51° 01′.3 N 001° 23′.9 E) and F1 (51° 11′.2 N 001°45′.0 E) light-buoys should be aware of heavy traffic in the south west going lane, as well as ferry traffic, and alter course and/or speed at an appropriate point."

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME "OFF THE SOUTH-WEST COAST OF ICELAND"

1 The first paragraph after the title "OFF THE SOUTH-WEST COAST OF ICELAND", which refers to the reference chart, is replaced by the following text:

"(Reference chart: Icelandic No.31 (INT 1103) Dyrhólaey – Snæfellsnes (May 2008 edition).
Note: The chart is based on World Geodetic System 1984 datum (WGS 84).)"

2 In "Notes" section, the following paragraph is added after the existing paragraph 1.4:

"1.5 Passenger ships of unlimited size may only navigate the Inner Route (Húllid Passage) during the period from 1 May to 1 October."

3 In "Notes" section, the reference to paragraphs "1.2 and 1.4" in the last part of paragraph 1.1 is replaced by "1.2 to 1.5".

***

ANNEX 2

ROUTEING MEASURES OTHER THAN TRAFFIC SEPARATION SCHEMES

ESTABLISHMENT OF AN AREA TO BE AVOIDED "OFF THE COAST OF GHANA IN THE ATLANTIC OCEAN"

(Reference chart: British Admiralty 1383, 2009 edition.
***Note*:** This chart is based on World Geodetic System 1984 Datum (WGS 84).)

Description of the Area To Be Avoided

Excepting ships authorized by the Ghana Maritime Authority, all ships should avoid the area within a radius of 5 nautical miles centred on the following geographical position:

04° 32′.10 N, 002° 54′.60 W (marked J-09).

ESTABLISHMENT OF A NEW DEEP-WATER ROUTE "IN THE APPROACHES TO THE NEW PORT OF KING ABDULLAH PORT (KAP PORT) IN THE NORTHERN RED SEA"

(Reference chart: British Admiralty (BA) 2659, 4 May 1990.
***Note*:** This chart is not based on World Geodetic System 1984 Datum (WGS 84). The geographical positions, (1) to (11), listed in item (a) below are referenced to BA 2659.)

Description of the deep-water route

(a) The deep-water route is bounded by a line drawn connecting the following geographical positions:

(1)	22° 17′.236 N	038° 52′.933 E
(2)	22° 18′.610 N	038° 53′.600 E
(3)	22° 20′.570 N	038° 54′.640 E
(4)	22° 25′.940 N	038° 57′.472 E
(5)	22° 28′.997 N	038° 58′.978 E
(6)	22° 31′.752 N	039° 03′.008 E
(7)	22° 29′.578 N	039° 03′.610 E
(8)	22° 26′.694 N	038° 59′.418 E
(9)	22° 21′.250 N	038° 56′.610 E
(10)	22° 19′.240 N	038° 55′.580 E
(11)	22° 15′.900 N	038° 53′.905 E

Thence back to the point of origin (1)

Notes:

Geographical positions referenced to WGS 84

(1)	22° 17.238′ N	038° 52.942′ E
(2)	22° 18.612′ N	038° 53.609′ E
(3)	22° 20.572′ N	038° 54.649′ E
(4)	22° 25.942′ N	038° 57.481′ E
(5)	22° 28.999′ N	038° 58.987′ E
(6)	22° 31.752′ N	039° 03.017′ E
(7)	22° 29.580′ N	039° 03.619′ E

(8)	22° 26.696′ N	038° 59.427′ E
(9)	22° 21.252′ N	038° 56.619′ E
(10)	22° 19.242′ N	038° 55.589′ E
(11)	22° 15.902′ N	038° 53.914′ E

ESTABLISHMENT OF A NEW PRECAUTIONARY AREA "IN THE APPROACHES TO THE NEW PORT OF KING ABDULLAH PORT (KAP PORT) IN THE NORTHERN RED SEA"

(Reference chart: British Admiralty (BA) 2659, 4 May 1990.
***Note*:** This chart is not based on World Geodetic System 1984 Datum (WGS 84). The geographical positions, (1) to (4), listed in item (a) below are referenced to BA 2659.)

Description of the precautionary area

(a) The precautionary area is established bounded by a line connecting the following geographical positions:

(2)	22° 18.610′ N	038° 53.600′ E
(3)	22° 20.570′ N	038° 54.640′ E
(9)	22° 21.250′ N	038° 56.610′ E
(10)	22° 19.240′ N	038° 55.580′ E

Thence back to the point of origin (2)

Notes:

Geographical positions referenced to WGS 84

(2)	22° 18.612′ N	038° 53.609′ E
(3)	22° 20.572′ N	038° 54.649′ E
(9)	22° 21.252′ N	038° 56.619′ E
(10)	22° 19.242′ N	038° 55.589′ E

AMENDMENTS TO THE EXISTING AREA TO BE AVOIDED "OFF THE SOUTH-WEST COAST OF ICELAND"

1 The first paragraph after the title "OFF THE SOUTH-WEST COAST OF ICELAND", which refers to the reference chart, is replaced by the following text:

"(Reference chart: Icelandic No.31 (INT 1103) Dyrhólaey – Snæfellsnes (May 2008 edition).
Note: The chart is based on World Geodetic System 1984 datum (WGS 84).)"

2 In "Notes" section, the following two new paragraphs are added after the existing paragraph 2:

"3 Ships of up to 20,000 gross tonnage, en route to or from Faxaflói Bay, which neither carry dangerous goods nor noxious materials in bulk or cargo tanks, may transit the Eastern ATBA south of latitude 63° 45′ N. When sailing such ships within this area, navigating officers should take utmost precaution and take special notice of weather and sea state forecasts in onshore wind conditions.

4 Passenger ships of unlimited size may only transit the area during the period 1 May to 1 October. When sailing such ships within this area, navigating officers should take utmost precaution and take special notice of weather and sea state forecasts in onshore wind conditions."

AMENDMENTS TO THE EXISTING DEEP-WATER ROUTE FORMING PART OF THE "IN THE STRAIT OF DOVER AND ADJACENT WATERS" TRAFFIC SEPARATION SCHEME

1 In "WARNINGS" section, the existing paragraph 3 is replaced by the following text:

"3 In the area of the deep-water route east of the separation line, ships are recommended to avoid overtaking where traffic and navigation do not allow sufficient sea room and passing distance. If overtaking is performed then a safe distance must be maintained and COLREG Rule 13 observed."

AMENDMENTS TO THE RULES FOR VESSELS NAVIGATING THROUGH THE STRAITS OF MALACCA AND SINGAPORE – RECOMMENDATIONS FOR VESSELS CROSSING THE TRAFFIC SEPARATION SCHEME (TSS) AND PRECAUTIONARY AREAS IN THE SINGAPORE STRAIT DURING HOURS OF DARKNESS (INTERIM RECOMMENDATORY MEASURE)

1 Vessels are recommended to display the night signals consisting of 3 all-round green lights[1] in a vertical line in the following situations:

a) Vessels departing from ports or anchorages when crossing the westbound or eastbound lane of the TSS or precautionary areas in the Singapore Strait to join the eastbound or westbound lane respectively; and

b) Eastbound or westbound vessels in the TSS or precautionary areas in the Singapore Strait crossing to proceed to ports or anchorages in the Singapore Strait.

2 The night signals should be displayed by:

a) Vessels of 300 gross tonnage and above;

b) Vessels of 50 metres or more in length; and

c) Vessels engaged in towing or pushing with a combined 300 gross tonnage and above, or with a combined length of 50 metres or more.

3 Vessels crossing the TSS and precautionary areas in the Singapore Strait to proceed to or from ports or anchorages are recommended to comply with the following procedures:

a) A vessel in the Singapore Strait which intends to cross the eastbound or westbound traffic lanes in the TSS or precautionary areas respectively, is recommended to comply with the following:

i) report to the VTIS to indicate its intention in advance.

ii) display the signals consisting of 3 all-round green lights in a vertical line. VTIS would alert ships in the vicinity to keep a good look out for the crossing vessel.

iii) when traffic condition is favourable, alter course boldly if necessary, (to be readily apparent to other vessels in the vicinity observing by sight or radar) and cross the traffic lane on a heading as nearly as practicable at right angles to the general direction of traffic flow.

[1] The specifications of the lights used in configuring the "3 green lights" signal are to comply closely with positioning and technical details of lights in ANNEX I of COLREG.

iv) report to VTIS and switch off the night signals when it has safely left / crossed or joined the appropriate traffic lane.

b) Displaying the night signals shall not exempt the crossing vessel of its obligation to give way to other vessels in a crossing situation or any other rules under the COLREG.

***

ANNEX 3

DRAFT MSC RESOLUTION

DRAFT RESOLUTION MSC.[...](88)
(adopted on [...])

