# PROVISIONAL AGENDA OF THE FIFTEENTH MEETING OF THE WWNWS SUB COMMITTEE (WWNWS15)

# To be held at IHO Headquarters, Monaco 4 to 8 September 2023

#### 1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS

Chair WWNWS-SC welcomed all participants and introduced himself. He provided brief background details to the meeting and expressed his appreciation to all present for making the effort to participate in person.

The Chair asked the 63 participants introduce themselves - list of participants.

.1 Welcome by the Host

Director Luigi Sinapi welcomed all participants to the WWNWS15 meeting. He highlighted the importance and wide remit of the WWNWS-SC and that development of S-124 – Navigational Warnings – will be critical to meeting the 2026-2029 timeframe for S-100 implementation.

.2 Working Arrangements

The Secretary introduced the working arrangements, including articulating some remote meeting procedures and protocols.

.3 Administrative Arrangements

The Secretary provided details on the meeting arrangements and reminded all to remember those whose first language is not English, to speak slowly and clearly to allow all to be able to understand and engage in the meeting.

.4 Adoption of the Agenda

Agenda was introduced, it was adopted and approved without amendment,

Decision 1 - Agenda adopted without revision

.5 Review of Action Items from WWNWS14

The actions items from WWNWS14 were reviewed and it was agreed that some items were covered in the agenda.

Action 1 - All participants to review list of actions from WWNWS14 and provide an update on the status of those for which they have responsibility.

.6 Report from IRCC15 - Report

The Chair provided a brief on the IRCC15 and its outcomes relevant to the WWNWS-SC. He recalled that the key elements reported to IRCC15 were the IHO WWNWS Strategic Performance Indicator, WWNWS support to IHO C-55, Iridium SafetyCast Implementation, Capacity building and an update on S-124.

The key outcomes included:

- Decisions made at Assembly 3 including the use of gender inclusive language and the creation of a dedicated project team to explore external funding options for IHO activity such as Capacity Building and GEBCO
- Various items from HSSC15 that were relevant included the tasking of the Nautical Cartographic Working Group (NCWG) to make an impact study and develop a standard for NtM (XML) if appropriate and the establishment of an ISO Cell after HSSC13 to experiment with the application of ISO 9001 in the development of S-101 Product Specifications. On this, HSSC invited IRCC to consider mirroring such an ISO Cell on S-101 via the RHCs.
- On capacity building, the e-learning centre guidelines were approved and the 2024 Capacity Building Work Programme was endorsed.
- On the WENDWG, it was noted that many of the RHCs have not yet established the S-100 Coordinator roles and would like the IRCC/RHCs to consider how the S-100 Coordinator role will be implemented and what their responsibilities will be.
- On General Strategic Issues, IRCC encouraged RHCs to consider the
  requirements (including regulations) for non-ECDIS mandated vessels (e.g.
  small commercial, fishing, leisure, etc), with national, regional and global
  discussions on this topic...to allow for the transition from paper nautical charts
  via the provision of digital maritime data for these users. IRCC requested HSSC
  to direct the NCWG to liaise with WWNWS for the definition of the impact of
  the future of the paper chart production on the navigational warnings.

# 2 MATTERS RELATED TO THE GMDSS MASTER PLAN

.1 Review of content of GMDSS Master Plan Annexes 7 & 8 - presentation

The Chair provided a briefing on the GMDSS Master Plan Annexes 7 & 8. He went through the analysis that had been undertaken to review the contents of the annexes which is detail in his <u>presentation</u>. He stressed the importance of ensuring that the information in GISIS is up to date, and explained the process for doing this.

Action 2. NAVAREA Coordinators to note discrepancies identified in the Chairs report and take action to update GISIS and Annexes 7 & 8 as appropriate.

A question was posed by NAVAREAIII regarding the area of the Caspian sea that falls into their area. He asked what can be done to reconcile this anomaly.

Action 3. Investigate which NAVAREA should be responsible the area of the Caspian Sea that technically falls into NAVAREA III.

France noted that the master plan has information on the range, but not the area of coverage of the NAXTEX stations and that this was an important detail that should be provided. In response, the NAVTEX Panel Chair noted that whilst this information would be useful, it is also geopolitically sensitive

IMO updated the group on the modifications to GISIS, specifically the EGC annex where information will be consolidated to provide an easy view of what services are operational in a particular area.

Action 4. IMO EGC panel invited to discuss broadcast times for EGC services and report back to next meeting

.2 Review of authoritative Geospatial Coordinates for the GMDSS module of GISIS - Report

The USA presented a review of authoritative Geospatial Coordinates for the GMDSS module of GISIS. He noted DRWG21 action 16 requested FRA/GRB/USA to "Research the origins of NAVAREA/METAREA boundaries with a view to create authoritative geospatial files to be contained within the GMDSS Module of GISIS." After investigating these boundaries, it remained clear that the sub-committee will need to provide additional guidance on how to reference geospatial coordinates for NAVAREA boundaries that travel along the coastline. The detail of the analysis is included in the Report. In summarising, he offered the following recommendations:

- (3.1) Encourage NAVAREA Coordinators to be proactive in working with their neighbouring NAVAREA Coordinators to determine agreed upon geospatial coordinates marking the boundaries between areas. With the expectation that the delimitation of NAVAREAs is not related to and shall not prejudice the delimitations of any boundaries between States.
- (3.2) Allow the parties responsible for this action to continue to work with the RMSS to determine the geospatial coordinates of how Inmarsat and Iridium ship earth stations are programmed.
- (3.3) Allow for geospatial coordinates found in (the previous recommendation) to be used as a starting point to create standard Open Geospatial Consortium (OGC) files such as Keyhole Markup Language (KML) or Geopackage to display the delimitation of NAVAREAS, METAREAS, and Coastal Warning Areas. These files would then be contained within the GMDSS module of GISIS.
- 3.4 Invite the parties responsible for this action to update the sub-committee of the progress of their work at DRWG22 and WWNWS16.

IMO Noted that there are already some modules in GISIS that hold geospatial information. He noted that in this case, GML is used as the standard data types. He shared some lessons learnt about how to manage geographical areas defined by a polygon.

The Chair summarised the situation as the need to consider how, and whether a definitive list of coordinates exists or should exist. WMO advised that situation was by design as it meant that it could be seen as an authoritative resource that would draw political interest. NAVTEX Coordination Panel Chair disagreed with WMO. He noted that the coordinates are already in the public domain [and would have been thoroughly considered by the Division for Ocean Affairs and the Law of the Sea (DOALOS].).

IMO noted their interest in providing their expertise to assist with this work.

Decision 2: Geographic boundaries need to be standardized and recorded to aid interoperability within various GIS environments.

