

**13th MEETING of the IHO SUB-COMMITTEE ON THE WORLD-WIDE
NAVIGATIONAL WARNING SERVICE (WWNWS13)**

**Virtual WebEx Meeting
30 August - 3 September 2021**

SUMMARY REPORT

Note: Paragraph numbering corresponds to Agenda Item numbering (Annex A), and not necessarily to the order in which matters were discussed.

1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS

1.1 Opening Remarks and Introductions

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 the current challenging circumstances. He highlighted the importance of keeping the maritime community and the mariner at the forefront of all discussions.

The Chair asked the 59 participants introduce themselves, see Annex B for list of participants.

1.2 Welcome by host

Director Luigi Sinapi welcomed all participants to the WWNWS13 meeting. He highlighted the importance and wide remit of the WWNWS-SC and the key function of the NAVAREA Coordinators in capacity building, development of S-124 – *Navigational Warnings* – and support to national coordinators.

1.3 Working Arrangements

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

1.4 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.

1.5 Adoption of the Agenda

Agenda was introduced, it was adopted and approved without amendment, see Annex A, and see Annex C for list of documents.

Decision 1: Agenda adopted without revision

1.6 Review of Action Items from WWNWS12

The actions items from WWNWS12 were reviewed, it was agreed that some items were covered in the agenda, the Secretary highlighted those on which progress was needed and effort focused.

Action 1 – All

The Chair noted that, as result of the comments made at NCSR 8, the issue of rectangular area broadcasting required further consideration. He noted that the matter had been referred to the IMO EGC Coordinating Panel for a final decision on cessation of rectangular area broadcasting to be replaced by Area broadcasting. It was noted that further investigation needed to be undertaken to confirm that all legacy equipment was no longer in use and that it was appropriate to set a date for this action. It was further noted that currently SafetyNET and SafetyCast use different methods and there is a need to expedite this action to achieve harmonisation between the two systems. Inmarsat noted that, although no longer supported, there remain some terminals in use that cannot receive Area broadcasts; the exact number needs to be ascertained before an end date is proposed to NCSR. It was agreed that this was a matter to be addressed by the IMO EGC Coordinating Panel. NAVAREA VI noted that there could be an impact on the Polar Code, which might need to be considered further.

Decision 2: Cessation of rectangular broadcasts to Artic areas to be addressed by the IMO EGC Coordinating Panel

Action 1 - All: All participants to review list of actions from WWNWS12 and provide an update on the status of those for which they have responsibility

1.7 Report from IRCC13

The Chair provided a brief on the IRCC13 and its outcomes relevant to the WWNWS-SC. He noted the changes that had been made to the WWNWS-SC report to the IRCC to take into account the IHO Key Performance Indicators and how the WWNWS-SC was measuring performance against relevant ones. He noted that S-124 was targeted for operational availability by 2026. The role of the NAVAREA Coordinators for achieving the target of 90% by 2026 for the provision of MSI by coastal states was highlighted and the importance of having a complete knowledge of their respective area was vital. NAVAREA XIV requested clarification on the matrix used to compile the statistic reported to the IRCC, the Chair proposed that the matrix would be reviewed and the statistic would be provided to the relevant NAVAREAs for review prior to submission to IRCC. A number of NAVAREA Coordinators expressed reservations, the Chair proposed that the Self Assessment proforma could be amended to include provision for individual NAVAREA Coordinators to supply appropriate figures, this would be discussed at the next DRWG20 to generate the desired wording to capture the necessary data. **Action 2 – IHO** Consideration being made if single state NAVAREAs should be highlighted and displayed in a different manner. Inmarsat queried the IRCC13 MSI report and asked if these figures included repetitions, i.e. broadcasts or individual messages. The Chair commented this was unclear and should be investigated to give an accurate representation. **Action 3 – Chair**

The Chair highlighted the S-100 Roadmap timeline, which indicated the development requirements for S-124 and the targets which needed to be met to achieve operational use status. He noted when HOs were expected to commence producing S-101 ENCs. He highlighted the ‘Display anomalies in ECDIS’ reported to HSSC, which it was felt could have been a topic for a warning message and he requested that NAVAREA Coordinators highlight the promulgation facilities available for the distribution of navigational information.

Director Sinapi highlighted the IRCC workshop on the IHO Strategic Plan programmed for later in the year, he encouraged all to register.

Decision 3: Self Assessment proforma to be reviewed at DRWG20

Action 2 - IHO: Self Assessment proforma to be amended to include provision to provide appropriate figures to be used for reporting progress against relevant IHO KPIs

Action 3 - Chair: Investigate figures provided in IRCC13 report to clarify if repetitions were included

2 MATTERS RELATING TO THE GMDSS MASTER PLAN

- 2.1 The Chair provided a briefing on the GMDSS Master Plan Annexes 7 & 8. He highlighted the contents of Annex 7 covering NAVTEX and noted that the current messages broadcast by NAVTEX would need to be done so by another method in the S-124 environment. He noted the inconsistencies between the information provided by the NAVAREA Coordinators and that contained in the GISIS Master Plan; he encouraged all to conduct a review of the published data and work toward harmonisation between the various data sources. **Action 4 – All** He highlighted the inconsistencies with the information published for EGC Services, in particular the state of Iridium SafetyCast displayed on the IHO graphic and the GISIS information; it was acknowledged that some validation of the information was required. He also noted that there were discrepancies for the information on Inmarsat SafetyNET between GISIS and what is reported by the NAVAREA Coordinators. Inmarsat proposed that the LES/LESO column could be replaced by a simple SafetyNET or SafetyNET II, the Chair requested participants to consider the continued value of the column and whether a proposal should be made to NCSR 9 for its removal and replacement. IMO Secretariat indicated that, having being instructed by NCSR 8 to review the GMDSS Master Plan, it would appreciate feedback from participants. The Chair highlighted the GISIS page to assist correct completion. He noted that this review would be a regular item in future meetings, so that progress could be made toward harmonisation of information made available via the various portals. The Chair noted that the listing and display of coastal warning areas in EGC services needed to be considered to avoid misrepresentation of correct NAVAREA Coordinators and that this could be addressed at DRWG20.

Decision 4: Review requirement for LES/LESO column and consider replacement with SafetyNET/SafetyNET II use and liaise with the IMO Secretariat

Action 4 - All: Review data published in GISIS to ensure harmonisation with Self Assessment information

3 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)

3.1 Related IMO meetings

3.3.1 Outcome of the 103rd Sessions of the International Maritime Organization's Committee on Maritime Safety (MSC 103)

The Secretary provided a brief on the significant outcomes of MSC 103, he highlighted the significant items discussed and agreed, which were of relevance to the WNWNS-SC.

3.3.2 Outcome of the 8th Session of the International Maritime Organization's Sub-Committee on Navigation, Communications and Search and Rescue

The Secretary provided a brief on the significant outcomes of NCSR 8, he highlighted the significant items discussed and agreed, which were of relevance to the WNWNS-SC. NAVAREA II highlighted the development of NAVDAT, the output of which had been agreed by the MSC (which allows the consideration within the NCSR Sub-Committee). Once approved, it could serve as a digital system which should be able to support the provision of information in the S-124 environment. The Secretary noted that organizations are likely to have to support three different methodologies for a period, which would impact on resources and therefore costs, which need to be considered by administrations when planning and looking ahead. NAVAREA XIV noted that the delivery of S-124 needed to be considered, whilst it was

known that the capabilities to produce and display the information would be generated, it was not clear whether the current providers had the capacity to transmit the data, an issue which needed to be investigated.

3.2 NAVAREA Assessments of Navigational Warnings Services by Coordinators

The NAVAREA Coordinators provided brief reports on their activities since WVNWS12:

NAVAREA I – provided an update on activities, he noted a slight reduction in activities, which it was considered to be an impact of COVID and that was likely to recover in time. He highlighted the progress with Iridium SafetyCast, however the annual contingency exercise using the alternative facility was not conducted due to the impacts of COVID-19.

NAVAREA Ib – noted the steady increase in the number of warning messages over the past few years. He highlighted the activities of the Baltic Sea Hydrographic Commission and his work as Chair of the Baltic MSI Working Group (BSMSIWG). The BSMSIWG held two remote meetings in 2020 with approximately 25 participants.

NAVAREA II – provided a brief update on activities. She highlighted the national position on the use of Iridium SafetyCast and the rationale for the position taken. She noted the current state of NAVTEX stations; she highlighted the continued CB efforts, despite of the impacts of COVID. She noted the challenges of the NAVAREA II, particularly the developing coastal states in West Africa. The Chair noted the number of requests for ‘in-force’ warnings which are being serviced, rather than mariners receiving the information through the recognised methods. The Chair noted that challenge of contingency planning using SafetyNET II was less simple than in the past and the issue needed to be addressed.

Decision 5: Consider how best to service the growing number of requests for ‘in-force’ warnings

Decision 6: Process for inter-NAVAREA contingency planning for SafetyNET II to be considered and a solution proposed

NAVAREA III – provided details of activities within his NAVAREA. He highlighted concerns that the growing annual increase in the number of NAVAREA warnings broadcast, as highlighted in his report, will lead unavoidably to increasing costs in this multiple recognized mobile satellite services environment. The Chair thanked NAVAREA III for their continued efforts to ensure services were being maintained throughout his region, despite the many challenges encountered.

NAVAREA IV/XII – provided a report on developments within the two regions. In particular he noted the decrease in requests for ‘in-force’ warnings, which was considered a result of the COVID impact, however the figure remained high and further consideration on how to service this demand needed to be investigated. He noted the capacity building efforts and ways to maintain the contacts created to benefit in the longer term.

NAVAREA V – provided brief details of recent activities; she noted that, although a certificate had been issued, NAVAREA V had not commenced the process to complete an agreement with Iridium to use the SafetyCast service. The Chair requested that NAVAREA V engaged with the IMO MSI CG to ensure the concerns were captured and reported. **Action 5 – NAVAREA V**

Action 5 - NAVAREA V: NAVAREA V encouraged to participate in IMO MSI CG

NAVAREA VI – provided an update on activities and also highlighted the successful contingency exercise. The increase in the number of messages being transmitted was noted and the associated costs, which raised significant concerns for the administration, particularly with the additional satellite service provider. It was highlighted that NAVAREA Coordinators receiving maritime safety information not affecting their area of responsibility should retransmit it to the corresponding NAVAREA Coordinator, as cases had been experienced where the NAVAREA VI had not been aware of the MSI nor the need to broadcast a warning. The Chair requested that NAVAREA VI participate in the IMO MSI CG to ensure the concerns were captured and reported.

The Chair of the IMO MSI CG proposed that the Chair WNWNS-SC could extract all comments and items related to the cost issues from the Self Assessment report and submit them to the IMO MSI CG as a submission from the WNWNS-SC. **Action 6 – Chair**

Action 5 - NAVAREA VI: NAVAREA VI encouraged to participate in IMO MSI CG
Action 6 - Chair: Chair to generate submission to IMO MSI CG on behalf of WNWNS-SC

NAVAREA VII – noted the use of SafetyNET II and SafetyCast in testing mode, although an agreement had not been signed with Iridium. He highlighted improved interaction between Angola and Madagascar, although still at a low level. He also noted the low level of MSI being provided by Mozambique and the slow impact of CB effort with regards to other coastal states; he noted the lack of NAVTEX coverage outside South Africa and Namibia remains a concern. He noted the increase in messages was returning to near pre-COVID levels. He highlighted the e-learning MSI facility developed for the South Africa and Islands Hydrographic Commission (SAIHC) and the testing which has been completed within the region. He noted that requests for ‘in-force’ warnings appear to be received from a limited number of vessels, which could indicate a lack of system understanding. The Chair noted the issue of broadcasting to Coastal Warning Areas under the control of different states, which have different approaches to the use of multiple service providers.