ADOPTION OF A NEW MANDATORY SHIP REPORTING SYSTEM "IN THE SOUND BETWEEN DENMARK AND SWEDEN (SOUNDREP)"

THE MARITIME SAFETY COMMITTEE,

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

RECALLING ALSO regulation V/11 of the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS Convention), in relation to the adoption of mandatory ship reporting systems by the Organization, and

RECALLING FURTHER resolution A.858(20) resolving that the function of adopting ship reporting systems shall be performed by the Committee on behalf of the Organization,

TAKING INTO ACCOUNT the guidelines and criteria for ship reporting systems adopted by resolution MSC.43(64), as amended by resolutions MSC.111(73) and MSC.189(79),

HAVING CONSIDERED the recommendations of the Sub-Committee on Safety of Navigation, [at its fifty-sixth session],

1. ADOPTS, in accordance with SOLAS regulation V/11, a new mandatory ship reporting system "In the Sound between Denmark and Sweden (SOUNDREP)", as set out in annex;

2. DECIDES that the above-mentioned new mandatory ship reporting system will enter into force at 00:00 hours UTC on [1 September 2011];

3. REQUESTS the Secretary-General to bring this resolution and its annex to the attention of Contracting Governments to the SOLAS Convention and to members of the Organization.

ANNEX

MANDATORY SHIP REPORTING SYSTEM
"IN THE SOUND BETWEEN DENMARK AND SWEDEN (SOUNDREP)"

1 Categories of ships required to participate in the system

1.1 Ships participating in the ship reporting system:

Ships of 300 gross tonnage and upwards proceeding to or from ports or anchorages in the Sound or passing through the reporting area.

Pursuant to SOLAS 1974 Convention, as amended, the SOUNDREP does not apply to warships, naval auxiliaries, other ships owned or operated by a Contracting Government and used, only on Government non-commercial service. However, such ships are encouraged to participate in the reporting system. However, such ships are encouraged to participate in the reporting system.

2 Geographical coverage of the system and the number and edition of the reference chart used for delineation of the system

2.1 The mandatory ship reporting system SOUNDREP is operated by Sound VTS. The call sign is "Sound Traffic".

2.2 The operational area of SOUNDREP covers the northern, central and southern part of the Sound as shown on the chartlet given in Appendix 1. The area includes the routeing systems, in the north TSS "In the Sound" and in the south TSS "Off Falsterbo", both adopted by the Organization.

2.2.1 Report and border line North

Denmark:

(1)	56° 06´.58 N	012° 11´.00 E	(Rågeleje)
(2)	56° 14´.00 N	012° 11´.00 E	(At sea North of Rågeleje)

Sweden:

(3)	56° 18´.08 N	012° 17´.39 E	(At sea West of Kullen)
(4)	56° 18´.08 N	012° 26´.88 E	(Kullen Light House)

2.2.2 Report and border line South

Denmark:

(5)	55° 17´.44 N	012° 27´.28 E	(Stevns Light House)
(6)	55° 10´.00 N	012° 27´.28 E	(At sea South of Stevns)

Sweden:

(7)	55° 10´.00 N	012° 54´.50 E	(At sea South of Falsterbo)

2.2.3 Report and border line East

Sweden:

(7)	55° 10´.00 N	012° 54´.50 E	(At sea South of Falsterbo)
(8)	55° 22´.89 N	013° 01´.93 E	(Fredshög)

2.2.4 Report and border line West

Denmark:

(9)	55° 19´.81 N	012° 27´.30 E	(Mandehoved)
(10)	55° 33´.28 N	012° 35´.53 E	(Aflandshage)

2.2.5 Sector division

The SOUNDREP area is divided into two sectors at latitude 55° 50´.00 N; sector 1 northerly and sector 2 southerly. Each sector has an assigned VHF channel as shown in Appendix 2.

2.3 The reference charts (Datum: World Geodetic System 1984 (WGS 84)), which include the operational area of SOUNDREP, are:

.1 Danish charts Nos. 102 (7th edition May 2009), 104 (5th edition Aug 2009), 131 (1st edition Nov 2008), 132 (19th edition Aug 2009) and 133 (13th edition Sep 2009); and

.2 Swedish charts Nos. 921 (4th edition 2009) and 922 (22th edition 2009).

3 Format, content of reports, times and geographical positions for submitting reports, authority of whom reports should be sent and available services

3.1 *Procedures of reporting*

3.1.1 The SOUNDREP report must be initiated (see paragraph 3.1.4) to Sound VTS using VHF voice transmission. However, ships can fulfil most of the reporting requirements of the reporting system by the use of non-verbal means such as AIS (Automatic Information System) class A as approved by the Organization, and by e-mail or other alternative methods, prior to entering the ship reporting area (see also paragraph 3.4.1 note (c)). Additional details are given in Appendix 3. For contact information see Appendix 2.

3.1.2 The use of correct and updated AIS information can accomplish the reporting requirements for designators A (part of), B, C, E, F, I, O, P and W.

3.1.3 E-mail or other alternative methods prior to entering the ship reporting area, can accomplish the reporting requirements for designators L, T and X. Such non-verbal partly report must also state designator A (see also paragraph 3.4.1, note (c)). Additional details are given in Appendix 3.

3.1.4 A ship which fulfils the reporting requirements of the SOUNDREP mandatory ship reporting system, by the use of non-verbal means, must as a minimum carry out a VHF voice transmission to communicate the name of the ship (part of designator A) and the report line of entry, to the Sound VTS when actually entering the area. The same procedure must be followed before departing a port or leaving an anchorage in the SOUNDREP area. Additional details are given in Appendix 3.

3.1.5 Designators U and Q, if applicable, shall at all times be given using VHF voice transmission to Sound VTS when entering the area. Additional details are given in Appendix 3.

3.1.6 To prevent overloading the VHF channels for reporting by verbal voice transmissions and to avoid interference with essential navigational duties, and by this hampering the safety of navigation in the area, a ship unable to accomplish the reporting requirements for designators L, T and X by e-mail or other alternative methods prior to entering the ship reporting area, can report these designators by the use of radio telephone or mobile phone to Sound VTS. Designator A must additionally be included in this partly reporting.

3.2 Verbal reporting is not required when a ship is passing the SOUNDREP sector line at latitude 55° 50´.00 N. However, change of VHF frequency is required according to Appendix 2.

3.3 *Format*

3.3.1 The mandatory ship report shall be drafted in accordance with the format shown in Appendix 3. The information requested from ships is derived from the Standard Reporting Format shown in paragraph 2 of the Appendix to resolution A.851(20).

3.4 *Content*

3.4.1 A report from a ship to the SOUNDREP by non-verbal means or by voice transmission must contain the following information:

A	Name of the ship, call sign and if available IMO identification number and MMSI No.
B	Date and time
C	Position expressed in latitude and longitude
E	True course
F	Speed
I	Destination and ETA
L	Route information on the intended route through the Sound
O	Maximum present draught
P	Cargo; and quantity and IMO class of dangerous goods, if applicable (see note (c) below)
Q	Defects and deficiencies or other limitations
T	Contact details for the communication of cargo information (see note (c) below)
U	Air draught when exceeding 35 metres
W	Total number of persons on board
X	Type and estimated quantity of bunker fuel, for ships of 1,000 gross tonnage and above

Note:

(a) On receipt of a report, operators of the Sound VTS will establish the relation to the ship's position and the information supplied by the facilities available to them.

(b) The master of the ship must forthwith inform the Sound VTS concerned of any change to the information notified, including designator Q.

(c) Information on dangerous cargo and contact details for the communication of cargo information (designator P and T of the reporting format) is only requested when such information has not been notified to the competent authority via SafeSeaNet in an European Union (EU) member State in accordance with the requirements of Article 13 (for ships leaving or entering an EU port) in Directive 2002/59/EC on establishing Community vessel traffic monitoring and information system and amended by Directive 2009/17/EC, prior to entering the operational SOUNDREP area. Additional details are given in Appendix 3.

3.5 *Geographical position for submitting reports*

3.5.1 Ships entering the SOUNDREP operational area shall submit a report when crossing the entrance lines or on departure from a port or anchorage within the operational area.

3.5.2 Further reports should be made whenever there is a change in navigational status or circumstance, particularly in relation to designator Q the reporting format.

3.6 *Crossing traffic*

3.6.1 Recognizing that ferries crossing between Helsingør and Helsingborg operate according to published schedules special reporting arrangements can be made on a ship to ship basis. Ferries leaving the ports Helsingør in Denmark and Helsingborg in Sweden operating according to published schedules are normally not requested to report to the Sound VTS.

3.7 *Authority*

The VTS Authority for the SOUNDREP is Sound VTS with call sign "Sound Traffic". Additional details are given in Appendix 2.

4 Information to be provided to ships and procedures to be followed

4.1 Ships are required to keep a continuous listening watch in the area on the relevant VHF sector channel and VHF channel 16.

4.2 Sound VTS will provide information service to shipping about specific and urgent situations, which could cause conflicting traffic movements as well as other information concerning safety of navigation for instance, information about weather, current, ice, water level, navigational problems or other hazards.

4.2.1 If necessary, Sound VTS can provide individual information to a ship particularly in relation to positioning and navigational information or local conditions by using the IMO Standard Marine Communication Phrases (SMCP), section A1/6 for VTS message markers. The message markers can be of ADVICE, WARNING, INFORMATION, QUESTION, ANSWER, REQUEST and INTENTION.

4.2.2 Information of general interest to shipping in the area will be broadcast by Sound VTS on VHF channel as specified by the VTS operator or will be given on request. A broadcast will be preceded by an announcement on VHF channel 16. All ships navigating in the area should listen to the announced broadcast.