**Decision 3: Recommendation 3.1 agreed.** 

Decision 4: Recommendation 3.3 agreed but the potential formats to be left open

**Decision 5: Recommendation 3.4 agreed** 

3 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)

# .1 Relevant IMO meetings

.1 Outcome of the 106<sup>th</sup> and 107<sup>th</sup> Session of the International Maritime Organization's Committee on Maritime Safety (MSC 106 and MSC 107) 2 – 11 November 2022 and 31 May – 9 June 2023 (including significant developments in the GMDSS and issues relevant to WWNWS)

The IMO Representative provided a brief on the outcomes of MSC 106 and MSC 107

#### **Outcome of MSC 106**

# Recognition of the BeiDou Message Service System (BDMSS) for use in the GMDSS $\,$

The IMO Maritime Safety Committee considered the report of NCSR 9 and took the following actions:

- agreed that China Transport Telecommunication Information Group Co. Ltd (or CTTIC), through BDMSS, had satisfied the criteria established to receive recognition as a mobile satellite communication service provider in the GMDSS;
- recognized the maritime mobile satellite services provided by CTTIC through BDMSS for use in the GMDSS;
- adopted resolution MSC.529(106) on Statement of recognition of the maritime mobile satellite services provided by CTTIC through BDMSS;
- noted the commitment of China and CTTIC to addressing any outstanding implementation issues, including those listed in NCSR 9/WP.5, annex 2, appendix 2, before the commencement of services;
- invited IMSO to monitor the implementation and report to the Committee when the Public Services Agreement with CTTIC had been concluded and the Letter of Compliance had been issued; and
- agreed that any future expansion of the coverage area of BDMSS would require a new submission for consideration by the Committee, based on the applicable requirements.

Further, he outlined the outstanding implementation issues (NCSR 9/WP.5, annex 2, appendix 2)that need to be addressed before CTTIC can reach full operational capability as a GMDSS mobile satellite service provider:

- MSC to issue a resolution recognizing the mobile satellite GMDSS service provider (i.e. BDMSS);
- BDMSS to sign a Public Services Agreement (PSA) with IMSO for oversight of the recognized services;
- IMO to make available an MSI manual for the new Enhanced Group Call (EGC) service (i.e. SafetyLink service);
- BDMSS to develop internal operational procedures to support GMDSS recognized services;
- a type-approved terminal to be made available for the operation of the new mobile communication satellite services (i.e. BDMSS);
- WRC-23 to complete the necessary regulatory actions to safeguard the availability and full protection of the spectrum used for BDMSS (e.g. solving the issue of frequency coordination with other systems and

- inclusion of the frequencies used by BDMSS in appendix 15 of the ITU Radio Regulations);
- CTTIC to complete contingency arrangements for ground-based components of BDMSS (i.e. backup sites for BDMSS Master Control Station (MCS) and Gateway);
- any other issues to be indicated by MSC; and
- IMSO to issue CTTIC with a "Letter of Compliance

The Committee also approved a number of new or amended instruments:

- MSC.1/Circ.1659 on Guidance for the dissemination of search and rescue related information through the international enhanced group call service.
- MSC.1/Circ.1403/Rev.2 on NAVTEX Manual with an effective date of 1 January 2023.
- MSC.1/Circ.1503/Rev.2 on ECDIS Guidance for good practice.
- MSC.530(106) on Performance standards for electronic chart display and information systems (ECDIS). This resolution revised resolution MSC.232(82) to introduce the new IHO S100 standards. ECDIS equipment installed after 1 January 2026 should conform to either the new resolution or the existing PSs. However, equipment installed after 1 January 2029 should conform to the revised PSs.
- .2 Outcome of the 10<sup>th</sup> Session of the International Maritime Organization's Sub-Committee on Navigation, Communications and Search and Rescue (NCSR 10) 10 19 May 2023 (including all significant developments in the GMDSS and issues relevant to WWNWS)

The IMO Representative provided a brief on the relevant outcomes of NCSR10

# **VDES**

The Sub-Committee initiated its work on the development of amendments to SOLAS chapters IV and V and performance standards and guidelines to introduce VHF Data Exchange System (VDES) and considered related proposals and comments. Discussions at this session were mainly related to the introduction of VDES into SOLAS chapters IV and V.

With regard to the potential use of VDES for dissemination of maritime safety information (MSI), some delegations indicated that this should be carefully considered, taking into account the need for frequency protection and the impact on information providers. After consideration, the SC generally agreed that the development of amendments to SOLAS chapter V should be prioritized. A CG was established to continue this work intersessionally and report back to NCSR 11. The CG was instructed, in particular, to:

- undertake a technical, regulatory and operational analysis of VDES and its communication component (i.e. AIS, VDES-ASM, VDES-VDEterrestrial and VDES-VDE-satellite);
- based on the analysis, develop draft performance standards required for the introduction of VDES into the SOLAS Convention;
- prepare draft amendments to SOLAS chapter V, including consequential amendments, if necessary, to the forms of certificates and records of equipment and associated instruments, taking into consideration the

- possible substitution of the mandatory carriage requirement of AIS by the AIS component of the VDES;
- if time permits, develop draft amendments to SOLAS chapter IV;
- based on the analysis, identify and develop other relevant instruments, including consequential amendments and appropriate guidance for SOLAS Contracting Governments, shipowners and seafarers for the application of VDES, required for the introduction of VDES into SOLAS. These should not be limited to applications for harmonized worldwide implementation of VDES, especially taking into account the human element, financial implications and the technical specifications of the system;
- submit an interim report, containing the draft amendments to the SOLAS Convention, draft performance standards and other preliminary draft relevant instruments, as far as available, to the nineteenth meeting of Joint IMO/ITU Experts Group on Maritime Radiocommunication Matters for its consideration (the group is meeting this year, from 9 to 13 October 2023);
- taking into account the outcome of discussions at the meeting of the Joint IMO/ITU Experts Group, prepare a report, including the draft amendments to the SOLAS Convention, consequential amendments, draft performance standards and other relevant instruments, as far as available, for consideration; and
- submit a report to NCSR 11.

#### **Maritime services**

The SC considered inputs from IALA and WMO and finalized a draft MSC.1/Circ.1610/Rev.1 on Descriptions of Maritime Services in the context of e-navigation which was submitted to MSC 108 for approval. Maritime services under the purview of IHO (MS 5 – Maritime safety information (MSI) service, MS 11 Nautical chart service and MS 12 Nautical publications service were not updated this time due to the lack of input documents and proposals. This circular is intended to be update regularly, so IHO should consider this at future meetings.

# **NAVDAT**

NCSR 10 initiated the consideration of matters related to the development of performance standards for a digital navigational data system (NAVDAT) and considered related proposals and comments. The SC considered draft PS for NAVDAT, amendments to resolution MSC.509(105) to set the criteria for the establishment of NAVDAT stations. A draft NAVDAT Manual was also submitted. Issues requiring consideration were allocated to two working groups, i.e. the Working Group on Communications (NCSR 10/WP.5) and the Working Group on Search and Rescue and other Technical Matters (NCSR 10/WP.7).

After consideration, the Sub-Committee:

- instructed the Joint IMO/ITU Experts Group to further develop the draft performance standards for NAVDAT and the draft amendments to resolution MSC.509(105), for consideration at NCSR 11;
- noted the preliminary consideration of the Working Group on Search and Rescue and Other Technical Matters with respect to the draft NAVDAT Manual (NCSR 10/8, annex 3) and endorsed the Group's

- conclusion that it would be premature to continue further review of the draft Manual at this stage;
- endorsed the road map of elements to be considered (NCSR 10/WP.7, annex 1) for the introduction of the NAVDAT system in the future; and
- invited MSC 108 to determine if the Organization 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.

