

**6TH MEETING OF THE IHO SUB-COMMITTEE ON THE WORLD-WIDE
NAVIGATIONAL WARNING SERVICE (WWNWS-SC)
Amora Hotel, Wellington, New Zealand
18 – 22 August 2014**

SUMMARY REPORT

Note: Paragraph numbering corresponds to WWNWS 6 Agenda Item numbering (Annex A), and not necessarily to the order in which matters were discussed. The Joint Session is reported in a following section using numbering from the Joint Session Agenda (Annex B).

1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS

1.1 Opening Remarks and Introductions

The Chair, Mr Peter Doherty (NGA – USA) welcomed all to WWNWS6 noting this was the 6th time the meeting had been held outside the IHB. He recounted the previous locations and highlighted the benefits of hosting meetings outside the IHB. He thanked the New Zealand Hydrographic Authority (NZHA) of Land Information New Zealand (LINZ) for the hosting the event. Explaining the robust agenda and noting the particular difference for this meeting as it is the first time a joint meeting has been collocated with the World Meteorological Organization's (WMO) World-Wide Met-ocean Information Warning Service (WWMIWS). He thanked all who could make it to the meeting and looked forward to another productive week.

Mr Adam Greenland, National Hydrographer of New Zealand welcomed all in Maori and explained the Maori word for New Zealand. He gave a brief maritime history of the country highlighting the journeys by famous explorers, such as Abel Tasman, a Dutchman, who was the first known European explorer to reach Tasmania and New Zealand in the 1640's. He described the voyages of Captain James Cook and his contributions to the charting of New Zealand and Australia in the eighteenth century. He thanked all of the NAVAREA Coordinators in attendance at the first ever joint meeting and how very proud NZHA was to host it. He recounted NZ's first meeting in 2010 and how beneficial it was to LINZ in becoming a fully functioning NAVAREA Coordinator. He wished all an enjoyable stay and productive meeting.

The Chair thanked Mr. Greenland for the kind words.

The Chair opened the WWNWS 6 meeting welcoming 27 delegates from 14 IHO Member States, the International Hydrographic Bureau (IHB), the International Maritime Organization (IMO), the World Meteorological Organization (WMO), Iridium Satellite LLC, and Inmarsat Global Ltd. These included representatives from 11 NAVAREAS, one Sub-Area and 4 National Coordinators; the full list of participants is at Annex C. Apologies were received from Argentina, (NAVAREA VI), Canada (NAVAREA XVII, XVIII), Chile (NAVAREA XV), India (NAVAREA VIII), Pakistan (NAVAREA IX), Russia (NAVAREA XIII, XX, XXI) and South Africa (NAVAREA VII).

1.2 Welcome by the IHB

Assistant Director David Wyatt, Secretary of the WWNWS-SC, thanked the NZHA for hosting and all those who made the long journey to Wellington. He noted reputation of the WWNWS-SC within the IHO remains as strong as ever and it is held up within the IRCC as an example to others at what can and should be being achieved with commitment and collective engagement. This high regard for action and output is also acknowledged at the International Maritime Organization, particularly by the Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) and within the Maritime Safety Division of the IMO Secretariat. Equally important is the continuous and excellent cooperation with partner organizations beyond the IMO, in particular the close working relationships with the WMO, IMSO and Inmarsat, who have all contributed to the WWNWS-SC goal of supporting and improving safety at sea. Reminded that mission is the provision of a vital service to the maritime community, regardless of cost, and whose reliance on the timely receipt and accuracy of the Maritime Safety Information broadcast by each of you, was reflected most clearly in the responses received from the customer survey. He noted a significant reason for the annual completion of the Self-Assessment is the process of self-review and the drive for continuous improvement. He highlighted a number of significant projects and initiatives in various stages of progress; these include e-Navigation, GMDSS modernization, S-100 product specifications and navigational warning overlays in ECDIS, contingency planning and awareness in developments in existing and emerging technologies. He noted the hard work which had been directed towards the editorial revision of the IMO SafetyNET Manual and the IAMSAR Manual. Finally he highlighted the unique nature of the meeting; the collocation with the WMO WWMIWS METAREA Coordinators provides individually the opportunity to engage with respective METAREA Coordinators and collectively to discuss directly the many issues of mutual concern to achieve greater harmonization of MSI provision to the maritime community.

1.3 Working arrangements

Mr Stuart Caie, host for NZHA, provided a short brief on extracurricular activities and general safety arrangements for the week.

1.4 Administrative arrangements

The Chair confirmed the way he intended to approach the agenda and he highlighted items which would be covered in the Joint Session. All participants were asked to introduce themselves and provide brief details of their background and role.

1.5 Adoption of the Agenda

The Chair asked if there were any additions or amendments to the published draft agenda, none were offered. The agenda was adopted (WWNWS6-1-5)

1.6 Review of Action Items

The Action List from WWNWS 5 was presented and up-dates were requested for those actions not covered elsewhere in the agenda (WWNWS 6-1-6).

Standard message for receipt of MSI via email, request for in-force messages. It was agreed there was a need to serve all GMDSS customers and the main requirement was to focus on the primary customer – SOLAS class vessels. NAVAREA X reminded of national coordinator responsibilities, which was to service all vessels. IMO noted it was trying to regulate through SOLAS whilst serving a tremendous amount of non-SOLAS vessels; it was noted national coordinators are under more pressure to use evolving technology to provide MSI. IMO indicated that it is highly unlikely international standards will be created to support this demand. National coordinators will have to manage based on own countries regulations. NAVAREA coordinators might consider developing harmonization guidance for national coordinators within their Area.

NAVAREA IX in-force bulletin on website – work by the Chair on-going to resolve this issue.

Caspian Sea – NAVAREA XIII updated that no progress has been made, to be addressed at WWNWS 7.

Piracy correspondence group – further work required with the objective of discussion at NCSR 2.

NAVAREA V introduced their document (WWNWS6-1-6a) on Controlling MSI, giving background details and up-date on progress of the 3 phases of development. Chair requested a progress report and further presentation should be provided at WWNWS 7. **Action NAVAREA V**

1.7 Report from IRCC6

The Chair provided background on where WWNWS falls within the IHO structure, HSCC and IRCC. NAVAREA II provided a brief update on IRCC 6, which was held in Paris. Full details of the WWNWS-SC report are given in WWNWS6-1-7a. The MSI course successes were acknowledged and the commitment of France, UK and USA to this activity was highlighted.

3 PROMULGATION OF MARITIME SAFETY INFORMATION

3.2 Self Assessments

The Chair asked all to introduce their Self Assessment reports, highlighting only significant items, (WWNWS63-2-I to XXI).

NAVAREA I

Noted Immediate messages were tracked on transmission, which is a manual process. This had been in place since just after 2000.

Developing ICS system to monitor NAVTEX for all of NAVAREA I

Recommendation to include on in-force bulletins where mariners can find warnings on the website.

The Chair thanked for MSI training and input to various forums regarding message guidance. Recognized promotion to NAVTEX Coordinating panel chairmanship and the great cooperation with WWNWS-SC. The Chair suggested NAVTEX messages need to have a more consistent structure.

Each NAVAREA Coordinator should provide to National Coordinators (NAVTEX Coordinators) the link to IMO MSI related documents, which are available on the IHO website at http://www.iho.int/mtg_docs/com_wg/CPRNW/WWNWS_Publications_&_Documents/MSIPublics_Docs.htm.

It was agreed the Chair and NAVTEX Panel Chair would produce a letter for all NAVTEX Coordinators providing details of the location on where to find guidance documents for formatting their warnings.

Sub-area Ib

The Baltic Sea Sub-area Coordinator gave a short presentation of his Self Assessment report. He noted that Sweden is in the process of buying a system to support the handling and administration of MSI. He also highlighted that Sweden is engaged in the correspondence group to develop the S-124 product specification for Navigational Warnings, which was considered a nationally very important issue. The work within the ACCSEAS-project, which is intended to convey information such as MSI and NM to the bridge system aboard, is followed with great interest.

NAVAREA II

The timeliness of Piracy reports was highlighted; it was noted that piracy warnings should be cancelled 72 hours after the first promulgation of the event. Piracy warnings promulgated more than 72 hours after the event has occurred, should contain the date and time, if available, identifying when the actual piracy attack occurred.

We are trying to ensure timeliness and relevance to our piracy message with realistic consideration given that some Masters may not report acts of piracy to the appropriate authority, in the most timely manner. The 72hrs was agreed upon at IMO in the similar consideration given to drifting hazards, where the area (position) the incident occurred in, presents no real threat to safety of navigation.