4.3 If a ship needs to anchor due to breakdown, low visibility, adverse weather, changes in the indicated depth of water, etc., Sound VTS can recommend suitable anchorages or other place of refuge within the operational area.

5 Communication required for the SOUNDREP system

5.1 The language used for communication shall be English, using IMO Standard Marine Communication Phrases, where necessary.

5.2 Details of communication and contact information are given in Appendix 2.

6 Rules, regulations and recommendation in force in the area of the system

6.1 *Regulations for preventing collisions at sea*

The International Regulations for Preventing Collisions at Sea (COLREG) are applicable throughout the operational area of SOUNDREP.

6.2 *Traffic separation scheme "In the Sound"*

The Traffic separation scheme "In the Sound", situated to the north in the narrows of the Sound, as adopted by the Organization, and the rule 10 of the International Regulations for Preventing Collisions at Sea therefore applies.

6.3 *Traffic separation scheme "Off Falsterbo"*

The separation scheme "Off Falsterbo" situated in the southern part of the Sound, as adopted by the Organization, and the rule 10 of the International Regulations for Preventing Collisions at Sea therefore applies.

6.4 *IMO Recommendation on Navigation through the entrances to the Baltic Sea – The Sound*

SN.1/Circ.263, section 1.9 and Ships' Routeing, part C, on Amendments to Recommendation on Navigation through the entrances to the Baltic Sea, adopted at MSC 83 in October 2007, recommends for the Sound that loaded oil tankers with a draught of 7 metres or more, loaded chemical tankers and gas carriers, irrespective of size, and ships carrying a shipment of irradiated nuclear fuel, plutonium and high-level radioactive wastes (INF Code materials), when navigating the Sound between a line connecting Svinbådan Lighthouse and Hornbæk Harbour and a line connecting Skanör Harbour and Aflandshage should use the pilotage services established by the Governments of Denmark and Sweden.

6.5 *Mandatory pilotage*

Harbours within the SOUNDREP area are covered by provisions about mandatory pilotage for certain ships bound for or coming from Danish and Swedish ports.

6.6 *Air draught when exceeding 35 metres*

The navigable Drogden channel is located beside a major airport. In order to ensure safety of navigation in the dredged channel of Drogden and to reduce the risk of collision between an aircraft that serves the airport and a ship or other floating equipment, a reporting obligation has been established. Additional details are given in Appendix 3, designator U.

6.6.1 The safety procedure that has been established is that for all ships, including ships with a tow, with an air draught exceeding 35 metres, Sound VTS shall notify the air traffic control stating the maximum air draught of the ship or floating equipment. The notification shall be given at least 30 minutes prior to the expected time (UTC) for passage of:

- Nordre Røse lighthouse at position 55° 38´.17 N, 012° 41´.21 E; and
- light buoy No.9 at position 55° 36´.15 N, 012° 41´.79 E.

Sound VTS will transfer the information to the air traffic control.

7 Shore-based facilities to support the operation of the system

7.1 *System capability*

7.1.1 The Sound VTS centre is situated at Malmö, Sweden.

7.1.2 The Sound VTS system comprises several remote sensor sites. The sites provide surveillance of the SOUNDREP area using a combination of radar and AIS. An integrated network of ten radar sensors integrated with AIS provides surveillance of the area.

7.1.3 All the sensors mentioned below will be controlled or monitored by the VTS operators.

7.1.4 Recording equipment automatically stores information from all tracks, which can be replayed. In case of incidents the VTS authority can use records as evidence. VTS operators have access to different ship registers, pilot information and hazardous cargo data.

7.1.5 An integrated database is available for the operators in handling information.

7.2 *Radar and other sensors*

Information necessary to evaluate the traffic activities within the operational area of SOUNDREP is compiled via remote controlled sensors comprising:

- Sensors for water level and current at Drogden and Flintrännan;
- High-resolution radar systems; and
- VHF communications systems including DSC call (see Appendix 2).

7.3 *Radio communication equipment*

Redundant VHF system with DSC functionality (see Appendix 2).

7.4 *AIS facilities*

Sound VTS is linked to both the Danish and Swedish national shore-based AIS network and can continually receive messages broadcast by ships with transponders to gain information on their identity and position. The information is displayed as part of the VTS system and is covering the ship reporting area.

7.5 *Personnel qualifications and training*

7.5.1 The VTS centre is staffed with personnel all educated and experienced as officers in charge of navigational watch according to national and international requirements.

7.5.2 Training of VTS personnel will meet the standards recommended by IMO in MSC/Circ.1065 on IALA Standards for training and certification of VTS personnel (Ed. 2).

7.5.3 Refresher training is carried out on a regular basis.

8 Information concerning the applicable procedures if the communication facilities of shore-based Authority fail

8.1 The system is designed with sufficient system redundancy to cope with normal equipment failure.

8.2 In the event of radio communication system failure at the VTS centre, communication will be maintained via a redundant standby VHF system. If the radar system or other essential equipment suffers a breakdown, information of reduced operational capability will be given by Sound VTS or as national navigational warnings.

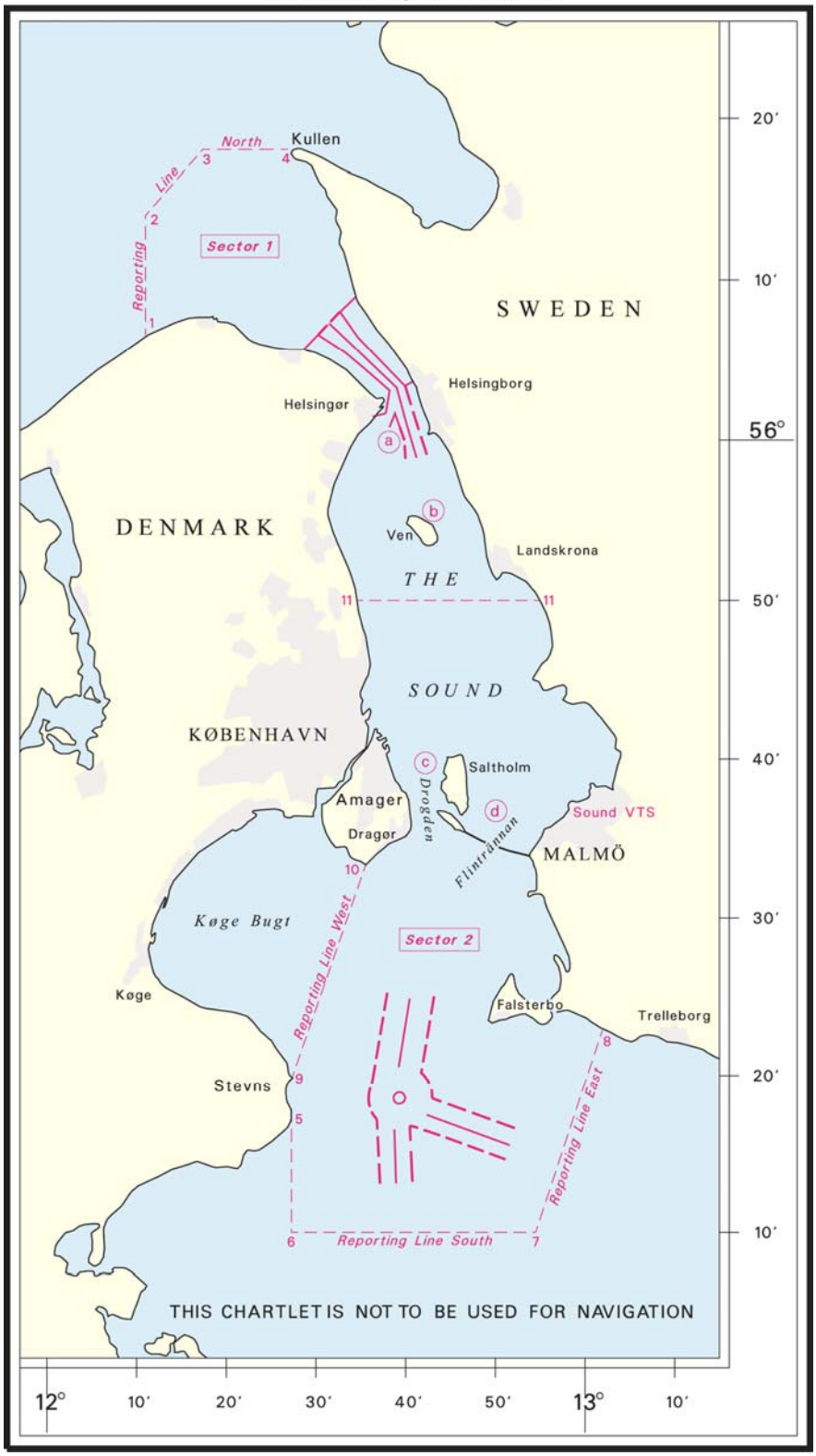
9 Measures to be taken if a ship fails to comply with the requirements of the system

9.1 The objective of the VTS Authority is to facilitate the exchange of information between the shipping and the shore in order to ensure safe passages of the bridges, support safety of navigation and the protection of the marine environment.

9.2 All means will be used to encourage and promote the full participation of ships required to submit reports under SOLAS regulation V/11. If reports are not submitted and the offending ship can be positively identified, then information will be passed to the relevant flag State Authority for investigation and possible prosecution in accordance with national legislation. Information will also be made available to Port State Control inspectors.