# He described the road map of elements:

- 1. Identify the areas where NAVDAT can complement NAVTEX/GMDSS in providing maritime safety information to ships at sea and what identified gap(s) it is filling.
- 2. Determine if the intent is for NAVDAT to eventually replace NAVTEX, and if so, what are the time frame and regulatory amendments required.
- 3. Determine if NAVDAT can support the S-100 data model for providing maritime safety information to ships at sea, for navigational warnings, meteorological warnings and forecasts and ice information.
- 4. Develop performance (IMO), technical (ITU), test and certification (IEC) standards for the integration of NAVDAT into GMDSS.
- 5. Finalize amendments to Appendix 15 of the Radio Regulations to include the frequencies of NAVDAT.
- 6. Determine if equipment for shore-based transmission and/or shipborne reception simultaneously supports NAVDAT and NAVTEX in what capacity, i.e. forward and backward compatibility or only backward compatibility.
- 7. Engage with the IHO and WMO on the development of guidelines and procedures for the integration process, including a NAVDAT manual and operational implementation plan as a component of the WWNWS and WWMIWS.
- 8. Conduct and evaluate pilot projects to test the integration of NAVDAT into GMDSS.
- 9. Develop training and certification standards for ship operators and shore-based personnel.
- 10. Amend the terms of reference for the NAVTEX Coordinating Panel to monitor and evaluate the integration of the NAVDAT system to ensure compliance with standards, guidelines and procedures. Articulate the process for determining service areas and the process for formal recognition of applications.

# Developments in GMDSS services, including guidelines on maritime safety information

NCSR 10 continued the consideration of matters related to the dissemination of maritime safety information (MSI) and search and rescue (SAR) related

information over multiple recognized mobile satellite services (RMSSs). The Working Group on Search and Rescue and other Technical Matters was tasked to progress this work (NCSR 10/WP.7).

# Amendments to the revised ECDIS performance standards (resolution MSC.232(82)) to facilitate a standardized digital exchange of ships' route plans

The Sub-Committee approved a draft revision of resolution MSC.530(106)/Rev.1 on performance standards for electronic chart display and information systems (ECDIS), with a view to adoption by MSC 108. The revision includes additional ECDIS functionalities to facilitate a standardized digital exchange of ships' route plans. The timeline for implementation of this revision has been aligned with the existing performance standards.

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))

NCSR 10 continued to work on the 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)). The Working Group on Communications was tasked to deal with this matter (NCSR 10/WP.5).

A Correspondence Group on the Revision of Resolution A.1001(25) was reestablished and instructed it to:

- further develop the draft revision of resolution A.1001(25) based on the progress made at NCSR 10;
- submit an interim report, containing an updated draft revision of resolution A.1001(25), to the nineteenth meeting of the Joint IMO/ITU Experts Group on Maritime Radiocommunication Matters, for its consideration;
- taking into account the outcome of discussions at the meeting of the Joint IMO/ITU Experts Group, submit a report, including a draft revision of resolution A.1001(25), for consideration at NCSR 11.
- .3 preparations for the 108<sup>th</sup> meeting of the Maritime Safety Committee 15-24 May 2024 (including preparation of the cost discussions on the dissemination of Maritime Safety Information and the mandatory use of all Recognized Mobile Satellite Services)

The Chair reflected on the key topics raised in 3.1.1 and 3.1.2 and noted that in light of these outcomes, the SC should consider what if any inputs were required into MSC108 and NCSR11. He invited Australia (in their capacity as chair of the WG on SAR and other technical matters at NCSR), to provide an update on developments in GMDSS services, including guidelines on maritime safety information (presentation).

A lengthy discussion was had about the virtues and practicalities of whether the WWNWS-SC, or the IHO should or could form a position on these topics that could be articulate to MSC108 and/or NSCR11. The items identified about which a position should be formed included:

- The use of all RMSS's by information providers (NAVAREAs/METAREAs)

- Technical solutions concerning dissemination and reception of MSI
- Review and revision of resolution A.707(17(71) A.707(17)
- Addressing the cost implications for information providers
- NAVDAT and the recognition of new terrestrial services

The IHO explained that given it is well known that many of these topics attract differing positions by member states, it may not be possible to present a consolidated view of the WWNWS-SC without first going to IRCC16 with a proposal for endorsement. He indicated that it may be possible to include an annex to the WWNWS15 report that could be said to indicate the working position of those assembled at WWNWS15, but this would have to be checked.

Action 5. Consider the process for getting IHO/WMO MS approval for the position to be submitted to IMO.

.4 Outcomes from the 18<sup>th</sup> meeting of the IMO/ITU Experts Group (IMO/ITU EG 19) 9-13 October 2023 (including significant developments in the GMDSS and issues relevant to WWNWS, to include WRC 23 progress)

The IMO Reported that the Group reviewed the draft revision of resolution A.1001(25) prepared by the Correspondence Group and provided feedback to the Correspondence Group which was further reported to NCSR 10. NCSR 10/12, annex 2.

.5 Relevant Correspondence Groups established at NCSR 10

Covered in the previous agenda items.

.6 Diversity in Maritime

Director Sinapi gave an update on diversity, equality and inclusion activities within the IHO. He noted that at IHO A3, resolution 1/2020 had been amended to mandate the use of gender inclusive language in IHO documents, publications and communications. He also gave a presentation on the latest developments within the IHO Empowering Women in Hydrography Project and encouraged any interested parties to get in touch should they wish to contribute in any way.

Action 6. Consider what opportunities there would be to contribute to the EWH Project through sponsorship/opportunities.

.2 Self Assessments by NAVAREA Coordinators (*Brief reports highlighting only significant events in previous period, identified deliverables/outputs and matters requiring WWNWS-SC action, full reports can be downloaded from the WWNWS-SC website*)

The NAVAREA I coordinator gave their report.

Summary - NAVAREA I remains in a good state. Communication between member states remains good and further, is improving. Deputy NAVAREA I co-ordinator has left the UKHO and will be replaced in due course. No other significant changes since the WWNWS14 report.

#### **NAVAREA Ib**

The NAVAREA Ib coordinator gave their report.

Summary - The Baltic Sea Sub-Area Coordinator introduced the Self-Assessment Report, document WWNWS14/2/1/Ib. No significant change since previous report. Additional to the report - Coordinating development of S-124 in the Baltic Sea. Most countries report lack of a plan and that focus is on S-101 and S-102. Working with the UK Met-Office to discuss a Met sub-area in the Baltic Sea. EGC Panel Chair noted the process would not be as simple as just creating a new Sub-Area.

#### **NAVAREA II**

The NAVAREA II coordinator gave their report.

Summary - Became operational for Iridium Safety Cast in June 2023. Training in PING tools is ongoing and now most MSI tools are transmitted from PING tools. Now that S-124 Ed 1.0.0 has been published, PING will be aligned. PING public portal to be available for mainland France by the end of the year. The NAVAREA coordinator informed the WWNWS members of the capacity building actions that took place just after the last WWWNWS-SC in September 2022 in Cape Verde. She also provided an update on the ongoing PING project and the expected date of return to service of the NAVTEX station of Corsen and La Garde.

Action 7. NAVAREA II to provide data on file sizes for S-124 data based on navingational warnings in PING.

# **NAVAREA III**

The NAVAREA III coordinator gave their report.

Summary - The number of NAVAREA III warnings have remained consistentthese last years. The number of NAVTEX stations not operational in NAVAREA III area have increased since last report. Consequently, the NAVTEX stations in Italy, Greece, Bulgaria and Malta have to resend messages on behalf of FRANCE, TUNISSIA, EGYPT, ROMANIA and LIBIA. Often, NAVAREA III has to broadcast these NAVTEX messages as NAVAREA III warnings through SafetyNET II and SafetyCast. All Member States are encouraged to use only NAVAREA warning for Safety to Navigation purposes as stated on IMO Res A.706 (17), NOT FOR ANY OTHER REASONS. Libya NAVTEX Station is still under construction.

