

**9th MEETNG of the IHO SUB-COMMITTEE ON THE WORLD-WIDE
NAVIGATIONAL WARNING SERVICE (WWNWS)
Cape Town, South Africa
28 August – 1 September 2017**

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, Mr. Peter Doherty, opened the meeting and welcomed all. This was followed by a welcome from Commander Christoff Theunissen, acting Hydrographer of South Africa, who provided a background brief on the organization and the provision of MSI services within NAVAREA VII and South African waters.

The Chair then provided his introduction, which included a thank you for the South African Hydrographic Service for hosting the meeting, particularly the efforts of Ms. Ruth Farre for all her efforts in the excellent arrangements and facilities. He highlighted the broad experience of the WWNWS-SC members and the close working relationship between the IHO and the IMO, which has been the foundation of the highlighted productive and successful work undertaken by the WWNWS-SC. He noted the importance of the attendance of the NAVAREA Coordinators, not just to find out what is developing within the WWNWS services, but also for the input from their individual NAVAREAs. He noted a number of challenges which need to be addressed in the near future and the importance of this service provided to the maritime customers. He noted the role of developing coastal states' capabilities.

The Chair noted that, as this was the first meeting after the IHO Assembly, there was a need for elections of the Chair and vice-Chair.

On completion all participants introduced themselves, see Annex B for a list of participants.

1.2 Welcome by the International Hydrographic Organization Secretariat

Secretary provided a welcome and comments from the IHO Secretariat, highlighting the importance of focusing on the provision of safety services to the maritime community, which should always be considered above regional or local politics and inter-national differences. The Chair highlighted a number of issues, including the reputation of the WWNWS-SC, and how important maintaining this should be to all participants.

1.3 Working Arrangements

It was agreed that normal working hours would be from 0900 to 1730 with a morning and afternoon coffee break. The members were reminded that all meeting documents were

available from the WWNWS section of the IHO web site and they were referenced by WWNWS9 followed by the Agenda Item (AI) number.

1.4 Administrative Arrangements

IHO provided a short brief on Working and Administrative arrangements.

1.5 Adoption of the Agenda

The provisional agenda was adopted. It is attached at Annex A to this report. The documents submitted to WWNWS9 are listed at Annex C.

1.6 Review of Action Items from WWNWS7

The Action List from WWNWS8 was addressed. It was noted that a significant number of items were included in the meeting agenda.

1.7 Report from the 9th meeting of the Inter-Regional Co-ordination Committee (IRCC9)

The Chair provided an up-date brief on the WWNWS-SC report to the IRCC9.

2 MATTERS RELATING TO THE GMDSS MASTER PLAN

2.1 IHO Update

IHO provided a brief update on the main activities of the IHO since the last meeting, which included the approval of the Protocol of Amendments to the IHO Convention, which came into force on 8 November 2016, the first meeting of the IHO Assembly and the results of the elections for the Secretary-General and Director. He noted the first session of the new IHO Council would take place 17 to 19 October in Monaco and the HSSC9 would take place in Ottawa in November and then HSSC10 would be in Rostock, Germany, 14 to 18 May 2018 to align with future Council meetings annually in October. The main focuses of the IHO were highlighted as S-100, Capacity Building and efforts to improve the world bathymetric coverage via a number of initiatives including Satellite Derived Bathymetry, GEBCO Seabed 2030 and Crowdsourced Bathymetry.

2.2 IMO Update

No report received.

2.3 Report of International Mobile Satellite Organization (IMSO)

The Director General of IMSO provided an overview and update on IMSO activities, covering the Iridium and Inmarsat systems recognition processes, briefly the LRIT system and the development of a new website for the SafetyNET Coordinating Panel. He posed a number of questions which he suggested the meeting may need to consider. The Chair sort clarification on the timeline indicated for the Iridium acceptance as a recognised mobile satellite service provider of the GMDSS, including the terminal performance and test standards, which appeared to not have taken the operational assessment process into account. The Chair highlighted the need for operational testing prior submission of final application to IMO. This was endorsed by all WWNWS members in attendance,

2.4 Review of Content of the GMDSS Master Plan Annexes 7 & 8

The Chair went through the document submitted by NAVAREA XV as an example. The Chair noted in future updating will be via GISIS, currently either self update or provided via SafetyNET and NAVTEX Coordinating Panel chairs. The NAVTEX Coordinating Panel Chair highlighted that positions should be for the antenna position not a remote station/office location. The Chair noted the need to validate Master Plan SafetyNET information provided by NAVAREA XV for Annex 8. **Action XV/Chair** NAVTEX Coordinating Panel Chair noted the need to update Annex 1 when updating other annexes, NAVAREA Coordinators should remind national coordinators; he also noted the need to compare information provided in C-55 and GMDSS Master Plan to ensure the information was harmonization, national coordinators should be encouraged to cross-check both. **Action All**

3 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)

3.1.1/3.1.2 Outcomes of International Maritime Organization (IMO) Sub-Committees and Expert Groups

IHO gave a brief review on the significant outcomes of MSC97, NCSR4, MSC98 and the IMO-ITU EG13 meetings relevant to the Sub-Committee, highlighting items from the final reports of the meetings and the subsequent information IHO Circular Letters. In particular it was highlighted the approval of the Modernization Plan of the GMDSS, the Iridium recognition process and the initial work on integrated bridge display systems and equipment, all of which will impact on the work of the NAVAREA Coordinators and how Navigational Warning messages will be presented to bridge personnel.

The question was asked on how WNWNS-SC will be represented in IMO-IHO Harmonization Group on Data Modelling (HGDM), it was noted that S-124CG chair was present at IALA-IHO coordination meeting (17-18 July 2017); he considered that the HGDM was addressing much more general overarching concepts. The increasing challenge of attending meetings was highlighted. The Chair noted the need to consider making requests to organizations to represent MSI providers at meetings; WMO suggested sending invitation to individuals as well as organizations. The Chair encouraged all participants to engage with these meetings and any relevant Correspondence Groups to ensure the concerns and views of the NAVAREA Coordinators were recognised during the development phase rather than trying to alter items later in the process. **Action All**

3.2 NAVAREA Assessments of Navigational Warnings Services by Coordinators

Each NAVAREA then presented highlights from their Self Assessment reports, particularly noting any short falls or problems encountered with the provision of delivery of MSI within their areas.

NAVAREA I - provided overview of activities, the Chair thanked him for his support at meetings and training activities. The Chair noted increasing number of requests received for in-force warnings lists via email, a significant burden on Coordinators. He identified a need to develop a generic note for inclusion on email requests for MSI.

Action Chair

NAVAREA Ib - provided overview of activities, he highlighted the Danish web based facility. The NAVTEX Coordinating Panel Chair indicated he had commenced

discussions with Italy on night time interference to resolve issue highlighted in the report. NAVAREA Ib sought more information on use of DSC for provision of MSI, XVII_XVIII highlighted she was investigating with ITU on the use of DSC for alert calling and for what it can be used, due to comments from mariners on interference and overuse. The Chair noted NAVAREA Ib had been participating since before 2000 and this was final meeting.

NAVAREA II - highlighted the challenges of the NAVAREA and the coastal states within the region. He highlighted lack of MSI being provided by a number of coastal states despite significant training effort directed by IHO CBSC and SHOM. He noted a number of ships transiting through the Gulf of Guinea were not reporting piracy incidents, possibly due to lack of understanding of procedures or a wish to deal with incidents rather than provide statistics. He highlighted the development of an online MSI course in French for use within NAVAREA II; he noted it could be used as pre-course learning and as a filter for selecting appropriate students. He did not consider it was a replacement to the current MSI Course delivered by the WNWWS. The Chair thanked him for his involvement and engagement over the years both during meetings as well support on training courses.

NAVAREA III - highlighted issues with NAVTEX service areas in the Eastern Mediterranean. Due to the lack of agreement for the delimitation of NAVTEX service areas in the region, there is no proper coordination in the International NAVTEX service. This situation results in the NAVAREA III Coordinator having to evaluate all information received to broadcast, when appropriate, the corresponding NAVAREA III Warning in the area via SafetyNET to guarantee the safety of navigation. He noted that he is aware that MSI information is not being passed from Turkey to the Greek Coordinator or the Cypriot Coordinator, as it should be per the NAVTEX Manual, if the International NAVTEX service was properly coordinated between Greece and Turkey and between Cyprus and Turkey. Moreover, this NAVAREA III Coordinator considers the resolution in the letter from the NAVTEX Panel dated 26th March 2009, stating that service areas proposed by Greece to IMO in Note COM 31/5/4 and the agreement in the Monaco meeting of 2006 should remain in force.

In addition he noted that NAVTEX messages issued from Turkey were being counted by Greece claiming the message was issued by an unauthorized station. Turkey made statement included as Annex G on NAVTEX service issues. Greece made a statement included as Annex F; Cyprus made a statement included as Annex E. When asked by the Chair, Turkey agreed to try and achieve a way to coordinate transmissions of NAVTEX information with other states to ensure conflicting messages and activities are not transmitted. The Chair asked regional NAVTEX providers to pass MSI information between each other to ensure all stations could transmit the same information. Graphics were displayed indicating proposed NAVTEX service areas for the region, by Turkey and Cyprus. Greece stated that there was no need to discuss or propose NAVTEX service areas in the region since the issue has been resolved. Moreover Greece stressed that there is no technical or operational reason for starting discussions to amend the existing and approved service areas by the IMO and IHO; therefore, Greece did not accept the Turkish graphic.

The NAVTEX Coordinating Panel Chair provided background on the general process for the establishment of stations and services areas. Greece highlighted that the vast majority of the NAVTEX transmissions from Turkey fall within the established Greek service areas. Turkey suggested possibly one or two messages may have been outside

of their proposed service areas, and agreed it would not happen in the future. The Chair suggested to keep at least within the proposed service areas and to pass information to other coastal states for transmission if outside that area; if it was within the overlap areas there was a need to ensure information was passed to the other relevant coastal state so it could promulgate information as well. Greece did not accept the term 'overlap areas' used, as there are agreed service areas in the region - versus new proposals.

The Chair required all states to stop misusing the NAVTEX system and B1 characters, which included such incidents as political message content and cancelling of NAVTEX messages transmitted by other states. The Chair noted the inappropriate use of NAVTEX services was a disservice to the mariner. **Action CYP/GRC/TUR** The Chair suggested Cyprus, Greece and Turkey individually provide information to the IMO to request and support the validation of their individual service areas for consideration and subsequent decision. Greece did not consent with Chair's proposal, as they stated the Greece NAVTEX Service Areas have already been validated and recognized by the competent bodies of IMO and IHO. The Chair subsequently consulted with the IMO Secretariat on this issue.