Appendix 1

SOUNDREP Operational Area



Appendix 2

Contact information and assigned VHF channels for sectors in the mandatory ship reporting system "SOUNDREP", in the Sound between Denmark and Sweden

SOUNDREP, radio call sign:	**"Sound Traffic"**

VHF Channels	Operational use
VHF Channel 73	Sound VTS – Sector 1 North
VHF Channel 71	Sound VTS – Sector 2 South
VHF Channel 79	Sound VTS – Broadcast 1, individual assistance
VHF Channel 68	Sound VTS – Broadcast 2, individual assistance and reserve channel

The Sound VTS operating SOUNDREP is located in Malmö, Sweden:

H24 contact information:

1) Sound VTS is monitoring VHF channels 73, 71 and 16 continuously.

2) Duty officer phone: +46 40 20 43 17 or,
+46 40 20 43 34

3) Fax: +46 40 20 43 45

4) E-mail: contact@soundvts.org

Address:

Sound VTS
Hans Michelsensgata 9
Box 855
S-201 80 Malmö
Sweden

Appendix 3

Drafting of reports to the mandatory ship reporting system "SOUNDREP" In the Sound between Denmark and Sweden

Designator	AIS	Function	Information required
A	Yes, and VHF	Ship	Name of the ship (VHF); call sign and if available IMO identification number and MMSI number (AIS)
B	Yes	Date and time of event	A 6-digit group event giving day of month and hours and minutes in Universal Co-ordinated Time (UTC).
C	Yes	Position	A 5-digit group giving latitude in degrees and minutes, decimal, suffixed with N and a 6-digit group giving longitude in degrees and minutes, decimal, suffixed with E.
E	Yes	True course	A 3-digit group
F	Yes	Speed in knots and tenths of knots	A 3-digit group
I	Yes	Destination and ETA	The name of next port of call given in UN LOCODE. For details see in IMO SN/Circ.244 and; www.unece.org/cefact/locode/service/main.htm. Date and time group expressed as in (B)
L	No	Route information	A brief description of the intended route as planned by the master. Ships navigating in The Sound have options on deciding route in the following areas (see Appendix 1); a) Disken shoal b) Ven island c) Drogden channel d) Flintrännan channel The route information should be given coded by using the following local designators: • DW – Disken, west of • DE – Disken, east of • VW – Ven, west of • VE – Ven, east of • D – Drogden • F – Flintrännan See examples below.
O	Yes	Maximum present draught in metres	A 2-digit or 3-digit group giving the present maximum draught in metres (e.g.: 6.1 or 10.4)

Designator	AIS	Function	Information required
P	Yes	Cargo on board	Cargo; and quantity and IMO class of dangerous goods, if applicable. (see 3.4.1, note c)
Q	VHF	Defects and deficiencies or other limitations	Details of defects and deficiencies affecting the equipment of the ship or any other circumstances affecting normal navigation and manoeuvrability.
T	No	Ship's representative and or owner	Address and particulars from which detailed information on the cargo may be obtained.
U	VHF	Ships size	Information of maximum air draught when exceeding 35 metres, required for all ships, including ships towing or other floating equipment. This information shall be given by voice transmissions when entering the SOUNDREP area, irrespectively of, if the information also is given by, e.g., AIS; details in paragraph 6.6.
W	Yes	Total number of persons on board	State number.
X	No	Miscellaneous	Type and estimated quantity of bunker fuel, for ships of 1,000 gross tonnage and above.

Examples of routes as given under designator L

A northbound ship leaving Malmö Port planning to sail, east of Ven, TSS In the Sound (UN LOCODE format for Malmö Port is SE MMA):

L: SE MMA, VE,

A southbound ship in transit planning to sail TSS In the Sound, east of Disken, west of Ven, Drogden channel and TSS Off Falsterbo:

L: DE, VW, D

***

ANNEX 4

DRAFT MSC RESOLUTION

RESOLUTION MSC.[...](88)
(adopted on [...])

ADOPTION OF AMENDMENTS TO THE EXISTING MANDATORY SHIP REPORTING SYSTEM "IN THE TORRES STRAIT REGION AND THE INNER ROUTE OF THE GREAT BARRIER REEF (REEFREP)"

THE MARITIME SAFETY COMMITTEE,

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

RECALLING ALSO regulation V/11 of the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS Convention), in relation to the adoption of mandatory ship reporting systems by the Organization, and

RECALLING FURTHER resolution A.858(20) resolving that the function of adopting ship reporting systems shall be performed by the Committee on behalf of the Organization,

TAKING INTO ACCOUNT the guidelines and criteria for ship reporting systems adopted by resolution MSC.43(64), as amended by resolutions MSC.111(73) and MSC.189(79),

HAVING CONSIDERED the recommendations of the Sub-Committee on Safety of Navigation, [at its fifty-sixth session],

1. ADOPTS, in accordance with SOLAS regulation V/11, the amendments to the existing mandatory ship reporting system "In the Torres Strait region and the Inner Route of the Great Barrier Reef (REEFREP)", as described in the annex of this resolution;

2. DECIDES that the amendments to this existing mandatory ship reporting system will enter into force at 00:00 hours UTC on [1 July 2011];

3. REQUESTS the Secretary-General to bring this resolution and its annex to the attention of Contracting Governments to the SOLAS Convention and to members of the Organization.

ANNEX

AMENDMENTS TO THE EXISTING MANDATORY SHIP REPORTING SYSTEM "IN THE TORRES STRAIT REGION AND THE INNER ROUTE OF THE GREAT BARRIER REEF (REEFREP)"

AMENDMENTS TO ANNEX 1 OF RESOLUTION MSC.52(66), AS AMENDED BY RESOLUTION MSC.161(78)

1 In Annex 1, paragraphs 2.1 and 2.2 are replaced by the following paragraphs:

"2.1 The reporting system will cover the general area, as shown in the chartlet at appendix 1. The area encompasses the Torres Strait between longitudes 141º 45′ E and 144º 00′ E, including the Endeavour Strait, and the waters of the Great Barrier Reef (GBR) between the Australian coast and the outer edge of the GBR, from the latitude of Cape York (10º 40′ S) south-eastwards to 21° 00′ S 152° 55′ E. From this position, the REEFREP boundary extends as follows:

(a) to position 23° 42′ S 153° 45′ E,

(b) thence to position 24° 30′ S 153° 35′ E,

(c) thence westward on latitude 24° 30′ S to its intersection with the Queensland coastline at the low water mark, and

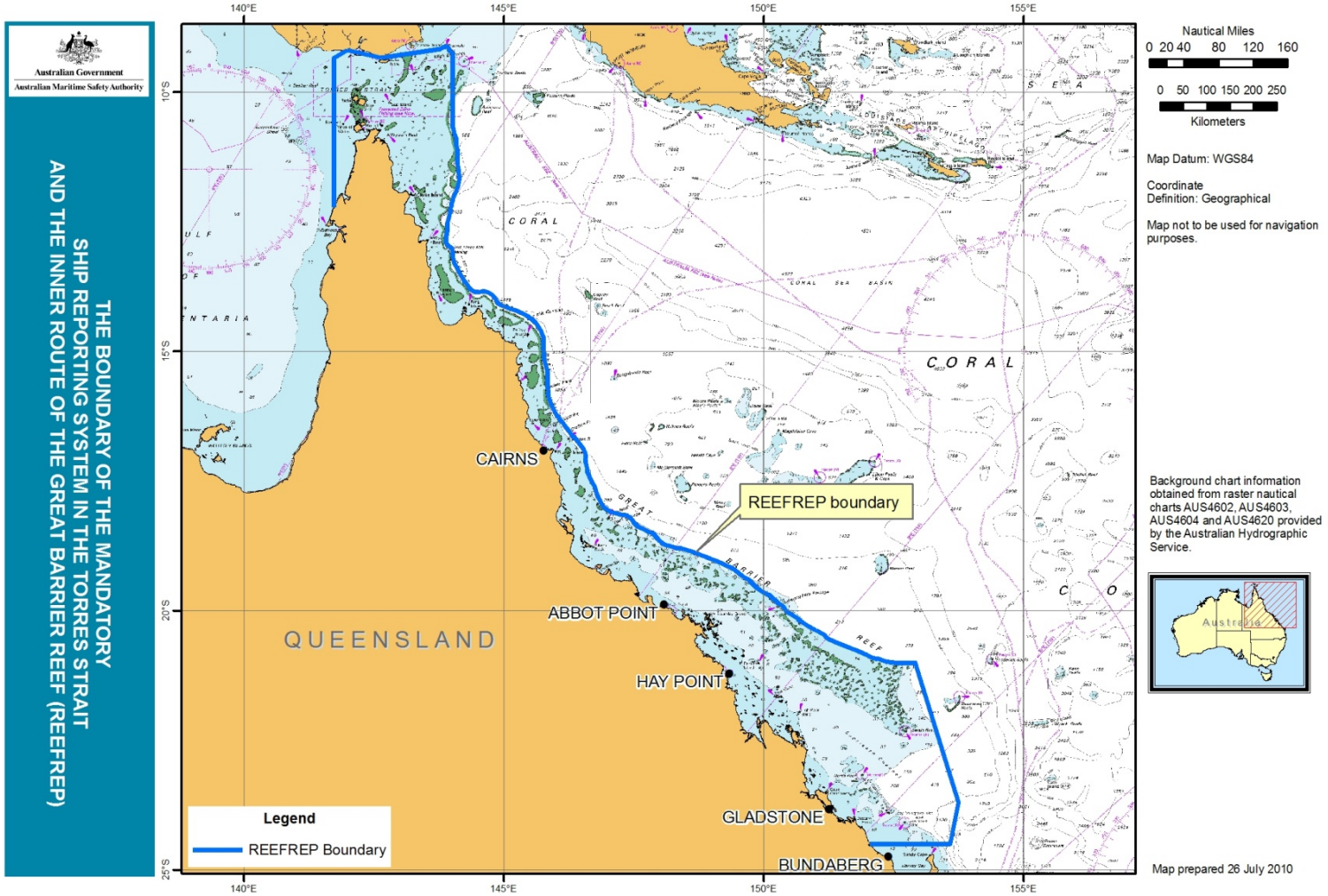
(d) thence generally north-westerly along the coastline to the latitude of Cape York (10º 40′ S).