NAVAREA III

NAVAREA III Coordinator introduced and presented his Self Assessment report. He again noted the ongoing MSI dissemination problem in the coastal areas of Tunisia and the Sicilian Channel due to the Kelibia NAVTEX station not being functional since 2012. NAVAREA III requested Tunisia to send, via email, its MSI to Malta for broadcast through its NAVTEX station. However, despite the best efforts of NAVAREA III, Tunisia has not implemented this solution. NAVAREA III enlisted the support of the IMO NAVTEX Coordinating Panel Chairman to liaise with Tunisia, but the correct point of contact has proven difficult to isolate.

NAVAREA III expressed concern with the timeliness of MSI from Egypt, which continues to arrive by mail. He raised this same concern at WWNWS5 and requests assistance to facilitate a solution to ensure MSI from Egypt reaches mariners more expeditiously.

Lastly, the Chairman reminded the Sub-Committee to follow the guidance in the Joint IHO/IMO/WMO Manual on Maritime Safety Information which states the geographic names selected as general area and locality for navigational warnings should be the one that can be

found on the charts and nautical publications for the area. He called attention to the Black Sea and areas in vicinity of the Crimean coast. He referred to United Nations Resolution, adopted by the General Assembly, on 27 March 2014 (A/RES/68/262) titled Territorial integrity of the Ukraine. It called upon all States, international organizations and specialized agencies not to recognize any alteration of the status of the Autonomous Republic of Crimea and the city of Sevastopol on the basis of the above-mentioned referendum and to refrain from any action or dealing that might be interpreted as recognizing any such altered status. Based on U.N. Resolution 68/262 and the Joint IHO/IMO/WMO Manual on Maritime Safety Information, the Chairman emphasized that navigation warnings in this area should continue to use the geographic location of Ukraine.

NAVAREA IV/XII

The NAVAREA IV and XII Coordinator presented an overview of his Self Assessment report and noted that all broadcast messages, which are promulgated during the previous 24 hours, are posted to the NGA website. He stated that NAVAREA IV and XII have a business continuity plan and messages are promulgated from a secondary site on a routine basis, totally transparent to the shipboard user. He noted increased collaboration with Mexico and Colombia concerning MSI. He discussed the firmware problem and solution with Thrane and Thrane's mini-C transceiver, model TT 3027M. He noted the fully operational status of the new Hudson Bay meteorological information area within METAREA IV. Lastly, he described the work that the U.S. Coast Guard recently completed to automatically make NAVTEX warnings for the east coast of the United States available on its website.

NAVAREA V (use self assessment)

The NAVAREA V Coordinator introduced the Self Assessment report and noted the Brazilian Hydrographic Center has contracted a company to develop an automatic system to control and process all the information relevant to promulgation of navigational warnings. The details were provided under agenda item 1.6, List of Actions from WNWNS 5.

NAVAREA VI

The Chair introduced the Self Assessment on behalf of the NAVAREA Coordinator. He noted a common contingency planning between NAVAREA VI and NAVAREA V for all MSI warnings, in case a failure occurs, is currently in its final stage. He reported NAVTEX station La Paloma (Uruguay) remains off air since June 2005.

NAVAREA VI complied with WNWNS request to disseminate a survey to assess the quality of MSI services provided. Such survey has been broadcast through SafetyNET and NAVTEX for six weeks, and was monthly included in the Notices to Mariners publication as well as on the SHN Website for the time requested by IHB.

As provided for in S-53, the service webpage is available for any consultation of any NAVAREA VI warnings. It was highlighted that frequently, upon request they send to ships within their area the updated information on all the navigational warnings (both NAVAREA and coastal warnings) in force.

Finally he noted NAVAREA VI has been keeping a 24-hour guard duty system since its appointment as National Coordinator (IMO Res A.706(17) – 1979).

NAVAREA VII

The Chair introduced the Self Assessment on behalf of the NAVAREA Coordinator, noting the following points:

- a. There remains a lack of NAVTEX Stations north of the South African international borders;
- b. The slow progress and the lack of adequate MSI implementation by States in the Great Rift Valley in the Southern African region remains a persistent matter of concern;
- c. The RHC (SAIHC) continuously strive to instill the awareness of maritime safety and encourages the implementation of MSI measures by member states. The next SAIHC Conference will be held in Maputo, Mozambique over the period 11 to 13 August 2014 and an update of C-55 will be one of the outcomes;
- d. A contingency plan arrangement between NAVAREA VII and NAVAREA II with the latter acting as backup for the AOR-E and NAVAREA X acting as backup for the IOR have been agreed in principle, but a procedure still needs to be developed, tested and implemented;
- e. NAVAREA VII (SafetyNET) broadcasts are being conducted twice daily since 20 January 2014.

NAVAREA VIII

The Chair introduced the Self Assessment on behalf of the NAVAREA Coordinator; he highlighted the support provided in reporting piracy events. He also noted the NAVTEX project between India and Seychelles is likely to be commissioned by end of 2014.

NAVAREA IX

The Chair introduced the Self Assessment on behalf of the NAVAREA Coordinator; NAVAREA IX transmits MSI for the 16 countries in the region. Navigational Warnings are promulgated via SafetyNET and NAVTEX with all enforced warnings being included in the Notice to Mariners which is published once per week. All the in-force warnings and NTMs are regularly posted and monitored on NAVAREA IX website as well. NAVAREA IX accesses LES via internet and all SafetyNET broadcasts are monitored. Karachi NAVTEX station is under up gradation, Coastal Warnings are also being transmitted via SafetyNET.

The Chair highlighted the support provided in reporting piracy events. He noted the confusion on broadcast times and exactly how many were made, this would be addressed to the NAVAREA Coordinator for clarification and correction in the report, which was not consistent with the report provided to WNWSS5. He also noted no promulgation of in-force bulletins on the website. **Action Chair**

NAVAREA X

NAVAREA X Coordinator introduced and presented his Self Assessment report. He noted the upgrading of Papua New Guinea's MSI capabilities is expected to be completed in December 2014.

The Chair highlighted AMSA's tremendous involvement and support regarding the SAR operations for MH370. He thanked Australia for their efforts and on-going commitment.

NAVAREA XI

NAVAREA XI Coordinator introduced and presented his Self Assessment report. He noted provision of safety information on the map by using the Internet was started on 18 June 2014.

NAVAREA XIII

The Chair introduced the Self Assessment on behalf of the NAVAREA Coordinator; he noted daily updated web-page of NAVAREA XIII started from December 2013.

NAVAREA XIV

NAVAREA XIV Coordinator introduced and presented his Self Assessment report, noting there were no areas of concern. He highlighted that NZ is actively involved with a number of IMO and IHO Sub-Committees and Working Groups; and capacity building in the SWP region.

He noted that LINZ continues to investigate a contingency plan to ensure the provision of MSI continues if a catastrophic event occurs. The Chair offered to support dissemination for any NAVAREA as a contingency and offered Australia's support to NZ for contingency operations. NAVAREA X stated it might not be as easy for Australia to support NZ with contingency MSI support. There was a need to test that capability within their highly digital system. **Action Chair**

NAVAREA XV

The Chair introduced the Self Assessment on behalf of the NAVAREA Coordinator; he noted the capacity building for NAVAREA V, cancellation of warnings by dropping out from the in-force bulletin; he also noted in-force bulletins were not serialized. **Action NAVAREA XV**

NAVAREA XVI

NAVAREA XVI Coordinator introduced and presented his Self Assessment report. He noted, with the purpose of improving the nautical warning service, changes have been made. The completion of scheduled transmissions as well as a register of transmissions with a back-up of files has been prioritized. The quality standards and the changes generated at this stage are reflected in the amount of monthly transmissions that has exceeded the previous year.

To fulfill transmissions both In-Force bulletins and Warning Messages were already scheduled to increase the quality of the service. Likewise, the ISO 90001 quality management is already in progress. DHN staff is training to comply with their functions as operator on duty of the NAVAREA XVI Coordination Center.

The Chair highlighted a tsunami warning message, which had been subsequently discovered to have been issued in error; the Chair highlighted the need to prefix exercise messages with 'EXERCISE' so as not to initiate actions which were not required by outside authorities. The Chair also noted no contingency plan was in place, NAVAREA IV/XII offered to provide contingency services.

NAVAREA XVII/XVIII

The Chair introduced the Self Assessment on behalf of the NAVAREA Coordinator; he noted the NAVAREA XVII and XVIII desk is in its 4th year of operation, providing a year round SafetyNET broadcast and coordination service. Broadcasts are made twice a day for each NAVAREA and a weekly In-force Bulletin message is also transmitted. NAVAREA warnings are posted on the Canadian Coast Guard website in near real time. NAVAREA warnings and METAREA information are also transmitted over HF-NBDP, on 8416.5 kHz, twice daily on a seasonal basis.

