

## **IMO SUB-COMMITTEE ON NAVIGATION, COMMUNICATIONS AND SEARCH AND RESCUE, 10<sup>TH</sup> SESSION 10 – 19 MAY 2023**

The IMO Sub-Committee on Navigation, Communications and Search and Rescue held its 10<sup>th</sup> Session, in hybrid form, from Wednesday 10 through Friday 19 May 2023 under the chairmanship of Mr Nigel Clifford (New Zealand), assisted by Vice-Chair, Mr Alexander Schwarz (Germany), both of whom were re-elected for 2024. The meeting was attended by representatives from Member States, Associate Members, Intergovernmental organisations and Non-Governmental organisations. The hybrid meeting of physical attendees and others on-line, was conducted in a format maximising the many technical skills available; the first three daily sessions were spent in plenary discussing all agenda items followed by a further four daily working sessions which permitted delegates to attend the various Working, Expert and Drafting Groups. A final day's session of plenary enabled the Sub-Committee to examine the recommendations of each Group leading to approval of the final meeting report for submission to the Marine Safety Committee.

The Agenda for the meeting was as follows, noting that items in red type only, are described in a fair amount of detail.

- 1 Adoption of the agenda (page 4)
- 2 Decisions of other IMO bodies (page 4)
- 3 Routeing measures and mandatory ship reporting systems (page 5)
- 4 Updates to the LRIT system (page 6)
- 5 Development of generic performance standards for shipborne satellite navigation system receiver equipment (page 6)
- 6 Development of amendments to SOLAS chapters IV and V and performance standards and guidelines to introduce VHF data exchange system (VDES) (page 6)
- 7 Descriptions of Maritime Services in the context of e-navigation (page 7)
- 8 Development of performance standards for a digital navigational data system (NAVDAT) (pages 7/8)
- 9 Amendments to ECDIS Performance Standards (resolution MSC.530(106)) to facilitate a standardised digital exchange of ships' route plans (page 9)
- 10 Developments in GMDSS services, including guidelines on maritime safety information (MSI) (pages 9/14)

- 11 Revision of the *Criteria for provision of mobile satellite communication services in the Global Maritime Distress and Safety System (GMDSS)* (resolution A.1001(25)) (pages 14/15)
- 12 Response to matters related to the ITU-R Study Groups and ITU World Radiocommunication Conference (pages15/16)
- 13 Development of global maritime SAR services, including harmonisation of maritime and aeronautical procedures (pages16/17)
- 14 Amendments to the IAMSAR Manual (pages 17/18)
- 15 Development of amendments to VDR performance standards and carriage requirements (page 18)
- 16 Revision of SOLAS regulation V/23 and associated instruments to improve the safety of pilot transfer arrangements (page 18)
- 17 Unified interpretation of provisions of IMO safety, security, environment, facilitation, liability and compensation-related conventions (page 18)
- 18 Validated model training courses (pages 18/19)
- 19 Biennial status report and provisional agenda for NCSR 11 (page 19)
- 20 Election of Chair and Vice-Chair for 2024 (page 20)
- 21 Any other business (page 20/21)
- 22 Report to the Maritime Safety Committee (page 21)

Specialist delegates were split into three Working Groups (WGs), one Expert Group (EG), and one Drafting Group (DG), formed and chaired as follows:

WG 1: Communications, Mr. A. Schwarz (Germany).

WG 2: Navigation, Mr. J. Brouwers (Netherlands).

WG 3: Search and Rescue and other technical matters, Mr. S. Shepherd (Australia).

EG: Ships' Routing, Mr. G. Detweiler (United States).

DG: Review of Maritime Safety Information (MSI) Documentation and Model Courses, Mr. D. Wilson (New Zealand).

## **ADDRESS BY THE IMO SECRETARY-GENERAL.**

Mrs Heike Deggim, Director Maritime Safety Division, welcomed delegates to the tenth session of NCSR on behalf of the Secretary General. Referring to this year's World Maritime Day theme, "MARPOL at 50 – Our commitment goes on", she pointed out that it spotlights the prevention of pollution of the marine environment by ships from operational and accident causes.

Mrs Deggim expressed pleasure in announcing that a Global Conference of the IMO Women in Maritime Associations (WIMAs) will take place on 18 and 19 May in the IMO building. She also reminded delegates that the IMO Council at its 129<sup>th</sup> session in July, will be considering nominations for the 2023 IMO Awards for Exceptional Bravery at Sea. Turning to key issues for discussion/resolution at the meeting, one of the high-profile communications events of this year will be the ITU World Radiocommunication Conference scheduled to take place in December, for which this meeting will finalise the IMO position on relevant Conference agenda items relating to Maritime Services, for approval by MSC which meets next month.

Regarding digital momentum, new technologies and systems such as VHF Data Exchange and NAVDAT will be considered in additions to proposals concerning descriptions of Maritime Services in the context of e-navigation and amendments to ECDIS performance standards, all important steps towards the digital revolution in shipping.

The crucial role played by the Sub-Committee as the driving force behind GMDSS services was noted, as also was the progress made on revisions of the Iridium service manual and the Joint IMO/IHO/WMO Manual on Maritime Safety Information.

In her view, among other important issues to be dealt with at this session, would be:

- Revision of resolution A.1001(25) concerning the criteria for the recognition of mobile satellite services for use in the GMDSS;
- Proposals related to pilot transfer arrangements; and,
- Revision of model courses related to search and rescue.

Mrs Deggim concluded by wishing every success to the Sub-Committee in their impending deliberations.

## **SIGNIFICANT OUTCOMES OF THE MEETING.**

Following is a summary of outcomes achieved at the meeting. Items in red type above are summarised in detail but if further information is required, email [paddy@intermanager.org](mailto:paddy@intermanager.org).