2.2 The REEFREP area is shown on charts AUS 4620 (1996) and AUS 4635 (2010). A series of large scale charts is provided for coastal navigation throughout the REEFREP area."

2 Appendix 1 is replaced as follows:

Appendix 1

GENERAL AREA COVERED BY THE REPORTING SYSTEM



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ANNEX 5

DRAFT MSC RESOLUTION

RESOLUTION MSC.[...](88)
(adopted on [...])

ADOPTION OF AMENDMENTS TO THE EXISTING MANDATORY SHIP REPORTING SYSTEM "OFF THE SOUTH AND SOUTH-WEST COAST OF ICELAND (TRANSREP)"

THE MARITIME SAFETY COMMITTEE,

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

RECALLING ALSO regulation V/11 of the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS Convention), in relation to the adoption of mandatory ship reporting systems by the Organization, and

RECALLING FURTHER resolution A.858(20) resolving that the function of adopting ship reporting systems shall be performed by the Committee on behalf of the Organization,

TAKING INTO ACCOUNT the guidelines and criteria for ship reporting systems adopted by resolution MSC.43(64), as amended by resolutions MSC.111(73) and MSC.189(79),

HAVING CONSIDERED the recommendations of the Sub-Committee on Safety of Navigation, at its [fifty-sixth session],

1. ADOPTS, in accordance with SOLAS regulation V/11, the amendments to the existing mandatory ship reporting system "Off the south and south-west coast of Iceland (TRANSREP)", as described in the annex of this resolution;

2. DECIDES that the amendments to this existing mandatory ship reporting system will enter into force at 00:00 hours UTC on [1 July 2011];

3. REQUESTS the Secretary-General to bring this resolution and its annex to the attention of Contracting Governments to the SOLAS Convention and to members of the Organization.

ANNEX

AMENDMENTS TO THE EXISTING MANDATORY SHIP REPORTING SYSTEM "OFF THE SOUTH AND SOUTH-WEST COAST OF ICELAND (TRANSREP)"

1 *In section 1 "Categories of ships required to participate in the system", the following paragraphs are added after the existing paragraph 1.1.2:*

".3 ships of up to 20,000 gross tonnage, en route to or from Faxaflói Bay, which neither carry dangerous goods nor noxious materials in bulk or cargo tanks and which may transit the Eastern ATBA south of latitude 63° 45´ N; and

.4 passenger ships of unlimited size, which may only transit the inner route (Húllid Passage) and the Eastern ATBA during the period 1 May to 1 October."

2 *In section 2 "Geographical coverage of the system and the number and edition of the reference charts used for the delineation of the system", the second paragraph, which refers to the reference chart, is replaced by the following paragraph:*

"The reference chart, which includes all the area of coverage for the system, is Icelandic chart No.31 (INT 1103) *Dyrhólaey – Snæfellsnes* (May 2008 edition), based on datum WGS 84."

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ANNEX 6

DRAFT SN CIRCULAR

GUIDELINES FOR SAFETY ZONES AND SAFETY OF NAVIGATION AROUND OFFSHORE INSTALLATIONS AND STRUCTURES

1 The Sub-Committee on Safety of Navigation (NAV), at its [fifty-sixth session (26 July to 30 July 2010)], agreed on Guidelines for safety zones and safety of navigation around offshore installations and structures, for increasing awareness of the availability and best use of existing routeing measures for the safety of both navigation and artificial islands, installations or structures.

2 The Maritime Safety Committee, at its [eighty-eighth session (24 November to 3 December 2010)], approved the circulation of the attached guidelines for safety zones and safety of navigation around offshore installations and structures.

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

ANNEX

GUIDELINES FOR SAFETY ZONES AND SAFETY OF NAVIGATION AROUND OFFSHORE INSTALLATIONS AND STRUCTURES

1 Some offshore artificial islands, installations or structures are complex systems that present particular challenges for safe navigation. These artificial islands, installations or structures are such that navigation around them creates concern about the safety of personnel and the risk of serious damage to offshore installations or structures, vessels and the environment in the event of a collision.

2 Any features of a sufficiently permanent nature of offshore artificial islands, installations or structures should be shown on all appropriate navigational charts.

3 Related documents:

- Resolution A.671(16) provides guidance on safety zones and safety of navigation around offshore installations and structures.

- Resolution A.572(14), as amended, establishes the General Provisions on Ships' Routeing.

- Resolution A.857(20) establishes guidelines for vessel traffic services.

- Resolution A.893(21) establishes guidelines for voyage planning when approaching artificial islands, installations and structures.

4 In order to enhance both the safety of navigation and of these artificial islands, installations or structures as well as the safety of personnel,

.1 Governments are requested to:

.1 implement the recommendations in resolution A.671(16);

.2 take appropriate measures to ensure navigation charts clearly reflect the location and projected swing or movement, if any, with the wind and seas of Floating Production Storage Offloading units (FPSOs), including their connected associated and necessary structures, installations, vessels, shuttle tankers and/or tugs in its operations, and other similarly situated installations or structures, that rotate around a fixed mooring;

.3 adopt as standard representation on navigation charts the legends, symbols and notes recommended by the International Hydrographic Organization for the designation of safety zones around offshore artificial islands, structures or installations including their connected associated and necessary operational arrangements mentioned in paragraph 4.1.2 above, as guidance for the representation of details of safety zones established in accordance with international law;

.4 consider as standard representation on navigation charts, the use of appropriate area legends, symbols and notes, such as "development areas" and "anchors and cables", recommended by the International Hydrographic Organization, as a warning to mariners navigating in the vicinity of offshore resource and exploitation areas;

.5 include a cautionary or explanatory note on navigation charts depicting the location of safety zones established in accordance with international law;

.6 consider and propose to the Organization those routeing measures that, in combination with duly established safety zones around offshore artificial islands, structures or installations, will enhance the safety both of navigation and of the artificial island, structure or installation, particularly those that are complex systems; and

.7 if circumstances permit, consider holding consultation with all stakeholders with respect to safety of navigation.

.2 Flag States are requested to:

.1 take all necessary steps to ensure that, unless specifically authorized, ships flying their flag observe any coastal State's conditions for entry into and/or navigation within duly established safety zones; and

.2 draw the attention of seafarers to the need to navigate with extreme caution, including taking all necessary measures in regard to voyage planning required by SOLAS regulation V/34 and make timely radio contact with the offshore artificial islands, installations or structures, associated vessel traffic services and other vessels in the area, if an infringement of the safety zone cannot be avoided.

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ANNEX 7

DRAFT SN CIRCULAR

MAINTENANCE OF ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEM (ECDIS) SOFTWARE

1 The Sub-Committee on Safety of Navigation (NAV), at its fifty-sixth session (26 to 30 July 2010), reviewed the text of SN.1/Circ.266 and agreed that the text of the original circular should be amended as this was an important issue for ensuring the safety of navigation.

2 The Maritime Safety Committee, at its [eighty-eighth session (24 November to 3 December 2010)], concurred with the Sub-Committee's views, approved the Guidance on the maintenance of Electronic Chart Display and Information System (ECDIS) software, as set out in the annex, and encouraged their use by the relevant authorities.

3 Member Governments are invited to bring the attached revised SN circular to the attention of all concerned for information and in particular to ensure that mariners always have the latest safety-related information available to them.

ANNEX

1 Resolution MSC.282(86), adopted on 5 June 2009, introduced a mandatory carriage requirement for Electronic Chart and Display Systems (ECDIS) to be phased in, according to size and class of ship, between 1 July 2012 and 1 July 2018. ECDIS Performance Standards have been adopted by IMO and in turn refer to the International Hydrographic Organization (IHO) Standards that govern the transfer and presentation of the chart information used in ECDIS.

2 ECDIS in operation comprises hardware, software and data. It is important for the safety of navigation that the application software within the ECDIS works fully in accordance with the Performance Standards and is capable of displaying all the relevant digital information contained within the Electronic Navigational Chart (ENC).

3 ECDIS that is not updated for the latest version of IHO Standards may not meet the chart carriage requirements as set out in SOLAS regulation V/19.2.1.4.

4 For example, in January 2007, Supplement No.1 to the IHO ENC Product Specification[1] was introduced in order to include, within the ENC, the then recently introduced IMO requirements for Particularly Sensitive Sea Areas (PSSA), Archipelagic Sea Lanes (ASL) and to cater for any future Safety of Navigation requirements.