The IMO Secretariat provided the following guidance:

- a. Cyprus, Greece and Turkey should submit details of their claimed or proposed NAVTEX Service areas, along with all supporting/validating documentation, directly to NCSR5 for consideration and a subsequent decision;
 - b. If no submissions are received then NCSR5 will invite these states to make submissions to NCSR6, whilst at the same time recommending that no further discussion on the issue is undertaken at subsequent WNWNS-SC meetings until NCSR has received the requested information and been able to make a final decision;
 - c. If considered necessary, the advice of the Chair of the IMO NAVTEX Coordinating Panel should be sought for clarification on any technical aspects.
- Action CYP/GRC/TUR**

The NAVTEX Coordinating Panel Chair highlighted some issues with the proposals that would not be acceptable to IMO, he urged all to consider their proposals and for them to ensure all technical issues were taken into account prior to any submission. The Chair asked NAVAREA III to initiate bi-lateral discussions between the relevant coastal states on information provision by Cyprus, Greece and Turkey, in order to ensure all broadcasts were coordinated, to guarantee conflicting messages were not promulgated and that they worked together to coordinate message traffic and ensure all were aware of activities impacting on each other and the mariners transiting the area. **Action NAVAREA III/CYP/GRC/TUR** The Chair asked all states involved to respect the authority of the NAVAREA III Coordinator to coordinate MSI provision within NAVAREA and to work together to resolve the issues. **Action NAVAREA III/CYP/GRC/TUR**

NAVAREA IV_XII - highlighted their web based service, which is currently undergoing trials; the questioned was asked whether monitoring of the content of the website was in place, it was agreed there was a needed for this to be considered.

NAVAREA V - highlighted contingency plan in place with NAVAREA VI and the results of an exercise conducted. The Chair highlighted the email subscription service established as an example method for others to consider.

NAVAREA VI - highlighted NAVTEX station at La Paloma, Uruguay, was non-operational. He highlighted the challenge of receiving MSI from external organizations when the position is not within the area of that organization and therefore they were not passing it to the relevant authority. The Chair highlighted the requirement was detailed in the Joint IMO/IHO/WMO Manual on MSI and that it was a major responsibility to ensure MSI is passed to the correct authority.

NAVAREA VII - highlighted MSI for Namibia being transmitted by NAVAREA VII whilst NAVTEX transmitter off air. He highlighted the contingency plan with NAVAREA II had been put into action due to the loss of connectivity with the LES, he noted it highlighted the need to actually practice contingency plans at least once per year; the Chair requested all to exercise their contingency plans at least once per year and that details of exercises were to be reported in Self Assessment report. **Action IHO/All** He highlighted the significant CB efforts within the region which were led by NAVAREA VII. He noted the lack of MSI being received from national authorities, particularly from Angola. The Chair suggested a generic letter be developed for NAVAREA Coordinators to send to national authorities to highlight the lack of provision of MSI and their roles and responsibilities under SOLAS. **Action Chair** The Chair agreed to provide contact details for Angola to NAVAREA VII to facilitate engagement. **Action Chair** NAVTEX Coordinating Panel Chair noted the Seychelles had an operational NAVTEX station, hence no SafetyNET information needed to be passed to NAVAREA VII.

NAVAREA VIII - highlighted that all 7 newly commissioned NAVTEX stations along the Indian Coast are transmitting on trails basis.

NAVAREA IX: highlighted their active role in promulgation of piracy alerts. He noted the new website and NAVTEX stations operating in the region. Oman provided details of progress on the installation of two new stations and confirmed MSI was being sent to NAVAREA IX Coordinator for transmission via SafetyNET, it was agreed a receipt email would be sent to confirm reception of information, receipt of MSI from Oman was confirmed and reflected in a revision to the report. It was confirmed a contingency plan was being developed with NAVAREA III and intend to exercise the plan.

NAVAREA X - highlighted that AHO no longer issue annual summary of Notice to Mariners (NtM). He highlighted CB activities and progress with the development of Papua New Guinea (PNG) GMDSS capability, he anticipated full capability should be achieved and full operational certificate requested from SafetyNET Coordinating Panel before WNWWS10. He noted the request for the issue of warnings for operation of autonomous vessels in a designated area off the coast. The Chair highlighted the number of messages sent and asked if a breakdown of number of navigational and other types of messages could be provided; suggested historical figures were around 400-500 per year. The Chair noted PNG had not made any contact with SafetyNET Coordinating Panel and noted a future anticipation that PNG would be an active participant in WNWWS-SC.

NAVAREA XI - highlighted the non-operational NAVTEX station J in Philippines. He highlighted not receiving MSI from some of coastal states within region often because multiple national agencies are involved with issuing MSI. He noted the need to investigate whether MSI is being generated by coastal states and to whom it is being transmitted and how, he considered it may be lack of communications to NAVAREA XI Coordinator and understanding the need to have wider dissemination beyond own national waters. **Action XI** The Chair highlighted the significant number of unannounced rocket firings by the DPRK and the grave concern over these operations, which pose a serious threat to maritime safety. The Chair noted the actions taken by NAVAREA XI to warn mariners after these rocket firings have occurred.

NAVAREA XIII - highlighted new contact details for updating of published information on IHO website. **Action IHO**

NAVAREA XIV - highlighted change of responsibility for MSI from LINZ to RCCNZ. He noted contact details of all coastal states within region had been checked during the process of informing them of the changeover. The Chair highlighted the background processes which took place prior to the transfer of responsibility. The Chair also highlighted the need to ensure training material is up to date and consistent with latest material in use. NAVAREA XIV provided a live demonstration of the systems in use for assessing and processing information by operations room personnel to help decision making and the issuing of warnings.

NAVAREA XV - Chair introduced report. Subsequently the NAVAREA Coordinator provided an update on discussions held during recent SEPRHC to create a four nation contingency plan, initially to cover Tsunami warnings and then for MSI. The Chair and XVI welcomed the development. The Chair offered the support of NAVAREA IV and XII to both, if required, in the event of a total loss of capabilities in both NAVAREA XV and XVI.

NAVAREA XVI - highlighted split responsibility between the Hydrographic Office and the Coastal Administration. He noted all NAVTEX stations were non-operational. NAVAREA IV_XII offered to provide cover in a formal contingency plan, which would be investigated after further discussions with NAVAREA XV. **Action XVI/IV_XII**

NAVAREA XVII_XVIII - highlighted joint NAV/MET customer survey. She provided a live demonstration of a new web based NAV warning system. The Chair S-124CG suggested all organizations developing web based systems could engage with each other to share experiences and lessons learnt. **Action Chair S-124CG/All**

NAVAREA XIX - asked when transition from rectangular addressing to Navarea limits addressing for Arctic areas would be available. The Chair suggested waiting until Iridium became operational. The Chair suggested transmitting test messages requesting vessels report position of receipt to evaluate limit of Inmarsat coverage in high latitudes. **Action XVII_XVIII/XIX/XX_XXI**

NAVAREA XX_XXI - The Chair questioned the age of equipment indicated as in use, he requested confirmation of the information. **Action XX_XXI** He noted additional NAVTEX stations to be installed to cover northern Arctic route.

National Report:

China provided a brief report on national activities and capabilities. China confirmed information was available from the Maritime Safety Agency website in English including all warning messages.

3.2.1 Quality Management Analysis of Self Assessments

IHO provided an analysis of the Self Assessment reports and highlighted some of the significant issues identified. Chair asked feedback on comments identified be provided to him. **Action All** The Chair provided a brief on the contents of the NAVAREA IV presentation report to the MACHC. He agreed to provide it as an example for use at RHC meetings. **Action Chair/IHO**

WMO conducted METAREA Assessments in 2016 and reported on these in February 2017 at ETMSS-5 in Finland. The outcomes are being monitored by the WWMIWS Committee Chair. The 2016 Self Assessment was administered through an online form, rather than word document, positive feedback was received. Plan to conduct next Self Assessments in 2018 prior to the proposed joint session.

3.3 Broadcast Systems and Services

3.3.1.1 Report of the IMO NAVTEX Co-ordinating Panel

The Chair IMO NAVTEX Coordinating Panel provided a comprehensive brief on the current state of the NAVTEX services. The Chair thanked the work and efforts of the NAVTEX Coordinating Panel Chair for all his work, he also highlighted the most recent version of the GMDSS Master Plan issued in May and asked all Coordinators to check and confirm the details contained, particularly the non-operational stations. **Action All**

3.3.2.1 Report of the IMO SafetyNET Coordinating Panel

The Chair provided a comprehensive brief on the activities of the International SafetyNET Coordinating Panel, which included background information and details of documentation and current activities. The Chair detailed how it was proposed to create an Iridium manual in a similar fashion to the SafetyNET Manual. Iridium noted that they were working hard to be as similar and recognisable to the current Inmarsat operational processes.

NAVAREA II highlighted some NAVAREAs are only authorized to disseminate Navigational Warnings via SafetyNET, which caused an issue when activating contingency plans for another NAVAREA which may have the authority to promulgate Met Warnings. The Chair noted that the issue had been experienced and discussion with Inmarsat, which will allow this as necessary for the period required. . IMSO highlighted the on-going development of the SafetyNET website, the Chair acknowledged that the content and what documents should be made available had not been fully considered.

WMO noted that WMO METAREA Schedule is available at:

http://www.wmo.int/pages/prog/www/ois/Operational_Information/VolumeD/GMDSS/SatelliteSystemsCommunication/GMDSS/TransmissionSchedule_FullGMDSS.pdf

The Chair provided a briefing on the *M/V JESSIKA* incident off the coast of Panama in November 2016. He highlighted a number of significant issues for consideration by NAVAREA Coordinators.

3.3.2.2 Report from NTSB – El Faro

WMO noted that USA is currently working on the domestic meteorological service related recommendations. WMO noted the potential change in user requirement for updates of warnings from 6 hourly to 3 hourly on SafetyNET. WMO feels that there is limited evidence that this is a universal requirement. WMO 558 outlines that Tropical Cyclone/Hurricane/Typhoon warnings include a current position plus a future position at next 12 and 24 hour intervals, including the radius of gale force winds. Expectation is that ships are informed of the scale of these weather systems and take early action to avoid the area affected. WMO will seek additional feedback from industry internationally to validate the stated requirement and provide details at the next WWNWS-SC meeting. **Action WMO**

3.3.3.1 WMO Liaison Report

WMO provided an update on recent programme activities. WMO provided additional information to the written report. He particular highlighted the enthusiasm to hold a joint session in Monaco in 2018. He also noted that WMO would work with WWNWS-SC and IHO/IMO to progress the numerous tasks which impact across the three organizations.

3.3.3.2 NAVAREA/METAREA Customer Survey

NAVAREA XVII_XVIII provided a comprehensive brief on the customer survey conducted for NAVAREA XVII_XVIII and Hudson Bay METAREA IV. Turkey asked on the use of the internet for receipt of MSI; the Chair highlighted that the Modernization Plan of the GMDSS had noted the internet would remain a complementary capability and not a recognized primary means for dissemination of MSI.

3.3.4 Contingency Planning

Although comprehensively covered in the Self Assessment reports, the Chair re-stated the importance of contingency planning and the need to have extensive protocols in place. He noted the increased number of agreements either in-place or being progressed since the last meeting, he urged all to continue this process and to exercise the plan, at least on a yearly basis. He also emphasised the importance of having external arrangements with an adjacent NAVAREA Coordinator, as internal alternative site relocation did not meet the entire requirements of contingency planning.