- Finalisation of draft SN Circular on the Pentland Firth;
- Agreement on the draft APMs in the NW Mediterranean PSSA;
- Successful overall performance of LRIT;
- Good progress with SOLAS amendments;
- Draft revision of Circular on Maritime Services in the context of e-navigation;
- Progress made in draft performance standards of NAVDAT;
- Amendments to ECDIS performance standards;
- Significant progress on MSI and SAR;
- SOLAS amendments to improve safety of pilot transfer;
- Validation of model courses;

- Revision of MSC circular on the Iridium Service Manual; and,
- Finalisation of the IMO position in IMRU relevant to maritime services and liaison statements.

## **1. ADOPTION OF THE AGENDA.**

The published agenda was duly adopted.

## **2. DECISIONS OF OTHER IMO BODIES.**

**General.** The Sub-Committee noted the decisions and comments pertaining to its work made by FAL 46, C 127, III 8, CCC 8, MSC 106, C 128 and MEPC 79, and took them into account when dealing with the relevant agenda items.

**Issues concerning the ongoing military conflict between the Russian Federation and Ukraine.** The Sub-Committee noted that MSC 106 adopted resolution MSC.519(106) on *Member States' obligations in connection with search and rescue services under the SOLAS and SAR Conventions in the context of armed conflicts.*

Two documents were submitted for consideration, one by Ukraine and the other, a commenting document by the Russian Federation. The Ukraine document commented, in particular, on impacts of the Russian Federation full-scale invasion of Ukraine on safety and security of navigation in the Black Sea, the Sea of Azov and the Kerch Strait originating from attacks and seizures of maritime rescue coordinating centres, NAVTEX coastal stations and lighthouses and abduction of their personnel, misusing of NAVTEX transmissions, interfering with SAR operations, maritime safety information (MSI) dissemination and aids to navigation and hydrographic services in the region.

For its part, the Russian Federation expressed the view that:

- .1 the issues raised were political in nature, contained unfounded allegations and should not be discussed by the Sub-Committee;
- .2 the issues raised were political in nature and contained unfounded allegations;
- .3 the Black Sea Grain Initiative is part of a larger package and all parts of the agreement need to be finally fulfilled; and,
- .4 IMO Member States were regularly informed that maritime safety and security in the sea areas along the Russian Federation coast were duly ensured, and that they complied with all relevant international regulations, including navigational and hydrographic support, including aids to navigation and SAR support.

The Sub-Committee noted statements by a large number of delegations commenting on the armed conflict and, in particular, its impact on international shipping.

In concluding, the Sub-Committee:

.1 recognised the importance of taking prompt actions to restore aids to navigation and navigational systems affected by armed conflicts;

.2 noted the support for the wide range of matters raised in document NCSR 10/2/1 (Ukraine) and taking into account the roles and responsibilities of NCSR from a technical perspective in regard to communications, navigation and search and rescue, encouraged the functioning of key navigational aids and systems to be protected at all times, particularly during any conflict situation in order to guarantee the safety of international shipping and protect the lives of seafarers; and;

.3 in regard to specific concerns and issues related to the current armed conflict impacting shipping in the northern part of the Black Sea, the Sea of Azov and the Kerch Strait, invited detailed proposals for consideration by relevant IMO bodies.

### **3. ROUTEING MEASURES AND MANDATORY SHIP REPORTING SYSTEMS.**

The Experts Group on Ships' Routeing, taking into account comments, decisions and proposals made in plenary, was duly formed and reported back to the Sub-Committee which approved its report in general, and in particular:

.1 agreed the draft SN circular on Recognition of ship reporting system in the Pentland Firth (PENTREP), with a view to approval by MSC 108, for implementation six months after its approval;

.2 regarding the proposed associated protective measures (APM) within a particularly sensitive sea area in the North-Western Mediterranean Sea:

.1 noted the discussion and review of the Group, and agreed to the draft APMs, with a view to being included in the final MEPC resolution on the designation of NW Med PSSA to be considered by MEPC;

.2 endorsed the Group's views on the next steps requested of the Committees, and, in particular:

.1 invited MSC 107, as an urgent matter, to agree that the above-mentioned APMs could be directly referred to MEPC 80, taking into account their general nature aiming at information-sharing primarily for contributing to the protection of the marine environment and recognised that the Sub-Committee was already an associated organ of output 4.1 "Identification and protection of Special Areas, Emission Control Areas and PSSAs and associated protective measures";

.2 invited MEPC 80 to consider the agreed APMs as an urgent matter, given the proximity of the Committee's meeting, and the compelling need and urgency for the designation of the PSSA; and,

.3 requested the Secretariat to take the necessary action to facilitate the consultation of the Chair of the Sub-Committee with the Chairs of MSC 107 and MEPC 80 for the approval of the contemplated action.

.3 regarding the workload of the Sub-Committee on ships' routing and ship reporting systems:

.1 noted the discussion and recommendations of the Group, with a view to taking action considering the availability of resources, as appropriate; and,

.2 invited relevant submissions to NCSR 11 for consideration.

#### **4. UPDATES TO THE LRIT SYSTEM.**

**Developments on LRIT since NCSR 9.** The Sub-Committee considered document NCSR 10/4 (Secretariat) on relevant developments on LRIT since NCSR 9, including the functioning and operation of the LRIT Data Distribution Plan (DDP) server and the Information Distribution Facility (IDF), the renewal of Public Key Infrastructure (PKI) certificates, the testing and establishment of LRIT Data Centres (DCs) and the outcomes of the periodical meetings of the LRIT Operational Governance body (OGB).

#### **Performance of the LRIT system and recommendations by the LRIT Coordinator.**

Having considered document NCSR 10/4/1 (IMSO), including an oral update provided by the observer from IMSO, related to the LRIT system between 1 January 2022 and 31 January 2023, including recommendations to improve efficiency, effectiveness and security of the system, the Sub-Committee noted that the overall performance of the LRIT system was found successful during the reporting period.