5 Any ECDIS which is not upgraded to be compatible with the latest version of the Product Specification or the S-52 Presentation Library[2] may be unable to correctly display the latest charted features. Additionally the appropriate alarms and indications may not be activated even though the features have been included in the ENC. Similarly any ECDIS which is not updated to be fully compliant with the latest version of the S-63 Data Protection Standard may fail to decrypt or to properly authenticate some ENCs, leading to failure to load or install.

6 In 2010, the status of IHO standards affecting ECDIS Equipment is:

IHO ECDIS Standards	**Current Edition**
Electronic Navigational Chart (ENC)	S-57 Edition 3.1
Presentation Library for ECDIS	S-52 PresLib Edition 3.4
ENC Data Protection Scheme	S-63 Edition 1.1
Raster Navigational Chart (RNC) *(Only if ECDIS software supports RCDS mode)*	S-61 Edition 1.0

An up-to-date list of all the relevant IHO standards relating to ECDIS equipment is maintained within the "About ENCs" section of the IHO website (www.iho.int).

[1] S-57 Appendix B.1, ENC Product Specification, ed. 3.1.
[2] S-52 Appendix 2, Annex A, Presentation Library, ed. 3.4.

7 The need for safe navigation requires that manufacturers should provide a mechanism to ensure software maintenance arrangements are adequate. This may be achieved through the provision of software version information using a website. Such information should include the IHO Standards which have been implemented.

8 Administrations should inform shipowners and operators that proper ECDIS software maintenance is an important issue and that adequate measures need to be implemented by masters, shipowners and operators in accordance with the International Safety Management (ISM) Code.

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ANNEX 8

DRAFT MSC CIRCULAR

GUIDANCE ON PROCEDURES FOR UPDATING SHIPBORNE NAVIGATION AND COMMUNICATION EQUIPMENT

1 The Maritime Safety Committee (MSC), at its [eighty-eighth session (24 November to 3 December 2010)], approved the guidance on procedures for updating shipborne navigation and communication equipment, as prepared by the Sub-Committee on Safety of Navigation (NAV) at its fifty-sixth session (26 to 30 July 2010).

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

ANNEX

GUIDANCE ON PROCEDURES FOR UPDATING SHIPBORNE NAVIGATION AND COMMUNICATION EQUIPMENT

Background

1 As navigation and radiocommunication equipment becomes increasingly software and firmware dependent, updates to application software and firmware to meet changes in IMO and ITU regulatory requirements are needed. This applies in the case of retrospective changes to regulations which apply to all relevant ships.

2 Means should be provided to replace software and firmware or install updates to software and firmware in systems aboard ships.

3 Manufacturers should provide customers and interested parties with timely access to relevant information.

4 Adequate navigation and radiocommunication equipment software and firmware maintenance arrangements should be implemented by shipowners and be supported by equipment manufacturers. Equipment should provide the means to display, on demand, the current applicable software and firmware versions.

Procedures

5 Member Governments should promulgate information to all affected parties in relation to IMO and ITU regulatory changes that have the potential to affect maritime navigation and radiocommunication equipment.

6 Equipment manufacturers should provide timely access to information pertaining to maritime navigation and radiocommunication equipment application software, for any relevant changes, originating from IMO and ITU regulations. This could, for example, be by website listing relevant regulations currently in effect for the equipment, equipment software and firmware versions, compliance status and regulatory type approvals for the listed configurations/versions. Update of operating systems and hardware may also be necessary to meet the changed requirements.

7 Shipowners should ensure that the vessel's equipment is up to date with the latest requirements.

8 In addition to the above, in the case of ECDIS refer to SN.1/Circ.266, as amended.

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ANNEX 9

LIAISON STATEMENT TO ITU-R WORKING PARTY 5B (COPY TO CIRM, IALA AND IEC TC80)

FUTURE REVISION OF RECOMMENDATION ITU-R M.1371-4

IMO would like to thank ITU-R Working Party 5B (WP 5B) for their liaison statement regarding the draft revision of Recommendation ITU-R M.1371-3.

The revised recommendation, Recommendation ITU-R M.1371-4 on Technical characteristics for an automatic identification system using time-division multiple access in the VHF maritime mobile band, was brought to the attention of IMO on 16 July 2010.

The Sub-Committee on Safety of Navigation (NAV) at its fifty-sixth session (26 to 30 July 2010) considered the liaison statement received from ITU-R WP 5B (23 November to 3 December 2009) to IMO and IALA concerning draft revision of Recommendation ITU-R M.1371-3, and noted in particular that "No change" was given to the navigational status 1 to 13. It was further noted that the definition changes for navigational status 14 and 15 had been changed, as agreed between IMO and ITU by several liaisons.

The NAV Sub-Committee also noted that a change in the definitions would require follow-up changes in display systems. The Sub-Committee noted that such changes would have a higher impact than the situation was when the pollutant category had been changed and might cause confusion to the mariners.

It was further noted that in ITU-R's view the required change had to be initiated by IMO to ensure a harmonized solution implemented on those vessels using the AIS system.

Noting that a future revision of Recommendation ITU-R.1371-4 would not be considered by WP 5B before 2012, the NAV Sub-Committee decided to study the matter in further detail at its future sessions and to inform WP 5B in the near future on the outcome of these studies and required amendments to the recommendation, as appropriate.

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ANNEX 10

LIAISON STATEMENT TO ITU-R WP 5B

GUIDANCE ON THE USE OF AIS APPLICATION-SPECIFIC MESSAGES

Introduction

IMO would like to inform ITU-R of the issuing of SN.1/Circ.289 on Guidance on the use of AIS Application-Specific Messages, revoking SN/Circ.236 as from 1 January 2013. For clear reference, SN.1/Circ.289 is attached to this document.

Background

The Maritime Safety Committee, at its seventy-eighth session (12 to 21 May 2004), approved SN/Circ.236 on Guidance on the application of AIS binary messages as prepared by the Sub-Committee on Safety of Navigation at its forty-ninth session (30 June to 4 July 2003).

The Sub-Committee on Safety of Navigation, at its forty-ninth session (30 June to 4 July 2003), selected seven (7) binary messages as shown in annex 2 to SN/Circ.236 to be used as a trial set of messages for a period of four years with no change. It was noted that four additional system-related messages were identified in Recommendation ITU-R M.1371 for the operation of the system.

The Sub-Committee on Safety of Navigation, at its fifty-fifth session (27 to 31 July 2009), after evaluating the use of binary messages in the trial period defined in SN/Circ.236, agreed on Guidance on the use of AIS Application-specific Messages, including messages which are recommended for international use.

The Maritime Safety Committee, at its eighty-seventh session (12 to 21 May 2010), concurred with the Sub-Committee's views and approved SN.1/Circ.289 on Guidance on the use of AIS Application-Specific Messages, revoking SN/Circ.236 as from 1 January 2013.

Action requested from ITU-R

The Maritime Safety Committee invites ITU-R to incorporate AIS Application-Specific messages as given in SN.1/Circ.289, as deemed appropriate, within their existing technical recommendations; and, if needed, to develop technical clarifications as necessary to promote the harmonization, collection, integration, exchange and presentation of the content of these messages by AIS devices and other navigation and communication equipment. Manufacturers intending to implement these messages into navigation-related equipment should take such relevant clarifying guidance into consideration.

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ANNEX 11

DRAFT RESOLUTION A.[...](27)

ON

WORLD-WIDE RADIONAVIGATION SYSTEM

THE ASSEMBLY,

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

RECALLING ALSO resolution A.815(19) by which it adopted, as the IMO policy on the recognition and acceptance of suitable radionavigation systems intended for international use, the Report on the Study of a World-wide Radionavigation System annexed to that resolution,

RECOGNIZING the need for a world-wide radionavigation system to provide ships with navigational position-fixing throughout the world,

RECOGNIZING ALSO the need to amend the aforementioned Report on the Study of a World-Wide Radionavigation System,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its [eighty-eighth] session,

1. ADOPTS, as the IMO policy for the recognition and acceptance of suitable radionavigation systems intended for international use, the revised Report on the Study of a World-wide Radionavigation System, set out in the Annex to the present resolution;

2. INVITES Governments to keep the Organization informed of the operational development of any suitable radionavigation systems conforming to the policy referred to above, which might be considered by the Organization for use by ships world-wide;

3. INVITES ALSO Governments and organizations providing radionavigation systems to consent to recognition of these systems by IMO;

4. REQUESTS the Maritime Safety Committee to recognize systems conforming with the requirements set out in the annex to this resolution, and to publish information on such systems;

5. REQUESTS ALSO the Maritime Safety Committee to keep the aforesaid Report under review for adjustment as necessary;

6. REVOKES resolution A.953(23).

ANNEX

REVISED REPORT ON THE STUDY OF A WORLD-WIDE RADIONAVIGATION SYSTEM

1 INTRODUCTION

1.1 Studies on a world-wide radionavigation system have been taking place since 1983. These studies have provided a basis on which chapter V of the 1974 SOLAS Convention has been amended to include a requirement for ships to carry means of receiving transmissions from suitable radionavigation systems throughout their intended voyage.

