

**5th MEETING of the IHO SUB-COMMITTEE ON THE WORLD-WIDE
NAVIGATIONAL WARNING SERVICE (WWNWS)
International Hydrographic Bureau, Monaco
1 – 4 October 2013**

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

The Chairman, Mr. Peter Doherty, United States (NGA), opened the 5th WWNWS-SC meeting at 0900 on 1 October 2013, welcoming 42 delegates from 22 IHO Member States, the International Hydrographic Bureau (IHB), the World Meteorological Organization (WMO), the International Mobile Satellite Organization (IMSO), Iridium Satellite LLC, and Inmarsat Global Ltd. These included representatives from 19 NAVAREAS, one Sub-Area and five National Coordinators. The list of participants is given in Annex B. South Africa (NAVAREA VII) sent apologies for non-attendance. The Chairman thanked all for their attendance and discussed how participation had increased since 2003 when only 17 delegates and eight NAVAREAS attended. He noted that WWNWS 5 represented the largest number of participants to date, which not only reflected the importance of the work the sub-committee conducts, but the critical decisions the group makes at every meeting, which continue to move the WWNWS forward to ensure the safety of mariners worldwide.

**1.2 Welcome by the President of the International Hydrographic Organization,
Robert Ward**

The President welcomed all and was extremely pleased by the large number of delegates present. He emphasized how very significant the WWNWS expert group is and how the IHO and IMO have high expectations for the work the Sub-Committee does. He reflected on the work from the WWNWS in recent years and how effective it was. WWNWS proposals were well thought out and went unchallenged when presented to the IMO. The reason for that is because of the work each of the members contributes to the decisions this Sub-Committee makes. Due to the hard work the WWNWS Sub-Committee conducts every year, its standing in the IMO reflects favourably on the IHO. He thanked the entire group for that and he expressed confidence in its continued success. He noted and passed on apologies that the IMO could not attend due to the pending retirement of Mr. Gupreet Singhotia, Head of the IMO's Operational Safety Section, who would normally attend. He further noted the attendance of Mr. Andy Fuller, Deputy Director General of the International Mobile Satellite Organization, and that this would be his last WWNWS meeting. He thanked him for his immeasurable and invaluable contributions over his lengthy career. Lastly, the IHO President set the tone for the meeting. He understood that there were a number of new topics to consider and the most important was where and how does the WWNWS fit into the eNavigation vision. He challenged the group to develop a solution and course of action for this very important next step. He closed noting that WWNWS 5 would be Mr. Guy Beale's

last meeting. He thanked him for all of his numerous contributions to the IHO, IMO, WWNWS and his accomplishments as the IMO NAVTEX Coordinating Panel Chairman.

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 WWNWS 5 followed by the Agenda Item (AI) number.

1.4 Administrative Arrangements

Alberto Costa Neves, IHO Assistant Director, served as the WWNWS Secretary as Mr. David Wyatt, IHB Secretary, was unable to attend. He informed the meeting that he would be maintaining the list of Action Items and Chris Janus, USA, would prepare the draft report of the meeting. The Chairman recognized Argentina, Brazil, Japan, and Australia for hosting past meetings and then invited everyone to introduce themselves to the meeting for the benefit of all.

1.5 Adoption of the Agenda

The provisional agenda was adopted. It is attached at Annex A to this report. The documents submitted to WWNWS5 are listed at Annex C.

1.6 Review of Action Items from WWNWS 4

The Secretary reviewed the list of outstanding action items and briefly discussed the current status of each, identifying where, if appropriate, it would be addressed further within this meeting. The updated list of all outstanding Action Items and their current status are attached at Annex D. Those items marked “Complete” or “Delete” will subsequently be removed from the list once this report is approved.

1.7 Report from the 5th meeting of the Inter-Regional Co-ordination Committee (IRCC5)

The Chairman briefed the Sub-Committee on the outcome of IRCC5, held in Wollongong Australia from 3-4 June 2013. The IRCC is the IHO governing body for the WWNWS Sub-Committee and its primary responsibility is to establish, coordinate and enhance cooperation in hydrographic activities amongst States on a regional basis, and between regions, especially on matters associated with:

- Capacity Building;
- Promulgation of Navigational Warnings;
- General Bathymetry and Ocean Mapping;
- Education and Training; and
- Implementation of the Worldwide Electronic Navigational Chart Database (WEND) principles suitable for the needs of international shipping.

The Chairman briefed the Sub-Committee on the submission that he had made to IRCC5 on behalf of the WWNWS and noted the primary areas he addressed. He highlighted:

- The Document Review Working Group of the WNWNS-SC submitted a final proof review of the Annex 7 of MSC.1/Circ.1382/Rev.1, IMO Resolutions A.705(17) and A.706(17) for consideration at IMO MSC 92. The WG also prepared draft editorial amendments to the Joint IMO/IHO/WMO Manual on MSI (IHO Publication S-53) for further consideration at WWNWS 5.
- The WWNWS-SC conducted one MSI Capacity Building training course in Trinidad, 20-22 May 2013 and has another scheduled for South Africa in December 2013.

2 MATTERS RELATING TO THE GMDSS MASTER PLAN

2.1 IMO Update

Unfortunately, an IMO representative was unable to attend WWNWS 5. The WWNWS-SC Secretary led off with a brief summary regarding the establishment of the new IMO Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) and how it replaces and combines the IMO Sub-Committees on Safety of Navigation (NAV) and on Radiocommunications and Search and Rescue (COMSAR). He highlighted that NCSR's first meeting will be 30 June through 4 July 2014. NAVAREA IV/XII summarized the 8th Meeting of the IMO/ITU Experts Group on Maritime Radio Communications, document WWNWS5/2/1a and the Review and Modernization of the Global Maritime Distress and Safety System (GMDSS), document WWNWS5/2/1b.

In the IMO/ITU report, NAVAREA IV/XII noted the Expert Group's proposal to modify GMDSS functional requirement number 7 from *ships shall be capable of sending and receiving MSI* to *ships shall be capable of receiving MSI*. This change initially caused the WWNWS-SC great concern. However, the Expert Group's change was only editorial - to align the functional requirement with the SOLAS definition of MSI. Once the WWNWS-SC understood the full extent of the change, there were no longer any concerns and all agreed with the Expert Group's recommendation.

From the GMDSS Modernization report, NAVAREA IV/XII noted that Principle Three stated any modernization should avoid new costs to administrations. This is of particular concern to the WWNWS-SC and its maritime safety information providers. NAVAREA I echoed this concern and cautioned that rigidly holding to it might negatively influence progress. Subsequently, corollaries three and seven discussed equally important points. Corollary three stated that new system elements should be standards based, defined by IMO performance standards. Corollary seven suggested that the WMO and IHO should adopt a common standard to graphically display meteorological, navigation, ice and search and rescue data. The Chairman emphasized the importance of making progress to achieve corollary seven and tasked the WWNWS-SC, especially those countries located closer to the IMO, to support as much as possible. IMSO added that the WWNWS-SC should be very clear and concise with the recommendations it makes to the IMO GMDSS Correspondence Group.