3.4 Developments in the WWNWS

3.4.1 Inmarsat-C EGC SafetyNET Report

Inmarsat provided a comprehensive presentation on EGC SafetyNET services and current activities. The Chair asked on the number of terminals in use, Inmarsat indicated there were approximately 160,000 terminals in use; the Chair also asked on the number of terminals which can and cannot be up-graded to allow NAVAREA addressing from the current rectangular addressing in the Arctic areas. He also asked if Inmarsat wanted additional NAVAREAs to participate in the SafetyNET II testing, Inmarsat noted that the service would be commercially launched at the end of 2017. The Chair asked Inmarsat to investigate the ability to allow NAVAREAs to transmit MET messages when exercising contingency plans. Chair asked Inmarsat to provide a demonstration of the SafetyNET II at the DRWG16 meeting in 2018. **Action Inmarsat** Inmarsat noted interoperability discussion was at an early phase, she noted that Inmarsat was open to work with Iridium to provide solutions to

ensure the best service would be provided to the mariner through all mobile satellite service providers of the GMDSS. She noted the coverage gaps for I4 satellites compared with I3 satellites were under review for an appropriate solution to be created. The Chair requested Inmarsat to determine the number of terminals which can and cannot be up-graded to allow NAVAREA addressing from the current rectangular addressing in the Arctic areas. **Action Inmarsat**

WMO highlighted the comment in WNWWS9/3/4/1/1, paragraph 56:

56. SafetyNET II offers MSI providers and SAR services a new method for generating and submitting their messages directly to the Inmarsat-C NCSs and Inmarsat FleetBroadband Satellite Access Stations (SASs) over the internet using a user-friendly interactive Graphical User Interface (GUI).

The WMO noted this was not a main requirement for Met Services, which need machine to machine capabilities; he noted that a webpage interface would be acceptable as a backup facility. The WMO observed with respect to SafetyNET II that they were unsure whether IMSO were aware that SafetyNET II did not meet METAREA requirements and that discussions were being held between WMO and Inmarsat to find a solution.

WMO noted that it had been engaged with Inmarsat on the new system for the last 12 months. The WMO have provided Inmarsat with the functional requirements for Met MSI products, it is possible that some NAVAREA Coordinators may have the same requirements. He particularly highlighted the requirement to send the message directly (machine to machine) to Inmarsat's servers (similar to the current method for the LES). At present, it appears the system only accepts MSI messages entered through the SafetyNET II web; this is not operationally satisfactory for Met agencies, and possibly, some NAVAREA Coordinators. The WMO suggested that if both the WNWWS and WWMIWS desired this capability, it may be appropriate to discuss this further prior to any approach to Inmarsat.

3.4.2 S-124 Progress

Chair S-124CG provided a comprehensive presentation covering the background, activities, progress and future tasks for the development of the S-124 Product Specification. The Chair asked for clarification on the message delivery and promulgation procedures. It was noted that the model is designed for use for Navigational Warnings, however it could also be used for Ts&Ps NtM, which is out of the scope of the WNWWS-SC. : It was highlighted that the S-124 PS is for Navigational Warnings and is a data standard and format not a system. System and service are to be designed beyond the S-124 development. S-124CG Chair also provided information on some of the outcomes of IMO and IHO/IALA meetings. He noted that technical services for S-124 data delivery from the coordinator system and portrayal of Navigational Warnings are future tasks of the S-124CG. The S-124CG Chair noted he was no longer available to lead the CG and he requested a replacement be nominated. The Chair thanked him for all his efforts and the work he has achieved. The Chair asked IHO to investigate whether a suitable replacement can be identified and for the S-124SC Chair to highlight the issue to HSSC9. **Action IHO/S-124CG Chair** This generated numerous questions and a wide ranging discussion on future service provision and how the period of dual system operation will be undertaken.

The WMO noted the comment in the HSSC section related to the likelihood that current GMDSS technology will not be suitable to transmit S-100 content through it. This is a welcome observation as it could have increased costs through SafetyNET. It is understood

the internet will be the main option and the S-100 will be available as a complimentary service to the MSI text service, but may not be available to all ships if they do not have good internet access.

“HSSC

S-124 progress was reported at HSSC8 (HSSC8-07.1B INF2) (Nov 2016). The report stated that “the current NAVTEX, SafetyNET and AIS will not be able to convey NWs in S-124 and, therefore, S-124 NWs should be distributed by new communication systems (NAVDAT, VDES, ...) identified in the modernization plan of the GMDSS under development”.”

WMO provided an update on S-412 development. USA will be participating in the IMO/IHO HGDM in October 2017 at IMO, London. It is considered this will be a key meeting for S-100 Product displays on vessels.

Australia METAREA Coordinator and NAVAREA Coordinator are to commence participation in a trial to disseminate MSI text forecasts onto the Asia/Pacific Maritime Cloud testbed that is being setup by South Korea. Some initial message formatting work has been carried out.

3.5 Emerging Technologies

3.5.1 Iridium Satellite System

Iridium provided a comprehensive presentation on the progress of development of GMDSS services. NAVAREA X highlighted the desire for operators to generate single messages rather than one for each provider service. This concept was supported by all. Iridium highlighted the desire of both companies to create a single terminal and receiver. Concerns were raised over the potential rise in costs for NAVAREA Coordinators. Questions were asked on how the requirement to monitor broadcasts by NAVAREA Coordinator will be implemented as monitoring of MSI is a critical requirement of a NAVAREA Coordinators duties

3.5.2 Interoperability

The Chair noted there was a need to identify what was meant by interoperability and how it could work. NAVAREA X noted that as a NAVAREA Coordinator, it was his responsibility to ensure his Warning Messages were provided to the recognised mobile satellite service providers of the GMDSS. Concern was raised on how the information would be uploaded by the service providers and how NAVAREA Coordinators would monitor the delivery/receipt of the messages. Inmarsat and Iridium noted they were at very early stages of discussions and that the NAVAREA Coordinators had yet to define what they wanted. IMSO provided details of the considerations discussed at the recent IMO-ITU EG13 meeting and the issue that a single point of distribution would not necessarily reduce costs but could reduce workloads and opportunities for human errors. IHO and IMSO highlighted the need to consider a multi-provider environment. The Chair noted there remained a considerable number of issues which need to be addressed and resolved. The Chair suggested the need to establish a CG on Interoperability of members of the WWNWS-SC to address the issues and concerns which are being articulated over the recognition of new mobile satellite service providers. The Chair asked for those who wish to be involved; ZAR, CAN, NZL, ARG, NOR SWE, USA, AUS, ESP, FRA and JPN volunteered with the USA as the initial coordinator; he also asked that WMO and IMSO be kept informed of discussions. The Chair indicated the initial tasks should be the drawing up of draft ToRs, methods and frequency of meetings and initial definition and understanding of interoperability to be reported to the DRWG16; he invited Inmarsat and

Iridium to engage with the CG to provide technical input. IMSO, Inmarsat and Iridium confirmed their willingness to be actively involved. **Action USA**

4 REVIEW OF GUIDANCE DOCUMENTS

The Chairman noted that the 15th meeting of the Document Review Working Group was held at IMO Headquarters the week following NCSR4 in 2017. He intended to convene the 16th meeting following NCSR5 at IMO Headquarters in London from 27 February - 1 March 2017 and he asked the Secretary to make the necessary arrangements with IMO. Chair provided a background brief on the document review process

4.1 Document Review Status Report

The Chair briefed on the actions resulting from the DRWG15 meeting, which was followed by an update on the state of the MSI documentation. It was noted that IMO CL 3758 contained a number of new definitions, which need to be reflected in the MSI documentation.

The WMO provided feedback on some of their actions from the DRWG15:

- 2a WMO noted this has been addressed and in progress, it was highlighted a restructuring of services SFSPA will be reviewed at JCOMM-5. There is a new WWMIWS Committee and Vice Chairs. Also NOAA will be represented at the IMO-IHO HGDM; the individual has been engaged with Inmarsat and Iridium during 2016 and 2017.
- 2b WMO noted they would support a joint paper to NCSR-5 in 2018.
- 2c WMO noted this will happen as part of A.1051(27) update.
- 2d WMO are keen to support joint sessions at the next WNWNS-SC meeting in 2018.
- 3 WMO plan to revise A.1051(27) by end of 2017, he noted they had just completed the WMO 558 update for submission at JCOMM-5.
- 4 WMO noted they have login to the IMO GISIS website.

4.2/4.3 IMO Resolutions A705(170 and A.706(17), as amended

The Secretary to the DRWG and the Chair went through the documents, highlighting the proposed amendments and changes developed at the DRWG15, taking note of changes and amendments recently approved at MSC98 as published in IMO CL3758. The Chair asked the WMO to ensure the revised definitions are transferred to A.1051(27) during the revision process. **Action WMO**

NAVAREA XI provided details on recent unannounced missile firings within the region, which constituted a hazard to shipping and the safety of navigation. It was noted these events were conducted without prior warning or appropriate notification in accordance with the requirements of A.706(17). The WNWNS-SC unanimously approved the Chair should raise this concern to the S-G IMO and in his report to the NCSR5. **Action Chair**

WMO plan to revise A.1051(27) by end of 2017. The WMO noted it had just completed the WMO 558 update for submission at JCOMM-5.

The Chair suggested additional examples of messages covering virtual aids to navigation should be included in the IMO/IHO/WMO Joint Manual on MSI. **Action NAVAREA X**

4.13 Iridium Manual

Iridium went through the initial draft version of the Iridium manual; a number of comments were noted for consideration during the further development of the manual. The Chair asked the WMO to provide an updated version of the METAREA graphic to reflect the change of responsibility for METAREA XVI. **Action WMO** The Chair requested all to provide feedback, for consideration at DRWG16, to the Chair, Secretary DRWG and IHO on the draft Iridium EGC Manual, which will be available from the IHO website. **Action All**

4.14 Terms of Reference (TOR) for the WNWNS Sub-Committee

The Chair highlighted the requirement within the ToRs to conduct elections during the first meeting after an ordinary session of the IHO Assembly.

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

5.1 Update on WNWNS Members' Attendance to RHCs

The Chair provided the background to the engagement with RHCs and the importance of providing an accurate report on the activities for the provision of MSI within the region; the Chair highlighted the importance of ensuring the Chair of each RHC is given a clear picture of the state of MSI provision to assist in identifying where MSI training should be focused. IHO emphasised the importance of not just reusing the Self Assessment, which does not provide necessarily the information required by the RHC Chairs. The IHO encouraged all to check the IHO website to identify when relevant RHC meetings were taking place and contact their HO for the provision of their report. **All Action**

5.2 Capacity Building Training Course Development

The Chair asked for the IHO and the CBSC to clarify the differences between the terms MSI Course, MSI Workshop and MSI Regional Workshop; as confusion is being created for the MSI trainers – what is the content, who are the target audience and who is conducting the training? The Chair suggested there should be one term 'MSI Course' which should only address Navigational and Metocean Warnings and be conducted by the recognised WNWNS personnel. **Action IHO.** The Chair noted the need for better coordination between the CBSC and this SC with dates and regions for where MSI training will take place. This will allow for MSI trainers to be made available. **Action Chair/IHO**

The Chair described the full preparations and contents for the MSI Training course, how the material is delivered and the structure of the course. He highlighted how the course is adapted to reflect the region in which the course is being conducted. IMSO suggested candidates could complete a pre-course questionnaire to provide details of their background, experience and working environment.