**Scale of charges to be levied by the LRIT Coordinator during 2023.** The Sub-Committee noted the information provided in document NCSR 10/INF.11 (IMSO) on the scale of charges to be levied by the LRIT Coordinator during 2023.

#### **5. DEVELOPMENT OF GENERIC PERFORMANCE STANDARDS FOR SHIPBORNE SATELLITE NAVIGATION SYSTEM RECEIVER EQUIPMENT.**

Document NCSR 9/5 (Germany) containing the report of the Correspondence Group and commenting document NCSR 9/5/1 (United States) were considered and referred to the WG on Navigation. In considering the relevant item of the WG's report, the Sub-Committee noted the Group's considerations concerning the development of generic performance standards for shipborne satellite navigation system receiver equipment and invited the Committee to extend the target completion year of the associated output to 2024. It also agreed with the proposed alteration to the scope of the output to develop a draft recommendation on generic performance standards for shipborne satellite navigation system receiver equipment. A correspondence group on the development, under the coordination of Germany with draft terms of reference was approved.

## **6. DEVELOPMENT OF AMENDMENTS TO SOLAS CHAPTERS IV AND V AND PERFORMANCE STANDARDS AND GUIDELINES TO INTRODUCE VHF DATA EXCHANGE SYSTEM (VDES).**

Two documents were submitted on this item, NCSR 10/6 (Japan) providing proposals for the introduction of VDES into the 1974 SOLAS Convention, including preliminary draft performance standards for shipborne VDES and draft terms of reference for a correspondence group. NCSR 10/6/1 (China), commenting on document NCSR 10/6, proposing modifications to the preliminary draft performance standards for shipborne VDES. Following discussion, having generally agreed that priority should be given to the development of amendments to SOLAS chapter V, the Sub-Committee referred the matter to the Working Group on Navigation for further consideration and advice.

The Sub-Committee noted the Group's considerations on the development of amendments to SOLAS chapters IV and V and performance standards and guidelines to introduce VHF data exchange system (VDES); agreed to the establishment of a correspondence group on VHF data exchange system (VDES), under the coordination of Japan; and approved its draft terms of reference.

## **7. CONSIDERATION OF DESCRIPTIONS OF MARITIME SERVICES IN THE CONTEXT OF E-NAVIGATION.**

**Harmonisation of identifiers in the maritime domain.** The Sub-Committee noted the information provided in document NCSR 10/7 (IALA) highlighting the need for harmonisation of identifiers in the maritime domain using maritime resource names and encouraging maritime stakeholders, including IMO Member States, to apply maritime resource names in areas of their own domains.

**Revision of the initial descriptions of Maritime Services in the context of e-navigation.** The Sub-Committee noted that FAL 46 and FAL 47, having reviewed the description of Maritime Services from the FAL perspective, had approved revised descriptions of Maritime Services 4 (Port support service), 7 (Tug service), 8 (Vessel shore reporting) and 10 (Maritime assistance service) and had agreed that no changes to the initial description of Maritime Service 6 (Pilotage service) were required. Three documents were submitted, NCSR 10/7/1 (IALA), also NCSR 10/7/2 and NCSR 10/7/3 (WMO), all of which were referred to the WG on Navigation.

**Report of the Working Group.** Having considered the relevant part of the Working Group's report, the Sub-Committee:

.1 noted the Group's considerations on the review of the descriptions of maritime services in the context of e-navigation; agreed to the draft revision of MSC.1/Circ.1610; invited the FAL Committee to consider and endorse the proposed modifications to Maritime Service 8; and, invited MSC 108 to approve MSC.1/Circ.1610/Rev.1 on Descriptions of Maritime Services in the context of e-navigation, taking into account the outcome of the deliberations of the FAL Committee; and,

.2 invited the Committee to move the output "Consideration of descriptions of Maritime Services in the context of e-navigation" to the Committee's post-biennial agenda, in order to have the possibility to revisit it at a future session, as necessary, to review existing Maritime Services and/or include new ones.

## **8. DEVELOPMENT OF PERFORMANCE STANDARDS FOR A DIGITAL NAVIGATIONAL DATA SYSTEM (NAVDAT).**

The Sub-Committee considered document NCSR 10/8 (China et al.), presenting proposals to facilitate the introduction and use of NAVDAT in the GMDSS, including, inter alia, the first draft of performance standards for the reception of maritime safety information and search and rescue related information by MF and HF digital navigational data system (NAVDAT). Also, draft amendments to resolution MSC.509(105) with regard to criteria for use when providing a NAVDAT service, a draft NAVDAT Manual, and other related matters such as establishment of a coordination scheme for the implementation of NAVDAT, development of related amendments to MSI manuals and modifications to the GMDSS Master Plan module of GISIS to accommodate NAVDAT coast stations. In this context, the Sub-Committee also considered the related information in documents NCSR 10/10 (WMO), and NCSR 10/10/7 (IHO), inviting the Sub-Committee to consider under what body, coordination of NAVDAT should be undertaken, and whether a formal recognition process should be followed before NAVDAT could be used in the GMDSS, and if so, within what framework.

The Sub-Committee noted that the ITU World Radio Conference 2023, to be held from 20 November to 15 December 2023, was expected to consider the inclusion of the NAVDAT MF and HF frequencies into appendix 15 of the Radio Regulations to ensure their protection from harmful interference caused by other services and systems, which would be an important parameter to take into account when finalising the draft performance standards for NAVDAT.

During the ensuing discussion, concerns were expressed with regard to the implications of introducing NAVDAT, including carriage requirements, duplication of equipment, costs associated with shipborne equipment and shore-based stations, operational issues for dissemination of information and data formats supported.