2.2 Report of International Mobile Satellite Organization (IMSO)

The Primary Purpose of IMSO, under its Convention, is to ensure the provision, by each Provider, of maritime mobile satellite communications services for the Global Maritime Distress and Safety System (GMDSS). The Deputy Director General of IMSO summarized document WWNWS5/2/2, Analysis and Assessment of the GMDSS Performance of Inmarsat Global Limited. He noted the ongoing programme of satellite failure exercises, which occur every three months, to confirm the reliability of the service Inmarsat provides. NAVAREA

XIV expressed concern regarding the potential impacts to MSI providers during the exercises. IMISO confirmed that there were no impacts as a result of the exercises. Subsequently, IMISO welcomed the participation of NAVAREA Coordinators in future exercises. The Chairman asked NAVAREA IV/XII to be the first volunteer. Lastly, the Deputy Director General commented on the personnel changes to the small five-member organization. Over the next 18 months, he stated that three of the five-member team would retire, which would likely hamper its ability to take on additional work.

2.3 Review of the GMDSS Master Plan Annexes 7 & 8

The Secretary of the IMO International NAVTEX Coordinating Panel introduced the topic. He noted that time was short to submit changes for the next edition of the GMDSS Master Plan, GMDSS.1/Circ.16, which is due to be released in early 2014. He urged NAVAREA coordinators to develop more dynamic relationships between themselves and national NAVTEX coordinators, not only for the benefit of Annex 7, but for users worldwide.

The Chairman provided a brief update on Annex 8 and noted that the responsibility for updates falls to the International SafetyNET panel. He highlighted changes in columns, columns 3, 4, and 5. He requested that NAVAREA Coordinators send all proposed changes to Annex 8 to the Chairman first, for review, prior to formally submitting to the IMO. Upon approval, the Chairman would provide instructions how to submit to the IMO. NAVAREA XIV requested editable templates for Annexes 7 and 8 to facilitate the update process. The Chairman agreed and would provide them.

3 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)

3.1 Outcomes of International Maritime Organization (IMO) Sub-Committees

3.1.1 Outcome of the Seventeenth Session of the IMO's Sub-Committee on Communications and Search and Rescue (COMSAR17) 21- 25 January 2013

NAVAREA IV/XII reviewed the matters considered, and decisions taken, during COMSAR17, referring to document WWNWS5/3/1.1. Of note, COMSAR17 endorsed draft amendments for IMO Resolutions A.705, A.706, and MSC.1 Circ.1382/Rev.1 - Questionnaire On Shore-Based Facilities For The Global Maritime Distress And Safety System.

3.1.2 Outcome of the 92th Session of the IMO's Committee on Maritime Safety (MSC 92) 12-21 May 2013

The Chairman and Secretary reviewed the matters considered and decisions taken during MSC 92, referring to document WWNWS5/3/1/2. They highlighted the intention of the United States to provide the IMO Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) with the necessary information to enable it to verify that the Iridium mobile-satellite system meets the criteria of resolution A.1001(25) - Criteria for the Provision of Mobile Satellite Communication Systems in the Global Maritime Distress and Safety System.

3.1.3 Outcome of the 59th Session of the IMO's Sub-Committee on Safety of Navigation (NAV 59) 2-6 September 2013

The Chairman and Secretary reviewed the matters considered, and decisions taken, during NAV59, referring to document WWNWS5/3/1/3. Of relevance, NAV59 reported on the development of policy and new symbols for AIS aids to navigation, an outcome of the AIS Aids to Navigation Correspondence Group, which NAV 58 re-established. NAVAREA IV/XII commented on the potential use of AIS to broadcast MSI, as discussed by the USCG at the 2013 annual meeting of the Radio Technical Commission for Maritime Services (RTCM). NAVAREA I commented that the WWNWS should maintain a watchful eye on the broadcast of MSI via AIS, so that the WWNWS is not compromised.

3.2 NAVAREA Assessments of Navigational Warnings Services by Coordinators

The representatives of the 19 NAVAREAs and one Sub-Area present were invited to introduce their MSI Self Assessments. The MSI Self-Assessment document requires NAVAREA Coordinators to complete an MSI Quality Management Survey and the collated results of this survey are at Annex F.

NAVAREA I (UK)

The NAVAREA I representative introduced and presented his Self-Assessment Report, document WWNWS5/3/2/1. Discussions between United Kingdom Maritime Safety Agency and Faeroe Islands have commenced in order to fill a NAVTEX shadow area North West of Scotland. The UK MSI Capacity Building Trainer contributed to the MSI Training course in Trinidad and remains available for future courses. NAVAREA IV/XII commented on the usefulness of NAVAREA I's presentation regarding its collection of performance based data for immediate messages and suggested that the WWNWS-SC add this data point to the NAVAREA MSI Self-Assessment. The Chairman noted the report and thanked for NAVAREA 1 for its support to the WWNWS Document Review WG and MSI capacity building course.

NAVAREA I Sub-Area Baltic (Sweden)

The Baltic Sea Sub-Area representative introduced and presented his Self-Assessment Report, document WWNWS5/3/2/Ib. He noted that Sweden established MSI SWEDEN in February 2013 and it performs all operational issues concerning the broadcast of navigation warnings and MSI. He discussed Sub-Area I's involvement with the e-navigation project ACCSEAS, which aims to provide a more effective process in the North Sea for promulgation and distribution of MSI and notice to mariners data. The Chairman thanked Sub-Area I for its model performance, its well-organized and informative website, and its continued outreach to other meetings and projects. NAVAREA I echoed the Chairman's remarks and highlighted national coordinator message organization within Sub-Area I. Sub-Area I reviews all national coordinator warnings to ensure consistency. NAVAREA I recommended that NAVAREA Coordinator expand their role to monitor all warnings, including NAVTEX, within its navigation area to ensure a consistent product.

NAVAREA II (France)

The NAVAREA II representative introduced and presented his Self-Assessment Report, document WWNWS5/3/2/II. He particularly stressed that information concerning acts of piracy in the Gulf of Guinea is increasingly time late and it negatively impacts mariners that

rely on early notification of such events. He highlighted the continued and substantial increase in requests from ships for in-force warnings and the burden to watch officers it creates. NAVAREA IV/XII noted a similar increase for in-force warnings. The Chairman expressed concern regarding the excessive requests and that vessels should use SafetyNET to receive all warnings. To lessen the burden on watch officers, the Chairman recommended NAVAREAs provide a standard email response with an explanation how to access in-force warnings from each administration's website.

NAVAREA III (Spain)

The NAVAREA III representative introduced and presented his Self-Assessment Report, document WWNWS5/3/2/III. In general, he noted there are few communications between the NAVAREA III Coordinator and national coordinators. He noted that the Italian Coast Guard is the main authority who reports incidents (to NAVAREA III) for its surrounding sea areas. Lastly, he indicated two NAVTEX outages, one at Kelibia (Tunisia) and Surt (Libya), for which MSI is only available via SafetyNET.

NAVAREA IV & XII (USA)

The NAVAREA IV and XII representative introduced and presented of his Self-Assessment report, document WWNWS5/3/2/IV_XII, and noted that all broadcast messages 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 the very concerning Thrane and Thrane EasyMail software problem that both NAVAREA IV and NAVAREA I observed in February of 2013. He noted the benefits of the IHO's capacity building efforts in the most recent Maritime Safety Information Course conducted by the WWNWS-SC (NAVAREA I and IV) in Trinidad in May 2013. Lastly, he mentioned the new MET broadcast area in METAREA IV, which the Meteorological Service of Canada will operate and expects to be operational by June 2014.