5.3 WNWNS CD-ROM

The Chair provided background information on the creation and contents of the CD-ROM, he demonstrated the some of the details contained in it. The participants were reminded that it was a snapshot and therefore organization websites should be checked for the most recent versions of documents. A copy of the CD-ROM was provided to all attendees.

6 NEXT MEETING

6.1 DATES AND VENUE FOR WWNWS10

The Chair noted that the next meeting, WWNWS10, would be held in Monaco at the IHO, 27 – 31 August 2018. It was agreed that this would include joint sessions with the WWMIWS METAREA Coordinators. He also noted the IMO intended to hold the IMO-ITU EG14 meeting in London the week following NCSR5. It was noted that the letter of invitation would be provided before the end of the year. **Action IHO** NAVAREA XVII-XVIII offered to host the WWNWS11 meeting in Canada during the week 26 – 30 August 2019, the location was yet to be advised. China offered to host a meeting in 2020 around the end of August/early September. Cyprus offered to host a future external meeting. It was agreed that the current cycle of alternate years between Monaco and external venues would be reviewed in light of the administrative requirements placed on the IHO Secretariat to conduct annual IHO Council meetings and triennial IHO Assemblies; possibly a two and one cycle could be considered.

6.2 DRAFT AGENDA FOR WWNWS10

A provisional agenda for the WWNWS10 meeting was displayed and agreed by those present. It was noted that the draft agenda would be developed further at the DRWG16 meeting when proposed topics for the joint sessions had been received from and the WMO, after the JCOMM-5 meeting in October, and the WWNWS. The provisional agenda for WWNWS10 is at in Annex H. Some initial topics for consideration for the joint session were provided by the WMO: S-100 Products, Contingency planning, Survey feedback planning, Mobile satellite service providers, training, GMDSS modernization, review of trends in ship accidents and national services.

7 ELECTION OF CHAIR AND VICE-CHAIR

The WWNWS-SC unanimously re-elected Mr. Peter Doherty, USA, as Chair and Mr. Trond Ski, Norway, as vice-Chair in succession Mr. Alain Rouault, France, who announced his retirement,

8 REVIEW OF ACTION ITEMS FROM WWNWS9

The Secretary reviewed the list of action items agreed to during the meeting. These are set out in Annex D. It was noted that the draft List of Actions would be circulated with the draft meeting report to allow participants to correct errors of fact. Participants were reminded that the meeting report was a record of discussion undertaken during the meeting and not a vehicle to include discussions at previous meetings or other meetings, even if related, or the inclusion of historical documents or personal/national views or perspectives. It was also highlighted that the List of Actions was designed to be a brief reference table of the more detailed information contained in the meeting report. The Secretary highlighted that he would generate the final meeting report with supporting annexes, taking into account the comments and input received from the participants; in the event that conflicting views or inappropriate comments were expressed or provided, he would discuss the matter with the Chair and it would be their sole decision on the final wording and content of the final report, no further discussion would be conducted unless a clarification from the originator was considered beneficial or necessary.

9 ANY OTHER BUSINESS

No items were raised.

10 CLOSURE OF THE MEETING

The Chairman thanked everyone for attending and for the hard work that they had put in to achieve everything that was necessary. He particularly thanked the hosts, the South African Hydrographic Office, and Ms Ruth Farre, for the outstanding programme of events and facilities, which had ensured the success of the meeting.

Comments from the group in closing noted that the week's session was very interesting, helpful and productive. They supported comments that the Sub-Committee is a real team and genuinely strives for results while working for the benefit of all mariners in terms of maritime safety. They also reflected the Chair's praise for the hosts.

The Chair particularly thanked Mr. Alain Rouault (NAVAREA II/France) and Mr. Svante Håkansson (Sub-area Ib/Sweden) for their long term involvement, hard work and efforts towards the work of the WWNWS-SC. He noted the considerable experience that would be departing with them and that the remaining participants would have a challenge filling the gap their departure was creating. He wished them both an enjoyable and relaxed retirement.

The Chairman then formally closed the meeting and wished everyone a safe trip home.

Annexes:

- Annex A Agenda for the 9th Meeting of WWNWS-SC
- Annex B Participants at WWNWS9
- Annex C List of Documents submitted to WWNWS9
- Annex D List of Action Items as of 1 September 2017
- Annex E Statement by Republic of Cyprus
- Annex F Statement by Republic of Greece
- Annex G Statement by Republic of Turkey
- Annex H Provisional Agenda for the 10th Session of the IHO WWNWS Sub-Committee
- Annex I MSI Quality Management Survey Summary
- Annex J ToRs
- Annex K List of key IMO and IMSO meetings
- Annex l Justifications for broadcasting MSI

**PROVISIONAL AGENDA OF THE NINTH MEETING
OF THE WWNWS SUB COMMITTEE (WWNWS9)**

**To be held Cape Town, South Africa
28 August – 1 September 2017**

1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS

- .1 Opening Remarks and Introductions (**Chair**)
- .2 Welcome by the host (**ZAR**)
- .3 Working Arrangements (**Secretary**)
- .4 Administrative Arrangements (**Host**)
- .5 Adoption of the Agenda (**Chair**)
- .6 Review of Action Items from WWNWS8 (**Secretary**)
- .7 Report from IRCC9 (**Chair**)

2 MATTERS RELATING TO THE GMDSS MASTER PLAN

- .1 IHO Update
- .2 IMO Update
- .3 IMSO Update
- .4 Review content of GMDSS Master Plan Annexes 7 & 8 (**Chair**)

3 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)

- .1 .1 Outcome of the 97th and 98th Sessions of the International Maritime Organization's Committee on Maritime Safety (MSC97 and MSC98) 21 - 25 November 2016 and 7 – 16 June 2017 (**Secretary**)
- .2 Outcome of the 4th Session of the International Maritime Organization's Sub-Committee on Navigation, Communications and Search and Rescue (NCSR4) 6 – 10 March 2017 (*including development of the GMDSS Modernization Plan and issues relevant to WWNWS*) (**Secretary**)
- .3 Outcome of the 13th meeting of the IMO/ITU Experts Group IMO/ITU EG13) 10-14 July 2017 (*including development of the GMDSS Modernization Plan and issues relevant to WWNWS*) (**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 areas issues
 - .2 Report of the International SafetyNET Coordinating Panel
 - .3 WMO Activities
 - .1 WMO Liaison Report
 - .2 Report on NAVAREA/METAREA Customer Survey (**CAN**)

- .4 Contingency Planning (**Chair**)
- .4 Developments in the WWNWS
 - .1 Inmarsat-C EGC SafetyNET Report
 - .2 S-124 progress and IMO-IHO HGDM engagement (**Chair S-124CG**)
 - .3 Display of navigational warnings – EfficienSea 2, Canada, France, USA
- .5 Emerging Technologies/Modernisation
 - .1 Up-date for new satellite service providers – Iridium
 - .2 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 Manual (MSC.1/Circ.1364) (**Chair/Secretary DRWG**)
- .8 IMO NAVTEX Manual (MSC/Circ.1403) (**Chair/Secretary DRWG**)
- .9 Relations between NAVAREA Coordinators and Rescue Coordination Centres (COMSAR/Circ.3)
- .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 DRWG**)
- .13 Iridium Guidance Manual – draft (**Iridium**)
- .14 Terms of Reference for the WWNWS Sub Committee (IHO Circular Letter 46/2009) (**Chair/Secretary DRWG**)

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)
- .3 WWNWS CD-ROM (**Chair**)

6 NEXT MEETING

- .1 Dates and venue for WWNWS10 – IHB, Monaco, 27-31 August 2018
(Chair/Secretary)
- .2 Draft Agenda for WWNWS10, including identify items for joint NAVAREA and METAREA sessions (Chair/Secretary/WMO)

- 7 Election of chair and vice-chair (Secretary)**

- 8 Review of Action Items from WWNWS9 (Secretary)**

- 9 ANY OTHER BUSINESS (Chair)**

- 10 CLOSURE OF THE MEETING (Chair)**

**WWNWS9
LIST OF PARTICIPANTS**

| Country | Name | E-mail |
|--------------------------|---|--|
| Argentina – VI | Cdr Alejandro Lucio José López (NAVAREA VI Coordinator) | jsnautica@hidro.gov.ar lucios2000@hotmail.com |
| Australia – X | Mr Craig Longmuir (NAVAREA X Coordinator) | Craig.Longmuir@amsa.gov.au |
| Brazil – V | Lt Cdr Vânia Cláudia de Assis (NAVAREA V Coordinator) | vania@chm.mar.mil.br avgantes@chm.mar.mil.br |
| Canada – XVII & XVIII | Miss Lucia Bakker (NAVAREA XVII-XVIII Coordinator) | Lucia.Bakker@dfo-mpo.gc.ca |
| Chile – XV | Capt Enrique Silva Lcdr Raul Vargas | esilva@shoa.cl rvargas@shoa.cl |
| China | Tao Xue Shixin Li Chongyang Zhang Qiaoluan Li | xuetao_tju@163.com zhangchongyang@msa.gov.cn liqiaoluan@163.com |
| Cyprus | Lt Cdr Demetris Kasinis High Commissioner Yannis Iacovou | deputy.commander@jrcc.org.cy |
| France – II | M Alain Rouault (NAVAREA II Coordinator) M Yves Le Franc | alain.rouault@shom.fr yves.le.franc@shom.fr |
| Greece | Lt Cdr Georgios Chrysochou Cdr Konstantinos Karagkounis | law@navy.mil.gr nasf_hnhs@navy.mil.gr |
| India – VIII | Cdr S.K. Sajan | msis-inho@navy.gov.in inho@navy.gov.in |
| Japan – XI | Mr Shigeru Nishikubo (NAVAREA XI Coordinator) Mr Shigeru Kasuga | tuho@jodc.go.jp Jcg-tuho@navarea11.go.jp kasuga_shigeru@jha.jp |
| New Zealand – XIV | Mr David Wilson (NAVAREA XIV Coordinator) Mr Conrad Reynecke (RCCNZ) | David.Wilson@maritimenz.govt.nz Conrad.Reynecke@maritimenz.govt.nz |
| Norway – XIX | Mr Trond Ski (NAVAREA XIX Coordinator) | trond.ski@kystverket.no |
| Oman | Cdr Saleh al Rahbi Ms Salwa al Ghassani | nhooman@omantel.net.om |
| Pakistan – IX | Lt Cdr Mudassar Riaz | hydropk@paknavy.gov.pk hydrpk@gmail.com |
| Peru – XVI | Cdr Luis Castañeda Dinatale (NAVAREA XVI Coordinator) | lcastaneda@dhn.mil.pe |
| Russia – XIII | Mr Igor Viktorov (NAVAREA XIII Coordinator) Ms Irina Leychinskaya Mr Igor Bonakov | unio_navarea@mil.ru |
| Russia – XX & XXI | | |
| South Africa – VII | Capt Theo Stokes Cdr Christoff Theunissen (NAVAREA VII Coordinator) | hydrosan@iafrica.com |
| Spain – III | Cdr Alejandro Herrero Pita (NAVAREA III Coordinator) | aherrpit@fn.mde.es ihmesp@fn.mde.es avisosihm@fu.mde.es |
| Sweden – Ib | Mr Svante Håkansson (NAVAREA Ib Coordinator) | svante.hakansson@sjofartsverket.se |
| Turkey | Lt Cdr Ahmet Keskin Capt Hakan Kuşlaroğlu Lt Cdr İhsan Hikmet Ulusal | akeskin@shodb.gov.tr hkuslaroglu@shodb.gov.tr ulusal.i8647@dzkk.tsk.tr |
| United Kingdom – I | Mr William Van-Den-Bergh (NAVAREA I Coordinator) | william.van-den-bergh@ukho.gov.uk |
| United States – IV & XII | Mr Peter Doherty (Chairman) (NAVAREA IV-XII) | peter.m.doherty@nga.mil |