NAVAREA VIII – noted that progress was being made towards completing the agreement with Iridium to use the SafetyCast system; he highlighted the ongoing support and MSI training for Mauritius. He highlighted the NAVTEX coverage within the area. The increase in requests for ‘in-force’ warning was noted. The lack of information being received from Kenya, Tanzania and Seychelles could be raised to the relevant RHC Chairs and IRCC to investigate whether additional assistance was required. He noted that NAVAREA VIII had remained fully functional and operational during the COVID-19 pandemic.

NAVAREA IX – provided a short brief on the activities within NAVAREA IX. The new website address was noted and NAVAREA IX was requested to ensure that the correct website was displayed via the IHO Warnings on the web page. Concerns were noted on the use of MENAS for the provision of MSI, which masked whether the Gulf States were meeting their SOLAS responsibilities. The Chair highlighted the summary table provided and suggested that it was a useful way of portraying the engagement of coastal states within a NAVAREA, a potential addition to the Self Assessment report.

NAVAREA X – noted that all the contact details had been checked and those with whom contact had been lost were being investigated. He highlighted the reduction in lack of MSI received from coastal states within the area and that investigations were underway to ascertain the reasons and what actions were required to increase the engagement with these states. It was noted there was a significant increase in messages and requests for ‘in-force’ warnings.

NAVAREA XI – highlighted no operational impact resulting from COVID-19. He noted discussions held with some regional national coordinators to improve communications and provision of information. The significant improvement in efficiency was noted. In response to

the Chair's question, he confirmed that no advanced warnings of missile firings from the Democratic People's Republic of Korea (DPRK) were being received. Provided a brief presentation and demonstration on the NAVAREA XI warning system capability using a GIS.

NAVAREA XIII – The Chair provided details of highlights from the Self Assessment. It was noted that Morsviazspunik (Ministry of Transport) had taken over all satellite MSI communications, which would require Iridium to find a solution for NAVAREAs XIII, XX and XXI, although there was an intention to use SafetyCast. Chair to contact NAVAREA XIII on use of rectangular broadcasts instead of Area broadcasts. **Action 7 – Chair**

Action 7 – Chair: Contact NAVAREA XIII on broadcasts area anomaly

NAVAREA XIV – highlighted the operational status of SafetyCast and the monthly quality assurance check as part of their monitoring procedures. He described the SafetyCast monitoring process used. He also noted the six monthly communications check with all national coordinators and the success it has had in maintaining contact and highlighting changes of personnel as well as increased provision of MSI material. He noted that some amendments to the GISIS information had been highlighted as requiring updating since the comments made by the Chair earlier in the meeting. He highlighted the application made to the IMO EGC Coordinating Panel to amend the certificate to allow the broadcast of Met MSI to allow continuation of the contingency support to METAREA XIV. He highlighted the engagement with the South-West Pacific Hydrographic Commission (SWPHC) and the participation in their recent meetings. It was agreed that additional guidance in the Joint MSI Manual was required on the warning broadcasts to be made for planned rocket launches and best practice on monitoring procedures

Decision 7: Include additional guidance on rocket launches and monitoring procedures in the Joint MSI Manual

NAVAREA XV – noted the use of SafetyCast as well as SafetNET II. It was noted that the average time elapsed for promulgation of messages was not tracked. He noted that there was no method in use to monitor SafetyCast broadcasts. Iridium noted that the special deal to purchase a monitoring terminal at a reduced cost was still available and he encouraged all to take advantage. It was proposed that the Chair South-East Pacific Regional Hydrographic Commission (SEPRHC) was approached to assist with progressing the proposed contingency plan. **Action 8 – Chair** The Chair noted that there was five coastal warning areas with the same letter designations as the NAVTEX stations, although these were not highlighted in the report; he also suggested that this information could be included in the GISIS Master Plan.

Action 9 – NAVAREA XV

Action 8 - Chair: Request Chair SEPRHC to assist with progressing the proposed contingency plan

Action 9 - NAVAREA XV: Check the GISIS Master Plan to ensure the coastal warning areas are included

NAVAREA XVI – provided a presentation covering the Self Assessment report. He noted that SafetyCast testing had been undertaken since March 2021.

NAVAREA XVII/XVIII – noted work progressing the integration of a NAVAREA module into the domestic Navigational Warning Issuing Service (NIS). She noted the impacts of COVID-19 on the restoration of services after outages. She highlighted the updating of C-55 and that the table within the publication could be reviewed and updates proposed by the WWNWS-SC to make completion simpler. Preparations underway to test the EGC API. She noted that operational capability of SafetyCast cannot be declared until all three services (NAV, MET and SAR) are operational.

NAVAREA XIX – Noted no significant changes since WWNWS12. He highlighted the need to move away from rectangular areas to direct addressing to NAVAREAs in the Arctic as soon as possible. He noted the operational status of SafetyCast and the SafetyNET II transition was complete.

NAVAREA XX/XXI – no report received.

The Chair noted the encouraging progress and engagement with Iridium and amount of testing taking place. He also noted there remained a number of concerns which still needed to be addressed. All NAVAREAs were encouraged to continue their testing and training efforts, so that the Iridium SafetyCast service could be made available to the maritime community as a global element of the GMDSS as quickly as is prudent.

National Report – CHN provided brief details on activities. He noted the annual increase in the number of warnings issued over the past few years. He highlighted the desire to participate in IHO capacity building training opportunities.

3.2.1 Quality Management Analysis of Self Assessments

IHO introduced the Quality Management report, see Annex F, it was requested that all NAVAREAs and Sub-Area should check the comments and provide feedback to the Chair and Vice-Chair as appropriate. **Action 10 - All NAVAREAs/Sub-Area** It was proposed that the title should be amended to be NAVAREA Assessment, which was agreed. NAVAREA I proposed that the Assessment proforma could be reviewed at the DRWG20 to expand the guidance of completion and the information requested as well make amendments to the information requested. **Action 11 – Chair/IHO**

Action 10 - All: Check comments and provide feedback to Chair and Vice-Chair as appropriate

Action 11 - Chair/IHO: Review and amend the Assessment proforma at DGRW20

Decision 8: Agreed to change the title of the Assessments to be NAVAREA Assessments

3.3 Broadcast Systems and Services

3.3.1. IMO NAVTEX Coordinating Panel

The Panel Chair provided a brief overview of NAVTEX activities. He noted the number of overruns and incorrect message content, often not in accordance with the NAVTEX Manual; he did note that improvements had been observed over the past year and he encouraged all to continue in their efforts to continue these improvements. It was recognised that there needed to be a reconciliation of the information published in GISIS and that contained in the Self Assessment and NAVTEX coordinator reports to ensure harmonisation across all published information. **Action 12 – Chair NAVTEX Panel**

Action 12 - Chair NAVTEX Panel: Conduct review and harmonisation of published NAVTEX station information

3.3.2. IMO EGC Coordinating Panel

The Chair of the IMO EGC Coordinating Panel provided a presentation on the activities of the Panel, including background details of the structure of the Panel and its role. He highlighted the main functions and authority of the Panel with respect to EGC coordination. He noted a number of tasks that had been set by the NSCR and MSC, which the Panel has been directed to address and provide advice and solutions. He noted that these issues would be discussed and considered

at the next Panel meeting in November. In closing the Chair of the Panel made the following comments:

It is a fact that the IMO Maritime Safety Committee (MSC) has recognized Iridium as a provider of Global Maritime Distress and Safety System (GMDSS) satellite services. It is a fact that the Iridium SafetyCast Service is operational. It is also a fact that ships are installing Iridium GMDSS terminals in compliance with the requirements of SOLAS Chapter IV. We are not isolated NAVAREAs. We are all part of the World Wide Navigational Warning Service (WWNWS). At present, the WWNWS is not providing its service on all the recognized GMDSS satellite services. At present, the WWNWS is not providing its service to all SOLAS ships. And through that, we imply that our service, the operations we run 24 hours a day, 365 days a year, is not important. We imply that our WWNWS is not a service that needs to be prioritized.

A decision not to prioritize the provision of your service to all SOLAS ships, is not a decision you are making as isolated NAVAREAs. You are making that decision on behalf of the WWNWS. And, by not providing our service to all SOLAS ships we are setting the Safety of Life at Sea at risk. Based on this, I strongly encourage you ALL, as part of the WWNWS, to progress your implementation of the Iridium SafetyCast service. If you have any questions or need any kind of support in connection with your implementation, please feel free to contact the IMO EGC Coordinating Panel (ncsr@imo.org). We will do our utmost to assist you.

The Chair supported and endorsed these comments, he urged all NAVAREAs to expedite the full operational implementation of the Iridium SafetyCast Service and he encouraged the WMO SC-MMO to make similar efforts through the WWMIWS-SubC to encourage the METAREAs to progress their global implementation. **Action 13 – NAVAREAs/WMO SC-MMO**

Action 13 - NAVAREAs/WMO SC-MMO: Progress efforts to expedite full operational implementation of the Iridium SafetyCast Service

3.3.3. IOC Tsunami Early Warning Systems up-date, including TOWS-WG issues

The Chair provided a brief presentation on the IOC Tsunami Early Warning and Mitigation Systems, its structure and functions of the Tsunami Service Providers (TSP). He explained the processes for the promulgation of warnings through the various transmission platforms available. He described how a Tsunami warning reached a NAVAREA Coordinator, although he noted that there were a number of alternatives and varying message content and portrayal. NAVAREA XIV noted that this topic had been discussed at WWNWS10 and that it appeared limited progress had been achieved in generating standard messages. He proposed that further engagement was required with the IOC Secretariat. The Chair noted that it was anticipated that a representative of the IOC would attend WWNWS14 to help progress the work.

3.3.4. Contingency Planning

To be discussed at the next session of WWNWS.

3.4 Developments in the WWNWS

3.4.1 Inmarsat-C EGC SafetyNET Services Report

Inmarsat provided a presentation updating on activities and developments of SafetyNET and SafetyNET II EGC Services. He explained the differences between the two services.

3.4.2 Iridium SafetyCast Service Report

Iridium provided an update brief on the status of the operational implementation of SafetyCast and the increasing number of vessels fitting equipment. He highlighted the main issues which need to be addressed, particularly the harmonisation of the global status and the resistance of some coastal states to sign an agreement with Iridium and commence implementation of the SafetyCast service.

3.4.3 S-124PT report

Chair of the PT provided a comprehensive presentation covering the progress and work achieved since the WWNWS12. He highlighted the engagement with other IHO bodies (in particular S-100WG, Nautical Cartography Working Group (NCWG) and Nautical Information Provision Working Group (NIPWG)) and the submission to IMO NCSR 8. He noted that there had been one full meeting of the PT since WWNWS12 as well as highlighting the changes to the membership. NAVAREA IV-XII asked what was needed to be undertaken to better align the Joint MSI Manual with S-124 and achieve closer compatibility. The Chair S-124PT suggested that a tighter approach and reduced options would make a significant difference. It was noted that there were 20 general types and over 200-300 detailed types and therefore some rationalisation and standardisation would benefit progress. The Chair proposed that the planned review of the Joint MSI Manual could take the opportunity to progress this task to move formats and content closer to S-124, noting that organizations, at some state in the future, will have to service current methods as well as S-124 and therefore the work needed to be commenced as early as possible to ensure the published timeline could be followed. The Chair S-124 explained the challenge of languages used in Local warnings and the background to the reasons. It was noted that this situation could evolve with the wider availability of Maritime Services in the context of e-navigation. NAVAREA I proposed that this topic should be more regularly considered and that it would be appropriate to add the item to the agenda as a standard item for future meetings. **Action 14 – Chair/IHO**

Action 14 - Chair/IHO: Add discussion of operational concerns on development and implementation of S-124 for all NAVAREAs as a standing agenda item

3.4.4 EGC-API CG report (WWNWS13/3/4/4)

NAVAREA X (Australia), as Chair of the EGC-API CG¹, provided a report and presentation on the completion of the EGC-API CG. The EGC-API CG was tasked to develop a machine-to-machine standard to support the transfer of EGC shore-to-ship information, including its required messaging instructions, between certified and registered MSI providers (MSIP) and recognized mobile-satellite service (RMSS) providers. He noted the support for shore-to-ship SAR related information broadcasts was undecided and that it was not to solve interoperability and interconnectivity challenges.