NAVAREA V (Brazil)

The NAVAREA V representative introduced and presented her Self-Assessment Report, document WWNWS5/3/2/V. She noted that the Brazilian Hydrographic Centre contracted a company to develop an automatic system to manage, process, and disseminate all navigation warnings. NAVAREA I commented that it could not locate the NAVAREA V weekly in-force warning on its website. NAVAREA V noted the issue and remedied the situation the very next day.

NAVAREA VI (Argentina)

The NAVAREA VI representative introduced and presented his Self-Assessment Report, document WWNWS5/3/2/VI. He noted the contingency plan between NAVAREA VI and NAVAREA V to broadcast all MSI warnings was almost complete. He mentioned that NAVAREA VI complied with WWNWS request to disseminate its survey to assess the quality of MSI services provided. It broadcast the survey through SafetyNET and NAVTEX, included it in Argentina's Notice to Mariners, and posted it on the SHN Website. He indicated that, since 15 October 2012, NAVAREA VI had disseminated a weekly in-force bulletin on SafetyNET, which brought it into compliance with WWNWS guidance documents.

NAVAREA VII (South Africa)

The Chairman introduced and presented the Self-Assessment Report, document WWNWS5/3/2/VII. NAVAREA VII noted that there remains a lack of NAVTEX Stations north of the South African international border. The Chairman pointed out the slow progress and the lack of adequate MSI implementation by States in the Great Rift Valley in the Southern African region, which remains a persistent matter of concern. The identification of Sub-Area VIIA has, to date, not resulted in any further developments. NAVAREA VII has a contingency plan arrangement, in principle, with NAVAREA II, which acts as a backup for the AOR-E, and NAVAREA X, which acts as a backup for the IOR. However, formal procedures still need to be developed, tested, and implemented. The Chairman noted that NAVAREA VII only broadcasts over SafetyNET once per day (1940 UTC), which is not in compliance with the WWNWS guidance documents.

NAVAREA VIII (India)

The NAVAREA VIII representative introduced and presented his Self-Assessment Report, document WWNWS5/3/2/VIII. The report highlighted the MSI activities and provided updated information. The North Indian Ocean Hydrographic Commission (NIOHC) meeting was chaired by the Chief Hydrographer to the Government of India. The key improvement since WWNWS 4 is the development of a new NAVTEX Chain along the coast of India, which involves seven new NAVTEX stations. India expects this new chain to be operational in 2014. NAVAREA II noted that contact information for La Reunion and the Maldives were not listed and offered to provide. The Chairman thanked NAVAREA VIII for its report and complimented India for the effective piracy support it provided throughout the year.

NAVAREA IX (Pakistan)

The NAVAREA IX representative introduced and presented his Self-Assessment Report, document WWNWS5/3/2/IX. He noted that NAVAREA IX transmits MSI for 16 countries in its region. Navigational Warnings are promulgated via SafetyNET and NAVTEX with all warnings included in the Notice to Mariners, which Pakistan publishes once per week. All the warnings and NTMs are regularly posted and monitored on the NAVAREA IX website as well. He noted that the Karachi NAVTEX station remains out of service while it undergoes an upgrade and replacement. NAVAREA I observed that it could not locate the NAVAREA IX weekly in-force warning on its website. NAVAREA IX will investigate to determine why those warnings are not posted on its website. The Chairman thanked NAVAREA IX for its report and complimented Pakistan for the effective piracy support it provided throughout the year.

NAVAREA X (Australia)

The NAVAREA X representative introduced and presented his Self-Assessment Report, document WWNWS5/3/2/X. He noted the MSI activities for the period from July 2012 to June 2013. Of particular significance, he mentioned that NAVAREA X commenced promulgation of in-force bulletins in January 2013. MSI traffic received on the IOR and POR by the NAVAREA X MES is provided to USA and New Zealand authorities in almost real time. The establishment of Papua New Guinea's MSI capabilities is expected to be completed in the first quarter of 2014 and NAVAREA X continues to work on establishing Area S for the Solomon Islands. NAVAREA I commented that the NAVAREA X link on the IHO WWNWS page was broken, which NAVAREA X explained was due to the establishment of a new website for its services.

NAVAREA XI (Japan)

The NAVAREA XI representative introduced and presented his Self-Assessment Report, document WWNWS5/3/2/XI_Rev1. He noted that he would provide an updated report, which would contain new contact information for the Republic of Korea. He reported that two NAVTEX stations in Indonesia were initially operating on 490kHz, due to a manufacturer set up problem, and were finally switched to 518kHz with assistance from IMO NAVTEX Coordinating Panel secretary. NAVREA X thanked the NAVTEX Coordinating Panel secretary for providing this assistance. Sub-Area I requested additional information regarding the system NAVAREA XI developed to geographically display maritime safety information. The Chairman thanked him for his report and thanked Japan for the outstanding job they did hosting WWNWS 4.

NAVAREA XII (USA) (See NAVAREA IV above)

NAVAREA XIII (Russian Federation)

The NAVAREA XIII representative introduced and presented his Self-Assessment Report, document WWNWS5/3/2/XIII. He noted, during a recent meeting between the Hydrographic Offices responsible for charting in the Caspian Sea, that the subject arose once again to designate the Caspian Sea region as NAV/MET area under the WWNWS. The Chairman acknowledged the request and thanked the Russian Federation for the work it has conducted to coordinate MSI for the Caspian Sea area. However, the Chairman deferred any decision by the WWNWS-SC until the IMO formally decided on whether the Caspian Sea will fall under the governance of the UN Conventions for the Safety of Life at Sea (SOLAS).

NAVAREA XIV (New Zealand)

The NAVAREA XIV representative introduced and presented his Self-Assessment Report, document WWNWS5/3/2/XIV. He noted that NAVAREA XIV's newest SafetyNET area, Coastal Area Z, was operational. He mentioned that New Zealand was already making preparations to host WWNWS 6 and that it would most likely take place in Wellington, followed by an MSI capacity building course. The Chairman thanked him for his report as well as for New Zealand's gracious offer to host WWNWS 6.

NAVAREA XV (Chile)

The NAVAREA XV representative introduced and presented his Self-Assessment Report, document WWNWS5/3/2/XV. He highlighted an increase in the number of e-mail requests for in-force warnings, similar to NAVAREA II and IV. He noted a joint commitment between the national maritime authority and the national shipping and fishing fleet to have NAVTEX equipment capable of monitoring both 518 kHz and 490 kHz, and it is expected to be fully implemented by 2016. The Chairman noted that NAVAREA XV cancellation warnings should be by individual warning, or part of another warning if convenient, as opposed to removing that particular warning number from its weekly in-force warning.