| Country | Name | E-mail |
|-----------------------|--|---|
| | Coordinator) Mr Chris Janus Mr Christopher Conlan | christopher.g.janus@nga.mil Chris.Y.Conlan@nga.mil |
| IHO | Mr David Wyatt (Secretary) | adso@iho.int |
| IMO | | |
| WMO | Mr Johan Stander | Johan.Stander@weathersa.co.za |
| IOC | | |
| IMSO | Mr Moin Ahmed | dg@imso.org gmdss@imso.org |
| Inmarsat | Miss Dana Jongens | dana.jongens@inmarsat.com |
| SAMSA (MRCC) | Mr Jared Blows | jblows@samsa.org.za |
| SONSAT | Mr Michael White | michael.white@ukho.gov.uk |
| Telkom Maritime Radio | Mr Ashraf Khan Mr Cornelis de Beste | ashrafk@openserve.co.za |
| Iridium Satellite LLC | Mr Chris Snowdon Mr Larry Solomon Mr Brian Pemberton | chris@accesspartnership.com Larry.solomon@iridium.com brian.pemberton@iridium.com |

Documents Submitted to WWNWS8

| Document No | Document Title | Date Uploaded |
|---|--|----------------------|
| WWNWS9-1-6 | WWNWS8 ACTION ITEMS - Corrected to 11 August 2017 | 11 August 2017 |
| WWNWS9 Self Assessment Template | Template to be used for the submission of NAVAREA Self Assessments - amended 6 May 2017 | 6 May 2017 |
| WWNWS9 Self Assessment Template Annex A | Excel Spread sheet template to be used for details of coastal states within individual NAVAREA | 6 May 2017 |
| WWNWS9 Document Template | Template to be used for the submission of documents, other than Self Assessments | 13 January 2017 |
| WWNWS9 PowerPoint Template | Template to be used for PowerPoint Presentations at WWNWS9 | 22 March 2017 |
| WWNWS9-01/2017 | Invitation Letter | 22 March 2017 |
| WWNWS9-01/2017 | Enclosure 1 - Logistics Information | 22 March 2017 |
| WWNWS9-01/2017 | Enclosure 2 - Hotel Information | 22 March 2017 |
| WWNWS9-01/2017 | Enclosure 3 - Hotel Booking Form (Word version) | 11 May 2017 |
| WWNWS9-01/2017 | Enclosure 4 - Registration Form (Word version) | 22 March 2017 |
| WWNWS9-Provisional-Agenda | Provisional Agenda for WWNWS9 v5.0 | 3 August 2017 |
| WWNWS9-List of Participants | List of Participants | 1 September 2017 |
| WWNWS9-1-3 | Programme for WWNWS9-SC meeting v2.0 | 10 August 2017 |
| WWNWS9-1-7.1 | Report to IRCC9 | 1 August 2017 |
| WWNWS9-1-7.2 | Report to IRCC9 Presentation | 1 August 2017 |
| WWNWS9-2-2 | IMO Liaison Report | |
| WWNWS9-2-3 | IMSO Liaison Report Rev.1 | 25 August 2017 |
| WWNWS9-2-4 | Master Plan - CHL | 21 August 2017 |
| WWNWS9-3-1-1.1 | Outcomes of MSC97 and MSC98 | 1 August 2017 |
| WWNWS9-3-1-1.2 | Extracts from IMO CL3758 - Amendments to SOLAS | 24 August 2017 |
| WWNWS9-3-1-2 | Outcomes of NCSR4 | 1 August 2017 |
| WWNWS9-3-1-3 | Outcomes of IMO/ITU EG13 | 1 August 2017 |
| WWNWS9-3-2-I | Self Assessment NAVAREA I | 4 August 2017 |
| WWNWS9-3-2-I-Annex B | Self Assessment NAVAREA I Annex B | 4 August 2017 |
| WWNWS9-3-2-Ib | Self Assessment NAVAREA Ib | 14 August 2107 |
| WWNWS9-3-2-II | Self Assessment NAVAREA II | 12 July 2017 |

| | | |
|-------------------------------|--|-------------------|
| WWNWS9-3-2-II-Annex A | Self Assessment NAVAREA II Annex A | 12 July 2017 |
| WWNWS9-3-2-III | Self Assessment NAVAREA III | 11 August 2017 |
| WWNWS9-3-2-IV_XII | Self Assessment NAVAREA IV XII | 3 August 2017 |
| WWNWS9-3-2-V | Self Assessment NAVAREA V | 18 August 2017 |
| WWNWS9-3-2-VI | Self Assessment NAVAREA VI | 26 July 2017 |
| WWNWS9-3-2-VII | Self Assessment NAVAREA VII | 12 July 2017 |
| WWNWS9-3-2-VIII | Self Assessment NAVAREA VIII | 7 August 2017 |
| WWNWS9-3-2-IX | Self Assessment NAVAREA IX Rev.1 | 30 August 2017 |
| WWNWS9-3-2-X | Self Assessment NAVAREA X | 14 August 2017 |
| WWNWS9-3-2-XI | Self Assessment NAVAREA XI | 4 August 2017 |
| WWNWS9-3-2-XI-Annex A | Self Assessment NAVAREA XI Annex A | 7 August 2017 |
| WWNWS9-3-2-XIII | Self Assessment NAVAREA XIII | 7 August 2017 |
| WWNWS9-3-2-XIV | Self Assessment NAVAREA XIV | 14 August 2017 |
| WWNWS9-3-2-XV | Self Assessment NAVAREA XV | 21 August 2017 |
| WWNWS9-3-2-XVI-Rev.1 | Self Assessment NAVAREA XVI Rev.1 | 22 August 2017 |
| WWNWS9-3-2-XVII_XVIII | Self Assessment NAVAREA XVII XVIII | 24 July 2017 |
| WWNWS9-3-2-XVII_XVIII-Annex A | Self Assessment NAVAREA XVII XVIII Annex A | 24 July 2017 |
| WWNWS9-3-2-XIX | Self Assessment NAVAREA XIX | 12 July 2017 |
| WWNWS9-3-2-XX_XXI | Self Assessment NAVAREA XX XXI | 10 August 2017 |
| WWNWS9-3-2-N_C_R | National Coordinator Report - CHN | 18 August 2017 |
| WWNWS9-3-2-1 | Quality Management Survey-Rev.1 | 11 September 2017 |
| WWNWS9-3-3-1-1 | NAVTEX Panel Report | 4 August 2017 |
| WWNWS9-3-3-1-2.1 | NAVAREA III Coordinator Letter to the Chairman IMO NAVTEX Coordinating Panel | 28 July 2017 |
| WWNWS9-3-3-1-2.2 | IMO NAVTEX Panel Chair Letter 2009 | 3 August 2017 |
| WWNWS9-3-3-2.1 | SafetyNET Panel Report | 16 August 2017 |
| WWNWS9-3-3-2.2 | National Transportation Safety Board report - USA | 7 July 2017 |
| WWNWS9-3-3-2.3 | CHIRP bulletin extract | 7 July 2017 |
| WWNWS9-3-3-3-1 | WMO Liaison Report | 11 August 2017 |
| WWNWS9-INF.3 | EC-69/INF.6.4-Meteorological Services Marine Operations - WMO | 11 August 2017 |

WWNWS9 Report
Annex C

| | | |
|----------------------|--|----------------|
| WWNWS9-INF.5 | SafetyNET functional requirements - WMO | 31 August 2017 |
| WWNWS9-3-3-3-2 | Joint MET/NAVAREA Customer Survey - CAN | 24 July 2017 |
| WWNWS9-3-4-1.1 | Inmarsat Performance Report - IMSO | 11 August 2017 |
| WWNWS9-3-4-1.2 | Inmarsat EGC SafetyNET Report | |
| WWNWS9-3-4-2 | S-124 CG Progress Report | 10 August 2017 |
| WWNWS9-3-4-3.1 | Proposed Navwarning Issuing System - CAN | 24 July 2017 |
| WWNWS9-3-4-3.2 | New IALA Guideline 1117 on VHF Data Exchange System (VDES) Overview | 1 August 2017 |
| WWNWS9-3-5-1 | Iridium Progress Report | |
| WWNWS9-4-1.1 | Actions from DocRev WG15 Meeting | 1 August 2017 |
| WWNWS9-4-1.2 | Document Review Status Report | 4 August 2017 |
| WWNWS9-INF.4 | Use of a generic term for mobile satellite systems recognized for use in the GMDSS - USA | 9 August 2017 |
| WWNWS9-4-14 | WWNWS-SC ToRs | 1 August 2017 |
| WWNWS9-5-1 | Regional Hydrographic Commission Meetings | 4 August 2017 |
| WWNWS9-5-2 | CB MSI Training 2017-2018 | 9 August 2017 |
| WWNWS9-6-2 | Provisional Agenda WWNWS10 | 9 August 2017 |
| WWNWS9 Presentations | Presentations zip | |