The EGC-API CG has met ten times throughout 2020 and into early 2021 whilst contributing to a number of meetings of the IMO and the IHO, mainly in a report capacity. He noted that there remained one outstanding item, which was to develop the test procedure for the API. He highlighted that understanding how messages would be cancelled by the API process and the need for further experience were needed.

NAVAREA II provided a brief presentation covering the SAR functional requirements articulated in SOLAS IV/R4, which can be grouped into Distress, SAR and MSI. The Chair summarised the focus of the presentation to being the issuing of a Distress alert transmission via the appropriate system by the relevant authority. The Chair considered that the WWNWS-SC may not be the appropriate body to discuss the issue which could be addressed more appropriately to the IMO-IACO JWG meeting, which he was attending.

¹ Enhanced Group Call Application Programming Interface Correspondence Group

Inmarsat provided a presentation covering the EGC API, including some background explanation, details on how it worked and the advantages of using it. He provided details of the testing process to be used prior to live use. He then provided a demonstration of the system developed by Inmarsat. IMO asked, noting that the API standard had been developed for NAV and MET Areas, whether there was any intention to expand the standard for SAR related information. Inmarsat noted that the software could support SAR related information and it is not in the ToRs and within the remit of the WWNWS-SC. Iridium highlighted that their capability was live, which meant that the ability to transmit a single message to both recognised service providers was available and needed individual NAV and MET Area Coordinators to progress the work for their systems. Inmarsat confirmed that no additional work was required to make the standard available for SAR related information. He confirmed that it was available only for SafetyNET II, which meant a migration from SafetyNET. Chair WWMIWS-SubC noted that now was the time for NAV and MET Area Coordinators to review their systems and progress the work of updating to take advantage of these developments. The IMO considered that the CG was already established and therefore it would seem logical for it to address the SAR related information topic at the request of the IMO. The Chair highlighted that the API was not mandatory but it provide significant benefits when implemented and therefore he encouraged all to develop their own software interfaces.

NAVAREA I proposed that an informal group could be established to discuss the experiences and the use of different systems to take the work forward; NAVAREA X volunteered to lead this continuation work. **Action 15 – NAVAREA X** Iridium highlighted the benefits that had been achieved through keeping the work as a cooperative approach rather than a regulatory approach. NAVAREA XIX thanked Inmarsat and Iridium for helping to progress the work and that there should be a reference on the API in the manuals, when next updated. **Action 16 – Chair/DRWG**

The WWNWS-SC addressed the requested actions, in particular to progress the work to develop a shore-to-ship SAR-related information broadcast in the standard, once the request had been received formally from the IMO. The WWNWS-SC endorsed the API standard and approved that the standard should be published on the IHO website and report to NCSR 9. **Action 17 – Chair/IHO**

Action 15 - NAVAREA X: Lead and progress the necessary continuation work

Action 16 - Chair/DRWG: Include reference to EGC API in SafetyNET Services and SafetyCast Service manuals at next update

Action 17 - Chair/IHO: Publish API standards on IHO website and report to NCSR 9

Decision 9: The API standard was endorsed and approved for testing and subsequent use by NAV and MET Areas

3.4.5 IMO MSI CG overview

The Chair of the IMO MSI CG provided a presentation and brief on the background to the establishment of the CG by MCS 103. He noted the relevant IMO documents and the subsequent discussions at the IMO on the tasks to be addressed by the CG. He noted when the report to the MSC 105 needed to be submitted, mid-January 2022. He highlighted the three critical issues which needed to be addressed by the CG and reported to MSC 105. He provided some details on the present state of discussion on these critical issues, he suggested five options to address the cost issues, which could be considered. He encouraged the NAVAREAs not participating currently to engage actively to have 100% participation.

The Chair noted that there was a need to capture the collective WWNWS-SC concerns and questions so that they can be presented by the Chair WWNWS-SC to the CG in a coordinated

manner. IMSO noted the challenge of accurately assessing the costs to individual NAVAREAs, Iridium proposed that consideration could be given to assessing the value of MSI. IMO suggested that there was a need for some real figures to be provided to give an idea of the scale of the issue. He suggested that the figures should cover all related costs and not simply the costs of transmitting MSI. Inmarsat noted that charging for messages acted as a control on the length and number of messages broadcast, which protected the integrity of the system. NAVAREA XIX provided some comment on its experience and noted that moving from SafetyNET to SafetyNET II had generated a cost reduction; he noted that the current assessment is that using SafetyNET II and SafetyCast was at a lower cost than using SafetyNET with great efficiency. NAVAREA XVII-XVIII endorsed the comments made by NAVAREA XIX and noted the ease of training and use of the new systems. She asked whether future costs would be considered, including those related to S-124 implementation. Iridium noted that the organizational costs were far greater than income revenue generated. The Chair noted that the WWNWS-SC responsibility was to the maritime community and the provision of a service allowing them to navigate safely with a service on which they can rely. NAVAREA XIV noted that the costs issue should be considered in perspective of potentially multiple providers rather than simply two and consideration could be given to determining whether increasing the number of providers to generate a competitive market would benefit the community. He noted that more was not necessarily better in this case. NAVAREA XIX noted that the role of NAVAREA or METAREA Coordinator was a voluntary position. If there was reconsideration of this due to an inability to meet the IMO mandate, then standing down was an option or inviting another NAVAREA Coordinator to fulfil the role for a particular recognised service provider. The IHO noted the IMO member states had recognised the Iridium SafetyCast Service as a recognised mobile satellite service within the GMDSS operating in the WWNWS and WWMIWS and the meaning of Global and World-wide should not be overlooked. NAVAREA II suggested the use for MSI should be different from that of SAR and that mandating for MSI use could be considered. NAVAREA I supported this perspective. NAVAREA XIX endorsed the comments of Iridium that it should not be left to the more than 100,000 vessel to resolve the situation by forcing them to fit equipment for all providers rather than the service providers transmitting MSI over all recognised service providers.

The Chair summed up that the consensus was to implement a global service to support the IMO decision, however he recognised that this would not resolve the cost issues and that looking ahead, careful consideration should be given in the future when considering the recognition of additional mobile satellite service providers.

3.5 Emerging Technologies/Modernisation

3.5.1. Interoperability between recognized GMDSS mobile satellite service providers

Covered under agenda item 3.4.4.

3.5.2. EGNOS and Galileo related MSI

EUSPA provided a presentation covering the EGNOS and Galileo services, the background and development of the services were explained and the planned availability was noted. He noted that MSI covered outages of GNSS and therefore it was appropriate for EUSPA to engage with the WWNWS-SC on the methods and mechanisms to achieve this promulgation of information. He described how EUSPA understood how the system functioned and how they proposed to interact with the WWNWS and the NAVAREA Coordinators; a proposed message example email format was displayed. The Chair clarified that EUSPA was requesting the WWNWS promulgated warning messages to support any planned or unplanned outages of their GNSS systems in accordance with the procedures in the Joint MSI Manual. NAVAREA XVII-XVIII noted that the S-124 Production Specification had already captured this message category type. Inmarsat asked how multiple area failures would be addressed. The Chair noted that there were

capabilities to broadcast to areas larger than single NAVAREAs, including globally. EUSPA considered that this was a useful function to use the coordination of multiple NAVAREAs by the Chair. EUSPA agreed to provide the authorised email address from which the requests for message promulgation will issued, when the service is operational.

Decision 10: It was agreed that the EUSPA request should be supported and the procedure, as articulated, should be implemented

4 REVIEW OF GUIDANCE DOCUMENTS

4.1 Document Review Status Report

Document Review status report was provided by the Secretary, who highlighted the document submitted to WWNWS13 and the submission of the revised interim Iridium SafetyCast Service manual to MSC 104. The Chair highlighted the approval process and timelines as displayed in the review cycle spreadsheet as well as the amount of work that takes place at the annual DRWG. The IMO noted that the consequential impacts of amendments to documents need to be noted and reflected. It was agreed that this was the overall objective, however amending of particular documents had been taken out of turn at the request of NCSR due to the up-grading and recognition of new and additional services. It was planned that a four year revision cycle was achieved in a cascading manner from the overarching Resolutions through the Joint MSI manual to the individual service manuals.

4.2 IMO Resolutions A705(17) and A.706(17)

The Chair went through the two resolutions, highlighting significant sections, whilst noting items which needed to be amended at the next revision. IMO proposed whether having simultaneous or separate broadcast schedules for EGC services could be considered or was necessary with the increased bandwidth availability. **Action 18 – Chair EGC Panel**

Action 18 - Chair EGC Panel: Consider whether simultaneous or separate broadcast schedules for EGC services are appropriate

4.3 WMO-IMO Resolution A.1051(27)

The Chair noted that this document was the responsibility of the IMO and WMO, although it was harmonised with all other MSI documents.

4.4 IMO Resolution MSC.306(87) and A.664(16)

The Chair displayed the text of the two resolutions, where he highlighted the text which needed to be amended to reflect the changes to other MSI documents approved and adopted by the IMO.

Decision 11: DRWG to undertake review of both resolutions to bring into line with other approved MSI documents

4.5 IMO Resolution MSC.305(87)

The Chair introduced the resolution, in particular highlighting the date. The Chair requested that SONSAT (inc AWNIS) progress the revision of this document for presentation to DRWG20, in particular to reflect current practices and procedures. Inmarsat proposed that IMB Piracy Centre should be involved in the revision process. **Action 19 – SONSAT**

Action 19 - SONSAT: Progress update for presentation to DRWG20

4.6 Joint IMO/IHO/WMO Manual

The Chair proposed that an intersessional meeting to commence the review of the Joint MSI Manual could be arranged so as to provide a mature draft revision to the DRWG20 and to reflect the work required to progress toward the S-124 environment. **Action 20 – Chair/Secretary DRWG/IHO** The soft mapping from current categories to proposed S-124 categories were displayed, he noted the Type General and Type Details should be amended in the manual to reflect those proposed for S-124 so as to commence the transition process; he noted that this needed further consideration and discussion, which would be undertaken during the revision process. The China MSA proposed to undertake the translation of the Joint MSI Manual, the IHO proposed that the final text of the amended version after it had been reviewed could be provided to the China MSA for translation. **Action 21 – Secretary DRWG**

Action 20 - Chair/Secretary DRWG/IHO: Organise intersessional meeting to commence review of Joint MSI Manual

Action 21 - Secretary DRWG: Provide final text to China MSA to allow progression of translation work

4.7 International SafetyNET Services Manual

The Chair presented the manual, he highlighted significant text. He encouraged all to check through the document to gain familiarity with the contents. Inmarsat proposed that monitoring of EGC broadcasts should be consistent across all satellite service providers and therefore the text may need to be amended when the IMO had determined appropriate methods for undertaking the monitoring task. IMSO noted their submission to NCSR 8 in WWNWS13/4/7 in which it proposed an amendment to the manual to include a blocking requirement at -30dBm in the Technical Requirements for Fleet Safety Radio Installations onboard SOLAS Ships. IMSO noted that NCSR 8 had instructed IMSO to seek input from the IHO and WMO for this proposed amendment, prior to resubmission to NCSR 9. The IHO noted that approval needed to be obtained from the WMO as well before IMSO could formally submit the proposed amendment. **Action 22 – WMO SC-MMO**

Action 22 - WMO SC-MMO: Undertake the necessary approval process for this amendment and inform IMSO as appropriate

Decision 12: It was agreed that the amendment as proposed by IMSO was supported

4.8 IMO NAVTEX Manual

NAVTEX Manual revision. The Chair of the IMO NAVTEX Coordinating Panel provided details of the review of the manual and identified amendments which needed to be addressed. In particular the process for shutting down a station was presented for consideration, the text below was presented:

4.2 *Withdrawing NAVTEX stations and/or services*

International NAVTEX. Administrations wishing to withdraw International NAVTEX services and/or stations should provide the IMO with timely and adequate notice prior to the planned withdrawal. Early consultation with the relevant NAVAREA/METAREA/SAR Coordinators and the IMO NAVTEX Coordination Panel is required. When withdrawing services and/or stations the administration should ensure:

.1 Continued provision of MSI services within the area previously covered:

- .2 *The impact upon adjoining NAVTEX service areas is considered:*
- .3 *All appropriate authorities are informed, including the following:*

*IMO International NAVTEX Coordinating Panel;
NAVAREA/METAREA Coordinators;
SAR Coordinators;
Information Providers;
NAVTEX users by Notice to Mariners.*

.4 *Six weeks prior to withdrawal of the service and/or station notification should be promulgated by NAVTEX message;*

.5 *GMDSS Master Plan within GISIS is updated.*

The IMO International NAVTEX Coordinating Panel recommends prior notice of one year is given to NAVTEX stakeholders.