Following discussion, the WG on Communications was instructed to consider the draft performance standards for the reception of maritime safety information and search and rescue related information by MF and HF digital navigational data system (NAVDAT) and the draft amendments to resolution MSC.509(105). Simultaneously, the WG on Search and Rescue and other Technical Matters was tasked to give preliminary consideration to the draft NAVDAT Manual, set out in document NCSR 10/8, annex 3, and to consider the proposals in paragraphs 7 to 9 of document NCSR 10/8 on the actions for the introduction of the NAVDAT system.

The Sub-Committee noted the considerations of the Communications WG with respect to development of the draft performance standards for NAVDAT and related draft amendments to resolution MSC.509(105) and instructed EG 19 to further develop both draft instruments, taking into account the comments and submissions at NCSR 10, for consideration at NCSR 11.



With respect to the SAR WG, the Sub-Committee:

- .1 noted the Group's preliminary consideration of the draft NAVDAT Manual;
- .2 endorsed the Group's conclusion that it would be premature to continue further review of the draft NAVDAT Manual set out in document NCSR 10/8, annex 3, at this stage;
- .3 endorsed the road map of elements to be considered for the introduction of the NAVDAT system in the future; and,
- .4 invited the Committee to determine whether the Organisation needs to develop a formal recognition framework for new terrestrial GMDSS services, such as NAVDAT, including consideration of implementation issues for shore-based facilities and cost issues.

## **9. AMENDMENTS TO ECDIS PERFORMANCE STANDARDS (RESOLUTION MSC.530(106)) TO FACILITATE A STANDARDISED DIGITAL EXCHANGE OF SHIPS' ROUTE PLANS.**

The Sub-Committee considered document NCSR 10/9 (Austria et al.), proposing draft amendments to the ECDIS performance standards to facilitate a standardised digital exchange of ships' route plans, including two documents commenting on the proposal. During the ensuing discussion, the delegations that took the floor supported in general the development of amendments to the ECDIS performance standards to facilitate a standardised digital exchange of ships' route plans and referred the two documents to the WG on Navigation for detailed consideration.

Commenting on the draft amendments to the ECDIS performance standards, views were expressed that additional guidance addressing operational aspects of the use of the proposed new functions should be developed to avoid unintended consequences, including those with regard to the overriding authority and responsibility of the master, the potential for over-reliance on a route plan originating from VTS by the navigating officers on the bridge, as well as the additional administrative burden that this exchange could cause to the bridge team. A view was also expressed that the radio link for exchange of such information was yet to be determined and that careful consideration should be given to avoid overloading the Automatic Identification System (AIS).

With regard to the proposal in document NCSR 10/9/2 to include also exchange of plans between ships, the Sub-Committee agreed that the function of ship-to-ship exchange of route plans should not be included in the proposed amendments to the ECDIS performance standards and referred it to the WG on Navigation.

**Report of the Working Group.** Having considered the relevant part of the WG's report, the Sub-Committee noted the Group's consideration on amendments to ECDIS performance standards and approved the draft revision of resolution MSC.530(106) on *Performance standards for electronic chart display and information systems (ECDIS)* with a view to adoption by the Committee.

## **10. DEVELOPMENTS IN GMDSS SERVICES, INCLUDING GUIDELINES ON MARITIME SAFETY INFORMATION (MSI).**

**GMDSS Master Plan.** The Sub-Committee recalled that the Master Plan of shore-based facilities for the GMDSS contains information communicated by SOLAS Contracting Governments to the Organisation, as required under SOLAS regulation IV/5, including inter alia, the status of facilities and the communication services provided for different sea areas. It was noted that the modifications to the GMDSS Master Plan agreed by NCSR 9 are still under development by the Secretariat, pending implementation.

**Report of the IMO NAVTEX Coordinating Panel.** The Sub-Committee considered document NCSR 10/10/9 (Chair of the IMO NAVTEX Coordinating Panel) providing a summary of the issues addressed by the IMO NAVTEX Coordinating Panel and its actions and activities since NCSR 9.

**Report of the IMO Enhanced Group Call Coordinating Panel.** Document NCSR 10/10/8 (Chair of the IMO Enhanced Group Call Coordinating Panel) provided a summary of the issues addressed by the IMO Enhanced Group Call Coordinating Panel and its actions and activities since NCSR 9. Brazil made a statement concerning the conclusion of agreements for the implementation of the Iridium SafetyCast service, expressing the view that there are still technical questions and cost issues to be addressed before a final decision can be taken with regard to the mandatory use of all recognised services by information providers. The Sub-Committee noted that significant concerns remain for many delegations over cost and interoperability issues due to the recognition of new mobile satellite services and with additional clarifications provided by the Chair of the Panel, the Sub-Committee noted the information contained in the Panel's report in general and:

.1 agreed that no additional Enhanced Group Call (EGC) certification should be required when contingency arrangements are established between METAREA and/or NAVAREA Coordinators;

.2 noted that all active SafetyNET certificates have been replaced by EGC certificates, as appropriate, and confirmed the revocation of all SafetyNET certificates, with immediate effect;

.3 noted that the Panel had urged MSI and SAR related information providers to conclude agreements with Iridium if they had not done so, and to progress their implementation of the Iridium SafetyCast service; and,

.4 noted that the Panel has set 1 July 2023 as the target deadline for METAREA and NAVAREA Coordinators, and SAR authorities, in receipt of EGC certificates, to conclude an agreement with Iridium as part of an implementation process and determine any necessary actions to be taken after that date to address gaps in coverage.