NAVAREA XVI (Peru)

The NAVAREA XVI representative introduced his Self-Assessment Report, document WWNWS5/3/2/XVI. He highlighted an action, which carried over from WWNWS 4. METAREA XVI, during the fourth meeting of the Joint WMO-IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM), requested from the World

Meteorological Organization to assign full responsibility for the broadcast of meteorological information to Peru (from the United States) due to the quality and accuracy of its forecasts and the modernization of its equipment. He noted changes to scheduled broadcast times to align with requirements described in WNWNS guidance documents and indicated that NAVAREA XVI now staffs its watch office 24 hours a day. Lastly, he reported that NAVAREA XVI is in the process of implementing the ISO 90001 quality management system. NAVAREA I commended Peru on its significant progress and outstanding Self-Assessment. The Chairman noted NAVAREA XVI's accomplishments and echoed NAVAREA I's commendation.

NAVAREA XVII and XVIII (Canada)

The NAVAREA XVII and XVIII representative introduced and presented her Self-Assessment Report, document WWNWS5/3/2/XVII_XVIII. The NAVAREA XVII and XVIII desk is in its 3rd 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 is transmitted. NAVAREA messages are posted on the Canadian Coast Guard Website in near real time. NAVAREA messages and METAREA information are transmitted over HF-NBDP, on 8416.5 kHz, twice daily on a seasonal basis. Canada conducted a brief radio survey of the reception coverage of its Arctic NAVTEX installation and the results demonstrated that the coverage is as depicted in its self assessment report with some minor anomalies created by local topography.

NAVAREA XIX (Norway)

The NAVAREA XIX representative introduced and presented his Self-Assessment Report, document WWNWS5/3/2/XIX. The Chairman thanked Norway for the great work it has done and its contributions to the WWNWS.

NAVAREA XX and XXI (Russian Federation)

The Chairman presented the NAVAREA XX and XXI Self-Assessment Report, document WWNWS5/3/2/XX - XXI. He noted that both areas continue to promulgate navigation warnings, with broadcasts on HF NBDP for Arctic waters which are not covered by the Inmarsat service. The Chairman thanked NAVAREA XX and XXI, and all of the Arctic NAVAREA Coordinators, for their continued dedication and support to the WWNWS.

3.3 Broadcast Systems and Services

3.3.1 Report of the IMO NAVTEX Co-ordinating Panel

The Chairman of the IMO NAVTEX Coordinating Panel introduced and presented document WWNWS5/3/3.1, which highlighted the main matters raised with the Panel.

3.3.1.1 Coordination of NAVTEX Coverage in the Central Mediterranean Sea

The representative from Italy introduced and presented his paper, document WWNWS5/3/3.1.1. He noted that Italy's newest NAVTEX station in Piombino operates on 490 kHz and broadcasts in English because there were no more B1 characters available for the 518 kHz spectrum. NAVAREA I recommended that NAVAREA III promulgate a SafetyNET broadcast to notify vessels that the primary means for obtaining MSI in the northern Ligurian Sea is via this new station, and that it broadcasts on 490 kHz vice 518 kHz.

Italy noted the difficulty in cooperation and with communications amongst NAVTEX coordinators in the central Mediterranean Sea, especially concerning search and rescue operations. He hoped, with assistance from NAVAREA III, that a meeting could be arranged to establish better collaboration concerning MSI. The Chairman of the IMO NAVTEX Coordinating Panel thanked Italy for their presentation and stated that this was an excellent example of how administrations should cooperate in assisting with the dissemination of MSI across Services Areas. This approach was particularly important when NAVTEX Coordinators had a requirement to transmit information into their respective SAR Regions when there is insufficient reception coverage from their national NAVTEX aerial sites. He also recommended that the littoral Mediterranean States in the Western Mediterranean Sea work together under the guidance of the NAVAREA III Coordinator to attempt to establish working level agreements on the exchange and promulgation of MSI using the NAVTEX Services Areas as depicted under item 4, in document WWNWS5/3/2/III.

3.3.1.2 Information Related with Marine Mammals

The representative from France introduced and presented his paper, document WWNWS5/3/3.1.2. NAVAREA I and II, Sub-Area I, and IMSO all presented objections regarding the use of the WWNWS to pass this type of information. The Chairman offered an alternative: Provide this information through an administration's notice to mariners publication, as the United States regularly does. The representative from Turkey raised the point that the B2 "W" character once existed to support environmental information. However, after the Chairman queried the Sub-Committee, all agreed that to support this proposal would not be prudent and the WWNWS-SC agreed not to endorse it.

3.3.2 Report of the IMO SafetyNET Coordinating Panel

The Chairman briefly described the roles and responsibilities of this panel and then allowed NAVAREA IV to summarize the problem it experienced, as well as did NAVAREA I, with the AOR-E satellite in February 2013. The full details can be found in the NAVAREA IV/XII Self-Assessment, document WWNWS5/3/2/IV_XII. IMSO commented how the IMO has difficulties regulating ECDIS software and implied that similar problems will most likely exist for SafetyNET software. Inmarsat added that they too encountered problems when requesting support from Thrane and Thrane, which was recently bought by another company named Cobham, based in the UK. NAVAREA I questioned whether it would be prudent to establish technology standards for NAVAREA Coordinators and suggested, alternatively, to include information about what type of equipment and software each used in its Self-Assessment report. The Chairman queried the WWNWS-SC about adding equipment types and performance standards to the Self-Assessment report. None opposed and the Chairman endorsed the proposal.

3.3.3 WMO Liaison Report

Ms. Boram Lee introduced and presented the WMO Liaison Report, document WWNWS5/3/3/3A, and provided a presentation, document WWNWS5/3/3/3B. She highlighted progress made through JCOMM in the implementation of the IMO/WMO Worldwide Met-Ocean Information and Warning Service (WWMIWS), including; 1) progress in the provision of Arctic MSI; 2) new development of meteorological MSI such as dangerous and complex sea states; 3) review of WMO regulations and guidelines relevant to the meteorological MSI (WMO-No.558 and WMO-No.471), and; 4) ongoing review of Metocean information support for marine environmental emergency responses. The meeting also noted with pleasure the support of WMO Secretariat for the development of WWNWS

online survey. The Chairman commented that he looked forward to improving the already close relationship between the WMO Marine Meteorology and Oceanography Programme (MMOP) and WNWNS and how that synergy will benefit mariners.

3.3.4 Contingency Planning

Mr. Andy Fuller, Deputy Director General of IMSO, presented an overview of Inmarsat's contingency planning exercises. The Chairman requested to establish an exercise between NAVAREA IV/XII and NAVAREA XVII/XVIII to test the capability to disseminate warnings seamlessly on behalf of each other. Discussion by the representatives agreed that this would be feasible. NAVAREA I noted that it provided this service on behalf of NAVAREA III in 2010. However, they noted that the process to cancel a message might be more difficult due to transmission through a different LES than one's own. The cancellation message would be easy enough to promulgate, but deleting the warning from the transmission queue would be more difficult. Inmarsat will investigate and determine how it might be able to assist with this potential issue.

3.3.5 Navigation Warnings Concerning EM Radiation Interference

The Chairman introduced the topic and covered the progress that the Document Review Working Group made in March 2012. For the most part, this topic is complete. To ensure that the WNWNS-SC has accurate examples concerning this warning type, it will be reviewed again at the next Document Review meeting, which is scheduled for the week following NCSR1 in 2014.

3.3.6 MSI Broadcast via satellite, new providers

Mr. Andy Fuller, Deputy Director General of IMSO, had nothing significant to report. He deferred comments until agenda item 3.5 was complete, which covered emerging technologies and modernization.