NAVAREA XIX

NAVAREA XIX Coordinator introduced and presented his Self Assessment report. The Chair thanked for the significant efforts, as a newer NAVAREA, for continued support and attendance.

NAVAREA XX/XXI

The Chair introduced the Self Assessment on behalf of the NAVAREA Coordinator; he noted there were no significant changes since their previous report, except that they had begun the transmission of MSI on HF NBDP in areas NAVAREA XX and XXI.

The Chair highlighted concerns that, as a relatively new NAVAREA Coordinator, little contact was maintained with the WWNWS-SC and that much important information and experience was being missed due to the continued absence from the annual meetings. It was agreed ways needs to be explored to achieved closer engagement and regular attendance at WWNWS-SC meetings, assistance of IHB and IMO was requested.

3.2.1 Quality Management Analysis of Self Assessment Reports

It was noted there had been a steady increase in information being received via non-traditional means from the expanding recreational sector, which highlighted a need to explore ways of engaging with these customers without significantly increasing the workload (WWNWS6-3-2-1). It was agreed to amend the form to read 'Monitor Broadcast'. **Action IHB**

3.4 Developments in WWNWS

3.4.2 WWNWS Survey Questionnaire Analysis

The results of the WWNWS customer survey questionnaire were discussed (WWNWS6-3-4-2); individual NAVAREAs were reviewed. It was suggested a method of providing feedback to individual comments should be investigated for the next survey. A need was identified to make the link to the 'Warnings on the Web' graphic more readily accessible; IHO agreed to investigate putting a link on the front page of the IHO website. **Action IHB**

Comments identified a need to check where NAVAREA VII placed older in-force messages and whether they were available through the NAVAREA VII website. As this information was presently not included in the weekly In-force bulletin, the Chair agreed to contact NAVAREA VII Coordinator to request a note is added to advise that in-force messages older than 42 weeks could be found on the NAVAREA VII website. **Action Chair/NAVAREA VII**

Chair asked if all NAVTEX stations issue a weekly in-force bulletin message. It was noted from the comments that not all service providers were completing their remit and providing the required service. This highlighted the difficulty of monitoring the NAVTEX stations and service they provided.

Chair requested all NAVAREA Coordinators to study the survey results and comments to consider if any trends could be identified, either globally or regionally, and to suggest appropriate actions.

Sub-area 1b suggested more frequent transmission of In-force lists. Chair IMO NAVTEX Panel noted all messages are retained in the transmitter memory and transmitted immediately a receiver enters coverage area; these are then not re-transmitted to that receiver. If a receiver is more than 72 hours out of coverage the messages would be deleted and received again on re-entering the coverage area.

3.4.4 S-124 Progress Report

NAVAREA II gave a further presentation on the development and current state of progress for the development of the S-124 Product Specification (WWNWS6-3-4-4c); particular focus was on:

- a. new ways of operations;
- b. modelling of T&P NtoM.

It was agreed there would be a need to discuss at HSSC 6 the issuing of T&P NtoM, which was considered to be beyond the scope of NAVAREA Coordinators. It was identified there would be significant implications for HOs.

The ToRs for the S-124 CG were reviewed and agreed; these are to be circulated for final comments and approval with a deadline of 5th September 2014. **Action IHB**

3.5 Emerging Technologies/Modernization

3.5.1 Manufacturer's presentations

NAVAREA XIX gave a presentation on the ACCSEAS project cover the Potential solution MSI and Notice to Mariners (T&P) (WWNWS6-3-5-3). A significant difference with S-124 was the inclusion of NtoM and T&P with MSI. It was agreed to invite ACCSEAS to WWNWS 7 to provide a presentation on project progress as well as submitting a supporting document for the SC meeting post the trials to be undertaken in December 2014. **Action NAVAREA XIX**

4 REVIEW OF GUIDANCE DOCUMENTS AND OTHER RELATED DOCUMENTATION

4.1 Document Review Status Report

WWNWS-SC Chair provided a background brief on the Document Review process and the rationale for the formation of the WWNWS-SC DRWG (WWNWS6-4-1a and 4-1b). It was noted work had commenced in 2006 with a holistic review of all MSI documentation; this work had now evolved into an annual editorial review cycle for each individual document. The METAREA Coordinators were urged to attend the DRWG meetings to reduce the burden on the UK MetOffice and to help ensure the WWMIWS considerations were taken into account at an early stage of the process rather than at the later approval stage.

IHB suggested the WMO-IMO resolution on Met-ocean services, A.1051(27) is considered for review and submission on completion of the current cycle in 2017. IMO agreed this would provide ample time to ensure the review was completed to meet the NCSR 4 submission deadlines. IMO also confirmed the NCSR and MSC time frame and cycle were now set to ensure any document endorsed by NCSR would be presented at the following early summer MSC to ensure timely effective dates after approval had been gained.

The Chair briefed on the current state of the MSI document review process and noted the successful submission to NCSR 1 of the proposed amendments to the Joint IMO/IHO/WMO Manual on MSI, commenting that only very minor editorial changes had been identified. The manual will be submitted to MSC 94 for approval and an anticipated in force date of 1 January 2016. The Chair highlighted the need for harmonization between all MSI documents.

Significant items from the recent DRWG 12 meeting were noted; the errors identified in the hard copy versions of some of the MSI documents discussed and the action which had been taken at the DRWG was reported; it was noted the IMO secretariat had agreed to discuss the issue with the publisher to explore ways to ensure these errors were removed and not repeated in future versions. The new contact e-mail (ncsr@imo.org) was confirmed as the route for future correspondence on MSI documentation, which will ensure the correct distribution of the information.

4.7 IMO SafetyNET Manual

The proposed editorial amendments to the IMO SafetyNET Manual, developed at DRGW 12, were displayed and discussed. All participants were encouraged to comment.

NAVAREA X questioned the reason for the extended Forward and Introduction. It was explained that IMO and IHO documents use this format to provide a history of the development of the publication and the subject.

NAVAREAs I and X suggested the inclusion of (Joint, Aviation/Aeronautical and Maritime) in the definition of RCC to ensure clarity. Inmarsat noted the term SafetyNET was trademarked and could not be used by any future service providers.

The review of the IMO SafetyNET Manual was completed and all amendments and changes were approved. It was agreed the manual would be circulated to IHO member states and passed to the WMO for their approval with a deadline of mid-November to allow any additional changes to be considered by the Chair prior to submission to NCSR 2 in mid-December.

4.10 IAMSAR Manual

The amendments to sections 2.18, 2.19 and 2.20 of the IAMSAR Manual completed at DRWG 12 were highlighted and explained. It was stressed these had been aligned with other MSI documentation and the revisions had been passed to the IMO secretariat for discussion at ICAO/IMO joint WG prior to submission to NCSR 2 for approval. It was noted that WNWWS-SC members, through their national delegations to IMO, could continue to submit amendments to this document.

The Chair noted the next DRWG would focus on the NAVTEX manual and start work on IMO Resolution A.1051(27) at the next meeting, which would require significant input from the WMO and the METAREA Coordinators if the proposed revision time frame of submission to IMO in 2017 was to be achieved.

4.13 WNWWS-SC ToRs

The WNWWS-SC ToRs were reviewed and minor editorial amendments were identified (WWNWS6-4-13); with agreement of secretary of IRCC, these will be actioned and the revised ToRs will be published on the website without further reference to IRCC.

5 WNWWS-SC REPRESENTATION AT RHC AND OTHER CONFERENCES

5.2 Capacity Building MSI Training Course Developments

Chair provided a background brief on the development of the MSI training course and how it evolved. NAVAREA IV provided a detailed presentation on the course contents and highlighted some of the rapid impact the training had generated (WWNWS6-5-2a). Particular focus was on the course objectives, the anticipated outcomes and clarification of what the students should be capable of doing on completion of the course.

IHB asked if there was any mechanism in place of monitoring the longer term success of the training and whether students were continuing in the roles for which they had been trained. It was recognized this had yet to be addressed and needed a joint follow-up approach between the NAVAREA Coordinators and the RHCs.

IHB described the proposed new method of identifying coastal states and candidates in need of training so as to increase the impact of the available training and progress towards a global improvement in the standard of MSI provided to the maritime community (WWNWS6-5-2b). It was agreed NAVAREA Coordinators were in a position to help identify and prioritize candidates within their areas. It was agreed all would review the document and provide annual 1st March input to Regional CB Coordinators for submission to the CBSC; it was highlighted the importance of copying the Chair and the IHB on the applications to assist in organizing an even annual distribution of training workload. **Action All NAVAREA Coordinators**

NAVAREA XIX asked whether standards and training material was available for internal training courses. Chair confirmed the material was available and would pass to NAVAREA Coordinators as requested. **Action Chair**

5.3 WWNWS-SC CD-ROM

Chair gave an overview brief on the WWNWS CD-ROM, commenting on the usefulness of the historical documents, which provided important background on many of the decisions and issues with which the SC is involved. The contents of the CD was displayed and demonstrated.