**Annual reports of recognised mobile satellite service providers.** The Sub-Committee noted the information provided in document NCSR 10/10/4 (IMSO) concerning the annual report on Inmarsat's public service obligations for the provision of recognised mobile satellite services in the GMDSS, as overseen by IMSO, covering the period from

1 January to 31 December 2022; and, in particular, IMSO's overall conclusion that, during the said period, Inmarsat had successfully provided the recognised maritime mobile satellite distress and safety communication services for GMDSS and fulfilled the company's public service obligation as stated in the Public Service Agreement.

**Report on the Cospas-Sarsat system.** The Sub-Committee noted the information provided in document NCSR 10/10/6 (Cospas-Sarsat) providing a status report on the Cospas-Sarsat system, including system operations, significant developments, space and ground segments, beacons, false alerts, incident reporting by rescue coordination centres and results of communication tests with SAR points of contact; and, in particular:

.1 invited Member States to continue to focus on improving the reliability in communications between Cospas-Sarsat mission control centres (MCCs) and their supported SAR points of contact (SPOCs) (usually rescue coordination centres (RCCs)) both during tests and for transmission of real distress alerts;

.2 encouraged Member States to support the work of the ICAO/IMO Joint Working Group on Harmonisation of Aeronautical and Maritime Search and Rescue to educate SAR authorities on satellite aided distress tracking, and to enter into agreements or understandings between SPOCs and their supporting MCCs; and,

.3 also encouraged Member States to participate in the informal Cospas-Sarsat correspondence working group considering matters related to two-way messaging with 406 MHz distress beacons.

In this regard, the Sub-Committee, noting that Cospas-Sarsat had declared in January 2023 its system effective at full operational capability for distress tracking emergency locator transmitters (ELT(DT)s) based on current signal technology, instructed the Working Group on Search and Rescue and Other Technical Matters to consider any further necessary actions by IMO.

**Worldwide Met-Ocean Information and Warning Service.** The Sub-Committee noted the information provided in document NCSR 10/10 (WMO) concerning the outcomes of the first session of the WMO Advisory Group on the Worldwide Met-Ocean Information and Warning Service (WWMIWS) Sub-Committee, held from 12 to 16 September 2022.

**World-Wide Navigational Warning Service.** The Sub-Committee noted the information provided in NCSR 10/10/7 (IHO) concerning the outcomes of the fourteenth session of the IHO World-Wide Navigational Warning Service (WWNWS) Sub-Committee, held from 12 to 16 September 2022.

**Draft revision of the Interim Iridium SafetyCast service manual.** The Sub-Committee agreed a draft revised MSC circular on Iridium SafetyCast service manual and recommended to the Committee an implementation date of 1 July 2023.

### **Draft revision of the Joint IMO/IHO/WMO Manual on Maritime Safety Information.**

The Sub-Committee agreed to a draft revised Joint IMO/IHO/WMO Manual on Maritime Safety Information, with a view to approval by MSC 108.

### **Report of the Correspondence Group on Dissemination of MSI and SAR related information.**

The Sub-Committee recalled the instructions issued to it by MSC 105 including technical solutions for the dissemination and reception of MSI and SAR-related information over multiple services, including interoperability issues and broadcast monitoring, also consideration of any necessary amendments to existing MSI-related instruments, including the SOLAS Convention and to further consider the cost options, identifying advantages and disadvantages. It was also recalled that NCSR 9, after consideration, had established a Correspondence Group on Dissemination of MSI and SAR-related Information, under the coordination of Australia, to continue to work intersessionally, and the Sub-Committee noted the outcome of the CG.

Following general discussion, the Sub-Committee considered the actions emanating from the report of the Correspondence Group under four main topics:

- .1 Technical solutions, including interoperability and interconnectivity issues and broadcast monitoring;
- .2 Amendments to existing instruments;
- .3 Revision of resolution A.707(17); and,
- .4 Options to address cost implications for MSI and SAR information providers.

### **Report of the Working Group on Search and Rescue and other Technical Matters.**

Having considered the part of the Working Group's report relevant to this item the Sub-Committee took action as follows:

- approved the draft revised guidance for search and rescue services regarding implementation of autonomous distress tracking (ADT) of aircraft in flight for dissemination as COMSAR.1/Circ.59/Rev.1, and invited the Committee to endorse;
- noted the Group's considerations on technical solutions concerning the dissemination and reception of MSI and SAR related information over multiple recognised mobile satellite services and, in particular, endorsed the Group's agreement that the implementation of an interoperable application programming interface (API) was a suitable technical approach;
- noted the Group's considerations on amendments to existing MSI related instruments to clarify the understanding of dissemination of information via EGC through all RMSSs, and, in particular:

.1 invited the Committee to provide clear instruction and guidance on whether information providers (i.e. NAVAREA and METAREA Coordinators and SAR services) are required to disseminate information through all recognised mobile satellite services:

(1). with immediate effect; or

(2). while the question regarding possible solutions for dissemination of information, including interoperability, and cost related implications is addressed simultaneously, after a specific date; or,

(3). only after the question regarding possible solutions for dissemination of information, including interoperability, and cost related implications is duly addressed;

.2 endorsed the Group's agreement that the proposed revision to MSC.1/Circ.1635 (NCSR 10/10/3, annex 3) should be subject to further policy consideration by the Committee and considered at a future session;

.3 invited IHO, as part of its review process of MSI-related documentation, to consider incorporating elements of resolution MSC.305(87) in relevant IMO instruments; and,

.4 endorsed the Group's agreement that there is currently no need to amend the instruments contained in document NCSR 10/10/3, annex 3 to clarify the understanding of dissemination of information via EGC through all RMSSs;

- noted the Group's considerations on the revision of resolution A.707(17) and, in particular:

.1 invited the Committee to confirm that the option to not raise a charge for the originator for distress communication, SAR coordination and medical assistance, would be the agreed way forward in terms of the scope of a revision to resolution A.707(17);