WWNWS9
Cape Town, South Africa - 28 August to 1 September 2017

List of Actions (updated: 13 October 2017)

| Agenda Item | Subject | Status / Due Date | Comments | Action By |
|-------------------------------|---------------------------------|--|---|----------------------------------|
| WWNWS6 List of Actions | | | | |
| WWNWS6 3.2 | NAVAREA XV Self-Assessment | December 2014 WWNWS89 | NAVAREA XV to transmit cancelation messages and serialise In-Force Bulletin messages On going | NAVAREA XV/Chair |
| WWNWS8 List of Actions | | | | |
| WWNWS8 1.7 | IRCC8 Report | 15 November JCOMM5 | Submit proposed revised version of A.1051(27) to NCSR4. To be submitted to NCSR5 | WMO/IHO |
| WWNWS8 3.2 | NAVAREA II Self Assessment | WWNWS9/10 | Invite IMB to attend WWNWS9 or WWNWS10 | Chair |
| WWNWS8 3.2 | NAVAREA XV Self Assessment | WWNWS9 | Discuss contingency planning and message structures with NAVAREA XV Coordinator | NAVAREA XV |
| WWNWS8 3.2 | NAVAREA XX_XXI Self Assessment | WWNWS9 | Discuss website link for In-Force Warning, which appears to link to NtM | NAVAREAs XX & XXI |
| WWNWS8 3.3.2 | SafetyNET Coordinating Panel | WWNWS9/10 | Invite IALA to attend WWNWS-SC meetings to ensure developments in new technology and VHF Data Exchange are highlighted to WWNWS S-C | Chair/IHO |
| WWNWS8 3.4.2 | New satellite service providers | WWNWS9/10 | Transition from rectangular area to NAVAREA specific addressing for the Arctic areas Review technology and establishment of terminals with both service providers | Inmarsat/ Arctic NAVAREAs |
| WWNWS8 4.1 | Document Review Status Report | DRWG15 WWNWS9 DRWG16 | Create text for “ broadcast ” announcing the introduction of Iridium MSI services | Chair |
| WWNWS8 4.8 | SafetyNET Users’ Handbook | DRWG15 WWNWS9 DRWG16 | 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 WWNWS9 DRWG16 | Inmarsat |

| WWNWS9 List of Actions | | | | |
|------------------------|--------------------------|--------------|---|-------------------------|
| WWNWS9 2.4 | GMDSS Master Plan | NCSR5 | Validate Master Plan SafetyNET information provided for Annex 8 | Chair/NAVARE A XV |
| WWNWS9 2.4 | GMDSS Master Plan | On going | Encourage national coordinators to cross-check C-55 and GMDSS Master Plan information | All |
| WWNWS9 3.1 | Outcomes of IMO Meetings | On going | Engage with IMO meetings and relevant Correspondence Groups | All |
| WWNWS9 3.2 | Self Assessment reports | DRWG16 | Develop generic note for inclusion on email requests for MSI | Chair |
| WWNWS9 3.2 | Self Assessment reports | 1 September | Stop misuse of NAVTEX system and B1 character, including cancelling of externally issued messages | CYP/GRC/TUR |
| WWNWS9 3.2 | Self Assessment reports | NCSR5 | Individually provide NAVTEX service area information, if appropriate, to IMO for consideration and validation, as necessary | CYP/GRC/TUR |
| WWNWS9 3.2 | Self Assessment reports | 1 September | NAVAREA III to initiate bi-lateral discussions to ensure coordination of broadcasts and message content | NAVAREA III/CYP/GRC/TUR |
| WWNWS9 3.2 | Self Assessment reports | 1 September | Work through NAVAREA III Coordinator as the central point of contact on synchronisation of information provision | NAVAREA III/GRC/TUR |
| WWNWS9 3.2 | Self Assessment reports | On going | Include details of annual contingency exercises in reports | IHO/All |
| WWNWS9 3.2 | Self Assessment reports | DRWG16 | Develop generic letter for use by NAVAREA Coordinators to encourage provision of MSI | Chair |
| WWNWS9 3.2 | Self Assessment reports | 29 September | Provide contact details of Angola to NAVAREA VII | Chair |
| WWNWS9 3.2 | Self Assessment reports | WWNWS10 | Engage with national coordinators to clarify need for MSI to be promulgated beyond national borders | NAVAREA XI |
| WWNWS9 3.2 | Self Assessment reports | 29 September | Update contact details for NAVAREA XIII | IHO |
| WWNWS9 3.2 | Self Assessment reports | WWNWS10 | Progress implementation of contingency plan | NAVAREAs XV/XVI |

WWNWS9 Report
Annex D

| | | | | |
|-------------------|--------------------------------------|--------------|---|---|
| WWNWS9 3.2 | Self Assessment reports | WWNWS10 | Investigate establishment of contingency plan | NAVAREAs IV-XII/XVI |
| WWNWS9 3.2 | Self Assessment reports | WWNWS10 | Share experiences and solutions during development of web based systems for publication of warnings | Chair S- 124CG/All |
| WWNWS9 3.2 | Self Assessment reports | WWNWS10 | Transmission of test message for vessels to report position when received | NAVAREAs XVII- XVIII/XIX/XX- XXI |
| WWNWS9 3.2 | Self Assessment reports | WWNWS10 | Confirm information on equipment provided in report | Chair/NAVARE A XX-XXI |
| WWNWS9 3.2.1 | Quality Management Report | 29 September | Provide feedback on comments raised | All |
| WWNWS9 3.2.1 | Quality Management Report | 29 September | Provide NAVAREA IV-XII presentation to MACHC for use as example for other RHC meetings | Chair/IHO |
| WWNWS9 3.3.1.1 | IMO NAVTEX Coordinating Panel Report | WWNWS10 | Confirm contents of most recent version of GMDSS Master Plan | All |
| WWNWS9 3.3.2.2 | NTSB – El Faro | WWNWS10 | Provide details of discussions with customers on change of warnings update cycle on SafetyNET | WMO |
| WWNWS9 3.4.1 | Inmarsat-C EGC SafetyNET Report | DRWG16 | Provide demonstration of SafetyNET II service | Inmarsat |
| WWNWS9 3.4.1 | Inmarsat-C EGC SafetyNET Report | WWNWS10 | Provide details on number of terminals capable and non-capable of upgrade to allow NAVAREA addressing in Arctic areas | Inmarsat |
| WWNWS9 3.4.2 | S-124CG Report | HSSC9 | Highlight the need to identify a suitable replacement as Chair of the S-124CG | IHO/Chair S- 124CG |
| WWNWS9 3.5.2 | InteroperabilityCG | DRWG16 | Develop draft ToRs, title, frequency and method of meetings and initial definition of InteroperabilityCG | USA |
| WWNWS9 4.2/4.3 | Document Review | JCOMM5 | Ensure revised definitions are reflected and transferred in the revision of A.1051(27) | WMO |
| WWNWS9 4.2/4.3 | Document Review | DRWG16 | Provide example messages covering virtual aids to navigation | NAVAREA X |

WWNWS9 Report
Annex D

| | | | | |
|-------------------|---|----------------------------------|--|----------------------|
| WWNWS9 4.2/4.3 | Document Review | NCSR5 | Report continuation of unannounced missile firings in NAVAREA XI and request compliance with A.706(17) | Chair |
| WWNWS9 4.13 | Document Review | DRWG16 | Update METAREA graphic | WMO |
| WWNWS9 4.13 | Document Review | 26 January | Provide feedback on draft Iridium EGC Manual | All |
| WWNWS9 5.1 | Regional Hydrographic Commission meetings | On going | Check dates of relevant RHC meetings and contact HO for provision of MSI report | All |
| WWNWS9 5.2 | MSI Training | CBSC16 | Clarify terms used to describe MSI training and personnel involved | IHO |
| WWNWS9 6.1 | Next meeting | 15 December | Confirm details of WWNWS10 | Chair/ IHO |
| WWNWS9 8 | Action List | WWNWS10 | Keep IHO and the Chair informed of progress with allocated actions | All |
| WWNWS9 8 | WWNWS9 Draft Report | 8 September Complete | Draft to be circulated for comment | IHO |
| WWNWS9 8 | WWNWS9 Draft Report | 22 September Complete | All to provide comments on draft report | All |
| WWNWS9 8 | WWNWS9 Draft Report | 29 September Complete | Publish final report | IHO |
| WWNWS9 8 | Report to IRCC10 | 30 March | Draft report for review and amendment. | Chair/vice-Chair/IHO |

29/08/2017

Statement by the delegation of the Republic of Cyprus to the
9th Meeting of the IHO World-Wide Navigational Warning Service Sub Committee
(WWNWS9)

Dear Mr. Chairman – Dear Colleagues,

Firstly we would like to thank the organisers of this meeting and all the people behind the scenes working hard making our stay here comfortable and consequently productive and effective.

Concerning the matter of the NAVTEX service in the Eastern Mediterranean, we would like to inform you that Cyprus Radio is accomplishing its mission successfully by transmitting all the necessary Maritime Safety Information (MSI) within the Search and Rescue Region (SRR) of the Republic of Cyprus. The Cyprus SRR coincides with the Nicosia FIR and has been submitted to the IMO since 1994. Cyprus Radio has all the distress and safety communication facilities according to the GMDSS Master Plan and it is operating on a 24/7 basis under the command of the Joint Rescue Coordination Center in Larnaca. The NAVTEX transmissions are conducted according to the defined prototypes and procedures determined in the NAVTEX manual.

It is worth mentioning that the JRCC Larnaca, the Cyprus Radio which acts also as the national NAVTEX Coordinator and the Mission Control Centre responsible for receiving and distributing distress signal alerts from distress radio beacons are collocated and operating in the sake of safety of mariners. In that way the monitoring, the distribution of MSI, the coordination and the responding time in case of an emergency situation has been improved tremendously.

However, unfortunately, and with regret we have to inform you that since Turkey's NAVTEX Coordinator is not communicating any MSI to Cyprus Radio or coordinating all the activities with the NAVTEX Coordinator of the Republic of Cyprus, as per NAVTEX manual provisions, there is high risk probability of a potential maritime accident in the area.

On the screen (Annexes 1,2,3) you can observe the dangerous situation has been developed recently, because of this practice from Turkey. Specifically when Navigational Warnings issued from Cyprus Radio, as the NAVTEX Coordinator of the Republic of Cyprus, are in force, Turkey concurrently issuing new ones overlapping the existing areas, so inevitably creates vulnerability risking safety.

The first one (NW 466/17 - Turkey) was regarding a real life exercise on the 29th of April 2017, while on the same period other ships were conducting survey operations according to NW - NR 162/17 and NR 171/17.

The second one (NAV III 398/17- Turkey) was regarding a firing exercise on the 3rd of July 2017, affecting the area of multinational SAR exercise that has been already issued by NW 396/17.

And the third one (NW 837/17 - Turkey) is regarding a firing exercise for the 30th of August 2017, affecting the existing NW – NR265/27 for the transit corridor for the supporting vessels of the drilling ship West Cappella and an existing NOTAM – A1024/17 for frequent flights of helicopters to and from this ship.

Additionally we have recently observed that Turkey is involving other countries in this practice, since these countries participate in common exercises with Turkey, without realising what this practice entails. Of course the involved countries did not request the issuance of any navigational warning related with the exercise.

Therefore we once again are requesting that all MS of the IHO, all coastal stations and national NAVTEX Coordinators coordinate their activities within the SRR of the Republic of Cyprus (FIR Nicosia) with Cyprus Radio in order to ensure the maximum safety of mariners.

Moreover we expect that the NAVAREA III Coordinator will contact Cyprus Radio, which as I mentioned before operates on 24/7 basis and is the national NAVTEX Coordinator, for any future request concerning the issuances of a Navigational Warning in the area of the responsibility of the Republic of Cyprus.

After all we strongly believe that so far we have done everything possible of us, since Cyprus Radio is fulfilling successfully its demanding mission as the national Coordinator, in order to ensure the safety of mariners. It is up to Turkey now and the NAVAREA III Coordinator to follow and take actions in that direction.

Finally, Mr. Chairman, I would kindly request that this present statement by the Republic of Cyprus be duly reflected in the report / minutes to be issued of this meeting.