6. NEXT MEETING

6.1 Date and Venue for Next Meeting

Date of next meeting was agreed to be IHB office in Monaco during the week 24-28 August. Norway offered to host WWNWS 8 in early September 2016, exact dates and venue would be confirmed at WWNWS 7. China enquired if a National Coordinator could host a meeting as opposed to only NAVAREA Coordinators; IHB confirmed any Member State could host the meeting. China indicated a willingness to investigate hosting in 2017 or 2018.

7 REVIEW OF ACTIONS FROM WWNWS 6

7.1 The list of actions from the meeting were reviewed and agreed, see Annex E.

7.2 The draft agenda for WWNWS 7 was noted, see Annex F.

8 ANY OTHER BUSINESS

8.1 Sub-area Ib introduced a list of NAVTEX abbreviations which were suggested as additions to the standard published list. Background to the additions was provided; the Chair agreed the changes should be discussed directly with the WMO and asked Sub-area Ib to undertake this on behalf of the SC. **Action Sub-area 1b**

8.3 Chair provided feedback on comments generated from the GMDSS modernization coordinator, he asked for input from the WWNWS-SC, he also noted the higher level review had been completed and the detailed review was now underway. Chair highlighted the vital importance of engaging and commenting on the activities and decisions; it was agreed the Chair would circulate e-mails from the CG and he requested feedback and comment be passed through him. The IMO noted it was a long process and the Chair stressed the need to be aware of the issues as they were discussed. **Action Chair/All**

8.4 NAVAREA IV/XII highlighted the process for reporting piracy, it was noted ships were reporting initially directly to their own security officers rather than the UK MCC, which was impacting on the coordination of anti-piracy activities. Questioned who had control and authority to ensure ships follow a standard routine; the Chair noted the UK MCC was under the jurisdiction of the UN for the area of operations, however the WWNWS was the authority for the dissemination of information.

9 CLOSURE OF THE MEETING

The Chair closed the meeting, thanking all for their participation and engagement. He hoped the interaction with their respective METAREA Coordinators would continue and help to improve the service provided to the maritime community. He again thanked the hosts, NZHA, for all their efforts in making in such a productive meeting and finally he wished all a safe journey back to their respective homes.

Annexes:

Annex A	Agenda for the 6 th Meeting of WWNWS-SC
Annex B	Agenda for the Joint Session
Annex C	Participants at WWNWS 5
Annex D	List of Documents submitted to WWNWS 5
Annex E	List of Action Items as of 2 October 2014
Annex F	Provisional Agenda for the 7 th Session of the IHO WWNWS Sub-Committee
Annex G	MSI Quality Management Survey Summary
Annex H	ToRs and RoPs – Draft Revisions
Annex I	Justifications for broadcasting MSI

**1ST JOINT MEETING OF THE IHO SUB-COMMITTEE ON THE WORLD-WIDE
NAVIGATIONAL WARNING SERVICE (WWNWS-SC) AND THE WORLD
METEOROLOGICAL ORGANIZATION (WMO) WORLD-WIDE MET-OCEAN
INFORMATION WARNING SERVICE (WWMIWS) METAREA COORDINATORS
Amora Hotel, Wellington, New Zealand
19 and 22 August 2014**

SUMMARY REPORT

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

1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS

1.1 Opening Remarks and Introductions

WWNWS-SC Chair, Peter Doherty, and JCOMM-ETMSS Chair, Neal Moodie, welcomed all delegates to the meeting and thanked the hosts, NZHA LINZ and MetService NZ, for the excellent venue and organization. They highlighted the important opportunity the collocation of the two separate meetings has given the NAV and MET Area Coordinators to interact and discuss the various topics, which are of mutual interest to both sets of Coordinators; they also urged all participants to make the most of the opportunities outside the formal meeting to interact and get to know each other as personal contacts are the most effective method of resolving issues and discussing problems.

1.2 Administrative Arrangements

NZHA provided additional administrative details for the session.

1.3 Adoption of the Agenda

WWNWS-SC Chair introduced the agenda and explained the background behind the creation of the agenda. All participants (47 in total) then introduced themselves and provided a brief description of their role within their respective organization.

2 ORGANIZATIONAL BRIEFS

All presentations are available from the WWNWS 6 document list on the WWNWS-SC page of the IHO website.

2.1 IHO

IHB gave a presentation on the IHO, outlining the history of the IHO, its structure and the key programme elements of S-100 development and Capacity Building initiatives.

2.2 WMO

WMO provided a presentation on the WMO structure relevant to the NAV and MET Area Coordinators and some of the programmes being undertaken. An explanation of the normal approval process for WMO documents was highlighted (WWNWS6-3-3-3).

2.3 IMO

IMO gave a presentation on the IMO structure, highlighting the relevant Committee and Sub-Committee with responsibility for MSI. Particular focus was placed on the meeting cycle and how it drives the timeline for document submission and the resultant impact on the up-date cycle for the MSI documentation. The importance of meeting the various deadlines was stressed and the impact of any missed deadline. WMO was urged to explore ways of achieving greater direct participation at NCSR and the WWNWS-SC DRWG, which normally is held the week following the NCSR meeting. **Action WMO**

WWNWS-SC Chair suggested it may be of benefit if the annual meeting and document submission timeline for the relevant IMO and IHO bodies could be published as this would enable forward planning by stakeholders to be focused.

2.4 IMSO

IMO provided a short background brief IMSO and functions in relation to MSI activities and mobile satellite GMDSS service providers. It was confirmed the Secretary General of IMSO would be taking on the liaison functions undertaken by the recently retired Deputy Secretary General of IMSO.

3 PROMULGATION OF MARITIME SAFETY INFORMATION

3.1 IMO Bodies

3.1.1 Outcomes of 93rd session of the IMO Maritime Safety Committee

IHB gave a short brief on the relevant outcome from MSC 93 (WWNWS6-3-1-1).

3.1.2 Outcomes of 1st session of the IMO Sub-committee on Navigation, Communications and Search and Rescue

IHB gave a brief on the outcomes of NCSR 1, in particular highlighting the broad scope of the areas of responsibility and noting how almost all impacted on the work of all Area Coordinators (WWNWS6-3-1-2).

IMO highlighted the need for direct engagement in e-Navigation, GMDSS modernization and the assessment of new mobile satellite GMDSS service providers; this engagement should be via attendance at the meetings as well as participation in the Correspondence Groups (CG).

Action All

3.2 Broadcast Systems and Services

3.2.1 IMO NAVTEX Coordinating Panel

UK gave a brief on the IMO NAVTEX Panel, highlighting the significant items in the Chair's report which impacted on the Area Coordinators (WWNWS6-3-3-1). UK particularly noted the number of transmitters using excessive power which was causing interference with neighboring transmitters, it was noted that it was a National Coordinator's responsibility to ensure the guidance in the NAVTEX Manual was followed and that Area Coordinators should be ensuring that National Coordinators within their area were fulfilling this responsibility.

The issue of overruns on broadcasts and the resultant blanking of the phasing signal causing failures of receivers to receive the next broadcast were raised. It was stressed that it was vital to remain within the 10 minute slot. Applications for new transmitters needed to avoid overlap of NAVTEX service areas and the importance of following IMO Resolution A.801(19) Annex 4, as amended, and IMO Resolution A.706(17), as amended.

UK ended with a short brief on the work of the IMO NAVTEX Panel and its responsibilities, which included the issuing of operating certificates.

3.2.2 IMO SafetyNET Coordinating Panel

WWNWS-SC Chair gave a short brief on the IMO SafetyNET Panel, covering its roles and responsibilities, the approval and certification process for new service providers (WWNWS6-3-3-2). The Terms of Reference of the Panel were highlighted. The process and provision of information for the International Ice Patrol was also described.

WWNWS-SC Chair highlighted the proposed editorial amendments to the IMO SafetyNET Manual, which had been prepared by the WWNWS-SC DRWG; the background to the proposed amendments was highlighted and the considerable input by Inmarsat was acknowledged.