.2 endorsed the Group's view that it would not be necessary to liaise with the ITU-T Study Group 3 and ITU-R Working Party 5B, at this stage, to update them on the Organisation's revision of resolution A.707(17);

.3 invited the Committee to agree that the revision, approval and adoption of resolution A.707(17) and resolution A.1001(25) should be aligned; and,

.4 invited the Committee to agree that resolution A.707(17) should remain compatible with, and should not duplicate the requirements for, ship-to-shore distress and safety communications originating from a maritime mobile station in ITU-T Recommendation D.90

- noted the Group's discussion on the options to address cost implications for information providers and, in particular:
  - .1 noted the six policy elements (options), agreed by the Group, with their advantages and disadvantages;
  - .2 invited the Committee to:
    - .1 note that option 1, reflects the status quo, and was the starting point for the Committee's considerations with respect to its discussions to address cost implications for information providers regarding the dissemination of information through multiple RMSS; and,
    - .2 address cost implications for information providers regarding the dissemination of information through multiple RMSSs, taking into account the six policy elements (options);
    - .3 request the Secretariat to provide relevant information on existing IMO funds, how this funding was replenished, and the process for Member States (that provide NAVAREA and METAREA Coordinator function) to request assistance; and,
    - .4 invite Member States to provide the Committee with further information on the implementation approach for the elements (options);
- endorsed the progress report on matters concerning the dissemination and reception of MSI and SAR related information via multiple RMSSs and forward it to the Committee for its consideration;
- noted the Group's discussion on the IMO/ICAO technical cooperation activities related to search and rescue and, in particular:
  - .1 Asked the Committee to invite TCC to review resource allocation for search and rescue matters so that funds are available globally and regionally for capacity-building and training; and,
  - .2 requested the Secretariat to collaborate with the ICAO Secretariat, subject to respective internal procedures, to:
    - .1 coordinate the programming of future technical cooperation activities related to search and rescue; and,
    - .2 consider joint efforts in future technical cooperation activities to:
      - .1 realise efficiencies in resourcing and cost; and,

.2 improve the ability of States to make available their subject matter experts to assist with delivery and participation;

## **11. REVISION OF THE CRITERIA FOR THE PROVISION OF MOBILE SATELLITE COMMUNICATION SERVICES IN THE GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS) (RESOLUTION A.1001(25)).**

After a brief discussion in plenary, the Sub-Committee instructed the WG on Communications to consider the draft revision of resolution A.1001(25) on *Criteria for the provision of mobile satellite communication systems in the Global Maritime Distress and Safety System (GMDSS)*.

**Report of the Working Group on Communications.** Having considered the relevant part of the Working Group's report, the Sub-Committee:

Noted the consideration of the Group with respect to the revision of resolution A.1001(25); re-established the Correspondence Group on the Revision of Resolution A.1001(25) coordinated by France, to further progress this work intersessionally; and approved its terms of reference;

Endorsed the view of the Group that the coordinator of the Correspondence Group established on the Revision of resolution A.1001(25) should have the flexibility in line with Council guidelines to convene virtual meetings, as a complement to the usual email correspondence; and,

Invited the Committee to extend the target completion year of the output concerning the revision of resolution A.1001(25) on *Criteria for the provision of mobile satellite communication systems in the Global Maritime Distress and Safety System (GMDSS)* to 2024.

## **12. RESPONSE TO MATTERS RELATED TO THE ITU-R STUDY GROUPS AND ITU WORLD RADIOCOMMUNICATION CONFERENCE.**

The Sub-Committee considered the relevant parts of the report of the eighteenth meeting of the Joint IMO/ITU Experts Group on Maritime Radiocommunication Matters (EG 18).

Prior to handing over matters to the Communications Group for technical appraisal, the Sub-Committee discussed the following:

- Wireless power transmission systems;
- Finalisation of the IMO position on relevant ITU WRC-23 agenda items;
- Revision of Recommendation ITU-R M.1371-5;
- MMSI-encoding of EPIRBs carried on craft associated with a parent ship;

- Bridge alert management;
- Assignment of manufacturer IDs;
- Personal locator beacons with AIS locating capability; and,
- Date of the next meeting of the Joint IMO/ITU Experts Group, 9 to 13 October 2023.

**Report of the Working Group.** Having considered the relevant part of the Communications Working Group report, the Sub-Committee:

Noted the considerations by the Group on issues concerning the application of the concept of bridge alert management; approved the draft liaison statement to ITU-R WP 5B on Digital Selective Calling alarms and the Bridge Alert Management; requested the Secretariat to convey it to ITU; and, invited the Committee to endorse the action taken;

Noted considerations of the Group concerning resolution MSC.302(87) on Performance standards for bridge alert management and invited relevant proposals for a new output to the Committee;

Invited IEC to further study the questions regarding technical implementation of BAM according to IEC 62923-1, making use of communication in accordance with IEC 61162;

Noted the considerations of the Group with respect to the revision of Recommendation ITU-R M.1371-5; approved the draft liaison statement to ITU-R WP 5B on revision of Recommendation ITU-R M.1371-5; requested the Secretariat to convey it to ITU; and invited the Committee to endorse the action taken;

Noted the considerations of the Group on wireless power transmission systems; approved the draft liaison statement to ITU-R WP 5B on wireless power transmission systems; requested the Secretariat to convey it to ITU; and, invited the Committee to endorse the action taken;

Noted the considerations of the Group on the final IMO position on relevant WRC-23 agenda items concerning matters relating to Maritime Services; agreed to the final IMO position; and, invited MSC 107 to approve it for subsequent submission to the WRC-23;

Invited relevant proposals for a new output to MSC 108 in order to enable commencement of the necessary work on digital voice in VHF radiotelephony and VDES R-mode;

Invited MSC 107 to request the Secretariat that, when unforeseen proposals are submitted for consideration by WRC-23, to consult with IMO Member States present at WRC-23 whilst developing the IMO position, and to take appropriate action;

Noted the considerations of the Group on MMSI-encoding of EPIRBs carried on craft associated with a parent ship; approved the draft liaison statement to ITU-R WP 5B on MMSI-encoding of EPIRBs carried on craft associated with a parent ship; requested the



Secretariat to convey it to ITU; also, invited the Committee to endorse the action taken; and,

Approved the draft terms of reference for the nineteenth meeting of the Joint IMO/ITU Experts Group on Maritime Radiocommunication Matters having agreed that five days is sufficient.