National NAVTEX. Administrations wishing to withdraw National NAVTEX services and/or stations should provide the IMO with timely and adequate notice prior to the planned withdrawal and inform the relevant NAVAREA/METAREA/SAR Coordinators and the IMO International NAVTEX Coordinating Panel as early as practicable. Upon completion the GMDSS Master Plan within GISIS must be updated.

The proposed changes were endorsed and approved for submission to NCSR 9. **Action 23 – Chair/IHO** It was noted that approval of WMO SC-MMO was also required. **Action 24 – WMO SC-MMO** Malta proposed that IMO Member States could be included as co-sponsors of the submission, Malta noted its willingness to act in such a capacity; the Chair asked if any other participants had the authority to agree to co-sponsor, they should indicate this to the IHO. **Action 25 – All**

The Chair presented the manual, highlighting a number of significant sections. NAVAREA Ib noted that the Baltic Sea coverage diagram required amendment prior to submission to NCSR 9, he noted that the updated graphic was contained in WWNWS13/3/2/Ib. It was proposed that a final proof reading should be undertaken at the same time as the graphic amendment. **Action 26 – Chair NAVTEX Panel**

Action 23 - Chair/IHO: Submit draft revisions to NCSR 9

Action 24 - WMO SC-MMO: Seek approval of SC-MMO for draft revisions at presented

Action 25 - All: Consider co-sponsoring MSI document submissions to the IMO

Action 26 - Chair NAVTEX Panel: Amend diagram with graphic from WWNWS13/3/2/Ib and undertake final proof reading

4.9 COMSAR/Circ.3

The Chair displayed the document and highlighted the text which needed revision. It was agreed that this should be undertaken at DRWG20.

Decision 13: Review COMSAR/Circ.3 at DRWG20

4.10 Inmarsat SafetyNET User's Handbook

The Chair noted that this document needed to be reviewed at the DRWG to ensure harmonisation with all other MSI documents. **Action 27 – Chair/Inmarsat**

Action 27 - Chair/Inmarsat: Submit to DRWG to review

4.11 IAM SAR Manual

The Chair displayed the document, he noted that, although relatively recently reviewed, the recognition of the Iridium SafetyCast Service meant that there was a need to conduct a review of the text to bring it in line with other MSI documentation. It was agreed that the revision process should be undertaken in preparation for a submission the ICAO/IMO Joint Working Group on Harmonization of Aeronautical and Maritime Search and Rescue.

Decision 14: DRWG to undertake review for submission to the ICAO/IMO Joint Working Group

4.12 IHO Publication C-55

The Chair highlighted C-55 and the need ensure the information is harmonised with the details in the GMDSS Master Plan.

4.13 Iridium SafetyCast Manual progress

The Chair displayed the changes made after NCSR 8, taking into account the comments submitted to the IMO and directive to submitted revisions to the Interim manual to MSC 104 and then further develop the text in preparation to submitting Edition 1 to a future meeting of NCSR.

4.14 Maritime Services

The Chair noted that this document had been added to the list for which the WWNWS-SC was responsible. The IMO noted that NCSR 9 would be considering updates and amendments to Maritime Services in the context of e-Navigation and that MS 5 was an important item for review. The Chair noted this task would be added to the tasks for DRWG20.

4.15 WWNWS-SC ToRs

The ToRs were reviewed and agreed that no amendments were required, IHO to update the review date, see Annex G. **Action 28 – IHO**

Action 28 - IHO: Update the review date

The Chair confirmed that the 20th meeting of the DRWG would be held the week after NCSR 9 at IMO in London. If the NCSR 9 was delayed to later in 2022, he proposed to hold DRWG20 in the January/February period to ensure the continuation of the document review cycle was maintained. He noted that a meeting of the IMO EGC Coordinating Panel may also be held during this period.

Noting the programmed dates for NCSR 9, as advised by the IMO Secretariat, the Chair proposed March with a date and length to be confirmed and he also proposed that an additional meeting could be programmed to complete the preparations for WWNWS14. **Action 29 – Chair/IHO**

Action 29 - Chair/IHO: Identify suitable dates for DRWG20 and for an intersessional meeting to progress the preparations for WWNWS14

5 WNWWS REPRESENTATION AT REGIONAL HYDROGRAPHIC COMMISSIONS (RHCs) AND OTHER CONFERENCES

5.1 WNWWS Members' Attendance to RHCs

The Chair highlighted the forthcoming RHC meetings and encouraged all to participate either in person or remotely. He noted that the RHCs determined what CB training would be bid to the CBSC for the next period. It was the NAVAREA Coordinator who was in the best position to identify which coastal states needed MSI training.

5.2 Capacity Building Training Course Development

The Chair noted the number of available trainers remained limited, he noted the number of NAVAREA Coordinators who had volunteered to be trained as a trainer. He noted that the best training was to participate in a course and interact with other students. NAVAREA IV-XII provided reports on the two most recent courses held – Jakarta and Dominican Republic – he highlighted the involvement of the NAVAREA XI Coordinator in the delivery of the course for the EAHC. He noted the positive impact of the courses with the increased communication with the NAVAREA Coordinator. He noted that the COVID-19 confinement had allowed development of the train-the-trainer course material and e-learning aspects.

NAVAREA VII provided a comprehensive brief and overview of the e-Learning course which had been developed initially to support the SAIHC Region, but which had generated wider interest and subsequent requests for broader access. He demonstrated the functionality and content of the course. NAVAREAs were invited to review the course content and provide feedback for further development.

NAVAREA IV-XII provided a demonstration of the virtual MSI course which had been developed to deliver the current MSI Training Course. He provided some background to the development and the updates which had taken place to generate the virtual course. He detailed the experience gained from the initial usage as well as the lessons learnt and where further development was required. Director Sinapi affirmed the IHO commitment to capacity building, in particularly the focus on MSI training. He highlighted the new e-Learning Centre being developed by KHOA in Korea, which it was anticipated would be operational in 2022.

The Chair highlighted his concern that there were insufficient trainers to deliver physical training and that it was considered an advantage to have the relevant NAVAREA Coordinator present. He expressed a desire to increase the number of instructors trained to deliver the MSI Training Course, he proposed that a train-the-trainers effort could be considered at the next WNWWS-SC meeting. He noted the success achieved by NAVAREA X and XIV.

6 NEXT MEETING

6.1 Dates and Venue for WNWWS14

It was proposed that a cautious approach should be taken in planning the next meeting, therefore it was agreed that WNWWS14 should be held at the IHO in Monaco or WMO in Genève, Switzerland, as a collocated event with WWMIWS-SubC, 29 August to 2 September 2022, with the option for either a hybrid or wholly remote meeting to be considered. **Action 30 - Chair/IHO**

Action 30 - Chair/IHO: Confirm details of WNWWS14

6.2 Draft Agenda for WWNWS14

The Chair reviewed the draft agenda for the WWNWS14, to which he identified a number of minor amendments that could be included, reflecting the discussions from WWNWS14. The IHO noted that the agenda for a collocated meeting would need to be amendment for reflect what is required for joint sessions and the individual sessions. He proposed that the agenda was reviewed in detail at the DRWG20. A provisional agenda for WWNWS14 is included at Annex E. **Action 31 – Chair/Vice-Chair/IHO**

Action 31 - Chair/Vice-Chair/IHO: Review draft agenda to reflect discussions at WWNWS13 and format of WWNWS14

7 REVIEW OF ACTION ITEMS FROM WWNWS13

7.1 These are set out in Annex D. It was agreed that the draft list of actions would be circulated with the draft report for input and comment as required. These are set out in Annex D. It was intended to pass the draft report to the Chair and Vice-Chair for initial comments and then circulate these drafts to the participants by 10 September for comment and input to the Secretary by 24 September. It was intended to publish the final report by 30 September. A list of relevant key meetings is at Annex H and the point brief on justification for MSI is at Annex I.

8 ANY OTHER BUSINESS

8.1 The Chair thanked Lucia Bakker, outgoing NAVAREA XVII-XVIII, for all her work and engagement over the past eight years. He highlighted the significant number initiatives in which she had been involved and the successes she had achieved.

8.2 The Chair also noted that this meeting would be the last for David Wyatt serving as the WWNWS-SC Secretariat. The Chair noted that it was hard not to look back at all the successes of the WWNWS without seeing him right there, sometimes in the shadows, but always the keel that enabled the WWNWS-SC to progress effortlessly through the waters of international bureaucracy and documentation. He thanked him for his nine years of outstanding and exemplary service to the IHO, WWNWS-SC, and to the seafarer. The Chair also noted his career of service to the maritime community prior to joining the IHO where he spent 31 years in the Royal Navy, which included positions as Commanding Officer HMS Anglesey, Commanding Officer HMS Blazer, and serving as the National Hydrographer of Oman from 2008-2011. While David's vast maritime knowledge, his timely guidance, and his candid comments will be difficult to replace, the Chair noted that he will miss the friendship David so generously gave to all of us the most. That is irreplaceable. The Chair wished David success with all of his future endeavours, and, as is tradition, he wished him a proper "Fair winds and following seas".

9. CLOSURE OF THE MEETING

The Chair thanked all the participants for their support in taking forward all the tasks which come under the remit of the SC.

The Chair finally wished all to keep safe and stay healthy in these difficult times.