3.2.3 GMDSS Master Plan and Modernization

IMO provided a brief on the GMDSS modernization and the Master Plan. The revised process for up-dating the Master Plan Annexes 7 & 8 was explained, noting the responsibility for inserting new data would be passed directly to the Member States with only a QA check being undertaken by the IMO Secretariat. IMO urged direct engagement with the GMDSS modernization CG by all Area Coordinators, the coordinator's contact details:

Mr. Robert L. Markle
President of the Radio Technical Commission for Maritime Services (RTCM)
1800 N. Kent St., Suite 1060
Arlington, VA 22209, United States
Tel (office): +1 703 527-2000
E-mail: RMarkle@rtcm.org

WWNWS-SC Chair detailed the contents of the relevant Annexes of the GMDSS Master Plan, it was requested the METAREA Coordinators liaise with their respective NAVAREA

Coordinators to ensure the information being submitted to the IMO was correct. UK questioned the advisability of allowing Member States direct access to the database. IMO indicated a validation process would be put in place.

JCOMM ETMSS Chair described the process for METAREA up-dating of the relevant Annexes and identified a need to include such information in the Self-Assessment reports to ensure the data was annual checked and confirmed as current.

3.2.4 Contingency Planning

WWNWS-SC Chair explained the NAVAREA contingency planning process and the preparations necessary to ensure a seamless continuation of MSI service provision by an adjacent NAVAREA during a period of capability outage. The METAREAs were urged to consider creating similar inter-AREA agreements and for the system to be exercised to prove its viability.

3.3 Developments in the WWNWS

3.3.1 Inmarsat-C ECG SafetyNET

Inmarsat provided an overview of the SafetyNET services and new developments, including the new Fleet Broadband service.

3.3.2 Document Review Overview

WWNWS-SC Chair provided a background brief on the Document Review process and the rationale for the formation of the WWNWS-SC DRWG (WWNWS6-4-1a and 4-1b). It was noted work had commenced in 2006 with a holistic review of all MSI documentation; this work had now evolved into an annual editorial review cycle for each individual document. The METAREA Coordinators were urged to attend the DRWG meetings to reduce the burden on the UK MetOffice and to help ensure the WWMIWS considerations were taken into account at an early stage of the process rather than at the later approval stage. **Action WMO**

IHB suggested the WMO-IMO resolution on Met-ocean services, A.1051(27) is considered for review and submission on completion of the current cycle in 2017. IMO agreed this would provide ample time to ensure the review was completed to meet the NCSR 4 submission deadlines. IMO also confirmed the NCSR and MSC time frame and cycle were now set to ensure any document endorsed by NCSR would be presented at the following early summer MSC to ensure timely effective dates after approval had been gained.

3.4 Emerging Technologies/Modernization

3.4.2 New developments in service provision

Iridium gave a detailed presentation on the application for Iridium to become a recognized mobile satellite GMDSS service provider. The presentation generated considerable debate and numerous questions (WWNWS6-3-5-2a, 3-5-2b and 3-5-2c).

3.4.3 Progress Developments

3.4.3.1 S-124 Product Specification

NAVAREA II gave an overview presentation on the S-124, which included a description of the Product Specification, what had been achieved and what were the next stages in development (WWNWS6-3-4-4c). The relevant parts of the e-Navigation were provided and how the S-100 was a significant part of the e-Navigation. IHB noted there was a need for a progress report to be submitted to HSSC 6. **Action NAVAREA II**

3.4.3.2 S-411 and S-412 Product Specifications

METAREA XIII/XX/XXI provided an overview of the S-411, giving background details, current progress and future developments.

METAREA XVII/XVIII provided an overview of the current activities in the development of S-412 and the next steps which need to be taken.

IHB requested progress and intended future developments were reported to HSSC 6, deadline 23 September, and that direct engagement was initiated with TSMAD to ensure harmonization with other projects already under development. The similarities of S-412 with the work being undertaken by the Surface Current WG on S-111 were highlighted and direct engagement between the two teams was suggested as a way of share work load and reducing the development timeframe. **Action METAREAs XIII/XX/XXI and XVII/XVIII**

3.4.3.3 E-Navigation

IMO provided an overview of e-Navigation covering the background, current state and future developments.

5 IHO WWNWS CUSTOMER SURVEY RESULTS ANALYSIS

5.1 Common Issues

WWNWS-SC Chair gave a brief overview of the WWNWS survey questionnaire and the initial analysis (WWNWS6-3-4-2).

Inmarsat provided a presentation on generic issues identified from the survey responses which were relevant to both NAVAREA and METAREA Coordinators. Inmarsat had identified potential problems and the appropriate solution or any need for further system improvement. It was noted a significant number of the issues were due to a lack of system knowledge and training; asked how this could be addressed. Inmarsat also noted the lack of ability to provide feedback to the individuals reduced the effectiveness of the survey. It was agreed the next survey should include an option for the responder to provide a contact for feedback and dialogue on any particular issue raised.

WWMIWS Chair noted WMO surveys had been improved by moving away from a straight 'Good/Average/Poor' assessment to a more rating orientated numeric assessment.

WWNWS-SC Chair suggested a FAQ section could be developed to cover comments and system education. METAREA XVII/XVIII suggested creating a feedback site to provide users with a forum for information.

6 CLOSURE OF MEETING

In closing the meeting, both Chairs expressed their thanks for the involvement and engagement of participants and both noted a considerable amount had been learnt over the week. The interaction between the two communities had been very beneficial and had improved the understanding of issues related to both NAVAREAs and METAREAs. They thanked the hosts, NZHA of LINZ and MetService NZ, for the hard work in organizing the meeting venue and the facilities.

All were urged to maintain the engagement and to keep discussions going between respective Area Coordinators to minimize the duplication of effort and maximize the information transfer. IMO and IHB noted the next significant events for cooperation were NCSR 2 and DRWG 13 in March 2015.

**PROVISIONAL AGENDA OF THE SIXTH MEETING
OF THE WWNWS SUB COMMITTEE (WWNWS 6)**

**To be held in Wellington, New Zealand
From 18 – 22 August 2014**

1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS

- .1 Opening Remarks and Introductions – **Chair/Host**
- .2 Welcome by the IHB – **IHB**
- .3 Working Arrangements – **Chair**
- .4 Administrative Arrangements – **IHB**
- .5 Adoption of the Agenda – **Chair**
- .6 Review of Action Items from WWNWS 5 – **Chair/IHB**
- .7 Report from IRCC 6 – **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

3 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)

- .1 .1 Outcome of the 93rd Session of the International Maritime Organization's Committee on Maritime Safety (MSC 93) 14 – 23 May 2014
- .1 .2 Outcome of the 1st Session of the International Maritime Organization's Sub-Committee on Navigation, Communications and Search and Rescue (NCSR 1) 30 June – 4 July 2014
- .2 Self Assessments by NAVAREA Coordinators
 - .1 Quality Management Analyses of Self Assessments – **NAVAREAs**
- .3 Broadcast Systems and Services
 - .1 Report of the IMO NAVTEX Coordinating Panel
 - .2 Report of the IMO SafetyNET Coordinating Panel
 - .3 WMO Liaison Report
 - .4 Contingency Planning
- .4 Developments in the WWNWS
 - .1 Inmarsat-C EGC SafetyNET Report
 - .2 WWNWS Survey analysis report – **Chair/IHB**
 - .3 Status report of the WWNWS element of the GMDSS – **Chair**
 - .4 S-124 progress – **France**
- .5 Emerging Technologies/Modernisation
 - .1 Manufacturers' presentations

- .2 New developments in service transmission
- .3 S-124 and e-navigation up-dates

4 REVIEW OF GUIDANCE DOCUMENTS AND OTHER RELATED DOCUMENTATION

- .1 Document Review Status Report – **Chair/IHB**
- .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**
- .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**
- .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**
- .6 Joint IMO/IHO/WMO Manual on MSI (MSC.1/Circ.1310) and IHO Publication S-53 - review of DRWG 12 amendments. – **Chair**
- .7 IMO International SafetyNET Manual (MSC.1/Circ.1364) – **Chair**
- .8 IMO NAVTEX Manual (MSC/Circ.1403) – **Chair**
- .9 Inmarsat SafetyNET Users' Handbook – **Chair**
- .10 IAM SAR Manual Volume 2 – **Chair**
- .11 Review on-line MSI Training Course – **Chair**
- .12 MSI element of IHO Publication C-55 – "Status of Hydrography and Nautical Cartography World-Wide". – **Chair**
- .13 Terms of Reference for the WWNWS Sub Committee (IHO Circular Letter 46/2009) – **Chair**

5 WWNWS REPRESENTATION AT REGIONAL HYDROGRAPHIC COMMISSIONS AND OTHER CONFERENCES

- .1 WWNWS member attendance at RHCs – **Chair**
- .2 Capacity Building MSI Training Course Developments – **Chair/IHB**
- .3 WWNWS CD-ROM – **Chair**

6 NEXT MEETING

- .1 Dates for WWNWS 7 in Monaco 29 September - 2 October or 6-9 October 2015 – **Chair/IHB**
- .2 Draft Agenda for WWNWS 7 – **Chair/IHB**