3.4 Developments in the WNWNS

3.4.1 Inmarsat-C EGC SafetyNET Report

The representative from Inmarsat introduced and presented his paper, document WNWNS5/3/4/1. He provided an update on its satellite-based services and gave insight into some of its newer technologies, most notably Fleet Broadband (FB) and its new Maritime Safety Data Service (MSDS). MSDS is cloud based with a central server that provides a more efficient path to disseminate, collect, and archive distress information and MSI. Ultimately, it seems that maritime safety information providers, NAVAREA Coordinators, will be able to not only access their own warnings as soon as they are sent, but warnings from any other NAVAREA coordinator as well - a promising new development. As at WNWNS 4, NAVAREA IV/XII led a brief discussion concerning Inmarsat's transition to its fourth generation satellites, which would provide global coverage using only three satellites vice four. The three-satellite constellation introduces gaps not currently present - the entire east coast of Greenland and half of its west coast. Those gaps would require NAVAREA I and IV to institute alternative means (to SafetyNET) to promulgate MSI. The Chairman inquired about fees for FB for administrations. Inmarsat responded that the fees would be comparable to those charged to broadcast warnings today through an LES.

3.4.2 WWNWS Survey update on progress

The WWNWS Secretary provided a brief synopsis and noted that approximately 400 responses had been received.

3.4.3 Status report of the WWNWS element of the GMDSS

The Chairman briefly introduced this subject and deferred discussions to topics 3.4.4 through 3.4.6, which would provide more insight into what lay ahead for the WWNWS element of GMDSS.

3.4.4 S-100 Basics Background Brief

IHO Director Gilles Bessero introduced and presented an overview of the S-100 data encoding standard for Electronic Navigation Charts (ENC), document WWNWS5/3/4/5B. He provided a detailed, yet easily understandable explanation of a complex subject.

3.4.5 S-100 Exchange Format for MSI

The representative from France introduced and presented his paper, document WWNWS5/3/4/5A-Rev.1. From it, the WWNWS-SC agreed to establish a working group - NAVAREA I, II, and IV volunteered to be part of it - to develop an MSI standard for S-100. The working group's first deliverable will be to provide an overview describing its goals and a timeline for achieving them.

3.4.6 S-10x MSI Product Specification—UKHO/Accseas

This topic was not presented. The representative from the UKHO was unable to attend the meeting.

3.5 Emerging Technologies

3.5.1 Iridium Satellite System Presentation

Mr. Brian Pemberton and Mr. Christopher Snowdon jointly introduced and presented their paper, document WWNWS5/3/5/1. In June 2013, at the 92nd meeting of the IMO's Maritime Safety Committee (MSC), the United States submitted a paper titled Recognition of the Iridium mobile-satellite system (MSC 92/9/2). This was the first step in the formal approval process to become a satellite service provider in the GMDSS. MSC 92 approved the recommendation, which sends the proposal to the IMO NCSR. Mr. Pemberton provided a high level overview detailing Iridium's current capabilities. However, the Chairman expressed concern that Iridium provided few specifics detailing how it might fulfil the requirements outlined in IMO Resolution A.1001(25): Criteria for the provision of mobile satellite communication systems in the Global Maritime Distress and Safety System (GMDSS). Iridium is the first satellite provider (Inmarsat excluded) to attempt to gain approval based on A.1001. The Sub-Committee discussed specific aspects of the broadcast of MSI via a low earth orbiting (LEO) satellite constellation. In order to provide guidance to Iridium on what would be expected, the Sub-Committee decided that for the purposes of broadcasting navigational warnings, NAVAREA Coordinators would need the Iridium system to offer, as a minimum, the same operational and technical capabilities and broadcast control as are currently offered by the Inmarsat SafetyNET broadcast service. The Chairman requested a more detailed report from Iridium for WWNWS 6, which would allow the

WWNWS-SC to provide not only better guidance to Iridium, but a more informative report to the IMO and NCSR.

3.5.2 Manufacturers' presentations – NAVDAT and VHF Data Exchange System (VDES)

Mr. Christian Rissone, Agence Nationale des Fréquences (ANFR), introduced and presented his paper, document WWNWS5/3/5/2. NAVDAT offers an increased MSI broadcast capability over 500kHz by utilizing digital modulation, which allows 300 times more data to be transmitted than NAVTEX in a 10kHz channel. The increased data throughput allows for the transmission of graphics, pictures and drawings. However, the system requires different antennas and receivers than NAVTEX to broadcast and receive this type of information.

VDES takes advantage of the VHF spectrum. When a number of the 25 kHz (VHF) channels are combined, a typical scheme might have a 100 kHz bandwidth; it creates a much higher data throughput than a single 25 kHz channel. The use of the six designated VHF data channels plus two additional channels (which have been identified for possible testing of future AIS applications) create an international scheme known as “VHF data exchange” (VDE). The main potential benefit of VDE is that it might serve as a suitable alternative for disseminating maritime safety information in the Arctic. Less likely although possible, it could become another global service provider within GMDSS, and ships already carry VHF equipment on board that can take advantage of VDE. The European Space Agency is planning to deploy satellites that will support VDE, which will enable much more widespread testing.

3.5.3 Broadcast

The representative from Australia introduced and presented his paper regarding the web-based transmission system it developed for Indonesia, which allows it to send properly formatted SAR broadcast, remotely, for transmission via RCC Australia. This system provides, for a relatively small cost, a highly beneficial broadcast capability where one previously did not exist at all.

4 REVIEW OF GUIDANCE DOCUMENTS

The Chairman noted that the 11th meeting of the Document Review Working Group was held at IMO Headquarters the week following COMSAR17 in 2013. He intended to convene the 12th meeting following NSCR1 at IMO Headquarters in London from 8-10 July 2014 and asked the Secretary to make the necessary arrangements with IMO.

4.1 Document Review Status Report

The Secretary introduced document WWNWS5/4/1B, reporting on the status of all documents being revised as part of the holistic review of WWNWS documentation, and document WWNWS5/4/1A, which listed the action items from the 11th meeting.

The Chairman specified that the documents have now all been adopted by IMO and the current intention is simply to ensure that there is 100% consistency between them and not to propose any significant changes at this time. He noted the extensive week-long review sessions following COMSAR during the last several years have achieved the quality documents that are available today. Marked up copies of all the documents will be made available on the WWNWS web page of the IHO web site and everyone is invited to submit

comments, aimed at consistency between the documents, to the Chairman and the IHB. These will be considered at the Working Group's 12th meeting.

4.2 IMO resolutions A.705 (17), as amended and A.706 (17) as amended

These documents were not discussed or reviewed at this meeting; the most recent revision went into force on 1 January 2013, approved by MSC92 on 24 June 2013.

4.3 WMO - IMO resolution on Met-ocean services Assembly resolution A.1051(27)

This document was not discussed or reviewed at this meeting.

4.4 IMO resolutions MSC.306(87) and A.664(16) "Performance Standards for Enhanced Group Call Equipment".

These documents were not discussed or reviewed at this meeting.