Thank you

ANNEX "1": NR 466/17

ANNEX "2": NAV III 398/17

ANNEX "3": NR 837/17

NAVTEX Service Areas issues

Submitted by Greece

SUMMARY

Executive Summary: NAVTEX Service Areas issues in the Aegean and East Mediterranean

Action to be taken: Include this statement in the final report of the WWNWS9

Related documents: NAVAREA III Self Assessment/WWNWS9/3/2/III/2 August 2017

1. As far as the HNHS is concerned, there are no pending issues with the NAVTEX Service Areas in the Aegean Sea. However, the Hellenic Navy delegation is compelled to react to the Turkish delegation's allegations, as follows:
2. Having listened to the statement made by the Turkish delegation, we would like to mention that the Greek NAVTEX Stations in Limnos and Iraklion, with the transmitter identification character (B1), L and H respectively, were duly established in 1986 in accordance with IMO and IHO regulations (Promulgation of Marine Safety Information (IMO) Noted by the Government of Greece, 13 Mar 1986 and COM/Cir. 99/8 May 1987. IMO) and since then have been operating successfully within their service areas.
3. That is something which has been officially recognized and approved as it is also stated at this year's self assessment report of the NAVAREA III Coordinator (MSI Self Assessment Report dated 2 Aug 2017), which in its turn confirms the Resolution in the letter from the NAVTEX Panel dated 26th March 2009 stating that the service areas proposed by Greece to IMO in Note COM 31/5/4 and the agreement in the Monaco meeting of 2006 should remain in force.
4. However in 2008, after 22 years, and despite the fact that the stations remain functional and credible, Turkey submitted a proposal to amend the limits of the Greek NAVTEX Service Areas, that was rejected by all neighboring states, by NAVAREA III (as per the letter of Instituto Hidrographico de la Marina, dated 10 March 2009) and the NAVTEX Coordinating Panel Chairman (as per the letter Chairman IMO NAVTEX Panel, dated 26 Mar 2009).
5. Consequently, the Turkish disagreement with the configurations of the limits of NAVTEX station service areas in the East Med and Aegean falls apparently within a constant attempt to revise and change the territorial status quo in the Aegean Sea along with the jurisdiction of Greece in the area. To that end, Turkey does not hesitate even to exploit the necessity for navigational safety.

6. In this context it should be recalled that in accordance with the NAVTEX Manual “The NAVTEX Coordinator must pass maritime safety information which warrants promulgation outside of their NAVTEX service area directly to the appropriate authority, using the quickest possible means». Therefore all MSI falling in the Greek NAVTEX Stations Service Areas should be circulated to Greece NAVTEX National Coordinator, the only appropriate authority, in order to be promulgated for securing the safety of navigation. Consequently, Turkey must follow the aforementioned appropriate procedure.

7. To conclude, HNHS has always been not only an effective and efficient NAVTEX Coordinator in its area of responsibility, but also in full compliance with IHO and IMO rules guidelines and principles as MSC.1/Circ. 1403 and MSC.1/Circ. 1310/Rev.1; thus constructively promoting the safety of navigation in the region.

8. Please include the above statement in the final report of the Sub-committee.

Statement by Turkey on WWNWS9/3/2/III MSI Self Assessment NAVAREA III

Submitted by Turkey

SUMMARY

Executive Summary: Turkey's statement regarding NAVTEX Service Areas in the Aegean Sea and Eastern Mediterranean Sea

Action to be taken: Including this statement in the agenda items and the final report of WWNWS9

Related documents: WWNWS9/3/2/III MSI Self-Assessment NAVAREA III

1. In Ref. MSI Self Assessment NAVAREA III, briefly stated his concerns regarding issues with coordination due to lack of agreement in the International NAVTEX Service in the Eastern Mediterranean and Aegean Seas between the related service providers regarding the delimitation of NAVTEX service areas.

2. There is no NAVTEX Service Area delimitation in Aegean Sea or Eastern Mediterranean Sea that is officially confirmed or approved by IMO or IHO, nor by Turkey. Moreover, coordination efforts by Turkey in the past to get an agreement over this issue have been unreciprocated. Turkey has not been officially asked or approached by any of the relevant national or international authorities for the joint delimitation of NAVTEX service areas in the Aegean as well as the Eastern Mediterranean. In such a semi-enclosed sea such cooperation and coordination is among the bedrock principles of relevant international instruments as well as customary and the IMO practices.

3. It should be noted that Turkey, starting from 1975¹, declared her strong willingness to assume responsibility and offered every possible assistance concerning WWNWS in NAVAREA III and has started to broadcast MSI on 1985 and since then has been disseminating MSI ceaselessly.

4. Regarding the reference to the document COM 31/5/4 in Ref.; Turkey declared her programme about NAVTEX stations during COM 30², furthermore Turkey submitted a detailed report about her NAVTEX stations and areas during COM 31³. Those facts speak for

¹ Turkish Ministry of Communication letter, COM XV/7/14/Rev.1, September 1975.

² COM 30/WP.11, page 4.

³ COM 31/5, 10 February 1986.

themselves and as such it is with regret that we notice NAVAREA III Coordinator failed to refer to any of these documents in his report in Ref.

5. Regarding the reference to the Monaco meeting in 2006 in Ref., it was a meeting of NAVAREA III National Coordinators and as such had no authority to approve, change or modify the existing limits of NAVTEX Service areas. Furthermore, the meeting report clearly reflected this fact and stated in its conclusion that “Chairman encouraged all the attendees to confirm the agreements reached during this meeting”. An observation to the same effect was also included in the Action List of the same meeting. Turkey never gave such confirmation. On the contrary, Turkey made a counter proposal for the draft study presented in Monaco based on her document COM 31/5 submitted back in 1986.

6. Regarding the reference to the NAVTEX Panel’s letter dated 26 March 2009, we agree with the observation of Mr. SEWELL that “...changes to the International NAVTEX service can only be achieved by agreement between all the parties affected. ...and that the current arrangements should remain unchanged”. As briefly outlined above, Turkey has never given her consent to draft proposals regarding changes to the international NAVTEX service and hence the current arrangements remain unchanged.

7. Against this background, Turkey, acting with good faith and spirit of cooperation, clearly stated many times that she stands ready to arrive at a negotiated solution acceptable to all. Turkey regrets that such a technical subject has been taken out of its context. Some other Service Providers exploit the NAVTEX system as a political discussion platform and hence defeating the very purpose of the system totally disregarding the safety and well-being of mariners at sea by promulgating NAVTEX messages stating that Turkish NAVTEX stations are unauthorized.

8. Turkish NAVTEX stations, as in the past, will continue to promulgate NAVTEX messages for the sake of navigation safety, until a delimitation of service limits in those areas is affected by an agreement with the consent of parties concerned.

9. It would be much appreciated, if this statement would be included in the minutes of the meeting and final report.

**PROVISIONAL AGENDA OF THE TENTH MEETING
OF THE WWNWS SUB COMMITTEE (WWNWS10)**

To be held IHO, Monaco
27 – 31 August 2018

1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS

- .1 Opening Remarks and Introductions (**Chair**)
- .2 Welcome by the host (**SG/Director**)
- .3 Working Arrangements (**Secretary**)
- .4 Administrative Arrangements (**Host**)
- .5 Adoption of the Agenda (**Chair**)
- .6 Review of Action Items from WWNWS9 (**Secretary**)
- .7 Report from IRCC10 (**Chair**)

2 MATTERS RELATING TO THE GMDSS MASTER PLAN

- .1 IHO Update
- .2 IMO Update
- .3 IMSO Update
- .4 Review content of GMDSS Master Plan Annexes 7 & 8 (**Chair**)

3 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)

- .1 .1 Outcome of the 99th Session of the International Maritime Organization's Committee on Maritime Safety (MSC99) 16 – 25 May 2018 (**Secretary**)
- .2 Outcome of the 5th Session of the International Maritime Organization's Sub-Committee on Navigation, Communications and Search and Rescue (NCSR5) 19 – 23 February 2018 (including developments in the GMDSS Modernization and issues relevant to WWNWS and WWMIWS) (**Secretary**)
- .3 Preparations for the 14th meeting of the IMO/ITU Experts Group IMO/ITU EG14) 3-7 September 2018 (including developments in the GMDSS Modernization and issues relevant to WWNWS and WWMIWS) (**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 areas issues
 - .2 Report of the International SafetyNET Coordinating Panel
 - .3 WMO Activities
 - .1 WMO Liaison Report
 - .4 IOC Liaison Report, including TOWS-WG issues (**IOC**)
 - .5 Contingency Planning (**Chair**)

- .4 Developments in the WWNWS
 - .1 Inmarsat-C EGC SafetyNET Report
 - .2 S-124 progress and IMO-IHO HGDM engagement (Chair S-124CG)
 - .3 Display of navigational warnings – EfficienSea 2, Canada, France, USA
- .5 Emerging Technologies/Modernisation
 - .1 Up-date for new satellite service providers – Iridium
 - .2 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 Manual (MSC.1/Circ.1364) (Chair/Secretary DRWG)
- .8 IMO NAVTEX Manual (MSC/Circ.1403) (Chair/Secretary DRWG)
- .9 Relations between NAVAREA Coordinators and Rescue Coordination Centres (COMSAR/Circ.3)
- .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 DRWG)
- .13 Iridium Guidance Manual – draft (Iridium)
- .14 Terms of Reference for the WWNWS Sub Committee (IHO Circular Letter 46/2009) (Chair/Secretary DRWG)

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)
- .3 WWNWS CD-ROM (Chair)

6 NEXT MEETING

- .1 Dates and venue for WWNWS11 – Canada, 26-30 August 2019 (tbc)
(Chair/Secretary)
- .2 Draft Agenda for WWNWS11 (Chair/Secretary)

- 7 Review of Action Items from WWNWS10 (Secretary)**

- 8 ANY OTHER BUSINESS (Chair)**

- 9 CLOSURE OF THE MEETING (Chair)**

Joint METAREA-NAVAREA Coordinators Discussion

The participants in this session will have the opportunity to strengthen the coordination within the NAVAREA-METAREA for MSI issues and GMDSS support, and to get the feedback or support for full implementation of WWNWS and World-Wide Met-ocean Information and Warning Service (WWMIWS) in a coordinated fashion.

Items underlined in the agenda will provide the main focus for the joint session; the participants will be presented with reports by representatives of IMO, WMO, IHO and IMSO on overall activities and actions in relation with MSI and the GMDSS. Focus will be to provide information relevant for the Issuing Services (identification of non-appropriate practises for navigational MSI and Metocean MSI prepared for SafetyNET or NAVTEX broadcasts, suggested improvements, expected or planned evolutions or emerging technologies with potential consequences for the NMHS issuing GMDSS and MSI). In particular, Inmarsat C System (including focus on Arctic areas, information on the new System Definition Manual), potential new provider for service transmission and associated impacts, the implementation of the GMDSS in Arctic NAVAREAs/METAREAs, brief overview of the revision cycle of the IMO/IHO/WMO joint documentation process and the GMDSS modernization will be of value. In addition information on Capacity Building initiatives and approach will be provided for consideration and discussion.