7 Review of Action Items from WWNWS 6 – IHB

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 FIRST JOINT SESSION
OF THE IHO WWNWS SUB-COMMITTEE (WWNWS-SC) AND WMO WWMIWS**

**To be held in Wellington, New Zealand
19 August 2014**

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 93rd Session of the International Maritime Organization's Committee on Maritime Safety (MSC 93) 14 – 23 May 2014 – **IHB**
- .2 Outcomes of the 1st Session of the International Maritime Organization's Sub-Committee on Navigation, Communications and Search and Rescue (NCSR 1) 30 June – 4 July 2014 – **IHB**
- .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 Contingency Planning – **Chairs**
- .3 Developments in the WWNWS
 - .1 Inmarsat-C EGC SafetyNET Report – **Inmarsat**
 - .2 MSI Document Review Overview – **Chair WWNWS**
- .4 Emerging Technologies/Modernization
 - .1 Manufacturers' presentations – tbc
 - .2 New developments in service provision – **IMSO/Inmarsat/Iridium**
 - .3 Progress Developments on
 - .1 S-124 – **France**
 - .2 S-411 and S-412 – **WMO**
 - .3 e-navigation – **IMO**

4 ANY OTHER BUSINESS

5 IHO WWNWS Customer Survey Results Review

.1 Common issues and lessons – Chair WWNWS/IHB

6 CLOSURE OF THE MEETING – Chairs

Joint METAREA-NAVAREA Coordinators Discussion

The overall focus of the joint session is dissemination of information and education for NAVAREA and METAREA Coordinators.

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.

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.

**WWNWS 6
LIST OF PARTICIPANTS**

Country	Name	E-mail
Argentina – VI		
Australia – X	Mr Lynn Walton (NAVAREA X Coordinator) Mr Craig Longmuir	lynn.walton@amsa.gov.au Craig.Longmuir@amsa.gov.au
Brazil – V	Lt Cdr Vânia Cláudia de Assis	vania@chm.mar.mil.br avgantes@chm.mar.mil.br
Canada – XVII & XVIII		
Chile – XV		
China	Ms Chi Jun Mr Gao Wanming Mr Lu Dewei	chijun@msa.gov.cn gaowanming@msa.gov.cn farocean2000@sina.com
France - II	M Alain Rouault	alain.rouault@shom.fr
India – VIII		
Japan – XI	Mr Teruo Kanazawa	tuho@jodc.go.jp kanazawa-r4w@jha.jp
New Zealand – XIV	Mr Stuart Caie (NAVAREA XIV Coordinator) Mr David Wilson (NZ National Coordinator) Mr Conrad Reynecke (RCCNZ)	s.caie@linz.govt.nz David.Wilson@maritimenz.govt.nz Conrad.Reynecke@maritime.govt.nz
Norway – XIX	Mr Trond Ski	trond.ski@kystverket.no
Oman, Sultanate of	Cdr Juma Khalfan Maktoum al Busaidi	nhooman@omantel.net.om
Pakistan – IX		
Peru – XVI	2Lt Andres Torres	andrestorres44@hotmail.com
Russia – XIII, XX & XXI		
South Africa – VII		
Spain – III	Cdr Alejandro Herrero Pita	aherrpit@fn.mde.es ihmesp@fn.mde.es avisosihn@fm.mde.es
Sweden – Ib	Mr Svante Håkansson	svante.hakansson@sjofartsverket.se
Turkey	Mrs Pervin Keser	Pervin.Keser@kiyiemniyeti.gov.tr
United Kingdom – I	Mr William Van-Den-Bergh (NAVAREA I Coordinator) Mr Larry Bennett Mr Michael White (Observer representing AWNIS)	william.van-den-bergh@ukho.gov.uk larry.bennett@ukho.gov.uk michael.white@ukho.gov.uk
United States – IV & XII	Mr Peter Doherty (Chairman) Mr Chris Janus	peter.m.doherty@nga.mil christopher.g.janus1@nga.mil
IHB	Mr David Wyatt (Secretary)	adso@iho.int
IMO	Mr Ashok Mahapatra	mahapat@imo.org
WMO		
Inmarsat	Mr Vladimir Maksimov	vladimir.maksimov@inmarsat.com

Country	Name	E-mail
IMSO		
Iridium Satellite LLC	Mr Chris Snowdon Mr Brian Pemberton	chris@accesspartnership.com brian.pemberton@iridium.com

Documents Submitted to WWNWS 6

Document No	Document Title
ACTION ITEMS	WWNWS 5 ACTION ITEMS - Corrected to 5 August 2014
WWNWS6 Self Assessment Template	Template to be used for the submission of NAVAREA Self Assessments - amended 17 February 2014
WWNWS6 Document Template	Template to be used for the submission of documents, other than Self Assessments
WWNWS6 PowerPoint Template	Template to be used for PowerPoint Presentations at WWNWS 6
WWNWS6 1/2014	Letter of Invitation
Logistic Information	Logistic Information
WWNWS6 Registration	Registration Form
WWNWS6 Registration	Registration Form (Word version)
Hotel Reservation Form	Hotel Amora Booking Form
WWNWS6_Programme	Programme for WWNWS6-SC meeting
WWNWS6_Provisional- Agenda	Provisional Agenda for WWNWS6
Joint Session_Provisional_Agenda	Provisional Agenda for Joint Session
WWNWS6_List of Participants	List of Participants
WWNWS6-1-6a	Controlling MSI-Brazil
WWNWS6-1-7a	Report to IRCC6
WWNWS6-1-7b	Presentation to IRCC 6
WWNWS6-2-2a	Report of the 9th Meeting of the Joint IMO/ITU Experts Group on Maritime Radiocommunication Matters
WWNWS6-2-2b	Review and Modernization of the GMDSS
WWNWS6-2-3	Analysis and Assessment of the GMDSS Performance of Inmarsat Global Limited by IMSO
WWNWS6-3-1-1	Outcomes of MCS 93
WWNMS6-3-1-2	Outcomes of NCSR 1
WWNWS6-3-2-I	Self Assessment NAVAREA I
WWNWS6-3-2-Ib	Self Assessment NAVAREA Ib
WWNWS6-3-2-II	Self Assessment NAVAREA II
WWNWS6-3-2-III	Self Assessment NAVAREA III
WWNWS6-3-2-IV_XII	Self Assessment NAVAREA IV XII

WWNWS6-3-2-V	Self Assessment NAVAREA V
WWNWS6-3-2-VI	Self Assessment NAVAREA VI
WWNWS6-3-2-VII	Self Assessment NAVAREA VII
WWNWS6-3-2-VIII	Self Assessment NAVAREA VIII
WWNWS6-3-2-IX	Self Assessment NAVAREA IX
WWNWS6-3-2-X	Self Assessment NAVAREA X
WWNWS6-3-2-XI	Self Assessment NAVAREA XI
WWNWS6-3-2-XIII	Self Assessment NAVAREA XIII
WWNWS6-3-2-XIV	Self Assessment NAVAREA XIV
WWNWS6-3-2-XV	Self Assessment NAVAREA XV
WWNWS6-3-2-XVI	Self Assessment NAVAREA XVI
WWNWS6-3-2-XVII_XVIII	Self Assessment NAVAREA XVII_XVIII
WWNWS6-3-2-XIX	Self Assessment NAVAREA XIX
WWNWS6-3-2-XX_XXI	Self Assessment NAVAREA XX_XXI
WWNWS6-3-2-1	Quality Management Survey
WWNWS6-3-3-1	NAVTEX Panel Report
WWNWS6-3-3-2	SafetyNET Panel Report
WWNWS6-3-3-3	WMO Liaison Report
WWNWS6-3-4-2a	WWNWS Survey Questionnaire Summary-2014
WWNWS6-3-4-2b	WWNWS Survey Questionnaire Data-2014 and Pie Charts
WWNWS6-3-4-4a	European Maritime Radionavigation Forum 27th meeting
WWNWS6-3-4-4b	European Maritime Radionavigation Forum 27th meeting documents
WWNWS6-3-4-4c	S-124 CG Report
WWNWS6-3-5-2a	Recognition of Iridium mobile satellite system as a GMDSS service provider
WWNWS6-3-5-2b	Actions undertaken by IMSO in preparation for the recognition of a new mobile satellite communications system for the GMDSS
WWNWS6-3-5-2c	Major concerns on the details provided relating to the recognition of the Iridium mobile satellite system as a GMDSS service provider
WWNWS6-3-5-3	ACCSEAS MSI NM
WWNWS6-4-1a	Actions from DocRev WG 12 Meeting
WWNWS6-4-1b	Document Review Status Report
WWNWS6-4-13	WWNWS-SC ToRs