#### **NAVAREA IV & XII**

The NAVAREA IV & XII coordinator gave their report.

Summary - The NAVAREA IV and XII Deputy Coordinator provided a report on NAVAREA activities in the reporting period since WWNWS14. He highlighted the challenges regarding NAVTEX equipment within the NAVAREA, updates on Space

Activity affecting shipping, and the establishment of a Maritime Safety Information Working Group within the MACHC. Lastly, he discussed the successful MSI capacity building course hosted by Colombia and thanked the NAVAREA XV coordinator for his assistance translating course materials. The EGC Panel Chair asked whether France was providing information into this NAVAREA – NAVAREA IV noted that France's EGC coastal warning areas promulgate coastal warnings via SafetyNET, but noted that they do not have an EGC certificate and this should be reviewed.

Action 8. Consider issue of lack of EGC certificate to allow France to broadcast into NAVAREA IV

#### NAVAREA V

The NAVAREA V coordinator gave their report.

Summary - The MSI Messages Monitoring System is a very important tool to confirm the receipt of the Navigational Warnings throughout the NAVAREA V region. The Contingency Plan with NAVAREA VI provides peace of mind that there will be no interruption in the broadcast of MSI messages of interest to NAVAREA V. The transition between SafetyNET and SafetyNET II has been completed. The Contingency Planning exercise could not take place in 2023 due to the transition to SafetyNET II.

#### **NAVAREA VI**

The NAVAREA VI coordinator gave their report.

Summary - NAVAREA VI in-force bulletins are issued weekly on SafetyNET, twice a day every Wednesday at 14.00 UTC and 02.00 UTC. Warnings are broadcasted and included in the next Notices to Mariners, when appropriate. During this period, NAVAREA VI kept 6 operational NAVTEX stations for broadcasting warnings on 518 kHz and 490 kHz within a 280 NM coverage range.

Chair noted the NAVTEX station in Uruguay has been non-operational for around 12 years – question posed to NAVTEX panel chair what do we do with such a case. Advice was on a case by case basis with owner/operator – if there is any chance that it may become operational then it should continue to be listed in GISIS and the NAVAERA VI report.

Action 9. Investigate with Uruguay the long-term future of non-operational NAVTEX Station.

In NAVAREA VI's Self Assessment Annex A, Argentina noted the naming of islands under their jurisdiction and requested it to be changed in appropriate places such as GSIS

Action 10. Consider guidance on request for change in naming of islands that Argentina consider to be under their jurisdiction.

# **NAVAREA VII**

The NAVAREA VII coordinator was not available to give their <u>report</u>. The WWNWS-SC Chair gave the presentation in their stead.

Summary - The lack of NAVTEX Stations north of South African borders, namely Angola, Mozambique and Madagascar, is a persistent challenge. The installation of

radio communication network equipment, and operator training, are the two most important components that need to be addressed. The slow progress and the lack of adequate MSI implementation by States in the Great Rift Valley in the Southern African region remains a persistent matter of concern. South Africa continues to assist and cooperate with Iridium SafetyCAST broadcasting within NAVAREA VII, broadcasting both MSI as well as meteorology warnings and broadcasts via the South African Weather Service.

#### **NAVAREA VIII**

The NAVAREA VIII coordinator gave their report.

Summary - The NAVAREA VIII self-assessment report highlights MSI activities for the period 2022-23. India is actively involved with various IHO committees and working groups.

#### **NAVAREA IX**

The NAVAREA IX coordinator gave their report.

Summary – The NAVAEA IX Coordinator transmits navigational warnings for all 16 countries in the region. Navigational Warnings are promulgated via INMARSAT and IRIDIUM satellites with all warnings being included in the weekly NTMs. All in-forced warnings and NTMs are regularly posted and monitored on NAVAREA IX website as well. NAVAREA IX accesses both service providers via internet and all broadcasts of both systems are monitored. Karachi NAVTEX station is under up gradation and hence Coastal Warnings are being transmitted via SafetyNET/ SafetyCast. The reception of all the NAVAREA warnings promulgated through SafetyNET/ SafetyCast and coastal warnings are monitored at NHO through respective terminals at communication center.

NAVAREA IX coordinator communicates with all National Coordinators within NAVAREA IX to promulgate warnings. However, no navigational warning was received from following member states during period under review:

Somalia

Diibouti

Eritrea

Sudan

Jordan

A question was posed to the group over considering how to deal with Saildrones operating in an area from an MSI perspective.

Action 11. Consider how the IHO could assist with increasing correspondence with countries identified in section 5.2 of national report

Action 12. Investigate/consider how to act when 'Saildrones' are operating within a given NAVAREA.

#### **NAVAREA X**

The NAVAREA X coordinator gave their <u>report</u>.

Summary - The Iridium SafetyCast service was declared 'operational' on 1 July 2023 via Australian Notice to Mariner for all SafetyCast services including navigational

warnings, meteorological forecasts and warnings and search and rescue services. NAVAREA X and XIV, with assistance from Maritime Safety Authority Fiji (MSAF) conducted MSI capacity building training from 25 to 27 July 2023 with eleven coastal states within and adjacent to NAVAREA X and XIV. From 23 June 2023, Australia is the new Chair of the South West Pacific Hydrographic Commission (SWPHC) from New Zealand.

The Chair asked whether Capacity Building is required more frequently with the high turn-over of national coordinators? The answer to this was yes. This was noted but the challenges with budget were acknowledged.

#### **NAVAREA XI**

The NAVAREA XI coordinator gave their report.

Summary - Iridium SafetyCast has already operated since 1 March 2023. No other significant changes since the WWNWS14 report.

#### **NAVAREA XIII**

The NAVAREA XIII coordinator was not available to give their <u>report</u> which was delivered by the Chair in their stead.

Summary – After test broadcasting NAVAREA XIII is ready to use SafetyCast system. No changes since the SafetyCast service was tested in 2021. Further progress depends on the actions of the national authorized body under Ministry of Transport. There are no significant changes since NAVAREA XIII report to WWNWS14.

#### **NAVAREA XIV**

The NAVAREA XIV coordinator gave their report.

Summary - The NAVAREA XIV self-assessment report highlights MSI activities for the period since WWNWS14. New Zealand is actively involved with a number of IMO and IHO Sub-Committees and Working Groups; and capacity building in the SWP region for MSI, charting and hydrography. New Zealand has declared to IMO all GMDSS services (MET, NAV and SAR) "Operational" via all recognized mobile satellite services and utilizes application programming interfaces (APIs) to submit all MSI and SAR related information via RMSS.

Action 13. Provide a contact for American Samoa to NAVAREA Coordinator.

#### **NAVAREA XV**

The NAVAREA XV coordinator gave their report.

Summary - SafetyCast and SafetyNET II EGC services are implemented and fully operational. Regarding NAVTEX and EGC services, the information contained in the GISIS module is updated. Rapa Nui (Easter Island) NAVTEX station is temporarily out of service. Coastal warnings for that are being promulgated by EGC. There has been an effort to increase the training of the MSI operators. No significant changes since WWNWS14 report. It was noted that NAVAREA XV had experience with saildrone operations and had promulgated navigational warnings accordingly. Chair asked

whether they had AIS and the answer is yes. Implication is that this could be a criteria for whether or not to issue a navingational warning.