1.2 The operational requirements for world-wide radionavigation systems are given in the appendix.

1.3 It is not considered feasible for IMO to fund a world-wide radionavigation system. Existing and planned systems which are being provided and operated by Governments or organizations have therefore been studied, in order to ascertain the conditions under which such systems might be recognized or accepted by IMO.

2 PROCEDURES AND RESPONSIBILITIES CONCERNING THE RECOGNITION OF SYSTEMS

2.1 Procedures and functions of IMO

2.1.1 The recognition by IMO of a radionavigation system would mean that the Organization recognizes that the system is capable of providing adequate position information within its coverage area and that the carriage of receiving equipment for use with the system satisfies the relevant requirements of the 1974 SOLAS Convention, as amended.

2.1.2 IMO should not recognize a radionavigation system without the consent of the Government or organization which has provided and is operating the system.

2.1.3 In deciding whether or not to recognize a radionavigation system, IMO should consider whether:

.1 the Government or organization providing and operating the system has stated formally that the system is operational and available for use by merchant shipping;

.2 its continued provision is assured;

.3 it is capable of providing position information within the coverage area declared by the Government or organization operating and providing the system with a performance not less than that given in the appendix;

.4 adequate arrangements have been made for publication of the characteristics and parameters of the system and of its status, including amendments, as necessary; and

.5 adequate arrangements have been made to protect the safety of navigation should it be necessary to introduce changes in the characteristics or parameters of the system that could adversely affect the performance of shipborne receiving equipment.

2.1.4 In deciding, in the light of any changes to a recognized system, whether the system should continue to be recognized, the criteria listed in paragraph 2.1.3 should be applied.

2.2 Responsibilities of Governments or organizations

2.2.1 The provision and operation of a radionavigation system is the responsibility of the Governments or organizations concerned.

2.2.2 Governments or organizations willing to have a radionavigation system recognized by IMO should formally notify IMO that the system is operational and available for use by merchant shipping. The Government or organization should also declare the coverage area of the system and provide as much other information as practicable to assist IMO in its consideration of the factors identified in paragraph 2.1.3.

2.2.3 Governments or organizations that have a system recognized by IMO should not allow changes to the operational characteristics of the system under which the system was recognized without notifying IMO (see resolution A.577(14)).

3 SHIPBORNE RECEIVING EQUIPMENT

3.1 To avoid the necessity of carrying more than one set of receiving equipment on a ship, the shipborne receiving equipment should be suitable for operating either with a world-wide radionavigation system, or with radionavigation systems which cover the area in which the ship trades.

3.2 Shipborne receiving equipment should conform to the relevant performance standards not inferior to those adopted by the Organization.

3.3 Radionavigation systems should make it possible for shipborne receiving equipment automatically to select the appropriate stations for determining the ship's position with the required performance.

3.4 Shipborne receiving equipment should be provided with at least one output* from which position information can be supplied in a standard form to other equipment.

* * *

* IEC publication 61162.

APPENDIX

OPERATIONAL REQUIREMENTS

1 INTRODUCTION

1.1 The operational requirements for a world-wide radionavigation system should be general in nature and capable of being met by a number of systems. All systems should be capable of being used by an unlimited number of ships.

1.2 The requirements may be met by individual radionavigation systems or by a combination of such systems.

1.3 The system is considered to be available when it provides the required integrity for the given accuracy level.

2 NAVIGATION IN OCEAN WATERS

2.1 Where a radionavigation system is used to assist in the navigation of ships in ocean waters, the system should provide positional information with an error not greater than 100 m with a probability of 95%. This degree of accuracy is suitable for purposes of general navigation and provision of position information in the GMDSS.

2.2 In view of the fact that merchant fleets operate world-wide, the information provided by a radionavigation system must be suitable for use for general navigation by ships engaged on international voyages in any ocean waters.

2.3 Taking into account the radio frequency environment, the coverage of the system should be adequate to provide position-fixing throughout this phase of navigation.

2.4 The radionavigation system should permit an update rate of the computed position data not less than once every 2 s.

2.5 Signal availability should exceed 99.8%.

2.6 An integrity warning of system malfunction, non-availability or discontinuity should be provided to users as soon as practicable by Maritime Safety Information (MSI) systems.

3 NAVIGATION IN HARBOUR ENTRANCES, HARBOUR APPROACHES AND COASTAL WATERS*

3.1 Where a radionavigation system is used to assist in the navigation of ships in such waters, the system should provide positional information with an error not greater than 10 m with a probability of 95%.

3.2 Taking into account the radio frequency environment, the coverage of the system should be adequate to provide position-fixing throughout this phase of navigation.

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* SOLAS regulation V/13 requires each contracting Government to provide, as it deems practical and necessary either individually or in co-operation with other contracting Governments, such aids to navigation as the volume of traffic justifies and the degree of risk requires.

3.3 The radionavigation system should permit an update rate of the computed position data not less than once every 2 s**.

3.4 Signal availability should exceed 99.8%.

3.5 When the system is available, the service continuity should be ≥99.97% over a period of 15 minutes.

3.6 An integrity warning of system malfunction, non-availability or discontinuity should be provided to users within 10 s.

3.7 The system shall be considered available when it provides the required integrity for the given accuracy level.

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** This applies to the computed and displayed position data, but not to the update rate of any correction data, which may remain valid for 30 s or more.

ANNEX 12

BIENNIAL AGENDA AND POST-BIENNIAL AGENDA ITEMS ASSIGNED TO THE NAV SUB-COMMITTEE

BIENNIAL AGENDA*

SUB-COMMITTEE ON SAFETY OF NAVIGATION (NAV)					
PLANNED OUTPUTS 2010-2011 (resolution A.1012(26))		Parent organ(s)	Coordinating organ(s)	Involved organ(s)	Target completion year
Number	Description				
1.1.2.2	**Consideration of IACS unified interpretations**	MSC	NAV		Ongoing
1.1.2.10	**Radiocommunication ITU-R Study Group matters**	MSC	NAV		2011
1.1.2.17	**ITU matters**	MSC	NAV		Ongoing
~~5.1.1.7~~	~~Safety provisions applicable to tenders operating from passenger ships~~	~~MSC~~	~~DE~~	~~FP, COMSAR, NAV, SLF and STW~~	~~2011~~
~~5.2.2.3~~	~~**Review of the principles for establishing the safe manning level of ships including mandatory requirements for determining safe manning**~~	~~MSC~~	~~NAV~~	~~STW~~	~~2010~~
5.2.4.1	**Routeing of ships, ship reporting and related matters**	MSC	NAV		Ongoing
~~5.2.4.2~~	~~**Amendments to the 1966 LL Convention and the 1988 LL Protocol related to seasonal zone (coordinated by SLF)**~~	~~MSC~~	~~SLF~~	~~NAV~~	~~2011~~
~~5.2.4.3~~	~~**Amendments to the World-wide Radionavigation System**~~	~~MSC~~	~~NAV~~		~~2011~~
~~5.2.4.6~~	~~**Guidelines on the layout and ergonomic design of safety centres on passenger ships**~~	~~MSC~~	~~FP~~	~~NAV~~	~~2010~~
5.2.4.9	**Review of vague expressions in SOLAS regulation V/22**	MSC	NAV		2011

* Outputs printed in bold letters have been selected for the provisional agenda for NAV 57. Strike-outs indicate proposed deletions and shaded text indicates proposed additions.

SUB-COMMITTEE ON SAFETY OF NAVIGATION (NAV)					
PLANNED OUTPUTS 2010-2011 (resolution A.1012(26))		Parent organ(s)	Coordinating organ(s)	Involved organ(s)	Target completion year
Number	Description				
5.2.4.11	**Amendments to the Performance standards for VDR and S-VDR**	MSC	NAV		2011
~~5.2.4.12~~	~~**Guidelines for consideration of requests for safety zones larger than 500 metres around artificial islands, installations and structures in the EEZ**~~	~~MSC~~	~~NAV~~		~~2010~~
5.2.4.13	**New symbols for AIS aids to navigation**	MSC	NAV		2013
~~5.2.5.8~~	~~**Development of procedures for updating shipborne navigation and communication equipment**~~	~~MSC~~	~~NAV~~	~~COMSAR~~	~~2010~~
5.2.6.1	**Development of an e-navigation strategy implementation plan**	MSC	NAV	COMSAR STW	2012
12.1.2.2	**Casualty analysis**	MSC	FSI	NAV	Ongoing

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ANNEX 13

DRAFT PROVISIONAL AGENDA FOR NAV 57*

	Opening of the session
1	Adoption of the agenda
2	Decisions of other IMO bodies
3	Routeing of ships, ship reporting and related matters
4	Amendments to the Performance standards for VDR and S-VDR
5	ITU matters, including Radiocommunication ITU-R Study Group matters
6	Development of an e-navigation strategy implementation plan
7	Review of vague expressions in SOLAS regulation V/22
8	New symbols for AIS aids to navigation
9	Casualty analysis
10	Consideration of IACS unified interpretations
11	Biennial agenda and provisional agenda for NAV 58
12	Election of Chairman and Vice-Chairman for 2012
13	Any other business
14	Report to the Maritime Safety Committee

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* Agenda item numbers do not indicate priorities.