WWNWS6-5-2a	MSI Training
WWNWS6-5-2b	Capacity Building Plan
WWNWS6-6-2	Provisional Agenda WWNWS 7
WWNWS6 Presentations	Presentations zip

WWNWS 6
IHB, Monaco - 18 to 22 August 2014

List of Actions (updated: 2 October 2014)

Agenda Item	Subject	Status / Due Date	Comments	Action By
From WWNWS 4 List of Actions				
WWNWS3 3.3.4 B	NAVAREA XV (Chile) and NAVAREA XVI (Peru) to consider contingency planning for the provision of NAVAREA services and include updated information in their Self Assessment submissions to WWNWS4	WWNWS 7	Chile and Peru to work on the implementation of the contingency plan	NAVAREA XV and XVI
WWNWS4 3.2.III	NAVAREA III Self Assessment	WWNWS 6 No answer from Egypt WWNWS 7	NAVAREA III to provide details to Chair and IHB on timeliness of dissemination of MSI from Egypt; Chair to contact Egypt to obtain support for NAVAREA III Coordinator efforts to ensure timely broadcast of MSI – contact name and e-mail passed to NAVAREA III Coordinator, up-date of situation at next meeting	NAVAREA III & Chair/IHB
WWNWS4 3.2.X	NAVAREA X Self assessment	WWNWS 6	WMO to work with PNG representative for Met Warning Services in Area P with oversight from NAVAREA X Coordinator	WMO
WWNWS 5 List of Actions				
WWNWS5 3.2	Work with Pakistan for In-Force bulletin on the website	December 2014		Chair
WWNWS5 3.2	Investigate the way forward on Caspian Sea with IMO and report back to the SC	WWNWS 7		Russia

WWNWS5 3.2	Demonstrate the visualization tools of MSI	WWNWS 7		NAVAREA IV
WWNWS5 3.3.1.1	Establish a meeting with other MSs to discuss NAVTEX within NAVAREA III and invite the NAVTEX coordinating panel	WWNWS 7	Continue engagement with Tunisia to progress towards operational state for NAVTEX transmitter	NAVAREA III Coordinator/ NAVTEX Panel chair
WWNWS5 3.4.1	Provide the table on MSDS codes and addresses to the Chair for revision	December 2014	Inmarsat to pass to Chair for circulation	Inmarsat (Vladimir Maksimov)/ Chair
WWNWS5 4.5	Put together information and statistics of piracy messages from IMB (Chris Janus [lead], Michael White and Alain Rouault with the support of Inmarsat (Vladimir Maksimov))	WWNWS 7		Correspondence Group on Piracy
WWNWS5 4.5	Submit the paper produced by the Piracy CG to the IMO via NCSR Committee to coordinate the promulgation of piracy messages	NCSR	See previous action	Chair
WWNWS5 4.5	Liaise with IMB concerning piracy warning processes	NCSR	See previous action	Correspondence Group on Piracy
WWNWS5 4.9	Provide link to the Inmarsat SafetyNet Handbook to Chair	October 2014		Inmarsat
WWNWS5 4.11	Improve the CD on MSI self-training	WWNWS 7		IHB
WWNWS 6 List of Actions				
WWNWS6 1.6	Controlling MSI warnings	WWNWS 7	Provide progress report and presentation	Brazil

WWNWS6 3.2	NAVAREA IX Self-Assessment	December 2014	Confirm transmitting two scheduled broadcasts per day, despite only one time of transmission noted in Self-Assessment report	Chair
WWNWS6 3.2	NAVAREA X Self-Assessment	December 2014	Conduct test transmission of message for NAVAREA X by NAVAREA IV/XII, liaise with NAVAREA X Coordinator and Inmarsat	Chair
WWNWS6 3.2	NAVAREA XV Self-Assessment	December 2014	NAVAREA XV to transmit cancelation messages and serialise In-Force Bulletin messages	NAVAREA XV
WWNWS6 3.2.1	Self-Assessment template	WWNWS 7	Amend column header to 'Monitor Broadcasts'	IHB
WWNWS6 3.4.2	Customer Survey Questionnaire	September 2014	Place link to Warnings on the Web graphic on front page of IHO website	IHB
WWNWS6 3.4.2	Customer Survey Questionnaire	December 2014	Consider to include where messages older than 42 weeks can be found, confirm available from website	Chair/ NAVAREA VII
WWNWS6 3.4.4	S-124 Progress Report	5 September 2014 Complete	Circulate amended S-124 CG ToRs to WWNWS SC members for approval and comment	IHB
WWNW6 3.5.1	Manufacturers' presentations	WWNWS 7	Invite ACCSEAS to submit a report and make a presentation on the outcomes for the trails conducted in late 2014	NAVAREA XIX
WWNWS6 4.6	Joint IMO/IHO/WMO Manual on MSI	December 2014	NAVAREA Coordinators to provide link to National Coordinators for IHO website for access to relevant MSC and COMSAR.Circs on MSI: http://www.iho.int/mtg_docs/com_wg/CPRNW/WWNWS_Publications_&_Documents/MSIPubs_Docs.htm	All
WWNWS6 4.6	Joint IMO/IHO/WMO Manual on MSI	WWNWS 7	Invite personnel from Pacific Tsunami Warning Service and IOC to brief on service and message warnings	IHB

WWNWS6 5.2	Capacity Building	1 March 2015	Review IHB document and proposed process, provide input to Regional CB Coordinators on coastal states identified as requiring training and prioritize if possible, copy to Chair, provide link to Regional CB Coordinators: http://www.iho.int/mtg_docs/com_wg/CBC/CBC_Misc/CBSC_members.pdf	All
WWNWS6 5.2	MSI training	December 2014	Provide training material and standards to use in internal training by NAVAREA Coordinators	Chair
WWNWS6 8.1	Any Other Business	WWNWS 7	Discuss additional abbreviations for inclusion in standard published list with WMO	Sweden
WWNWS6 8.2	Any Other Business	December 2014	Provide clarification on contents of Navigational Warning issued	Japan
WWNWS6 8.3	Any Other Business	1 December 2014	Provide comment and feedback on GMDSS Modernization discussions	All
Joint Session				
WWNWS6 J2.3	IMO Presentation	NCSR 2 and DRWG 13	WMO and METAREA Coordinators participation in NCSR and DRWG meetings	WMO
WWNWS6 J3.1.2	Outcomes of NCSR 1	NCSR 2	Engagement with GMDSS Modernization CG	WMO
WWNWS6 J3.3.2	Document Review Overview	DRWG 13	Attendance at DRWG meetings to commence review of A.1015(27)	WMO
WWNWS6 J3.3.2	DRWG 13	December 2014	Include WMO Maritime Met in invitation e-mail and include AR.1051(27) and NAVTEX manual in list of documents for review	IHB
WWNWS6 J3.4.3.1	S-124 Presentation	23-September-2014 Complete	Provide progress report to HSSC-6	France
WWNWS6 J3.4.3.2	S-411 and S-412 Presentations	23-September-2014 Complete	Provide progress report to HSSC-6	Russia & Canada
WWNWS6	IMO/IHO/WMO liaison	September 2014 Complete	IMO to invite IHO and WMO MM for coordination meeting 15 or 16 December	IMO

WMO List of Actions from Joint Session

J2.2	WMO overview	December 2014	WMO to submit METAREA Coordinators' list as a document to the next NCSR in order for it to be consider as part of a Circular	WMO Secretariat
J2.3	IMO overview	September 2014 Complete	WMO to confirm timing for joint meeting between IMO/IHO and WMO in December — now at NCSR 2	WMO Secretariat
J2.3	IMO overview	November 2014	Consider attendance during the DRWG following the NCSR in the spring	WMO Secretariat, ETMMS Chair,
J2.3	IMO overview	December 2014	Decide on and initiate coordination with: World-Wide Navigational Warning Service (WWNWS), Document Review Working Group (DRWG), Transfer Standard Maintenance and Applications Development (TSMAD) Working Group, SafetyNet Coordinating Panel, NAVTEX Coordinating Panel, Navigation Communication and Search and Rescue (NCSR), Correspondence Group for GMDSS, and other IMO & IHO relevant bodies	WMO Secretariat, ETMMS Chair, ETMSS
J3.2	Broadcast Systems and Services	December 2014	METAREA Coordinators to ensure through their monitoring process that messages do not get caught in a transmission loop when they are out of date.	METAREA Coordinators
J3.2.3	GMDSS Master Plan	September 2014	Coordinate updates to GMDSS Master Plan update with NAVAREA Coordinators	METAREA Coordinators
J3.3.2	MSI Document Review Overview	November 2014	Provide comments on and support SafetyNet Manual document review.	WMO Secretariat, ETMSS Chair, METAREA Coordinators
J3.4.2	S-411 and S-412 progress report	23-September-2014 Complete	Prepare progress report for S-412 and S-411 developments for next Hydrographic Standards and	Tim Rulon, ETMS Chair,