#### **NAVAREA XVI**

The NAVAREA XVI coordinator was unavailable to give their <u>report</u> which the Chair gave in their stead.

Summary - The Directorate of Hydrography and Navigation of the Peruvian Navy, as NAVAREA XVI coordinator, transmits in force MSI messages on daily at 0500 and 1700 hrs UTC by SafetyNET Service through the server MARLINK which uses AOR-W satellite, and by NAVTEX when required. Also, MSI messages will be transmitted at any schedule upon reception of warning messages. NAVAREA XVI is divided in 3 subareas defined as Ocean Pacific: Coastal Paita, Coastal Callao and Coastal Mollendo. These Coastal Centres operate autonomously promulgating Navigational Warnings via NAVTEX. Peruvian Contingency Plan provides actions needed to face emergencies caused by natural disasters, as well as provisions for the dissemination of alerts in case of a Tsunami warning occurrence. In addition, NAVAREA XVI has ISO 9001:2008 quality management certification.

#### NAVAREA XVII & XVIII

The NAVAREA XVII & XVIII coordinator gave their report.

Summary - Canada is advising mariners about the intention to cease rectangular broadcasts in the Arctic NAVAREAs by January 1, 2024 and has also commenced the process of updating all NAVTEX stations across the country. NAVAREA warnings have been added to the national navigational warning issuing service (NIS) website so please update bookmarks accordingly. It was noted that where NAVTEX stations are being withdrawn and VHF will provide the required coverage. Noted that there has been no reaction to the news of the NAVTEX withdrawals. It was noted that the move to the NIS has yielded benefits, noting the upfront implementation cost.

# **NAVAREA XIX**

The NAVAREA XIX coordinator gave their report.

Summary - The NAVAREA XIX Coordinator introduced the Self-Assessment Report covering the period since WWNWS 14. NAVAREA XIX is fully operational on Inmarsat SafetyNET II and Iridium SafetyCast and have integrated the MSI API in their system/operation. A conversation ensued regarding the implementation of APIs and whether there are significant efficiencies. General feeling that there are a number of work arounds/concerns that have been mentioned by NAVAREAs that mean a more detailed conversation is merited.

#### **National Report China**

The National Coordinator For China gave their report.

Summary - The coastal warnings with a VITAL priority are mainly search and rescue information. When receiving the coastal warnings of "VITAL" level, the duty personnel will immediately monitor the working frequency, and broadcast the information immediately if the frequency is idle. If the frequency is occupied, the duty personnel will contact the relevant station to ask for interruption of its transmission, and broadcast it immediately after the frequency is idle. China MSA established a coastal radio staff

training, testing and certificating system since 2020, e.g. the second session national competency training course for coastal radio staffs was carried out online. 50 managers and operators from coastal radio stations across the country participated in the training. In total, 90 workers have obtained the qualifications till now, making the service ability of coastal radio further improved.

# .3 Broadcast Systems and Services

.1 Report of the IMO NAVTEX Coordinating Panel - Report

The Panel Chair provided an overview of NAVTEX activities. He went through the key operational challenges which included non-operational NAVTEX stations, Over-running NAVTEX transmissions, NAVTEX station position changes and the NAVTEX Coordination Panel composition.

.2 Report of the IMO EGC Coordinating Panel - Report

IMO EGC Coordinating Panel Chair provided their report. He gave a brief on the background of EGC and its definition. He reviewed the ToRs and highlighted the scope and purpose of the panel. He gave a brief on the key issues that the panel have discussed:

- Authorization and registration of contingency arrangements between METAREA and/or NAVAREA Coordinators
- Revocation of SafetyNET Certificates
- Implementation of Iridium SafetyCast Service
- Coastal warning areas broadcast
- Contractual agreements with RMSS providers

# Action 14. Cross NAVAREA Contingency arrangements to be supplied to EGC Panel Chair and the recognised RMSS.

Question asked regarding whether coastal states are broadcasting directly through a RMSS or via a NAVAREA coordinator's associated EGC certificate . Answer was if an information provider broadcasts directly through a RMSS, then it will need the appropriate certification.

# .3 Report of the AG-WWMIWS – Report

The Chair of the AG-WWMIWS gave an update on the work of the group including background information on the WMO and the governance that supports the work of the WWMIWS. She noted that the implementation status of Iridium SafetyCast for METAREAs; she considers 12 operational, 4 in trials and 6 having not started. In terms of S-41x product specifications, she noted that S-411 (Ice information) and S-412 (Weather and wave hazards) are under development. Following operational activation of contingency plans in early July due to potential loss of access to satellite services, she offered the following lessons learnt:

- Both parties, separately, inform all RMSS providers by email of their plan, once agreed
- Clear early communication of challenges to all organizations
- Notification of activation of Contingency plan
- Clear details of assistance required (what, when, where, who)
- Maintenance of communications throughout
- Notification of resolution to all organizations
- Post-activity assessment and proposed improvements

She finished by advertising the  $2^{nd}$  WMO-IMO Symposium on Extreme Maritime Weather -23-26 September 2024.

Action 15. Participants to consider any contribution they could provide to the IMO/WMO Symposium.

# .4 Developments in GMDSS

.1 Inmarsat Services update – significant items/upgrades of relevance – Report

Inmarsat gave an update on its services including acquisition by Viasat, Inmarsat C, distress alerts and the API service. He noted Inmarsat have been acquired by Viasat but there is no functional change. He gave an update on SafetyNET and SafetyNETt II implementation. He reported that Inmarsat C has approximately 135K active terminals. He noted that MSI transmissions had increased from 30k to 40k per month over several years. In terms of distress alerts, it appears there is a skew to IOR and POR regions and this will be investigated further. He noted the API is operational and he offered any assistance that may be required. He reported that RescueNET adoption is increasing and now has 71 unique operational member centres. He speculated that expansion may in part be to provide redundancy. Finally, he noted that the Inmarsat Maritime Safety Training Hub will be updated shortly.

.2 Iridium Service update – significant items/upgrades of relevance; operational implementation progress update – Report.

Iridium provided an update on its services including the implementation status. He went through the work they are doing with the GMDSS RCCs and noted the existing 14 RCCs that have been certified and the plans for the 10 US RCCs. He noted that NAVAREAS V and VI are two of the five remaining NAVAREAS that have not implemented SafetyCast. He noted that Brazil and Argentina are in communication Iridium, which is a positive development. He stressed that the declaration of operational status is the priority and disseminating information to the mariner. He noted that the signing of the billing agreement is a separate process and should not prevent or delay the NAVAREA from declaring itself operational.

.3 BDMSS progress update - Report

IMSO provided an introduction and noted the two main functions of IMSO: oversight of the satellite providers of the GMDSS and co-ordinating the LRIT. He noted that IMSO has a new Secretary General, Mr Laurent Parenté (Vanuatu). He gave an update on the conclusion of the BDMSS assessment phase and an overview of the BDMSS implementation process.

BDMSS provided a more detailed update on its progress and implementation. He introduced the China Transport Telecomunication Information Group Co., Ltd (CTTIC) and noted that the Public Service agreement between CTTIC and IMSO is awaiting to be signed. He noted that BDMSS has created a draft interim BDMSS SafteyLink Service manual and submitted to IMSO and that it s was submitted to WWNWS15 for consideration. He noted that they are currently investigating contingency arrangements including the backup site in Shanghai. He covered the approach to developing and type approval of BDMSS terminals.