Annexes:

- Annex A Agenda for the 13th Meeting of WWNWS-SC
- Annex B Participants at WWNWS13
- Annex C List of Documents submitted to WWNWS13
- Annex D List of Action Items as of 27 September 2021

Annex E	Provisional Agenda for the 14 th Session of the IHO WWNWS Sub-Committee
Annex F	MSI Quality Management Survey Summary
Annex G	Terms of Reference (ToRs)
Annex H	List of key IMO and IMSO meetings
Annex I	Justifications for broadcasting MSI

**PROVISIONAL AGENDA OF THE THIRTEENTH MEETING
OF THE WWNWS SUB COMMITTEE (WWNWS13)**

**Remote virtual Webex
30 August to 3 September 2021**

1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS

- .1 Opening Remarks and Introductions (**Chair**)
- .2 Welcome by the host (**Director Luigi Sinapi**)
- .3 Working Arrangements (**Secretary**)
- .4 Administrative Arrangements (**Secretary**)
- .5 Adoption of the Agenda (**Chair**)
- .6 Review of Action Items from WWNWS12 (**Secretary**)
- .7 Report from IRCC13 (**Chair**)

2 MATTERS RELATING TO THE GMDSS MASTER PLAN

- .1 Review content of GMDSS Master Plan Annexes 7 & 8_ (**Chair**)

3 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)

- .1 Related IMO meetings:
 - .1 Outcome of the 103rd Sessions of the International Maritime Organization's Committee on Maritime Safety (MSC 103) 5 – 14 May 2021 (**Secretary**)
 - .2 Outcome of the 8th Session of the International Maritime Organization's Sub-Committee on Navigation, Communications and Search and Rescue (NCSR 8) 19 – 23 April 2021 (**Secretary**)
- .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*)
 - .1 Quality Management Analyses of Self Assessments (**Secretary**)
- .3 Broadcast Systems and Services
 - .1 NAVTEX issues
 - .1 Report of the IMO NAVTEX Coordinating Panel
 - .2 NAVTEX Service issues
 - .2 Report of the IMO EGC Coordinating Panel
 - .3 IOC Tsunami Early Warning Systems up-date, including TOWS-WG issues (**Chair**)
 - .4 Contingency Planning (**Chair**)
- .4 Developments in the WWNWS
 - .1 Inmarsat-C EGC SafetyNET Services Report (**Inmarsat**)
 - .2 Iridium SafetyCast Service Report (**Iridium**)
 - .3 S-124 progress report (**Chair S-124CG**)

- .4 EGC-API CG report (Chair EGC-API CG)
- .5 IMO MSI CG overview (Chair IMO MSI CG)
- .5 Emerging Technologies/Modernisation
 - .1 Interoperability between recognized GMDSS mobile satellite service providers (Chair/Secretary)
 - .2 EGNOS and Galileo related MSI (EUSPA)

4 REVIEW OF GUIDANCE DOCUMENTS AND OTHER RELATED DOCUMENTATION

- .1 Document Review Status Report (Chair/Secretary DRWG)
- .2 IMO Resolutions A.705(17) as amended and A.706(17) as amended (MSC.1/Circ.1287 and MSC.1/Circ.1288 respectively) (Chair/Secretary DRWG)
- .3 WMO - IMO resolution on Met-ocean services Assembly resolution A.1051(27)
- .4 IMO resolutions MSC.306(87) and A.664(16) "Performance Standards for Enhanced Group Call Equipment". (Chair/Secretary DRWG)
- .5 IMO "Guideline on operational procedures for the broadcast of maritime safety information concerning acts of piracy and piracy counter-measure operations." (IMO resolution MSC.305(87) (Chair/Secretary DRWG)
- .6 Joint IMO/IHO/WMO Manual on MSI (MSC.1/Circ.1310) and IHO Publication S-53 (Chair/Secretary DRWG)
- .7 International SafetyNET Services Manual (MSC.1/Circ.1364) (Chair/Secretary DRWG/Inmarsat)
- .8 IMO NAVTEX Manual (MSC/Circ.1403) (Chair/Secretary DRWG)
- .9 Relations between NAVAREA Coordinators and Rescue Coordination Centres (COMSAR/Circ.3) (Chair/IMO)
- .10 Inmarsat SafetyNET Users' Handbook (Chair/Secretary DRWG)
- .11 IAM SAR Manual Volume 2 (IMO)
- .12 MSI element of IHO Publication C-55 – "Status of Hydrography and Nautical Cartography World-Wide". (Chair/Secretary)
- .13 Iridium SafetyCast Service Manual – interim version (Chair/Secretary DRWG/Iridium)
- .14 Maritime Services in the context of e-Navigation (Chair/Secretary)
- .15 Terms of Reference for the WWNWS Sub Committee (IHO Circular Letter 46/2009) (Chair/Secretary)

5 WWNWS REPRESENTATION AT REGIONAL HYDROGRAPHIC COMMISSIONS AND OTHER CONFERENCES

- .1 WWNWS member attendance at RHCs and reports (Chair)
- .2 Capacity Building MSI Training Course Developments (Chair)
 - .1 Discussion of on-line MSI Training Course
 - .2 Discussion of attendance criteria and student selection;
 - .3 Discussion on input from partner Organizations involved in the provision of MSI (IMO, WMO, IOC)

6 NEXT MEETING

- .1 Dates and venue for WWNWS14 – Monaco or Genève collocated with WWMIWS-SubC, ??-?? August/September 2022 (tbc) (Chair/Secretary)
- .2 Draft Agenda for WWNWS14 (Chair/Secretary)

7 Review of Action Items from WWNWS13 (Secretary)

8 ANY OTHER BUSINESS (Chair)

.1

9 CLOSURE OF THE MEETING (Chair)

**WWNWS13
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Documents Submitted to WWNWS13

Document No	Document Title	Date Uploaded
WWNWS13 Self Assessment Template	Template to be used for the submission of NAVAREA Self Assessments - amended 7 April 2021	7 April 2021
WWNWS13 Self Assessment Template Annex	NAVAREA Self Assessment Annex A Template-Blank.zip	7 April 2021
WWNWS13 Document Template	Template to be used for the submission of documents, other than Self Assessments	7 April 2021
WWNWS13 PowerPoint Template	Template to be used for PowerPoint Presentations at WWNWS13	7 April 2021
WWNWS13-01/2021	Invitation Letter	12 May 2021
WWNWS13-01/2021	Enclosure 1 - Logistics Information	12 May 2021
WWNWS13-01/2021	Enclosure 2 - Hotel Reservations	12 May 2021
WWNWS13-01/2021	Enclosure 3 - Hotel Booking Form (Word version)	12 May 2021
WWNWS13-01/2021	Enclosure 4 - Registration Form (Word version)	12 May 2021
WWNWS13-List of Participants	List of Participants v2.0	31 August 2021
WWNWS13-1-2	IHO Opening Remarks	31 August 2021
WWNWS13-1-3	Programme for WWNWS13-SC meeting v1.0	20 August 2021
WWNWS13-1.5	Provisional Agenda for WWNWS13 v3.0	20 August 2021
WWNWS13-1-6	WWNWS12 ACTION ITEMS - Corrected to 22 June 2021	22 June 2021
WWNWS13-1-7-1	IRCC 13 Report + Outcomes	23 August 2021
WWNWS13-1-7-2	ENCWG Letter 1 2021 SevenCs EC2007	23 August 2021
WWNWS13-3-1-1	Outcomes of MSC 103	18 August 2021
WWNWS13-3-1-2	Outcomes of NCSR 8	18 August 2021
WWNWS13-2-1-I	Self Assessment NAVAREA I	29 July 2021
WWNWS13-2-1-I-Annex A	Self Assessment NAVAREA I Annex A	29 July 2021
WWNWS13-2-1-Ib	Self Assessment NAVAREA Ib	9 July 2021
WWNWS13-2-1-Ib-Annex A	Self Assessment NAVAREA Ib Annex A	9 July 2021
WWNWS13-2-1-II	Self Assessment NAVAREA II	26 July 2021
WWNWS13-2-1-II-Annex A	Self Assessment NAVAREA II Annex A	26 July 2021
WWNWS13-2-1-III	Self Assessment NAVAREA III	26 July 2021
WWNWS13-2-1-III-Annex A	Self Assessment NAVAREA III Annex A	26 July 2021
WWNWS13-2-1-IV_XII	Self Assessment NAVAREA IV_XII	27 July 2021

WWNWS13-2-1-IV-Annex A	Self Assessment NAVAREA IV Annex A	27 July 2021
WWNWS13-2-1-XII-Annex A	Self assessment NAVAREA XII Annex A	27 July 2021
WWNWS13-2-1-V	Self Assessment NAVAREA V	26 July 2021
WWNWS13-2-1-VI	Self Assessment NAVAREA VI	26 August 2021
WWNWS13-2-1-VI-Annex A	Self Assessment NAVAREA VI Annex A	
WWNWS13-2-1-VII	Self Assessment NAVAREA VII	18 August 2021
WWNWS13-2-1-VII-Annex A	Self Assessment NAVAREA VII Annex A	18 August 2021
WWNWS13-2-1-VIII	Self Assessment NAVAREA VIII	30 August 2021
WWNWS13-2-1-VIII-Annex A	Self Assessment NAVAREA VIII Annex A	
WWNWS13-2-1-IX	Self Assessment NAVAREA IX	31 August 2021
WWNWS13-2-1-IX-Annex A	Self Assessment NAVAREA IX Annex A	
WWNWS13-2-1-X	Self Assessment NAVAREA X	18 August 2021
WWNWS13-2-1-X-Annex A	Self Assessment NAVAREA X Annex A	18 August 2021
WWNWS13-2-1-XI	Self Assessment NAVAREA XI	29 July 2021
WWNWS13-2-1-XI-Annex A	Self Assessment NAVAREA XI Annex A	29 July 2021
WWNWS13-2-1-XIII	Self Assessment NAVAREA XIII	18 August 2021
WWNWS13-2-1-XIV	Self Assessment NAVAREA XIV	26 July 2021
WWNWS13-2-1-XIV-Annex A	Self Assessment NAVAREA XIV Annex A	26 July 2021
WWNWS13-2-1-XV	Self Assessment NAVAREA XV	18 August 2021
WWNWS13-2-1-XVI	Self Assessment NAVAREA XVI	18 August 2021
WWNWS13-2-1-XVII_XVIII	Self Assessment NAVAREA XVII_XVIII	26 July 2021
WWNWS13-2-1-XIX	Self Assessment NAVAREA XIX	18 August 2021
WWNWS13-2-1-XX_XXI	Self Assessment NAVAREA XX_XXI	
WWNWS13-2-1-N_C_R	National Coordinator Report - CHN	1 September 2021
WWNWS13-2-1-1	Quality Management Survey v3.0	1 September 2021
WWNWS13-3-3-1-1	IMO NAVTEX Coordinating Panel Report	18 August 2021
WWNWS13-3-3-2	IMO EGC Coordinating Panel Report	31 August 2021
WWNWS13-3-4-1	Inmarsat SafetyNET Services Report	
WWNWS13-3-4-2	Iridium SafetyCast Service Report	
WWNWS13-3-4-3	S-124 CG Report	27 August 2021
WWNWS13-3-4-4	EGC API CG Final Report documents .zip	3 May 2021

WWNWS13-3-4-4-1	GMDSS functional requirements - France (see Presentations)	
WWNWS13-3-4-5	IMO MSI CG Update	18 August 2021
WWNWS13-3-5-2	EGNOS and Galileo related MSI v2.0 - EUSPA (see Presentations)	
WWNWS13-4-1.1	Actions from DocRev WG19 Meeting	18 August 2021
WWNWS13-4-1.2	Document Review Status Report v1.0	18 August 2021
WWNWS13-4-1.3	Document Review cycle	23 August 2021
WWNWS13-4-7	IMO SafetyNET Manual amendment - IMSO	18 August 2021
WWNWS13-4-15	WWNWS-SC ToRs	7 April 2021
WWNWS13-5-1	Regional Hydrographic Commission Meetings	18 August 2021
WWNWS13-5-2	CB MSI Training 2021-2022	18 August 2021
WWNWS13-6-2	Provisional Agenda WWNWS14	18 August 2021
WWNWS13-7	List of Actions and Decisions - Draft	6 September 2021
WWNWS13-INF.1	Analysis and assessment of the GMDSS performance of Inmarsat Global Limited - IMSO	18 August 2021
WWNWS13-INF.2	Analysis and assessment of the GMDSS performance of Iridium - IMSO	18 August 2021
WWNWS13-INF.3	MSI automatic self-confirmation broadcast functionality and monitoring capability - IMSO	18 August 2021
WWNWS13-INF.4	Interim report on BDMSS assessment - IMSO	18 August 2021
WWNWS13 Presentations	Presentations.zip	2 September 2021

WWNWS13
Remote Webex – 30 August to 3 September 2021

List of Actions (updated: 27 September 2021)