### **13. DEVELOPMENT OF GLOBAL MARITIME SAR SERVICES, INCLUDING HARMONISATION OF MARITIME AND AERONAUTICAL PROCEDURES.**

**Global SAR Plan.** The Sub-Committee recalled that the Global SAR Plan, maintained as a GISIS module, held information on the availability of search and rescue (SAR) services, based on information provided by Member States, including, inter alia, information on Rescue Coordination Centres (RCCs), facilities available, means of communication and their areas of responsibility. Noting that many Member States have not yet updated the information concerning areas of responsibility, or SAR region, in Geography Markup Language (i.e. GML format), which is essential for the harmonisation and representation of SAR regions in electronic format, they were encouraged to keep the information on the Global SAR Plan updated and to verify that the areas of responsibility of RCCs are provided in the correct format. The Sub-Committee noted that the development of the modifications to Global SAR Plan agreed at NCSR 9 are still under development by the Secretariat and pending implementation.

Other matters discussed in plenary under this item included: the report of the twenty-ninth meeting of the ICAO/IMO Joint Working Group; the next meeting of the ICAO/IMO Joint Working Group; annual meetings of the ICAO/IMO Joint Working Group; and, an update on the implementation of Iridium's GMDSS SAR services.

**Report of the Working Group.** Having considered the relevant part of the SAR Working Group's report, the Sub-Committee took action as follows:

.1 instructed the thirtieth session of the ICAO/IMO Joint Working Group on Harmonisation of Aeronautical and Maritime Search and Rescue (JWG 30) to consider an interim analysis undertaken by the Secretariat, with the assistance of the United States, to map and review the SAR regions/boundaries contained in the GMDSS Master Plan of GISIS and make recommendations, as appropriate;

.2 instructed JWG 30 to compile, based on contributions, other sources of information on SAR regions/boundaries and RCC Point of Contact information;

.3 invited ICAO and Cospas-Sarsat to report to JWG 30 information on their data distribution systems and approach to addressing inconsistencies in SAR regions/boundaries, particularly with respect to implementation of the Location of an Aircraft in Distress Repository (LADR);

.4 instructed JWG 30 to review and advise on the naming conventions used by MRCCs, JRCCs and ARCCs and recommend a standardised international naming protocol; and,

.5 invited Member States to record their search and rescue regions in the GISIS module on Global SAR Plan and continue efforts to associate RCCs with the Iridium GMDSS service.

#### **14. AMENDMENTS TO THE IAMSAR MANUAL.**

The Sub-Committee, recalling that the IAMSAR Manual is revised under a three-year cycle and noting that the meeting of the JWG to be held later in 2023, will be finalising the amendments for inclusion in the 2025 edition, with a view to approval by NCSR 11, encouraged all member States to contribute to the work of the JWG, in particular, matters concerning amendments and updates to the Manual.

**15. DEVELOPMENT OF AMENDMENTS TO VDR PERFORMANCE STANDARDS AND CARRIAGE REQUIREMENTS.** Noting that no documents were received on this item at this session, the Sub-Committee will seek advice from the Committee with a view to deleting this output from the biennial agenda of the Sub-Committee.

#### **16. REVISION OF SOLAS REGULATION V/23 AND ASSOCIATED INSTRUMENTS TO IMPROVE THE SAFETY OF PILOT TRANSFER ARRANGEMENTS.**

The Sub-Committee had four submissions on this item, all of which were introduced in plenary and after consideration, documents NCSR 10/16, NCSR 10/16/1, NCSR 10/16/2 and NCSR 10/16/3 were referred to the Working Group on Navigation for consideration and advice, including comments emanating from III 8.

**Report of the Working Group.** Having considered the relevant part of the Navigation Working Group's report, the Sub-Committee endorsed the Group's agreement on the revision of SOLAS regulation V/23 and associated instruments, developing performance standards of a mandatory nature by reference under the regulation; agreed to the establishment of a correspondence group on pilot transfer arrangements under the coordination of China, and approved its draft terms of reference.

**17. UNIFIED INTERPRETATION OF PROVISIONS OF IMO SAFETY, SECURITY, ENVIRONMENT, FACILITATION, LIABILITY AND COMPENSATION-RELATED CONVENTIONS.** The Sub-Committee noted that no documents had been submitted under this agenda item to this session.

#### **18. VALIDATED MODEL TRAINING COURSES.**

**Validation of Model Courses 3.13 and 3.15.** The Sub-Committee recalled that NCSR 6 had agreed to initiate a review of Model Courses 3.13 on SAR Administration (IAMSAR Manual Volume I) and 3.15 on SAR On-scene Coordinator (IAMSAR Manual Volume III), with a view to validation by NCSR 8 and that NCSR 9 had noted that, due to delays caused by the pandemic, the review of these Model Courses could not be finalised.

Four submissions were considered, following which the Sub-Committee validated:

- .1 Model Course 3.13 on SAR Administration (IAMSAR Manual Volume I); and
- .2 Model Course 3.15 on SAR On-scene Coordinator (IAMSAR Manual Volume III).