4.5 IMO resolution MSC.305 (87) "Guideline on operational procedures for the broadcast of maritime safety information concerning acts of piracy and piracy counter-measure operations"

The Chairman introduced and provided a brief summary of the document. There was considerable discussion concerning the WWNWS's difficulty - the same issue arose at WWNWS 4 - to provide timely broadcasts regarding piracy attacks. The general flow of such information to the WWNWS came into question as well. The Sub-Committee agreed that it was necessary to conduct a complete review of current processes, procedures, guidance documents, and all parties involved. The WWNWS-SC established a Piracy Working Group comprised of NAVAREA II, IV, VIII, IX, AWNIS, and Inmarsat to address the issue. NAVAREA II and IV will serve as co-leaders for the group.

4.6 Joint IMO/IHO/WMO Manual on MSI (MSC.1/Circ.1310) and IHO Publication S-53 - review of WRWG 11 amendments.

The Secretary of the Document Review Working Group introduced and presented each change proposal. The Sub-Committee endorsed all recommendations. However, there were several additional proposed changes. NAVAREA X recommended an example for a coastal warning in-force warning. The Chairman suggested an example to address the increased email requests of NAVAREA Coordinators for in-force bulletin, noting specifically those requests received by NAVAREA II and IV. Lastly, the "No warnings" example still needs to be formally resolved

4.7 IMO International SafetyNET Manual (MSC.1/Circ.1364).

This document was not discussed or reviewed at this meeting. The 2011 version is the most current edition. NAVAREA II recommended adding a link for this document on the IHO WWNWS-SC web page because it is difficult to find on the internet.

4.8 IMO NAVTEX Manual (MSC.1/Circ.1403).

This document was not discussed or reviewed at this meeting; it went into force on 1 January 2013.

4.9 Inmarsat SafetyNET Users' Handbook

This document was not discussed or reviewed at this meeting.

4.10 Review on-line MSI Training Course

The Secretary introduced this document and gave a brief background on its origin, which stemmed from a request from the Republic of Korea. Several members of the WWNWS-SC reviewed the Phase 1 material at COMSAR17 and found that it was not ready for distribution. They recommended refinement to the installation process and user interface. Mr. Michael White, observer representing the Admiralty Warning and Navigation Information Service (AWNIS), offered to assist the IHO with second phase development and to find a training company to refine Phase 1 material.

4.11 MSI element of IHO Publication C-55 – “Status of Hydrography and Nautical Cartography World-Wide”.

The Secretary introduced this document and provided background on its subject matter. He recommended the addition of a country-by-country portrayal of MSI capabilities to create a single database holding all information about each country rather than having it dispersed and duplicated over several publications. He encouraged all representatives to review Publication C-55 and provide feedback to the IHO.

4.12 Terms of Reference (TOR) for the WWNWS Sub-Committee

The Chairman reported that he had not received any proposed changes to the ToRs since it was reviewed and amended at WWNWS 4.

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

5.1 Update on WWNWS Members' Attendance to RHCs

The Chairman briefly discussed and reminded all representatives that MSI is a standing agenda item for RHC meetings and he strongly encouraged NAVAREA participation in order to spread the word on MSI dissemination.

5.2 Capacity Building Training Course Development

The Chairman introduced this topic by providing a historical perspective on this program and how it began in 2006 as a request from the IHO Capacity Building Sub-Committee to put together a team of experts and a Phase 1 MSI training program for the MESO American & Caribbean Sea Hydrographic Commission (MACHC)

The Chairman endorsed the capacity building training stating that the nine courses taught since 2006, covered representatives from over 80 countries with 140 participants trained. While it has been mostly undertaken by the US, UK, and France, many other nations have stepped in to support much to the success of the program. The Sub-Committee hopes this level of support will continue and continue to spread WWNWS knowledge across the globe.

In 2013, WWNWS-SC completed the first of two MSI courses (20-22 May) in Trinidad, supporting the MESO American & Caribbean Sea Hydrographic Commission (MACHC). Eighteen students attended from 13 different countries. The remaining MSI course will be conducted in South Africa, 16-18 December, in support of the Southern Africa and Islands Hydrographic Commission (SAIHC). In 2014 there is currently only one course scheduled. It will be conducted for the South-West Pacific Hydrographic Commission (SWPHC) and will be conducted in New Zealand following WWNWS 6 in August 2014. The Chairman noted that IHO was able to provide partial instructor funding for the first time ever in 2013 and he thanked the IHO for working so diligently to make this happen.

5.3 WWNWS CD-ROM

The Chairman circulated the September 2013 edition of the WWNWS CD, which had been updated with all the latest information. Others are available on application to the Chairman.

6 NEXT MEETING

6.1 DATES AND VENUE FOR WWNWS 6

The Chairman announced that the next meeting would be held in New Zealand with dates tentatively set for 18-22 August 2014; a formal invitation for this meeting, to include the final venue, will be sent out to all members before the six month deadline required by the Rules of Procedure for the WWNWS Sub-Committee. The representative from New Zealand provided a brief overview of his country and the potential locations for the meeting, document WWNWS5/6/1. In addition, the Chairman solicited the Sub-Committee for volunteers to host WWNWS 8 in 2016 and Norway tentatively offered to host it.

6.2 DRAFT AGENDA FOR WWNWS 6

A provisional agenda for the WWNWS 6 meeting was displayed and agreed by those present. The Chairman noted that WWNWS 6 would be held in New Zealand in August 2014, and would be planned simultaneously with the WMO Maritime Safety Services Enhancement Workshop / METAREA Coordinators meeting, over the same dates and venue. This would be a first and stands to be beneficial for both organizations. The WMO recommended developing a joint agenda to make the most of the time available. There will be a further review of this agenda at the Document Review WG 12 meeting at the IMO. Any member wishing to include other items is requested to notify the Chairman and Secretary at the earliest possible opportunity in order that all members can be informed accordingly. The provisional agenda for WWNWS 6 is at in Annex E.

7 REVIEW OF ACTION ITEMS FROM WWNWS5

The Secretary reviewed the list of action items agreed to during the meeting. These are set out in Annex D.

8 ANY OTHER BUSINESS

No other business to report.

9 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 noted that this would be the last meeting attended by the Deputy Director General of the International Mobile Satellite Organization, Mr. Andy Fuller, and graciously thanked him for his numerous contributions to the WWNWS over his long career. 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.