Decision 6. Agreed to refer draft Interim BDMSS SafetyLink Service Manual to the DRWG for consideration and feedback.

# .4 NAVDAT and Resolution A.1001(25) progress update - Report

France gave an update from the Correspondence Gropu (CG) on Res A.1001(25) and highlighted the key changes and two options for revising the Legacy Services section. He gave an update on the background to NAVDAT and the work that had been done to consider the issues regarding its introduction into service. The issues considered included:

- Identify the areas where NAVDAT can complement NAVTEX/GMDSS to provide maritime safety information to ships at sea and what identified gap(s) it is filling;
- Determine if the intent is for NAVDAT to eventually replace NAVTEX and if so, what is the timeframe and regulatory amendments required;
- Determine if NAVDAT can support the S-100 data model for providing maritime safety information to ships at sea;
- Develop performance (IMO), technical (ITU), test and certification (IEC) standards for the integration of NAVDAT into GMDSS;
- Determine if equipment for shore-based transmission and/or shipborne reception simultaneously supports NAVDAT and NAVTEX and in what capacity, i.e., forward and backward compatibility or only backwards compatibility;
- Engage with the IHO and WMO on the development of guidelines and procedures for the integration process, including a NAVDAT manual and operational implementation plan as a component of the WWNWS and WWMIWS. Conduct and evaluate pilot projects to test the integration of NAVDAT into the GMDSS;
- Develop training and certification standards for ship operators and shore-based personnel.
- Amend the ToR for the NAVTEX coordinating Panel to monitor and evaluate the integration of the NAVDAT system to ensure compliance;
- Does the Organisation need to develop a formal recognition framework for new terrestrial GMDSS services?

He noted that S-124 testing over NAVDAT will be conducted in due course when the NAVDAT station in France is operational (in under two years). The IMO enquired what is the vision/plan for implementation of NAVDAT for the ship side, especially if there is the requirement to co-exist with NAVTEX – there was no clear answer to this. The WMO noted their concern regarding the through life cost of procurement and maintenance of NAVDAT and NAVTEX given many nations are struggling to manage existing NAVTEX stations. The NAVTEX Panel Chair acknowledged that new technology will be needed to support the future of digital navigation, however the question is whether NAVDAT has the longevity to be worth the investment. He noted that this will only be clear once testing has been completed.

# .5 VHF Data Exchange System (VDES) progress update – Report

The coordinator for the correspondence group on VHF Data Exchange System gave a presentation on work undertaken to date. He provided background on AIS and the technical transmission characteristics of both satellite and terrestrial systems and how they interact. He went through the various types of possible AIS messages and highlighted the key differences between this and the VDES system. He noted that the use of AIS is expanding and causing the AIS channels to become congested. He introduced the concept of application specific messages (ASM) and noted the

components of the VDES system which includes AIS, ASM VDE-Terrestrial (VDE-Ter) and VDE-Satetllite (VDE-Sat). He gave an update on the Japan CoastGuard and Tokyo University of Marine Science and Technology trial of VDES and their findings. He covered the Satellite VDES system and noted that Norway, China and Denmark have launched test satellites with the expectation that commercial services will be available in 2030. He touched on the latest activity at IMO with regard to VDES:

- MSC94 (2014): Finalized e-navigation strategic implementation plan that included VDES as an example of key enablers of e-navigation
- MSC102 (2020): Japan, Norway and Singapore submitted a new output on amendments to SOLAS Chapter V and development and revision of relevant IMO instruments to introduce VDES
- MSC103 (2021): The new output was agreed but not only SOLAS Chapter V but also Chapter IV
- NCSR10 (2023): Development of amendments to SOLAS chapters IV and V and performance standards and guidelines to introduce the VHF data exchange system (VDES) was started and agreed to establish the Correspondence Group to progress the development

He went through the ToRs for the CG and finished by highlighting the challenges of having VDES as a component of GMDSS.

It was suggested that VDES should not be used for MSI until significant testing had been undertaken due to resource implications. It was noted that GMDSS has a 99.9% transmission availability requirement and that VDES would struggle to meet this. The counter to this was that there was no equivalent transmission availability requirement for any terrestrial system. USA noted that VDES – Sat may be useful for transmission of S-100 products but questioned compatibility with cyber security protocols. The IMO provided some clarity and noted that SOLAS Chapter IV is not just focused on GMDSS, it also covers radio communications. The CG had been instructed by NCSR 10 to consider any changes to SOLAS Chapter IV in terms of radio communications IF TIME ALLOWS – SOLAS Chapter V is the priority. He asked if VDES would work as a standalone terrestrial system or whether it would only work with the satellite component once online. The implications are, if the latter, then it would likely have to wait until the full system has been developed before considering consequential changes to the various instruments. The answer was that it can work independently but not decided exactly how this would be packaged.

.6 NAVDAT proposed roadmap from NCSR 10

Covered in 3.4.6

# .5 Developments in the WWNWS

.1 S-124 progress report

Day three of WWNWS15 was given over entirely to a S-124 workshop. The day was led by the Chair of the S-124 Project team. Given the nature of the workshop, it was agreed that only decisions and actions would be recorded.

The central presentation is available from the WWNWS Website.

#### **Actions:**

Action 16. Investigate how to manage the liability question where S-124 portrayal causes a problem through a mistranslation in the translation file.

Action 17. Complete the S-124 impact study

Action 18. Create a dedicated WWNWS S-164 group with representative to S-164WG  $\,$ 

Action 19. Engage ECDIS Manufacturers with regards to S-124 or representative industry body such as CIRM for participation in S-124 development

Action 20. Establish a S-124 Portrayal guidance group

Action 21. Identify a S-98 focal point from the portrayal guidance group

Action 22. Establish a dedicated group to support the Document Capture and Encoding Guide (CEG)

Action 23. Identify a lead for the S-124 validation checks

Action 24. Produce a Statement of Requirements for Actions 22-25 for WWNWS16

Action 25. Canada (NAVAREAXVII & XVIII) to continue to act as convener to further refine the work of developing S-124 testing regimes

.2 Modernization of Terrestrial systems of the GMDSS and how to support S-124

Covered in other agenda items.

.3 Report of the Space Activity Working Group - Report

USA presented the update on the activity of the Space Activity Working Group. WWNWS14 established a group to investigate the operational challenges posed by space activity throughout the (WWNWS). The paper discussed the activity of the group since WWNWS14 and proposed that WWNWS15 re-establish the group to continue discussions with space operators worldwide while encouraging NAVAREA coordinators to be proactive in working with space operators within their NAVAREA.

Specific recommendations made in the paper included:

- 3.1 Post the optional source template, developed by the working group, to the basic subcommittee document section of the WWNWS-SC webpage.
- 3.2 Encourage NAVAREA Coordinators to be proactive in working with space operators in their region and to provide education and guidance on how to best promulgate their Maritime Safety Information.

- 3.3 Encourage NAVAREA Coordinators to promptly notify Space Operators of navigational warning dissemination to satisfy regulatory requirements.
- 3.4 Establish a Space Activity Advisory Group, to monitor and advise the sub-committee in developments in space activity and its applicability to seafarer safety.

There was a question over whether this would take the decision making away from the NAVAREA coordinator – this is not the case but there is always a consideration of how useful such navigational warnings would be. There was a discussion about the various approaches that can be taken to decide on what and for how long navigational warnings are broadcast. NAVAREA X noted section 2.9 "Multiple MSI providers noted the need to work with ships to determine how vessels respond to space warnings." They indicated that this would be useful information to know to inform decision making.