Action Number	Agenda Item	Subject	Status / Due Date	Comments	Action By
On going					
	WWNWS9	GMDSS Master Plan	On going	Encourage national coordinators to cross-check C-55 and GMDSS Master Plan information	All
	WWNWS9	Outcomes of IMO Meetings	On going	Engage with IMO meetings and relevant Correspondence Groups	All
	WWNWS11	Related IMO meetings	On going	Engage with maritime administration delegations attending IMO meetings to ensure all are briefed correctly and the implications of any proposals are understood fully	All NAVAREAs/ Sub-Area
	WWNWS11	Contingency Planning	On going	Develop appropriate arrangements and include details of annual contingency exercises in reports	All NAVAREAs
	WWNWS11	S-124CG Report	On going	Engage with S-124 PT to provide input and feedback on developments	All NAVAREAs/ Sub-Area
WWNWS8 List of Actions					
	WWNWS8 4.8	SafetyNET Users' Handbook	DRWG18 DRWG19 DRWG20	Provided an update on the revision of the Inmarsat SafetyNET Users' Handbook and the intended procedure to be followed. Revised version to be provided at DRWG18 DRWG19 DRWG20	Inmarsat
WWNWS9 List of Actions					
	WWNWS9 3.2	Self Assessment reports	DRWG18 DRWG19 DRWG20	Develop generic letter for use by NAVAREA Coordinators to encourage provision of MSI	Chair

WWNWS10 List of Actions					
15	2.1	NAVAREA IX	DRWG18 DRWG19 DRWG20	Develop generic letter for use by Coordinators to explain to National Coordinators their roles and responsibilities	Chair
18	2.1	NAVAREA XVI	30 November DRWG19 DRWG20	Review contents of Joint IMO/IHO/WMO Manual on MSI and provide message examples for inclusion	All
WWNWS11 List of Actions					
8	3.2.1	Quality Management Analysis	WWNWS12 WWNWS14	NAVAREA Coordinators to register on IMO Docs to gain access to relevant IMO documents and to gain viewing rights and GMDSS manager authority to GISIS and report in Self Assessment	All NAVAREAs/ Sub-Area
16	3.3.4	Contingency Planning	WWNWS12 WWNWS14	Expedite conclusion of planned contingency agreement and conduct annual exercise of plan	NAVAREAs XV/XVI
WWNWS12 List of Actions					
2	2.1	Self Assessment	CBSC19	Work with Regional CB Coordinators (RSAHC and NIOHC) for funding for proposed MSI training course	NAV IX
4	2.1	Self Assessment	25 September	Check scheduled broadcast time for NAVAREA XV	Chair
WWNWS13 List of Actions					
1	1.6	Review of actions from WWNWS12	1 October	All participants to review list of actions from WWNWS12 and provide an update on the status of those for which they have responsibility	All
2	1.7	Report from IRCC13	DRWG20	Self Assessment proforma to be amended to include provision to provide appropriate figures to be used for reporting progress against relevant IHO KPIs	IHO
3	1.7	Report from IRCC13	DRWG20	Investigate figures provided in IRCC13 report to clarify if repetitions were included	Chair
4	2.1	Matters relating to GMDSS Master Plan	WWNWS14	Review data published in GISIS to ensure harmonisation with Self Assessment information	All
5	3.2	Self Assessment reports	MSC 105	NAVAREA VI to participate in IMO MSI CG	NAVAREA VI
6	3.2	Self Assessment reports	MSC 105	Chair to generate submission to IMO MSI CG on behalf of WWNWS-SC	Chair

7	3.2	Self Assessment reports	WWNWS14	Chair to contact NAVAREA XIII on broadcasts area anomaly	Chair/NAVA REA XIII
8	3.2	Self Assessment reports	SEPRHC15	Request Chair SEPRHC to assist with progressing the proposed contingency plan	Chair
9	3.2	Self Assessment reports	1 October	Check the GISIS Master Plan to ensure the coastal warning areas are included	NAVAREA XV
10	3.2.1	Quality Management Analysis	1 October	Check comments and provide feedback to Chair and Vice-Chair as appropriate	All
11	3.2.1	Quality Management Analysis	DRWG20	Review and amend the Assessment proforma at DGRW20	Chair/IHO
12	3.3.1	NAVTEX Coordinating Panel report	WWNWS14	Conduct review and harmonisation of published NAVTEX station information	Chair NAVTEX Panel
13	3.3.2	EGC Coordinating Panel report	NCSR 9	Progress efforts to expedite full operational implementation of the Iridium SafetyCast Service	All NAVAREAs/ WMO SC- MMO
14	3.4.3	S-124PT report	WWNWS14	Add discussion of operational concerns on development and implementation of S-124 for all NAVAREAs as a standing agenda item	Chair/IHO
15	3.4.4	EGC-API CG report	WWNWS14	Lead and progress the necessary continuation work	NAVAREA X
16	3.4.4	EGC-API CG report	DRWG20	Include reference to EGC API in SafetyNET Services and SafetyCast Service manuals at next update	Chair/DRWG
17	3.4.4	EGC-API CG report	NCSR 9	Publish API standards on IHO website and report to NCSR 9	Chair/IHO
18	4.2	IMO Resolutions A705(17) and A.706(17)	DRWG20	Consider whether simultaneous or separate broadcast schedules for EGC services are appropriate	Chair EGC Panel
19	4.5	IMO Resolution MSC.305(87)	DRWG20	Progress update for presentation to DRWG20	SONSAT
20	4.6	Joint MSI Manual	DRWG20	Organise intersessional meeting to commence review of Joint MSI Manual	Chair/ Secretary DRWG/IHO
21	4.6	Joint IMO/IHO/WMO Manual	NCSR 9	Provide final text to China MSA to allow progression of translation work	Secretary DRWG

22	4.7	International SafetyNET Services Manual	31 December	Undertake the necessary approval process for this amendment and inform IMSO as appropriate	WMO SC-MMO
23	4.8	NAVTEX Manual	NCSR 9	Submit draft revisions to NCSR 9	Chair/IHO
24	4.8	NAVTEX Manual	NCSR 9	Seek approval of SC-MMO for draft revisions at presented	WMO SC-MMO
25	4.8	NAVTEX Manual	NCSR 9	Consider co-sponsoring MSI document submissions to the IMO	All
26	4.8	NAVTEX Manual	NCSR 9	Amend diagram with graphic from WWNWS13/3/2/Ib and undertake final proof reading	Chair NAVTEX Panel
27	4.10	Inmarsat SafetyNET User's Handbook	DRWG20	Submit to DRWG to review	Chair/ Inmarsat
28	4.15	ToRs	24 September	Amend ToRs with new review update date	IHO
29	\$.15	ToRs	10 December	Identify suitable dates for DRWG20 and for an intersessional meeting to progress the preparations for WWNWS14	Chair/IHO
30	6.1	Next meeting	10 December	Confirm details of WWNWS14	Chair/ IHO
31	6.1	Draft Agenda WWNWS14	DRWG20	Review draft agenda to reflect discussions at WWNWS13 and format of WWNWS14	Chair/Vice- Chair/IHO
32	7	Action List	WWNWS14	Keep IHO and the Chair informed of progress with allocated actions	All
33	7	WWNWS13 Draft Report	10 September Complete	Draft to be circulated for comment	IHO
34	7	WWNWS13 Draft Report	24 September	All to provide comments on draft report	All
35	7	WWNWS13 Draft Report	30 September	Publish final report	IHO
36	7	Report to NCSR 9	25 March	Draft report for review and amendment	Chair/vice- Chair/IHO
37	7	Report to IRCC14	1 April	Draft report for review and amendment	Chair/vice- Chair/IHO

LIST OF DECISIONS – 27 September 2021

<u>Agenda Item</u>	<u>Number</u>	<u>Decision</u>
1.5	1	WWNWS13 meeting agenda adopted
1.6	2	Cessation of rectangular broadcasts to Arctic areas to be addressed by the IMO EGC Coordinating Panel
1.7	3	Self Assessment proforma to be reviewed at DRWG20
2.1	4	Review requirement for LES/LESO column and consider replacement with SafetyNET/SafetyNET II use and liaise with the IMO Secretariat
3.2	5	Consider how best to service the growing number of requests for ‘in-force’ warnings
3.2	6	Process for inter-NAVAREA contingency planning for SafetyNET II to be considered and a solution proposed
3.2	7	Include additional guidance on rocket launches and monitoring procedures in the Joint MSI Manual
3.2.1	8	Agreed to change the title of the Assessments to be NAVAREA Assessments
3.4.4	9	The API standard was endorsed and approved for testing and subsequent use by NAV and MET Areas
3.5.2	10	It was agreed that the EUSPA request should be supported and the procedure, as articulated, should be implemented
4.4	11	DRWG to undertake review of both resolutions to bring into line with other approved MSI documents
4.7	12	It was agreed that the amendment as proposed by IMSO was supported
4.9	13	Review COMSAR/Circ.3 at DRWG20
4.11	14	DRWG to undertake review for submission to the ICAO/IMO Joint Working Group

**PROVISIONAL AGENDA OF THE FOURTEENTH MEETING
OF THE WWNWS SUB COMMITTEE (WWNWS14)**

To be held IHO, Monaco or WMO, Genève
?? August to ? September 2022

Items highlighted to be undertaken during physical meeting sessions

1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS

- .1 Opening Remarks and Introductions (**Chair**)
- .2 Welcome by the host (**Director Luigi Sinapi/Director Johan Stander**)
- .3 Working Arrangements (**Secretary**)
- .4 Administrative Arrangements (**Secretary**)
- .5 Adoption of the Agenda (**Chair**)
- .6 Review of Action Items from WWNWS13 (**Secretary**)
- .7 Report from IRCC14 (**Chair**)

2 MATTERS RELATING TO THE GMDSS MASTER PLAN

- .1 Review content of GMDSS Master Plan Annexes 7 & 8_ (**Chair**)

3 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)

- .1 Related IMO meetings:
 - .1 Outcome of the 104th and 105th Sessions of the International Maritime Organization's Committee on Maritime Safety (MSC 104/105) 4 – 8 October 2021 and 20 – 29 April 2022 (**Secretary**)
 - .2 Outcome of the 9th Session of the International Maritime Organization's Sub-Committee on Navigation, Communications and Search and Rescue (NCSR 9) 21 – 30 June 2021 (**Secretary**)
- .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*)
 - .1 Quality Management Analyses of Self Assessments (**Secretary**)
- .3 Broadcast Systems and Services
 - .1 NAVTEX issues
 - .1 Report of the IMO NAVTEX Coordinating Panel
 - .2 NAVTEX Service issues
 - .2 Report of the IMO EGC Coordinating Panel
 - .3 IOC Tsunami Early Warning Systems up-date, including TOWS-WG issues (**Chair**)
 - .4 Contingency Planning (**Chair**)

- .4 Developments in the WWNWS
 - .1 Inmarsat-C EGC SafetyNET Services Report (**Inmarsat**)
 - .2 Iridium SafetyCast Service Report (**Iridium**)
 - .3 S-124 progress report (**Chair S-124CG**)
 - .4 EGC-API CG final outcomes/progress (**Chair EGC-API CG**)
 - .5 IMO MSI CG report (**Chair IMO MSI CG**)
- .5 Emerging Technologies/Modernisation
 - .1 Interoperability between recognized GMDSS mobile satellite service providers (**Chair/Secretary**)