			Services Committee to be held in November	ETSI Chair
J3.4.2	S-411 and S-412 progress report	September 2014	Coordinate S-412 development with S-111 (surface currents)	ETMSS Chair, Tim Rulon
J3.4.2	S-411 and S-412 progress report	September 2014	Proceed with submission of IHO registry for MET-Ocean Catalogue	ETMSS Chair, WMO Secretariat, Tim Rulon
J3.4.2	S-411 and S-412 progress report	October 2014	Consider attendance at next TSMAD (Feb 2015) in order to represent S-100 activities	ETMSS Chair, ETSI Chair and WMO Secretariat

**PROVISIONAL AGENDA OF THE SIXTH MEETING
OF THE WWNWS SUB COMMITTEE (WWNWS 7)**

**To be held at the offices of the IHB, Monaco
From 24 – 28 August 2015**

1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS

- .1 Opening Remarks and Introductions
- .2 Welcome by the IHB
- .3 Working Arrangements
- .4 Administrative Arrangements
- .5 Adoption of the Agenda
- .6 Review of Action Items from WWNWS 6
- .7 Report from IRCC 7

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

3 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)

- .1 .1 Outcome of the 94th and 95th Sessions of the International Maritime Organization's Committee on Maritime Safety (MSC 94 & 95) 17 – 21 November 2014 and 3 – 12 June 2015
- .1 .2 Outcome of the 2nd Session of the International Maritime Organization's Sub-Committee on Navigation, Communications and Search and Rescue (NCSR 2) 9 – 13 March 2015
- .2 Self Assessments by NAVAREA Coordinators
 - .1 Quality Management Analyses of Self Assessments
- .3 Broadcast Systems and Services
 - .1 Report of the IMO NAVTEX Coordinating Panel
 - .2 Report of the IMO SafetyNET Coordinating Panel
 - .3 WMO Liaison Report
 - .4 Contingency Planning
- .4 Developments in the WWNWS
 - .1 Inmarsat-C EGC SafetyNET Report
 - .2 Status report of the WWNWS element of the GMDSS
 - .3 S-124 progress
- .5 Emerging Technologies/Modernisation
 - .1 Manufacturers' presentations

- .2 New developments in service transmission
- .3 e-Navigation up-date

4 REVIEW OF GUIDANCE DOCUMENTS AND OTHER RELATED DOCUMENTATION

- .1 Document Review Status Report
- .2 IMO Resolutions A.705(17) as amended and A.706(17) as amended (MSC.1/Circ.1287 and MSC.1/Circ.1288 respectively)
- .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".
- .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))
- .6 Joint IMO/IHO/WMO Manual on MSI (MSC.1/Circ.1310) and IHO Publication S-53 - review of DRWG 12 amendments.
- .7 IMO International SafetyNET Manual (MSC.1/Circ.1364)
- .8 IMO NAVTEX Manual (MSC/Circ.1403)
- .9 Inmarsat SafetyNET Users' Handbook
- .10 IAM SAR Manual Volume 2
- .11 Review on-line MSI Training Course
- .12 MSI element of IHO Publication C-55 – "Status of Hydrography and Nautical Cartography World-Wide".
- .13 Terms of Reference for the WWNWS Sub Committee (IHO Circular Letter 46/2009)

5 WWNWS REPRESENTATION AT REGIONAL HYDROGRAPHIC COMMISSIONS AND OTHER CONFERENCES

- .1 WWNWS member attendance at RHCs
- .2 Capacity Building MSI Training Course Developments
- .3 WWNWS CD-ROM

6 NEXT MEETING

- .1 Dates and venue for WWNWS
- .2 Draft Agenda for WWNWS 8

7 Review of Action Items from WWNWS 7

8 ANY OTHER BUSINESS

9 CLOSURE OF THE MEETING

WWNWS
Meeting 6
Agenda Item 3.2.1

WWNWS6/3/2/1
11 August 2014

NAVAREA Coordinators' Self Assessment Quality Management Analysis

Submitted by IHB

SUMMARY

Executive Summary: This document provides details of the analysis of the NAVAREA Coordinators' Self Assessment Reports to WWNWS 6.

Action to be taken: Paragraph 3.

Related documents: NAVAREA Coordinators' Self Assessment Reports

1. See attached document.
2. It is noted a number of the Self Assessment reports were received after the deadline and a number were received in pdf format, despite being requested in Word format. Both these 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 all documents submitted are in Word format to minimize editing effort.
3. The Sub-Committee is invited to note the information provided and take 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	No	Yes	6 (Navtex)	Yes
II	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
III	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IV	Yes	Yes	Yes	Yes	Yes ³	Yes	Yes	Yes
V	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
VI	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
VII	No	Yes	Yes	Yes	No ²	Yes	Yes	Yes ¹
VIII	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IX	No	Yes	No	Yes	No	Yes	Yes	Yes
X	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
XI	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
XII	Yes	Yes	Yes	Yes	Yes ³	Yes	Yes	Yes
XIII	No	Yes	Yes	Yes	Yes ⁶	Yes	Yes	Yes
XIV	No	Yes	Yes	Yes	No ⁴	Yes	Yes	Yes
XV	Yes	Yes	Yes	Yes	Yes ⁷	Yes	Yes	Yes
XVI	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
XVII	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
XVIII	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
XIX	No	Yes	Yes	Yes	No ⁵	Yes	Yes	Yes
XX	No	Yes	Yes	Yes		Yes	Yes	Yes
XXI	No	Yes	Yes	Yes		Yes	Yes	Yes

²See paragraph 2 of NAVAREA VII Self Assessment (WWNWS6/3/2/VII)

¹See paragraph 4 of NAVAREA VII Self Assessment (WWNWS6/3/2/VII)

³See paragraph 2 of NAVAREA IV_XIII Self Assessment (WWNWS6/3/2/IV_XIII)

⁴See paragraph 2 of NAVAREA XIV Self Assessment (WWNWS6/3/2/XIV)

⁵See paragraph 2 of NAVAREA XIX Self Assessment (WWNWS6/3/2/XIX)

⁶See paragraph 2 of NAVAREA XIX Self Assessment (WWNWS6/3/2/XIII)

⁷See paragraph 2 of NAVAREA XV Self Assessment (WWNWS6/3/2/XV)

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

References:

IHC Resolution 11/1962, as amended IHC17
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-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-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 prior to formal IHO, World Meteorological Organization (WMO) or IMO consideration.
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) for the delivery of training courses aimed at improving Navigational Warning Services.
9. These Terms of Reference can be amended in accordance with Resolution 11/1962, as amended (*Resolution 11/1962* to be replaced by *Article 6 of the General Regulations* when the revised text of the IHO Convention enters into force).

Rules of Procedure

1. The Sub-Committee is composed of the NAVAREA Co-ordinators¹ and Sub-Area Co-ordinators¹. Member States, other than those represented by a NAVAREA or Sub-Area Co-ordinator, may nominate their National Co-ordinators¹ as members. Representatives of the IMO, WMO, IMSO and the International Hydrographic Bureau (IHB) (*“the International Hydrographic Bureau (IHB)”* to be replaced by *“the IHO Secretariat”* when the Secretariat is established) participate in an Ex-Officio capacity without voting rights. The Sub-Committee may invite observers to participate in its activities.
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 International Hydrographic Conference (*“International Hydrographic Conference”* to be replaced by *“Assembly”* when the Assembly is established). IHO Resolution 11/1962, as amended (*Resolution 11/1962* to be replaced by *Article 6 of the General Regulations* when the revised text of the IHO Convention enters into force) shall govern the length of tenure. The Sub-Committee shall have a Secretary, nominated by the Directing Committee of the International Hydrographic Bureau (*“the Directing Committee of the International Hydrographic Bureau”* to be replaced by *“the Secretariat”* when the Secretariat is established). 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 International Hydrographic Conference (*“each ordinary session of the International Hydrographic Conference”* to be replaced by *“each ordinary session of the Assembly through the Council”* when the Council and Assembly are established).
4. The Sub-Committee shall have its permanent secretariat at the International Hydrographic Bureau (*“the International Hydrographic Bureau”* to be replaced by *“the Secretariat”* when the Secretariat is established). 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.

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

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.
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 WWNWS-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 Resolution 11/1962, as amended (*Resolution 11/1962* to be replaced by *Article 6 of the General Regulations* when the revised text of the IHO Convention enters into force).

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)