**Review process for SAR related model courses.** Noting the recommendations of the Joint Working Group with regard to the review process of SAR related Model Courses, namely 3.13, 3.14 and 3.15, the Sub-Committee agreed to:

- .1 retain the six-year review cycle of IMO Model Courses 3.13, 3.14 and 3.15, in order to maintain alignment with the updates to the IAMSAR Manual; and,
- .2 review the three Model Courses in separate two-year intervals, starting with Model Course 3.14 in 2026, followed by Model Courses 3.15 in 2028 and 3.13 in 2030.

**Review of model course 3.14.** The Sub-Committee agreed to initiate the review of Model Course 3.14 on SAR Mission Coordinator (IAMSAR Manual, Volume II) at this session and instructed the Working Group on Search and Rescue and Other Technical Matters to develop draft terms of reference for its review.

**Review of model course 3.08.** Model Course 3.08 on Survey of Navigational Aids and Equipment, was last reviewed and published in 2004 and, as indicated in the course framework "the scope of the course was concerned with verification of compliance with the requirements of IMO conventions regarding the safety of ships, navigation and life at sea, covering the requirements for the initial, annual, intermediate and periodical surveys, as specified by SOLAS and related documents". Noting that the *Survey Guidelines under the Harmonised System of Survey and Certification (HSSC), 2021* (resolution A.1156(32)) might adequately cover some of the elements provided in Model Course 3.08, the Sub-Committee agreed to discontinue it and invited the Committee to endorse this action.

**Report of the Working Group.** Having considered the relevant part of the Working Group's report, the Sub Committee:

- .1 approved the draft terms of reference for the revision of model course 3.14 on SAR Mission Coordinator (IAMSAR Manual, Volume II);
- .2 established a review group for the revision of model course 3.14;
- .3 considered the offers, with appreciation, from the United States as course developer and the United Kingdom as coordinator of the review group; and,
- .4 noted the Group's discussion on safety issues resulting in man overboard from fishing vessels and, in particular:
  - .1 instructed JWG 30 to further discuss safety issues resulting in man overboard from vessels in relation to the use of PFDs; and,

.2 referred the views expressed in paragraph 58 of the Group's report to the III Sub-Committee for consideration.

## **19. BIENNIAL STATUS REPORT AND PROVISIONAL AGENDA FOR NCSR 11.**

Under this item, the Sub-Committee prepared: its Biennial status report for the 2022-2023 biennium; proposed biennial agenda for the 2024-2025 biennium; a proposed agenda for NCSR 11; arrangements for working, experts and drafting groups during the next session; correspondence groups established at this session; review groups for model courses, intersessional meetings, and date of the next session, tentatively scheduled to take place from 4 to 13 June 2024.

**20. ELECTION OF CHAIR AND VICE-CHAIR FOR 2024.** As already stated, the incumbents of both Chairs were re-elected.

## **21. ANY OTHER BUSINESS.**

A number of matters were referred to the Working Groups on Navigation and Communication. These included: Guidance to the Auditor's Manual for the IMO Member State Audit Scheme; unlawful practices associated with the fraudulent registration and registries of ships; holistic approach to the human element; requests from III 8 concerning the safety of fishing vessels; requests from CCC 8 on reporting of lost/observed containers; also, updates on IEC standards and the associated impact on the availability of certain GMDSS radio equipment.

**Report on AOB matters referred to the Navigation Working Group.** Having considered the relevant part of the Working Group's report, the Sub-Committee:

.1 noted the discussion of the Group on possible ways to enhance information security of AIS signals, making it more resilient and reliable, including potential amendments to identified IMO instruments;

.2 agreed to invite ITU and IEC to review their respective instruments relating to specifications of AIS in order to prevent AIS spoofing;

.3 noted the view of the Group that the Sub-Committee should further explore ways which could provide the enhancement of information security of AIS signals and invited interested Member States and organisations to consider submitting proposals for new outputs, as a matter of urgency;

.4 noted the Group's consideration of the technical contents in the draft text of the guidance material set out in the annex to document NCSR 10/21 and requested the Secretariat to forward it to III 9 for consideration of inclusion in the draft III Code Implementation Guidance;

.5 noted the discussion of the Group on the direct relevance of the human element to the NCSR Sub-Committee, taking into account, inter alia, responsibility regarding the safe manning of ships, and the need for a holistic approach to address the issue.

**Report on AOB matters referred to the Communications Working Group.** Having considered the relevant part of the Working Group's report, the Sub-Committee:

.1 approved the draft modifications to COMSAR/Circ.32/Rev.1 on *Harmonisation of GMDSS requirements for radio installations on board SOLAS ships*; requested the Secretariat to issue COMSAR/Circ.32/Rev.2 with an effective implementation date of 1 January 2024, incorporating the aforesaid modifications into the circular and superseding COMSAR/Circ.32/Rev.1; and, invited MSC 107 to endorse the action taken;

.2 endorsed the view of the Group with respect to permitting continued installation of radio installations complying with the existing standards (i.e. resolutions A.803(19), as amended, A.804(19), as amended, A.806(19), as amended and A.807(19), as amended) until 1 January 2028; agreed to the draft MSC circular on delays affecting the availability of new GMDSS equipment compliant with the revised performance standards, set out in resolutions MSC.511(105), MSC.512(105) and MSC.513(105), and forward it to MSC 107 for approval; and,

.3 endorsed the view of the Group with respect to the revision of MSC.1/Circ.1460/Rev.3 on *Guidance on the validity of radiocommunications equipment installed and used on ships* to extend the deadline for updating VHF radiocommunication equipment to 1 January 2028 in alignment with the above action and advise MSC 107, accordingly.

**22. REPORT TO THE MARITIME SAFETY COMMITTEE.** MSC 107 convenes from 31 May through Friday 9 June 2023 and will consider NCSR 10's report at that session.

End

Captain Paddy McKnight