**PROVISIONAL AGENDA OF THE SECOND JOINT SESSIONS
OF THE IHO WWNWS SUB-COMMITTEE (WWNWS-SC) AND WMO WWMIWS**

To be held in Monaco
?? & ?? August 2018

1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS

- .1 Opening Remarks and Introductions – **Chairs**
- .2 Administrative Arrangements – **Hosts**
- .3 Adoption of the Agenda – **Chairs**

2 ORGANIZATION BRIEFS

- .1 IHO introduction/structure/developments/activities – **IHB**
- .2 WMO introduction/structure/developments/activities – **WMO**
- .3 IMO introduction/structure/developments/activities – **IMO**
- .4 IMSO introduction/structure/developments/activities – **IMSO**

3 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)

- .1 .1 Outcomes of the 99th Session of the International Maritime Organization's Committee on Maritime Safety (MSC99) 16 – 25 May 2018 – **IHO**
- .2 Outcomes of the 5th Session of the International Maritime Organization's Sub-Committee on Navigation, Communications and Search and Rescue (NCSR5) 19 – 23 February 2018 – **IHO**
- .3 Preparations for the 14th meeting of the IMO/ITU Experts Group IMO/ITU EG14) 3-7 September 2018 – **IHO**
- .2 Broadcast Systems and Services
 - .1 Report of the IMO NAVTEX Coordinating Panel – **UK**
 - .2 Report of the IMO SafetyNET Coordinating Panel – **USA**
 - .3 Review of GMDSS Master Plan and Modernization – **IMO/Chair WWNWS**
 - .4 IOC Liaison Report, including TOWS-WG issues – **IOC**
 - .5 Contingency Planning – **Chairs**
- .3 Developments in the MSI Promulgation
 - .1 Inmarsat-C EGC SafetyNET Report – **Inmarsat**
 - .2 MSI Document Review Overview – **Chair WWNWS**
- .4 Emerging Technologies/Modernization
 - .1 New developments in service provision, including considerations on interoperability between recognized GMDSS mobile satellite service providers – **IMSO/Inmarsat/Iridium**
 - .2 Progress Developments on
 - .1 S-124 – **France**
 - .2 S-411 and S-412 – **WMO**
 - .3 e-navigation – **IMO**

4 CAPACITY BUILDING MSI TRAINING COURSE DEVELOPMENTS

- .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)

5 ANY OTHER BUSINESS

6 CLOSURE OF THE MEETING – Chairs

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 WWNWS9.

Action to be taken: Paragraph 8.

Related documents: NAVAREA Coordinators' Self-Assessment Reports

1. See attached Quality Management analysis table.
2. A number of the Self-Assessment reports were received after the deadline; this caused significant additional work and delayed the publication of the documents on the website. 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 the majority were received in Word format, which greatly assisted in the final preparation of the documents.
3. Some of the quoted average elapsed times are a bit too uniform across the reported years. Although all reports were received on the current template, a number did not submit the additional Annex A Excel spreadsheet 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.
4. 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.
5. Specific comments on submitted Self Assessment report are contained in the table below:

| NAVAREA | Remarks |
|---------|---|
| I | Any considerations to establishing a reciprocal contingency agreement with another NAVAREA? |
| Ib | When was last update to GMDSS Master Plan submitted? NAVTEX interference noted; DSC issue noted; is there a need for some CB training |

| | |
|--------|---|
| | for some national coordinators? Does IMO NAVTEX Coordinating Panel chair attend Baltico meetings? |
| II | CB assessment details for NAVAREA should be used as the example format in all reports, where appropriate; table 4.2 and paragraph 7 provide clear picture of MSI provision within NAVAREA |
| III | GMDSS Master Plan update date two years old? Have contact details been confirmed; clarification of Contingency Plan; no CB required yet course funded for MBSHC in 2018? |
| IV-XII | Good to note Cuban success; note progress on receipt of MSI from coastal states with NAVAREA and ongoing contact post course. |
| V | When was last update to GMDSS Master Plan provided? Table on equipment in use not included; were any lessons learnt from the contingency exercise? Important SWAtHC CB Regional Coordinator liaises with other Regional CB Coordinators to ensure maximum benefit is obtained from the planned MSI course. |
| VI | Concern over the lack of progress at bringing La Paloma NAVTEX station back into service; good to note contingency plan with V has been exercised; funded bid approved for MSI training in 2018; recommendation noted. |
| VII | Received in pdf format; date of last GMDSS Master Plan update? No details on average elapsed time for transmission of immediate priority warnings; table to list requests for in-force warnings included since 2016, could have commenced recording information for 2016 onwards; efforts to improve MSI provision in region noted and appreciated; attendance at future WNWNS-SC meetings vital for regional development. |
| VIII | Date of last Master Plan update? Has contingency plan been exercised? No CB required yet course funded for NIOHC in 2017? |
| IX | Need to try and obtain details of points of contact for all national coordinators; when was GMDSS Master Plan updated? Details of number of warnings identified as immediate priority and average elapse time not provided; no MSI received from Oman? MENAS and Bahrain are not same, is MENAS acting officially on behalf of Bahrain? Good to note progress on development of external contingency plans; need to identify priority coastal states for MSI training and pass information to Regional CB Coordinator (Oman). |
| X | Details/reasons for reduced availability Jan, Feb, Mar and Jun 17? Current edition of GMDSS Master Plan is GMDSS.1/Circ.21 dated 31 May 2017; In-force bulletin understanding issues noted; any consideration for contingency plan with neighbouring NAVAREA? PNG progress encouraging, any coordination with METAREA initiatives? What impact resulting from significant CB investment, has MSI provision improved? |
| XI | Note realistic average elapse times; concern no MSI received from 5 coastal states and lack of launch warnings from DPRK; external contingency plan could be considered; good point on ensuring correct organizations receive MSI training, note MSI training course bid for 2018 not yet funded; |
| XIII | No immediate priority information for 2015 or 2016, none qualify? |
| XIV | 2.3 – any identified reasons for long broadcast times? Would be useful to know if any warnings received via text; what impact resulting from significant CB investment, has MSI provision improved? How will MSI training be managed in future as LINZ skill fades, need to train Maritime NZ personnel to deliver course? Close liaison required with LINZ for CB issues through SWPHC; |

| | |
|------------|--|
| XV | When was last update submitted to update GMDSS Master Plan; no information on average time to transmit 'immediate priority' messages; Encouraging to note various contingency initiatives, recommend they are completed and exercised at least annually; have NAVTEX updates been completed now? |
| XVI | What date was last update to GMDSS Master Plan submitted? Noting the vulnerability of the region to natural disasters, contingency agreement with adjacent NAVAREA needs to be completed as a matter of priority, further discussions with adjacent NAVAREAs should be explored. |
| XVII-XVIII | If no warnings identified as immediate priority, put NA in average elapsed time; Has contingency plan with IV_XII been exercised? |
| XX-XXI | Previous version of template used What are contingency plans and have they been exercised? |

6. 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.

7. 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.

8. 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 submit reports in a timely fashion well ahead of the meeting dates; and
- e. **take** any other action as appropriate.

MSI Quality Management Survey

| NAVAREA | ISO 9001-2008 | Promulgate “In-Force” Bulletins | Promulgate “No-Warning” Messages | Monitor Broadcast in almost real time | Promulgate Immediate Messages within maximum delay period | 24/7 contact information provided | Promulgate two scheduled broadcasts | IMO Master Plan updated |
|------------------------------|------------------|---------------------------------|----------------------------------|---------------------------------------|---|-----------------------------------|-------------------------------------|-------------------------|
| I | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| I Baltic Sub-area | Yes | Yes | Yes | Yes | Yes | Yes | Yes ¹ (Navtex) | Yes |
| II | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| III | No ² | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| IV | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| V | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| VI | No ³ | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| VII | No ⁴ | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| VIII | No ⁵ | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| IX | No ⁶ | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| X | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| XI | No ⁷ | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| XII | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| XIII | No ⁸ | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| XIV | No ⁹ | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| XV | Yes | Yes | Yes | Yes | No ¹⁰ | Yes | Yes | Yes |
| XVI | No ¹¹ | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

¹ See paragraphs 4 & 5 of NAVAREA Ib Self Assessment (WVNWS9/3/2/Ib)

² See paragraph 5 of NAVAREA III Self Assessment (WVNWS9/3/2/III)

³ See paragraph 5 of NAVAREA VI Self Assessment (WVNWS9/3/2/VI)

⁴ See paragraph 5 of NAVAREA VII Self Assessment (WVNWS9/3/2/VII)

⁵ See paragraph 5 of NAVAREA VIII Self Assessment (WVNWS9/3/2/VIII)

⁶ See paragraph 5 of NAVAREA IX Self Assessment (WVNWS9/3/2/IX)

⁷ See paragraph 5 of NAVAREA XI Self Assessment (WVNWS9/3/2/XI)

⁸ See paragraph 5 of NAVAREA XIII Self Assessment (WVNWS9/3/2/XIII)

⁹ See paragraph 5 of NAVAREA XIV Self Assessment (WVNWS9/3/2/XIV)

¹⁰ See paragraph 2 of NAVAREA XV Self Assessment (WVNWS9/3/2/XV)

¹¹ See paragraph 13 of NAVARERA XVI Self Assessment (WVNWS9/3/2/XVI)

| | | | | | | | | |
|--------------|------------------|-----|-----|-----|-----|-----|-----|-----|
| XVII | No ¹² | Yes |
| XVIII | No ¹³ | Yes |
| XIX | No ¹⁴ | Yes |
| XX | No ¹⁵ | Yes |
| XXI | No ¹⁶ | Yes |

¹² See paragraph 5 of NAVAREA XVII Self Assessment (WWNWS9/3/2/XVII)

¹³ See paragraph 5 of NAVAREA XVIII Self Assessment (WWNWS9/3/2/XVIII)

¹⁴ See paragraph 2 of NAVAREA XIX Self Assessment (WWNWS9/3/2/XIX)

¹⁵ See paragraph 2 of NAVAREA XX Self Assessment (WWNWS9/3/2/XX)

¹⁶ See paragraph 2 of NAVAREA XXI Self Assessment (WWNWS9/3/2/XXI)

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: 1 September 2017

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.

WWNWS9
LIST OF KEY MEETINGS – 2017-2018

| Organization | Meeting | Location | Dates |
|--------------|---------------------------|----------|--------------------------|
| IMO | NCSR5 | London | 19-23 February 2018 |
| IHO | DRWG16 | London | 27 February-1 March 2018 |
| IMSO | Advisory Committee (AC)41 | London | 14-15 May 2018 |
| IMO | MSC99 | London | 16-25 May 2018 |
| IHO | WWNWS10+WWMIWS | Monaco | 27-31 August 2018 |
| IMO | IMO-ITU EG14 | London | 3-7 September 2018 |
| IMSO | AC42 | London | 6-7 September 2018 |
| IMSO | Assembly (A)25 | London | 9-12 October 2018 |
| IMO | MSC100 | London | 3-7 December 2018 |

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)