The WWNWS-SC was invited to:

- Note the background provided in paragraph 1;
- discuss the work and outcomes of the Space activity working group provided in paragraph 2;
- agree to the recommendations in paragraph 3; reflecting discussions in 4.1.b;

Decision 7. Recommendation 3.1 agreed.

Decision 8. Recommendation 3.2 agreed.

Decision 9. Recommendation 3.3 agreed.

Decision 10. Recommendation 3.4 add as an agenda item for WWNWS16.

Action 26. Post the optional source template, developed by the working group, to the basic subcommittee document section of the WWNWS-SC webpage.

Action 27. Investigation to determine how vessels respond to space warnings.

Action 28. Add update on Space Activity as an agenda item for WWNWS16.

 .4 Report of the WMO Task Team on Volcanic Activity and Safety of Marine Navigation - Report

New Zealand presented the update on the activity of the Task Team on Volcanic Activity and Safety of Marine Navigation. He recalled that the joint session of WWNWS14 and AG-WWMIWS-SubC-1 established a joint task team, to be co-led by the METAREA and NAVAREA XIV Coordinators, to audit existing, readily available, resilient, and robust volcanic hazard information with the objective to provide recommendations and options for inclusion in future MSI products and services. He noted that in METAREA and NAVAREA XIV they have both good information supply and template navigational warnings but this was not the case for volcanic activity, and there is need for better cooperation with METAREAs. He explained the work that was done at the International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI) workshop where they agreed to need to establish better connections with NAV/METAREAs. They also considered the

need to seek input from professional mariners to understand their needs. In terms of outputs:

- Audit/collate applicable sources of volcanic activity and hazard information.
- Broadcast Responsibilities.
- Articulate the potential hazards that this activity may pose to the safety of marine navigation.
- Initiate discussion regarding the benefits of developing standard messaging relevant to mariners.
- Recommend possible methods for ingest and dissemination

# Action requested from group:

- 7.1.1. Agree that the Task Team has fulfilled its obligations under the Terms of Reference:
- 7.1.2. Recommend NAVAREA/METAREA Coordinators engage within their regions to further develop their procedures in this space, if necessary, considering the examples from the members of the task team when developing their procedures, and update the Sub-Committee as appropriate;
- 7.1.3. Note the outcomes from participation at the IAVCEI 2023 Post-Conference Workshop "Developing the future visions for seamless multihazard warning for volcanic eruptions";
- 7.1.4. Consider the request from volcanologists at the IAVCEI workshop, for NAVAREA Coordinators to create a "feedback loop" in the ship-shore direction, providing volcanic activity observations from ships to the volcanology community;
- 7.1.5. Encourage NAVAREA and METAREA Coordinators, if volcanic activity is likely to pose a hazard to navigation in their areas of responsibility, to consider the guidance in the Volcanic Activity to Hazard Mapping Guidance.

IMO noted COMSAR CL36 (2005) noting it refers to resolution 706. It provides some guidance on how natural hazards are communicated.

Decision 11. Recommendation 7.1.1 agreed.

Decision 12. Recommendation 7.1.2 agreed.

Decision 13. Recommendation 7.1.3 agreed.

Decision 14. Recommendation 7.1.4 agreed.

Decision 15. Recommendation 7.1.5 agreed.

Action 29. Revisit COMSAR/Cric.36 to assess utility and guidance and consider it as the basis for developing guidance or a process moving forward.

Action 30. Consider whether the sample messages should be added to S-124 and the joint manual.

New Zealand went through the Taranaki Mounga Volcanic Activity Exercise - Report

Supplementary to the report of the WMO Task Team on Volcanic Activity and Safety of Marine Navigation (TT-VASMN), the report focused on the volcanic

activity exercise facilitated by the Civil Aviation Authority (CAA) of New Zealand on Thursday 10 August 2023. While these exercises are typically aviation focused, the IHO WWNWS engagement with CAA NZ on this topic led to the inclusion of a marine environment aspect. The report informed the Sub-Committee on the engagement and learnings identified by NAVAREA XIV.

The exercise simulated the unrest and then eruption of Mount Taranaki (39.30S 174.06E), located on the west coast of the North Island of New Zealand. Information on the simulated ash dispersion was detailed in the exercise volcanic ash advisories (VAA) and ashfall graphics, provided on the day of the exercise.

Having gone through the details of the exercise and the lessons identified, he requested the following of the WWNWS-SC:

- 7.1.1. Note the challenges for assessment and translation of volcanic activity text to marine navigational warnings (paragraphs 2.4 to 2.6);
- 7.1.2. Consider including the sample warnings at paragraphs 3.2, 3.3 and 4.2 as sample text for volcanic activity in Section 7 paragraph 16 of the Joint IMO/IHO/WMO Manual on Maritime Safety Information (MSI)

# Decision 16. Recommendation 7.1.1 agreed.

# Decision 17. Recommendation 7.1.1 agreed.

Action 31. Consider whether the sample messages should be added to S-124 and the joint manual.

.5 International Maritime Bureau Piracy Center update

Cyrus MODY of the IMP PRC gave a verbal update on the work of the centre. He noted that it is affiliated to the international bureau of commerce and therefore recognises the role the maritime community is playing in supporting international trade. He noted that the environment that this community works within is harsh. Communication technologies have improved but noted working at sea is a lonely life and a high stress environment where the seafarers are often fatigued. A new situation is the stress induced through the fear of piracy and other criminal activities. The IMB PC was set up in 1999 and the aim is to make the reporting of these incidents easy and efficient. Any incident reported to the centre is promulgated to the relevant law enforcement agencies. The general call is for NAVAREAs to keep a look out for criminal agencies moving in between regions. IMO asked whether there is a coordination mechanism in place between the PRC and NAVAREA Coordinators - Answer "no" but it was suggested that there is very little overlap given the very specific nature of the information the PRC promulgates.

Action 32. Investigate closer cooperation and coordination between IMB PC and NAVAREAS with respect to the broadcasting of Piracy and other criminality information

The Chair introduced the paper. He went through the background of the tasking. He noted that the WWNWS Subcommittee aims to meet the IHO's goal and have an operational S-124 product specification by 2026. The question as to how the WWNWS will operationally implement S-124 could be a challenge, specifically with respect to coastal warnings. Key discussion points offered were:

- 7.1. Will information providers that disseminate navigational warnings to existing NAVTEX service or coverage areas provide S-124 navigational warnings to ships for the areas in which they are responsible?
- 7.2. If the answer to question "7.1" is "yes", will each NAVTEX station have a defined service area? When will any new service areas be approved by the IMO? What is the expected implementation plan for those? Will they use the same S-124 dissemination or delivery method as the NAVAREA Coordinator under which they belong?
- 7.3. If the answer to question "7.1" is "no", will all NAVTEX information providers remain as points of contact for their service or coverage area and forward S-124 structured navigational warnings to the respective NAVAREA Coordinator for dissemination? Or, will the NAVAREA coordinator have to create S-124 structured navigational warnings from the text received?
- 7.4. Should overlapping NAVTEX service areas or coverage areas be permitted to remain?

The Chairs recommendation was to develop a WWNWS view, in general, for how to address S-124 navigational warning dissemination and implementation, taking into account how amending or not amending NAVTEX service and coverage areas may have an impact.

Canada noted that the paper misses the reference/connection to Maritime Services (5)

He noted that the questions were framed in terms of what is currently the case, rather than what will be in the future.