4 REVIEW OF GUIDANCE DOCUMENTS AND OTHER RELATED DOCUMENTATION

- .1 Document Review Status Report (**Chair/Secretary DRWG**)
- .2 IMO Resolutions A.705(17) as amended and A.706(17) as amended (MSC.1/Circ.1287 and MSC.1/Circ.1288 respectively) (**Chair/Secretary DRWG**)
- .3 WMO - IMO resolution on Met-ocean services Assembly resolution A.1051(27)
- .4 IMO resolutions MSC.306(87) and A.664(16) "Performance Standards for Enhanced Group Call Equipment". (**Chair/Secretary DRWG**)
- .5 IMO "Guideline on operational procedures for the broadcast of maritime safety information concerning acts of piracy and piracy counter-measure operations." (IMO resolution MSC.305(87) (**Chair/Secretary DRWG**)
- .6 Joint IMO/IHO/WMO Manual on MSI (MSC.1/Circ.1310) and IHO Publication S-53 (**Chair/Secretary DRWG**)
- .7 International SafetyNET Services Manual (MSC.1/Circ.1364) (**Chair/Secretary DRWG/Inmarsat**)
- .8 IMO NAVTEX Manual (MSC/Circ.1403) (**Chair/Secretary DRWG**)
- .9 Relations between NAVAREA Coordinators and Rescue Coordination Centres (COMSAR/Circ.3) (**Chair/IMO**)
- .10 Inmarsat SafetyNET Users' Handbook (**Chair/Secretary DRWG**)
- .11 IAM SAR Manual Volume 2 (**IMO**)
- .12 MSI element of IHO Publication C-55 – "Status of Hydrography and Nautical Cartography World-Wide". (**Chair/Secretary**)
- .13 Iridium SafetyCast Service Manual – interim version (**Chair/Secretary DRWG/Iridium**)
- .14 Maritime Services in the context of e-Navigation (**Chair/Secretary**)
- .15 Terms of Reference for the WWNWS Sub Committee (IHO Circular Letter 46/2009) (**Chair/Secretary**)

5 WWNWS REPRESENTATION AT REGIONAL HYDROGRAPHIC COMMISSIONS AND OTHER CONFERENCES

- .1 WWNWS member attendance at RHCs and reports (**Chair**)
- .2 Capacity Building MSI Training Course Developments (**Chair**)
 - .1 Discussion of on-line MSI Training Course
 - .2 Discussion of attendance criteria and student selection;
 - .3 Discussion on input from partner Organizations involved in the provision of MSI (**IMO, WMO, IOC**)

6 NEXT MEETING

- .1 Dates and venue for WWNWS15 (**Chair/Secretary**)

- .2 Draft Agenda for WWNWS15 (Chair/Secretary)
- 7 Review of Action Items from WWNWS14 (Secretary)
- 8 ANY OTHER BUSINESS (Chair)
- .1
- 9 CLOSURE OF THE MEETING (Chair)

DRAFT

NAVAREA Coordinators' Self-Assessment Quality Management Analysis

Submitted by IHO Secretariat

SUMMARY

Executive Summary: This document provides details of the analysis of the NAVAREA Coordinators' Self-Assessment Reports to WWNWS13.

Action to be taken: Paragraph 9.

Related documents: NAVAREA Coordinators' Self-Assessment Reports

1. See attached Quality Management analysis table.
2. A number of the Self Assessment reports were received well after the deadline; this caused significant additional work and delayed the publication of the documents on the website. It is also noted that no reports were received for two NAVAREAs. NAVAREA Coordinators are requested to ensure the published deadline for submission of Self Assessment reports is observed and not treated as a target. It was pleasing to note that all were received in Word format, which greatly assisted in the final preparation of the documents.
3. Not all reports were received on the current template, nor the additional Annex A Excel spreadsheet provided for each relevant NAVAREA and for use by the CBSC, chairs of RHCs and Regional CB Coordinators. Details of MSI information received from coastal states within individual NAVAREAs and typical topics/subjects; i.e. mainly aids to navigation, military exercises, port construction activities, etc., helps to identify coastal states that are not providing information or the information that is provided is limited to particular topics/subjects and therefore they are likely not to be fulfilling their entire remit. The coastal states listed in each version were harmonized with the standard United Nations names, unless unavailable; the objective is to generate a comprehensive list of coastal states across all IHO activities, hence the need to use harmonized names to ensure all elements are referring to the same state. In addition it is intended to generate a master list for each NAVAREA to ensure the CB Coordinators are approaching the correct NAVAREA Coordinator and RHC Chair.
4. The widely varying states of progress with the preparations for implementation of the Iridium SafetyCast service is noted, all are encouraged to move forward as quickly as possible to aid the maintenance of a global unified system and service within the WWNWS for the benefit of the maritime customer.
5. NAVAREA Coordinators are strongly encouraged to confirm/check the contents of their Self Assessment reports with the National coordinators within their individual NAVAREAs. It is recommended that draft documents are circulated to National coordinators for their input and checking, this will also ensure communication between the NAVAREA Coordinator and the National coordinators is checked at least once per year.

6. Specific comments on submitted Self Assessment report are contained in the table below:

NAVAREA	Remarks
I	SafetyCast progress and comments noted. Contribution to MSI training gratefully acknowledged.
Ib	Successful working of BSMSIWG noted. Status of STM system noted. Website update noted, request check Warnings on the Web page to ensure links remain valid.
II	Noted the challenges of the area and the limited development and engagement of many of the coastal states, has contacted been made with Ghana, Nigeria and Cameroon to concerning the lack of MSI? Use of text to pass information is noted, are there any details on the originators (leisure sector?). SafetyCast comments and situation noted. Any further progress with bringing the non-operational NAVTEXT transmitters back into service? Provision of piracy information and warnings well noted with appreciation. When is the next test planned to be conducted with NAVAREA VII? CB assessment details for NAVAREA noted and efforts appreciated, need to continue to be raised at CBSC; concern remains that significant CB effort and expenditure appears to have had only limited longer term impact, reassessment of the strategy could be considered with CBSC.
III	Have the provided contact details been confirmed and checked? Any further progress on Iridium contract? Are there facilities to receive MSI details via text? Elapsed times are good, although a bit uniform? SafetyCast comments noted. Is any progress information available on non-operational NAVTEXT stations? Concerned that nothing has been received from a number of coastal states, it is assumed that all items were deemed to be local and coastal only, a check on the subjects and content might highlight some that should have been issued as NAVAREA Warnings as well, recommend to be investigated. Increase in number of information received, from whom are faxes received? Increase in requests for 'in-force' warnings noted. Clarification of Contingency Plan, is there an arrangement with an adjacent NAVAREA? Comments regarding MSI training are noted, has a bid been submitted by MBSHC CB Coordinator to CBSC? Comments on quantity of messages originating in the eastern sector of NAVAREA are noted and the ongoing exchanges between the NAVTEX Coordinating Panel Chair and coastal states have been read. Difficulties experienced are noted and continuing efforts to ensure provision of adequate service to the maritime community is appreciated.
IV-XII	How often are national contacts checked? SafetyCast state noted. Good to note the progress of the Dominican Republic and Panama, although concerned of overall decrease in the number of national coordinators providing MSI details. Consideration could be given to developing formal contingency plans with NAVAREAs XVII-XVIII and METAREAs IV-XII. CB priority list noted, has this been shared with the MACHC Regional CB Coordinator?
V	Comments regarding Iridium noted. When was last update to Master Plan, were new contact details added via GISIS? Current MSI message volumes noted. Any reasons for significant increase in message numbers over past

	year? Successful contingency exercise noted. CB activities noted and efforts for adjacent regions acknowledged.
VI	Any details on significant rise in messages? Is 20 minutes a standard? Comments regarding Iridium noted. Concern over the lack of progress at bringing La Paloma NAVTEX station back into service, can approach by Secretariat through SWAtHC be of benefit? Good to note successful contingency plan exercise with NAVAREA V.
VII	Efforts for local port warnings are noted and encouraged. Progress on MSI from Angola is encouraging. Limited MSI from Mozambique and Madagascar noted; concern remains on lack of MSI from Iles Comores. SafetyCast comments noted. Average elapsed time for transmission of immediate priority warnings appear somewhat uniform. Iridium comments noted. Efforts to improve MSI provision in region noted and appreciated, although lack of impact after MSI course remains a concern. Contingency planning and exercises noted. CB efforts noted and appreciated.
VIII	Have points of contact been confirmed? Comments on Iridium noted. With low level of information provision from some coastal states within region, the requirement for MSI training and raising awareness is noted, has a submission been made to CBSC? No Annex A provided. Has contingency plan been exercised?
IX	No details on use of SafetyCast. Average times appear to be outside target transmission time. When is next contingency exercise planned?
X	SafetyCast state noted. Concern with PNG, Solomon Islands and Vanuatu noted. Any consideration for contingency plan with neighbouring NAVAREA? Comments on CB noted.
XI	What date was the most recent Master Plan update? SafetyCast comments notes. Have contact details been checked? Please clarify elapsed times? Guam NAVTEX station details noted. Consider establishing formal contingency agreement with METAREA XI and advancement NAVAREA. Progress with Kiribati and discussions with Brunei noted.
XIII	Previous version of template used, paragraph table 5 incorrect. No warnings qualified as immediate priority? Comment regarding Iridium noted, however does not match comment on no change to GISIS?
XIV	SafetyCast operational state noted. Monitoring procedures noted. Success with communications checks noted. Comments on contingency plan noted. Any plans to reschedule the CB course?
XV	Previous version of template used. No information on average time to transmit 'immediate priority' messages. Encouraging to note various contingency initiatives, NAVAREA XVI requested to progress initiative. Comments regarding SafetyCast noted, has GISIS been updated to reflect this?
XVI	Comments on Iridium SafetyCast noted, has GISIS been updated? Important that NAVAREAs XV and XVI organise their contingency plan and exercise it periodically, this needs to be addressed by both as a matter of priority.
XVII-XVIII	SafetyCast state noted. Noted priority criteria now used has resulted in no urgent messages. What plans for contingency agreements and exercise, has mutual arrangement with METAREAs XVII-XVIII been considered? Significant input, engagement and contribution to WWNWS-SC appreciated and noted.
XIX	SafetyCast statenoted.

<i>XX-XXI</i>	
China	Non- operational state of Zhanjiang station noted, confirm date of return to operational status to Chair IMO NAVTEX Coordinating Panel. Provision of MSI to NAVAREA XI Coordinator noted, does it include warnings relevant to vessels in transit from outside Navtex coverage areas? Desire to participate in CB MSI training noted.

7. The relationship between NAVAREA Coordinators and National coordinators is the foundation for the successful provision of MSI to the wider maritime community, this is only achievable if there is open and regular communication. NAVAREA Coordinators have a vital role as the link between the information providers and the maritime customers. It is evident that time and effort invested in developing the skills and capabilities of National coordinators, after the concentrated Capacity Building MSI course, consolidates and reinforces the knowledge and confidence of the individuals as well as their organizations.

8. It is suggested a short survey/questionnaire could be developed to assess the performance/interaction between NAVAREA and National Coordinators. It would seek to highlight where improvements could be made by NAVAREA Coordinators to better engage and develop the knowledge and skills of National coordinators, as well identify areas on which National coordinators could focus to improve the provision of information back to their respective NAVAREA Coordinators. The information would assist chairs of Regional Hydrographic Commissions and Capacity Building Regional Coordinators to identify states in need of additional training effort as well as those not gaining from training already provided. This would allow RHC chairs' to remind National administrations of their responsibilities under SOLAS as well as to maximize the benefits of any CB training provided.

9. The Sub-Committee is invited to:

- a. **note** the information provided;
- b. **consider** amending the title to 'NAVAREA Assessment' to better reflect the objectives and sources of the information provided;
- c. **develop** a short questionnaire/survey to be sent to National coordinators;
- d. **encourage** NAVAREA Coordinators and participants to continue to submit reports in a timely fashion well ahead of the meeting dates;
- e. **request** individual NAVAREA Coordinators review the comments listed and email responses to the Chair and Vice-Chair; and
- f. **take** any other action as appropriate.