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

Annexes:

- Annex A Agenda for the 5th Meeting of WWNWS-SC
- Annex B Participants at WWNWS 5
- Annex C List of Documents submitted to WWNWS 5
- Annex D List of Action Items as of 17 January 2014
- Annex E Provisional Agenda for the 6th Session of the IHO WWNWS Sub-Committee
- Annex F MSI Quality Management Survey Summary
- Annex G Justifications for broadcasting MSI

PROVISIONAL AGENDA OF THE FIFTH MEETING OF THE WVNWS SUB COMMITTEE (WVNWS 5)

**To be held at the offices of IHB, Monaco
From 1 – 4 October 2013**

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 WVNWS 4
- .7 Report from IRCC 5

2 MATTERS RELATING TO THE GMDSS MASTER PLAN

- .1 IMO Update
- .2 IMSO Update
- .3 Review content of GMDSS Master Plan Annexes 7 & 8

3 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)

- .1
 - .1 Outcome of the 17th Session of the International Maritime Organization's Sub-Committee on Communications and Search and Rescue (COMSAR 17) 21 – 25 January 2013
 - .2 Outcome of the 92nd Session of the International Maritime Organization's Committee on Maritime Safety (MSC 92) 12 – 21 June 2013
 - .3 Outcome of the 59th Session of the International Maritime Organization's Sub-Committee on Safety of Navigation (NAV 59) 2 – 6 September 2013
- .2 Self Assessments by NAVAREA Coordinators
 - .1 Quality Management Analysis of Self Assessments
- .3 Broadcast Systems and Services
 - .1 Report of the IMO NAVTEX Coordinating Panel
 - .1 Coordination of NAVTEX coverage in central Mediterranean – Italy
 - .2 Information related with Marine Mammals – France
 - .2 Report of the IMO SafetyNET Coordinating Panel
 - .3 WMO Liaison Report
 - .4 Contingency Planning
 - .5 Navigation warnings concerning EM radiation interference, review example text
 - .6 MSI broadcasts via satellite, new providers – IMSO
- .4 Developments in the WVNWS
 - .1 Inmarsat-C EGC SafetyNET Report
 - .2 WVNWS Survey up-date on progress
 - .3 Status report of the WVNWS element of the GMDSS

- .4 S-100 basics background brief – IHB
- .5 S-100 exchange format for MSI – France
- .6 S-10x MSI Product Specification – UKHO/Accseas
- .5 Emerging Technologies/Modernisation
 - .1 Iridium satellite system presentation - IRIDIUM
 - .2 Manufacturers' presentations – NAVDAT and digital technology developments (only between 1100-1615 Wed 2 Oct)
 - .3 use of satellites in conjunction with the VHF Data Exchange System - ESA
 - .4 Navigational warning in ECDIS

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 WRWG 11 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 WNWNS Sub Committee (IHO Circular Letter 46/2009)

5 WNWNS REPRESENTATION AT REGIONAL HYDROGRAPHIC COMMISSIONS AND OTHER CONFERENCES

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

6 NEXT MEETING

- .1 Dates for WNWNS 6 in New Zealand in 2014 (last 2 weeks of August or first 2 weeks of September, due to EIHC 5)
- .2 Draft Agenda for WNWNS 6

7 Review of Action Items from WNWNS 5

8 ANY OTHER BUSINESS

9 CLOSURE OF THE MEETING

WWNWS 5
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Documents Submitted to WWNWS 5

Document No	Document Title
ACTION ITEMS	WWNWS 4 ACTION ITEMS - Corrected to 17 September 2013
WWNWS5 Self Assessment Template	Template to be used for the submission of NAVAREA Self Assessments - amended 21 March 2012
WWNWS5 Document Template	Template to be used for the submission of documents, other than Self Assessments
WWNWS5 Letter of Invitation	Letter of Invitation
Details of Hotel Bookings	Hotel Reservations
Hotel Reservation Form	Hotel Form - Word Format
WWNWS5_Programme	Programme for WWNWS5-SC meeting
WWNWS5_Provisional- Agenda	Provisional Agenda for WWNWS5
WWNWS5_List of Participants	Provisional List of Participants
WWNWS5-1-7	Report to IRCC5
WWNWS5-2-1a	Report of the 8th Meeting of the Joint IMO/ITU Experts Group on Maritime Radiocommunication Matters
WWNWS5-2-1b	Review and Modernization of the GMDSS - Comments by USA
WWNWS5-2-2	Analysis and Assessment of the GMDSS Performance of Inmarsat Global Limited by IMSO
WWNWS5-3-1-1	Outcomes of COMSAR 17
WWNWS5-3-1-2	Outcomes of MCS 92
WWNWS5-3-1-3	Outcomes of NAV 59
WWNWS5-3-2-I	Self Assessment NAVAREA I
WWNWS5-3-2-Ib	Self Assessment NAVAREA Ib
WWNWS5-3-2-II	Self Assessment NAVAREA II
WWNWS5-3-2-III	Self Assessment NAVAREA III
WWNWS5-3-2-IV_XII	Self Assessment NAVAREA IV_XII
WWNWS5-3-2-V	Self Assessment NAVAREA V
WWNWS5-3-2-VI	Self Assessment NAVAREA VI
WWNWS5-3-2-VII	Self Assessment NAVAREA VII
WWNWS5-3-2-VIII	Self Assessment NAVAREA VIII
WWNWS5-3-2-IX	Self Assessment NAVAREA IX
WWNWS5-3-2-X	Self Assessment NAVAREA X
WWNWS5-3-2-XI_Rev.1	Self Assessment NAVAREA XI Rev.1

WWNWS5-3-2-XIII	Self Assessment NAVAREA XIII
WWNWS5-3-2-XIV	Self Assessment NAVAREA XIV
WWNWS5-3-2-XV	Self Assessment NAVAREA XV
WWNWS5-3-2-XVI	Self Assessment NAVAREA XVI
WWNWS5-3-2-XVII_XVIII	Self Assessment NAVAREA XVII & XVIII
WWNWS5-3-2-XIX	Self Assessment NAVAREA XIX
WWNWS5-3-2-XX_XXI	Self Assessment NAVAREA XX XXI
WWNWS5-3-2-1	Quality Management Survey
WWNWS5-3-3-1	NAVTEX Panel Report
WWNWS5-3-3-1.1	Coordination of NAVTEX coverage in central Mediterranean - Italy and Presentation
WWNWS5-3-3-1.2	Information related to Marine Mammals - Frances
WWNWS5-3-3-3A	WMO Liaison Report
WWNWS5-3-3-3B	WMO Liaison Report Presentation
WWNWS5-3-3-6	MSI broadcasts via satellite, new providers - IMSO
WWNWS5-3-4-1	Inmarsat Presentation
WWNWS5-3-4-4	IHO S-100 Introduction Presentation
WWNWS5-3-4-5A-Rev.1	S-100 exchange format for MSI - France
WWNWS5-3-4-5B	S-100 MSI Presentation
WWNWS5-3-5-1	Iridium Presentation
WWNWS5-3-5-2	VDES Presentation
WWNWS5-4-1A	Actions from DocRev WG 11 Meeting
WWNWS5-4-1B	Document Review Status Report
WWNWS5-4-5	Piracy
WWNWS5-4-10	IAM SAR Manual Volume 2
WWNWS5-4-13	WWNWS-SC ToRs
WWNWS5-6-1	WWNWS 6 Invitation Presentation
WWNWS5-6-2	Provisional Agenda WWNWS 6
IMO Documents	Relevant IMO Documents

WWNWS 5
IHB, Monaco - 1 to 4 October 2013

List of Actions (updated: 17 January 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 6	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	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	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
WWNWS4 3.3.5	EM Radiation Interference	WWNWS 6	Initiate method and system for transmission to NAVAREA Coordinators of details of forecast solar events and potential interference to broadcasts and systems	NAVAREA IV
WWNWS 5 List of Actions				
WWNWS5 2.1	Report back from Joint IMOITU EG October meeting on Maritime Radiocommunication	November 2013		IMSO (Andy Fuller)