ANNEX 14

REPORT ON THE STATUS OF PLANNED OUTPUTS FOR THE NAV SUB-COMMITTEE

Planned output number in the HLA Plan for 2010-2011	Description[a]	Target completion year[b]	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1[c]	Status of output for Year 2[c]	References[d]
1.1.2.2	Consideration of IACS unified interpretations	Ongoing	MSC	NAV		Ongoing		MSC 78/26, paragraph 22.12; NAV 56/20, section 16
1.1.2.10	Radiocommunication ITU-R Study Group matters	2011	MSC	NAV		Ongoing		MSC 69/22, paragraphs 5.69 and 5.70; NAV 56/20, section 7
1.1.2.17	ITU matters	Ongoing	MSC	NAV		Ongoing		MSC 69/22, paragraphs 5.69 and 5.70; NAV 56/20, section 7
5.1.1.7	Safety provisions applicable to tenders operating from passenger ships	2011	MSC	DE	FP, COMSAR, NAV, SLF and STW	Completed		MSC 84/24, paragraph 22.40; NAV 56/20, section 19
5.2.2.3	Review of the principles for establishing the safe manning level of ships including mandatory requirements for determining safe manning	2010	MSC	STW	NAV	Completed		MSC 81/25, paragraphs 23.58 to 23.60; STW 40/14, section 8; MSC 86/26, paragraphs 9.10 and 23.24; STW 41/16, section 8; NAV 56/20, section 13

Planned output number in the HLA Plan for 2010-2011	Description[a]	Target completion year[b]	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1[c]	Status of output for Year 2[c]	References[d]
5.2.4.1	Routeing of ships, ship reporting and related matters	Ongoing	MSC	NAV		Ongoing		MSC 72/23, paragraphs 10.69 to 10.71, 20.41 and 20.42; NAV 56/20, section 3
5.2.4.2	Amendments to the 1966 LL Convention and the 1988 LL Protocol related to seasonal zone (coordinated by SLF)	2011	MSC	SLF		Completed		MSC 86/26, paragraphs 23.25 and 23.44; SLF 52/19, section 18; NAV 56/20, section 14
5.2.4.3	Amendments to the World-wide Radionavigation System	2011	MSC	NAV		Completed		MSC 86/26, paragraph 23.28; NAV 56/20, section 12
5.2.4.6	Guidelines on the layout and ergonomic design of safety centres on passenger ships	2010	MSC	NAV		Completed		MSC 81/25, paragraph 23.42; NAV 56/20, section 9
5.2.4.9	Review of vague expressions in SOLAS regulation V/22	2010	MSC	NAV		Completed		MSC 82/24, paragraphs 21.39 and 21.40; NAV 56/20, section 10
5.2.4.11	Amendments to the Performance standards for VDR and S-VDR	2011	MSC	NAV		Ongoing		MSC 83/28, paragraph 25.34; MSC 84/24, paragraph 22.43; NAV 56/20, section 5

Planned output number in the HLA Plan for 2010-2011	Description[a]	Target completion year[b]	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1[c]	Status of output for Year 2[c]	References[d]
5.2.4.12	Guidelines for consideration of requests for safety zones larger than 500 metres around artificial islands, installations and structures in the EEZ	2010	MSC	NAV		Completed		MSC 84/24, paragraph 22.41; NAV 56/20, section 4
5.2.4.13	New symbols for AIS aids to navigation	2013	MSC	NAV		Ongoing		MSC 86/26, paragraph 23.27; NAV 56/20, section 11
5.2.5.8	Development of procedures for updating shipborne navigation and communication equipment	2010	MSC	NAV	COMSAR	Completed		MSC 83/28, paragraph 25.33; NAV 56/20, section 6
5.2.6.1	Development of an e-navigation strategy implementation plan	2012	MSC	NAV	COMSAR STW	Ongoing		MSC 81/25, paragraphs 23.34 to 23.37; NAV 56/20, section 8
12.1.2.2	Casualty analysis	Ongoing	MSC	FSI		Ongoing		MSC 70/23, paragraphs 9.17 and 20.4; NAV 56/20, section 15

Notes:

a When individual outputs contain multiple deliverables, the format should report on each individual deliverable.

b The target completion date should be specified as a year, or indicate that the item is continuous. This should not indicate a number of sessions.

c The entries under the "Status of output" columns are to be classified as follows:

- "completed" signifies that the outputs in question have been duly finalized;
- "in progress" signifies that work on the related outputs has been progressed;
- "ongoing" signifies that the outputs relate to work of the respective IMO organs that is a permanent or continuous task; and
- "postponed" signifies the respective IMO organ has decided to defer the production of relevant outputs to another time.

d If the output consists of the adoption/approval of an instrument (e.g., resolution, circular, etc.), that instrument should be clearly referenced in this column.

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ANNEX 15

PROPOSED OUTPUTS FOR THE 2012-2013 BIENNIUM IN SMART TERMS

2012-2013 BIENNIAL AGENDA

SUB-COMMITTEE ON SAFETY OF NAVIGATION (NAV)					
PLANNED OUTPUTS 2012-2013 (resolution A.[...](27))		Parent organ(s)	Coordinating organ(s)	Involved organ(s)	Target completion year
Number*	Description				
1.1.2.2	Consideration of IACS unified interpretations	MSC		NAV	Ongoing
1.1.2.10	Consideration of various Radiocommunication ITU-R Study Group matters	MSC	NAV	COMSAR	Ongoing
1.1.2.17	Preparation of liasion statements on ITU matters	MSC	NAV	COMSAR	Ongoing
5.2.4.1	Consideration of proposals relating to establishment of routeing of ships, ship reporting and related matters	MSC	NAV		Ongoing
5.2.4.13	Development of new symbols for AIS aids to navigation	MSC	NAV		2013
5.2.6.1	Development of an e-navigation strategy implementation plan	MSC	NAV	COMSAR STW	2012
12.1.2.2	Casualty analysis	MSC	FSI		Ongoing

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* Numbers refer to the planned outputs for the 2010-2011 Biennium.

ANNEX 16

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DEGREE OF RISK EVALUATION

1 The Maritime Safety Committee, at its [eighty-eighth session (24 November to 3 December 2010)], at the request of IALA and with a view to improving the safety of navigation, approved the circulation of the details relating to the IALA Risk management Tool for Ports and Restricted Waterways, which provides guidance to Member Governments to assess the risk of collisions and groundings along their coasts and when planning to implement new measures to minimize the risks of coastal maritime traffic.

2 Member Governments are invited to bring the information in the annexed Guidance to the attention of all concerned.

* * *

ANNEX

1 Chapter 5 of the SOLAS Convention, 1974, as amended, regulation 13, requests the Contracting Governments to provide such marine aids to navigation, as the volume of traffic justifies and the degree of risk requires. Similarly, regulation 12 of chapter 5 also demands Contracting Governments to arrange for the establishment of VTS where, in their opinion, the volume of traffic or the degree of risk justifies such services. In both cases, IMO refers to IALA Recommendations and Guidelines.

2 Until recently, it was difficult for coastal States to get a clear view and a good knowledge of the maritime traffic along their coasts. The implementation of AIS on SOLAS ships has drastically changed the situation and, today, it is easy and cheap for every coastal States to have access to AIS data and to build an actual image of the coastal traffic, at least for SOLAS ships.

3 In the meantime, taking into account of advances of digital technology, IALA has developed different tools to assist IALA Members to assess the risk along their coasts and to answer the SOLAS chapter 5 requirements. The tools, which can also be used to justify and validate any proposed requests of routeing measures (chapter 5, regulation 11), or mandatory ships reporting system (chapter 5, regulation 12), are based on the following techniques:

- The Geographic Information System (GIS), providing authorities with vessel tracks selected using specific criteria (type, draught, etc.) giving graphical presentation of actual vessel activity for a given waterway and in relation to an aid to navigation, including VTS;

- The computer simulation technique for planning of aids to navigation and VTS in a specific waterway, channel or port area offers a method to help ensure that aids to navigation are appropriate and cost effective; and

- The IALA Risk Management Tool for Ports and Restricted Waterways, with its two components, the PAWSA tool (a qualitative model) and the IWRAP Mk2[1] tool (a quantitative model), which allows an authority to measure and quantify the risks of collisions and groundings in any waterways.

4 These tools are described in the following IALA Recommendations and Guidelines:

- O-138: IALA Recommendation on the Use of GIS and Simulation by Aids to Navigation Authorities (December 2007)

- O-134: IALA Recommendation on the Risk Management Tool for Ports and Restricted Waterways (May 2009 – Ed.2)

- 1057: IALA Guideline on the use of GIS by Aids to Navigation Authorities (December 2007)

- 1058: IALA Guideline on the use of Simulation as a Tool for Waterway Design and Aids to Navigation Planning (December 2007).

[1] The IWRAP Mk2 tool has now replaced the IWRAP tool. It has been recently validated by the IALA Council.

5 All the documents are available free of charge on the IALA website – www.iala-aism.org. Two manuals – the NAVGUIDE and the VTS Manual – are also available from the IALA Secretariat (20ter rue Schnapper – 78100 St Germain-en-Laye, France), e-mail: iala-aism@wanadoo.fr.

6 The Authorities responsible for the safety of navigation are encouraged to use the tools described in the present circular to assess the risks of collisions and groundings along their coasts and when they plan to implement new measures to minimize the risk of coastal maritime traffic.