MSI Quality Management Survey

NAVAREA	ISO 9001-2008	Promulgate “In-Force” Bulletins	Promulgate “No-Warning” Messages	Monitor Broadcast	24/7 contact information provided	Promulgate two scheduled broadcasts	Certificates for all recognised service providers	IMO Master Plan updated
I	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
I Baltic Sub-area	Yes	Yes	Yes	Yes	Yes	Yes ¹ (Navtex)	N/A	Yes
II	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
III	No ²	Yes	Yes	Yes	Yes	Yes	Yes ³	Yes
IV	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
V	Yes	Yes	Yes	Yes	Yes	Yes	Yes ⁴	Yes
VI	No ⁵	Yes	Yes	Yes	Yes	Yes	Yes ⁶	Yes
VII	No ⁷	Yes	Yes	Yes	Yes	Yes	Yes	Yes
VIII	No ⁸	Yes	Yes	Yes	Yes	Yes	Yes ⁹	Yes
IX	No ¹⁰	Yes	Yes	Yes	Yes	Yes	Yes ¹¹	Yes
X	Yes	Yes	Yes	Yes ¹²	Yes	Yes	Yes	Yes
XI	No ¹³	Yes	Yes	Yes	Yes	Yes	No ¹⁴	Yes
XII	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

¹ See paragraphs 5 of NAVAREA Ib Self Assessment (WWNWS13/3/2/Ib)

² See paragraph 5 of NAVAREA III Self Assessment (WWNWS13/3/2/III)

³ See paragraph 2 of NAVAREA III Self Assessment (WWNWS13/3/2/III)

⁴ See paragraphs 2 of NAVAREA V Self Assessment (WWNWS13/3/2/V)

⁵ See paragraph 5 of NAVAREA VI Self Assessment (WWNWS13/3/2/VI)

⁶ See paragraphs 2 & 5 of NAVAREA VI Self Assessment (WWNWS13/3/2/VI)

⁷ See paragraph 5 of NAVAREA VII Self Assessment (WWNWS13/3/2/VII)

⁸ See paragraph 5 of NAVAREA VIII Self Assessment (WWNWS13/3/2/VIII)

⁹ See paragraph 2 of NAVAREA VIII Self Assessment (WWNWS13/3/2/VIII)

¹⁰ See paragraph 5 of NAVAREA IX Self Assessment (WWNWS13/3/2/IX)

¹¹ See paragraph 2 of NAVAREA IX Self Assessment (WWNWS13/3/2/IX)

¹² See paragraphs 2 & 5 of NAVAREA X Self Assessment (WWNWS13/3/2/X)

¹³ See paragraph 5 of NAVAREA XI Self Assessment (WWNWS13/3/2/XI)

¹⁴ See paragraph 2 of NAVAREA XI Self Assessment (WWNWS13/3/2/XI)

XIII	No ¹⁵	Yes	Yes	Yes	Yes	Yes	Yes ¹⁶	Yes
XIV	No ¹⁷	Yes	Yes	Yes	Yes	Yes	Yes	Yes
XV	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
XVI	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
XVII	No ¹⁸	Yes	Yes	Yes ¹⁹	Yes	Yes	Yes	Yes
XVIII	No ²⁰	Yes	Yes	Yes ²¹	Yes	Yes	Yes	Yes
XIX	No ²²	Yes	Yes	Yes	Yes	Yes	Yes	Yes
XX	No ²³	Yes	Yes	Yes	Yes	Yes		Yes
XXI	No ²⁴	Yes	Yes	Yes	Yes	Yes		Yes
NCR China	No ²⁵	N/A	Yes	Yes	N/A	Yes	Yes	N/A

¹⁵ See paragraph 5 of NAVAREA XIII Self Assessment (WWNWS13/3/2/XIII)

¹⁶ See paragraph 2 of NAVAREA XIII Self Assessment (WWNWS13/3/2/XIII)

¹⁷ See paragraph 5 of NAVAREA XIV Self Assessment (WWNWS13/3/2/XIV)

¹⁸ See paragraph 5 of NAVAREA XVII Self Assessment (WWNWS13/3/2/XVII)

¹⁹ See paragraph 5 of NAVAREA XVII Self Assessment (WWNWS13/3/2/XVII)

²⁰ See paragraph 5 of NAVAREA XVIII Self Assessment (WWNWS13/3/2/XVIII)

²¹ See paragraph 5 of NAVAREA XVIII Self Assessment (WWNWS13/3/2/XVIII)

²² See paragraph 5 of NAVAREA XIX Self Assessment (WWNWS13/3/2/XIX)

²³ See paragraph 5 of NAVAREA XX Self Assessment (WWNWS12/2/1/XX)

²⁴ See paragraph 5 of NAVAREA XXI Self Assessment (WWNWS12/2/1/XXI)

²⁵ See paragraph 5 of NCR China Self Assessment (WWNWS13/3/2/NCR)

WORLD-WIDE NAVIGATIONAL WARNING SERVICE SUB-COMMITTEE (WWNWS-SC)

References:

Article 6 of the General Regulations
1st IRCC meeting (Monaco, June 2009)

Terms of Reference

1. Monitor and guide the International Hydrographic Organization (IHO) / International Maritime Organization (IMO) World Wide Navigational Warning Service (WWNWS) which includes NAVAREA, Sub-Area and coastal warnings.
2. Study and propose new methods to enhance the provision of Maritime Safety Information (MSI) to mariners at sea.
3. Facilitate the implementation of any necessary changes in procedures for disseminating MSI which are required by the Global Maritime Distress and Safety Systems (GMDSS), or systems that supersede the GMDSS, adopted by the IMO.
4. Provide appropriate guidance to concerned IHO Member State Representatives to further the evolution of the WWNWS with respect to the full implementation of the GMDSS to include attendance at the Conferences of the Regional Hydrographic Commissions and to develop and monitor standards for watch stander training.
5. Encourage the development of bilateral or multi-lateral arrangements between NAVAREA, Sub-Area and National Co-ordinators in the provision of MSI.
6. Prepare and review the various guidance documents for the WWNWS and evaluate any proposed amendments on behalf of the IHO Member States prior to formal World Meteorological Organization (WMO) and IMO consideration and approval. WWNWS-SC should submit proposed revisions directly to the IMO Sub-Committee on Navigation, Communications, and Search and Rescue (NCSR) in accordance with the deadlines set down by the NCSR and IMO Secretariat.
7. Cooperate with other international organizations concerned with improving the global standards for disseminating Maritime Safety Information (MSI), namely IMO, World Meteorological Organization (WMO) and International Mobile Satellite Organization (IMSO).
8. Liaise with the Capacity Building Sub-Committee (CBSC) and the CB Regional Coordinators for the delivery of training courses aimed at improving Navigational Warning Services.
9. The WWNWS-SC should liaise with other IHO bodies, international organizations and industry in the conduct of its work.
10. These Terms of Reference can be amended in accordance with Article 6 of the General Regulations.

Up dated: 3 September 2021

Rules of Procedure

1. The Sub-Committee is composed of the NAVAREA Co-ordinators¹, Sub-Area Coordinators¹ and IHO Member States. In a NAVAREA or Sub-Area Coordinators' absence, they may nominate a representative to attend the meeting on their behalf. Normally this would be one of their National Coordinators¹. Representatives of the IMO, WMO, IMSO and the IHO Secretariat participate in an Ex-Officio capacity without voting rights. The Sub-Committee members, through the Chair, may invite recognized Observers² and other suitably qualified individuals, as Expert Contributors, to participate in specific activities as deemed appropriate, but without voting rights.
2. The Chair and Vice-Chair shall each be a representative of a Member State and shall be determined by vote of the Member States participating in the Sub-Committee at the first meeting after each ordinary session of the Assembly. Article 6 of the General Regulations shall govern the length of tenure. The Sub-Committee shall have a Secretary, nominated by the Secretariat. If the Chair is unable to carry out the duties of the office, the Vice-Chair shall act as the Chair with the same powers and duties.
3. The Chair shall have a seat in the Inter Regional Co-ordination Committee (IRCC) and shall report on the activities of the Sub-Committee to the IRCC Chair for further report to each ordinary session of the Assembly through the Council.
4. The Sub-Committee shall have its permanent secretariat at the Secretariat. The Sub-Committee Secretariat shall provide the secretarial and administrative support needed to gather, hold and disseminate information on behalf of the Sub-Committee. The Secretary shall provide a summary of the Sub-Committee's activities to be included in the IHO Annual Report.
5. The Sub-Committee shall normally hold a meeting every year in early September, whenever possible in conjunction with another related conference or meeting. The venue and date of the meeting shall be decided at the previous meeting, in order to facilitate participants' travel arrangements. The Chair or any appointed member, as considered necessary, with the agreement of the simple majority of all members of the Sub-Committee, can call extraordinary meetings.
6. Confirmation of venue and date shall normally be announced at least six months in advance. All intending participants shall inform the Chair and Secretary ideally no later than one month in advance of their intention to attend meetings of the Sub-Committee.
7. Members are expected to attend every meeting of the Sub-Committee. Members who are not able to attend a meeting should appoint a proxy or send a written contribution on relevant items of the agenda to the Chair and Secretary, prior to the meeting.
8. Between meetings, the Sub-Committee business will be progressed by correspondence. E-mail will be the normal method of communication. Papers and information material will be posted on the Sub-Committee's section of the IHO web-site.

¹ As defined in the IMO/IHO World-Wide Navigational Warning Service Guidance Document - IMO resolution A.706(17) as amended.

² Recognized IHO Observer organizations are listed on the IHO website.

9. Decisions should generally be made by consensus. If votes are required, decisions shall be taken by simple majority of Members of the Sub-Committee present and voting. When dealing with matters by correspondence, a simple majority of all Members of the Sub-Committee shall be required.

10. Recommendations of a Sub-Committee shall be submitted to its Committee for consideration. Due to the requirement for the WNWNS-SC to provide timely input to the IMO Sub-Committee on Navigation, Communications and Search and Rescue (NCSR), the meetings of which are held annually in the period January to March, the Sub-Committee may submit proposals, by International Hydrographic Organization CL, directly to Member States for approval prior to submission to IMO.

11. The draft minutes of meetings shall normally be distributed by the Secretary within six weeks of the end of meetings and member comments should be returned within three weeks. Final minutes should be distributed and posted on the IHO website within three months after a meeting.

12. The working language of the Sub-Committee shall be English.

13. These Rules of Procedure can be amended in accordance with Article 6 of the General Regulations.

WWNWS13
LIST OF KEY MEETINGS – 2021-2022

Organization	Meeting	Location	Dates
IMSO	Assembly27	London (Remote)	27 September -1 October 2021
IMO	MCSC 104	London (Remote)	4-8 October 2021
IMO	IMO-ITU EG 17	London (Remote)	1-5 November 2021
IMSO	AC46	London (Remote)	15-19 November 2021
IMO	MSC 105	London	20-29 April 2022
IMSO	AC47	London	13-17 June 2022 (tbc)
IMO	NCSR 9	London	21-30 June 2022
IHO	DRWG20	London	5-7 July 2022 (tbc)
IMO	IMO-ITU EG 18	London	tbc
IHO	WWNWS14	Monaco/Genève	29 August - 2 September 2022
IMSO	AC48	London	12-16 September 2022 (tbc)
IMO	MSC 105	London	31 October – 4 November 2022
IMSO	AC49	London	21-25 November 2022 (tbc)

Justifications for broadcasting MSI:

- Free at point of delivery
- Knowing who to get the information from – varied authorities within each NAVAREA
- Automatic reception
- Automatic suppression of messages already received- administrative burden on the ship
- All ships receive the same message at the same time
- Prioritised delivery
- Alarms and notifications
- Shore side web site availability
- Lack of ship internet capability
- Standardised shipboard systems reduce training and error
- Flexible addressing
- Shore side web site design (English?)
- Scheduled broadcast is made at regular intervals (twice a day)
- How do ships know that there is urgent information to go and get using a "pull" system?
- Frequency of updating web sites - to be standardised
- Capacity issues (point to point transmission or web site hits)