WWNWS5 2.1	Not to submit the paper to IMO	Complete		Secretary
WWNWS5 2.2	Provide a detailed technical and operational description of the Iridium system	WWNWS6		Iridium
WWNWS5 2.2	Update SC on NCSR's decision on the Iridium proposal	WWNWS6		Chair
WWNWS5 2.3	Provide input to the GMDSS Master Plan template (to be prepared by Chair, Guy Beale, Bill Van Den Burgh) in order to be submitted to the IMO (in two steps, first to the SC and then to IMO). Chair will review submissions and liaise with MSs prior to the submission to the IMO	December 2013 Complete		Chair/UK
WWNWS5 3.2	Include in the template for the Self-Assessment reports the amount of the incoming data including phone calls	WWNWS6		All NAVAREA Coordinators
WWNWS5 3.2	Amend the Self-Assessment template for statistics on the time taken to promulgate immediate messages	WWNWS6		Secretary
WWNWS5 3.2	Prepare a standard email message to be utilized for commercial requests of in-force warnings	WWNWS6		Chair
WWNWS5 3.2	Contact Mexico and get the information on the plans for NAVTEX implementation within the area	October 2013		IHB

WWNWS5 3.2	Produce a paper on the new system being developed for controlling the MSI warnings	WWNWS6		Brazil
WWNWS5 3.2	Liaise with NAVAREA VII on twice a day broadcast (SafetyNET)	December 2013		Chair
WWNWS5 3.2	Provide contact information for La Réunion to India	Complete		France
WWNWS5 3.2	Update the contact information for La Réunion and Maldives	Complete		India
WWNWS5 3.2	Work with Pakistan for In-Force bulletin on the website	December 2013		Chair
WWNWS5 3.2	Investigate the way forward on Caspian Sea with IMO and report back to the SC	WWNWS6		Russia
WWNWS5 3.2	Validate the links in the graphic in WWNWS	Complete		HHB
WWNWS5 3.2	Demonstrate the visualization tools of MSI	WWNWS6		NAVAREA IV
WWNWS5 3.2.1	Send a remainder to all NAVAREA coordinators and participants to promulgate the quality management survey	January 2014		Chair
WWNWS5 3.3.1.1	Establish a meeting with other MSs to discuss NAVTEX within NAVAREA III and invite the NAVTEX coordinating panel	WWNWS6		Italy and NAVAREA III coordinator
WWNWS5 3.3.2	Include a part in the Self-Assessment reports which provides a description of equipment being used by NAVAREA for MSI	WWNWS6		Secretary
WWNWS5 3.3.3	Establish an agenda for combined meetings in New Zealand	January 2014		Chair and WMO

WWNWS5 3.3.4	Liaise with Chair on contingency planning exercise	WWNWS6		IMSO (Andy Fuller)
WWNWS5 3.4.1	Provide the table on MSDS codes and addresses to the Chair for revision	January 2014		Inmarsat (Vladimir Maksimov)
WWNWS5 3.4.1	Circulate the table on MSDS codes and addresses to the SC for information	February 2014	See previous action	Chair
WWNWS5 3.4.5	Provide the report on S-100 to WWNWS	June 2014		Correspondence Group on S-100
WWNWS5 3.4.5	Present an information paper to HSSC5 on the establishment of a WWNWS Correspondence Group for S-100 development	October 2013 Complete	See previous action	France
WWNWS5 3.4.6	Liaise with Accseas' PoC for submitting a presentation for WWNWS6	WWNWS6		UK
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))	February 2014		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 4.6	Include an example of no-warning messages in the Joint Manual	January 2014		UK

WWNWS5 4.9	Include the Inmarsat SafetyNet Handbook in the WWNWS CD	WWNWS6		Chair
WWNWS5 4.9	Provide link to the Inmarsat SafetyNet Handbook to Chair	October 2013		Inmarsat
WWNWS5 4.10	Clarify the action required on document WWNWS5-4-10 and inform the SC by correspondence	November 2013		Secretary
WWNWS5 4.11	Improve the CD on MSI self-training	WWNWS6		IHB
WWNWS5 4.12	Review their respective MSI information in C-55 and provide feedback to the IHB	December 2013		MSs
WWNWS5 4.13	Update the TOR, include the date of the revision and upload the document to the website	Complete		Secretary
WWNWS5 4.13	Update Doc. WWNWS5-5.4.1b regarding Inmarsat Handbook	Complete		Secretary

PROVISIONAL AGENDA OF THE SIXTH MEETING OF THE WVNWS SUB COMMITTEE (WVNWS 6)

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

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 WVNWS 5
- .7 Report from IRCC 6

2 MATTERS RELATING TO THE GMDSS MASTER PLAN

- .1 IMO Update
- .2 IMSO Update
- .3 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
- .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
- .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 WVNWS
 - .1 Inmarsat-C EGC SafetyNET Report
 - .2 WVNWS Survey analysis report
 - .3 Status report of the WVNWS element of the GMDSS
- .5 Emerging Technologies/Modernisation
 - .1 Manufacturers' presentations

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 WRWG 11 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 for WWNWS 7 in Monaco 29 September - 2 October or 6-9 October 2015
- .2 Draft Agenda for WWNWS 7

7 Review of Action Items from WWNWS 6

8 ANY OTHER BUSINESS

9 CLOSURE OF THE MEETING

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 5.

Action to be taken: Paragraph 2.

Related documents: NAVAREA Coordinators' Self Assessment Reports

1. See attached document.
2. 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	24/7 contact information provided	Promulgate two scheduled broadcasts	IMO Master Plan updated
I	Yes	Yes	Yes	Yes	Yes	Yes	Yes
I Baltic Sub-area	Yes	Yes	Yes	Yes	Yes	6 (Navtex)	Yes
II	Yes	Yes	Yes	Yes	Yes	Yes	Yes
III	No	Yes	Yes	Yes	Yes	Yes	Yes
IV	Yes	Yes	Yes	Yes	Yes	Yes	Yes
V	Yes	Yes	Yes	Yes	Yes	Yes	Yes
VI	No	Yes	Yes	Yes	Yes	Yes	Yes
VII	No	Yes	Yes	Yes	Yes	Yes	Yes ¹
VIII	No	Yes	Yes	Yes	Yes	Yes	Yes
IX	No	Yes	No	Yes	Yes	Yes	Yes
X	Yes	Yes	Yes	Yes	Yes	Yes	Yes
XI	No	Yes	Yes	Yes	Yes	Yes	Yes
XII	Yes	Yes	Yes	Yes	Yes	Yes	Yes
XIII	No	Yes	Yes	Yes	Yes	Yes	Yes
XIV	No	Yes	Yes	Yes	Yes	Yes	Yes
XV	Yes	Yes	Yes	Yes	Yes	Yes	Yes
XVI	Yes	Yes	Yes	Yes	Yes	Yes	Yes
XVII	No	Yes	Yes	Yes	Yes	Yes	Yes
XVIII	No	Yes	Yes	Yes	Yes	Yes	Yes
XIX	No	Yes	Yes	Yes	Yes	Yes	Yes
XX	No	Yes	Yes	Yes	Yes	Yes	Yes
XXI	No	Yes	Yes	Yes	Yes	Yes	Yes

¹ See paragraph 4 of NAVAREA VII Self Assessment (WWNWS5/3/2-VII)

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)