Action 33. Explore the relationship between the WEND100 principles and the WWNWS/GMDSS

# 4 REVIEW OF GUIDANCE DOCUMENTS AND OTHER RELATED DOCUMENTATION

.1 Document Review Status Report

The Chair provided an update on the work of the DRWG and went through the DRWG Document review schedule (Report). He presented the updated DRWG ToRs. He noted that the clean and redline versions of IMO Resolutions 705(17) & 706(17) were on the WWNWS15 website for all to consider.

Question over whether there should be an approval process for new terrestrial systems and whether they should be in the schedule. It was agreed that this would be looked into and when it was required. Question over workload and capacity flexibility of the DRWG to accommodate work like S-124. This concern was noted. The consensus was to keep the focus of the DRWG limited to documents that need to be submitted to the IMO. **Decision 18. DRWG ToRs approved subject to minor editorial changes.** 

.2 IMO Resolutions A.705(17) as amended and A.706(17) as amended (MSC.1/Circ.1287 and MSC.1/Circ.1288 respectively)

Clean and redline versions made available to all participants with key changes described.

.3 Joint IMO/IHO/WMO Manual on MSI (MSC.1/Circ.1310) and IHO Publication S-53

It was noted that NCSR 10 has approved the updated joint manual.

.4 Relations between NAVAREA Coordinators and Rescue Coordination Centres (COMSAR/Circ.3)

Nothing reported of note.

.5 MSI element of IHO Publication C-55 – "Status of Hydrography and Nautical Cartography World-Wide".

USA went through the background to C-55 and its current contents. He recapped the work presented to DRWG21 and demonstrated the GIS. He requested the SC to:

- Approve the upload on the IHO website
- Include the updating of shapefiles in the annual SA

Decision 18. Upload to the IHO website and inclusion in the Self Assessment (SA) templates approved.

IHO secretary made the connection between C-55 and how it is used in IMSAS. He stressed that the current content is not very helpful in this task but since it is being used in this way, its accuracy and completeness is paramount.

Action 34. Consider the broader governance and policy elements around the SA process, populating C-55 and the IMSAS process.

.6 Terms of Reference for the WWNWS Sub Committee Annual check and review (IHO Circular Letter 46/2009)

ToRs reviewed and considered fit for purpose.

.7 Modernization of MSI documentation: plan, timeline, approval process

Covered in 4.1.

.8 Proposed Terms of Reference of the Document Review Working Group

Covered in 4.1

# 5 WWNWS REPRESENTATION AT REGIONAL HYDROGRAPHIC COMMISSIONS AND OTHER CONFERENCES

.1 WWNWS member attendance at RHCs and reports

The Chair briefly introduced the section of the agenda and noted the importance of WWNWS-SC representation at the RHCs.

# .2 Reports from RHC MSI Working Groups

NSHC representative presented on the NSHC MSI activity. He went through the background to the group as well as the ToRs and the key objectives. He gave a subset of the last report given to NSHC37.

BSHC representative went through their work and how they meet and operate. He introduced the group to the RHC website and highlighted the significant level of cooperation. He showed the group the BSMSIWG web page and the history of the group. Finally, he noted the enduring challenges of cost, interference etc.

The MACHC representative noted that the MACHC approved the establishment of a MSI working group recently. The initial agenda will focus on governance but other topics will include tsunamis, S-124, and Capacity Building.

- .3 Capacity Building MSI Training Course Developments
  - .1 Report from MSI Course Colombia

USA provided a report on the MSI course that was delivered in Colombia - Report

.2 Report from MSI Course –Fiji

New Zealand and Australia provided a report on the MSI course that was delivered in Fiji - Report

.3 Report from MSI Course – Cabo Verde

France provided a report on the MSI course that was delivered in Cabo Verde – Report

.4 Demonstration of e-learning MSI materials - Report

NAVAREA II provided a brief on the extremely impressive e-learning MSI materials and portal that has been developed. She noted that the course was developed by the French Naval Hydrographic and Oceanographic Service (SHOM for Service Hydrographique et Océanographique de la Marine in French), as part of the International Hydrographic Organization's (IHO) strategic objective of Capacity Building (CB) and national capacity development. She gave an orientation on how the course material is structured, the objectives of the modules and how progression through the course would be evaluated. She finished by giving examples of numerous practical exercises.

# 6. ELECTIONS

.1 Election of chair and vice-chair for triennium 2023 to 2026

Following completion of their first terms, the sitting Chair and Vice Chair were unanimously elected to a second term for the triennium 2023-2026.

# 7 NEXT MEETING

.1 Dates and venue for WWNWS16

Following a call for volunteers, Chile kindly offered to host the WWNWS16 from 2-6 September 2024. Exact details and location will be confirmed in due course.

# 8 Review of Action Items from WWNWS15

The action items from WWNWS15 were reviewed and agreed by the participants.

#### 9 **ANY OTHER BUSINESS**

.1 Indian Warnings Information and Navigation Service demonstration

Cmdr Pews Pawsy introduced the presentation. They went through the key features of the website. He noted that the service is very popular with thousands of visitors a day and over a million in total. Question was asked regarding how the database could be used to support S-124 implementation – the answer was that it is not currently planned but accepted that was a good idea and would be willing to collaborate to look into it.

.2 Maritime Autonomous Surface Shipping

NAVTEX Panel chair gave their presentation. He went through the background to the IMOs work and noted the 4 degrees of autonomy. He reflected on the IHO MASS PT and noted the work of the UKHO and the assessment of the type and limitations of data that MASS will require.

.3 API implementation update

NZ gave a demonstration of their API implementation. He noted it was a production system that connects to both iridium and Inmarsat. There was a question on how the web interface connects with multiple APIs. NZ offered to provide more in depth technical advice to those that would like it.

.4 NORD Stream Pipeline Case Study (Sweden)

Presentation.

.5 Enhanced Group Call (EGC) Application Programming Interface (API) Definition

NAVAREA X introduced the paper which proposed the development of a single interoperable API definition for the dissemination of MSI and SAR-related information over multiple RMSS based on the EGC API definition developed by AMSA. He noted that WWNWS11 agreed to (paragraph 3.5.1 of WWNWS11-7) "... establish a correspondence group to explore the feasibility, creation and implementation of an API in order to allow NAVAREA and METAREA Coordinators to use only one interface for the broadcast and monitoring of their warnings". With this in mind, he suggested it would be beneficial to hear the experiences of other information providers who have implemented the Inmarsat and Iridium APIs and the possibility of working closely to develop a single API definition. In this regard, AMSA would like to invite the information providers, recognised mobile satellite service providers and their respective software developers to work with us on building the API definition. Further detail on the API definition and GitHub repository (https://github.com/amsa-code/egc-api) should be directed to Stuart Shepard (stuart.shepard@amsa.gov.au) or you can create a free GitHub account to access the publicly available repository and engage in discussion on issues and API definition.

He requested the following action of the sub-committee:

- a. note the development of the AMSA EGC API definition,
- b. confirm its preference for a single interoperable API definition for the dissemination of MSI and SAR-related information over multiple RMSS,
- c. invite information providers, recognised mobile satellite service providers and their respective software developers to work collaboratively on building the API definition.

Decision 19. Agree with point a.

Decision 20. Agree with point b. in principle but needs further investigation

Decision 21. Agree with point c.

# 10 CLOSURE OF THE MEETING

The Chair closed the meeting.

