

**4<sup>th</sup> MEETNG of the IHO SUB COMMITTEE ON THE WORLD-WIDE NAVIGATIONAL  
WARNING SERVICE (WWNWS)  
Japan Coast Guard, Tokyo  
24 – 28 September 2012**

**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 4<sup>th</sup> WWNWS meeting at 0900 on Monday, 24<sup>th</sup> September 2012, welcoming 29 delegates from 18 IHO Member States, the International Hydrographic Bureau (IHB), the World Meteorological Organization (WMO) and Inmarsat Global Ltd. These included representatives from 12 NAVAREAS, one Sub-Area and three National Co-ordinators. The list of participants is given in Annex B; Chile (NAVAREA XV), South Africa (NAVAREA VII), the Russian Federation (NAVAREAs XIII, XX and XXI), New Zealand (NAVAREA XIV), the International Maritime Organization (IMO) and the International Mobile Satellite Organization (IMSO) sent apologies for non-attendance.

**1.2 Welcome by Chief Hydrographer of Japan and Director General of the Hydrographic and Oceanographic Department of the Japan Coast Guard**

Director General Shin Tani, Chief Hydrographer of Japan, on behalf of the Hydrographic and Oceanographic Department of the Japan Coast Guard (JHOD) and NAVAREA XI, welcomed everyone to this fourth meeting of the WWNWS Sub-Committee, commenting on the very important work that the WWNWS does in maintaining safety of navigation and protection of the marine environment through its close cooperation with IMO, WMO, IMSO and Inmarsat. He noted the recent celebration of the JHOD'S 140<sup>th</sup> anniversary in conjunction with the opening of its new office building at Aomi. He commented briefly on the history of JHOD, noting that the New Meiji government began marine research and established the Japan Hydrographic Bureau in 1871. He paid tribute to the distress and tragedy of the survey vessel "KAIYO NO.5", which lost its entire crew on September 24, 1952, exactly 60 years to the day of this meeting, while conducting a survey of Myojin Reef – a historically dangerous area for ships due to submarine volcanic activity. This event, he commented, underscored the need for a coordinated global maritime warning service to prevent such losses of life in the future.

**1.3 Working Arrangements**

It was agreed that normal working hours would be from 0900 to 1230 and 1400 to 1730 with a morning and afternoon coffee break. The delegates were reminded that all meeting documents were available from the WWNWS section of the IHO website and they were referenced by WWNWS4 followed by the Agenda Item (AI) number and a sequential letter. There would also be a reception hosted by the JHOD on Tuesday evening for all representatives.

**1.4 Administrative Arrangements**

David Wyatt (IHB-Secretary) 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, and Australia for hosting past meetings and then invited everyone to introduce themselves to the meeting for the benefit of newcomers.

## **1.5 Adoption of the Agenda**

The provisional agenda was adopted. It is attached at Annex A to this report. The documents submitted to WWNWS 4 are listed at Annex C.

## **1.6 Review of Action Items from WWNWS 3**

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 state is attached at Annex D.

## **1.7 Report from the 4<sup>th</sup> meeting of the Inter-Regional Co-ordination Committee (IRCC4)**

The Chairman briefed the Sub-Committee on the outcome of IRCC 4, held in Singapore from 7-8 June 2012. 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 Member 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 IRCC 4 on behalf of the WWNWS and noted the primary areas he addressed. He highlighted:

- The work of the WWNWS Document Review Working Group and its intentions to submit revisions of the MSI Manual, and the International SafetyNET Manual to COMSAR 18 in 2014;
- Expansion of the WWNWS into the Arctic Ocean;
- Operating anomalies identified within ECDIS; and
- The MSI Capacity Building training course

## **2 MATTERS RELATING TO THE GMDSS MASTER PLAN**

**2.1** Unfortunately, an IMO representative was unable to attend the WWNWS 4. In lieu, the IHB Secretary provided a summary of the COMSAR 16 WP.6 Scoping Exercise, document WWNWS4-2-1A. The goal of the Scoping Exercise is to review the Global Maritime Distress and Safety System (GMDSS), and then develop a modernization program. The modernization program would implement findings of the review, include more modern and efficient communications technologies in the GMDSS, and support the communications needs of the e-navigation strategy.

### **2.2 ITU Issues**

The IHB Secretary summarized Resolution 360 from the 2012 World Radiocommunication Conference held in Geneva, Switzerland. Resolution 360 provides details for consideration regarding regulatory provisions and spectrum allocations for enhanced Automatic Identification System (AIS) technology applications and for enhanced maritime radiocommunications. He noted the Resolution suggested that additional AIS channels may be required for radiocommunications involving, but not limited to, area warnings and meteorological and hydrographic data, as well as channel management of AIS, and future VHF digital data and ship-to-shore data exchange.

## **2.3 Report of International Mobile Satellite Organization (IMSO) Assembly 22**

The Primary Purpose of IMSO, under its Convention, is to ensure the provision, by each Provider, of maritime mobile satellite communications services for GMDSS. The IHB Secretary summarized this report. The Assembly met in London from 25 – 28 June 2012 and reported on the activities of the Directorate and developments including analysis of GMDSS services provided by Inmarsat, information on next generation of Inmarsat satellites, new services to be used in GMDSS ship installations, ongoing issues related to the spectrum, Maritime Search and Rescue operations, broadcast of maritime safety information, the result of the scoping exercise for the review of the elements and procedures of the GMDSS and issues related to developments on Electronic Navigation. In particular, the Secretary noted information and analysis concerning a significant Inmarsat satellite service outage on 22 October 2011 in the Pacific Ocean Region, and its restoration.

## **2.4 Review of the GMDSS Master Plan Annex 7**

The Secretary of the IMO International NAVTEX Co-ordinating Panel summarized the paper, highlighting MSC 88 and MSC.1/Circ. 1382, which revised the questionnaire on shore-based facilities in the GMDSS Master Plan. The paper requested that positions for antennas refer to the exact location (recorded in WGS 84 datum) rather than a centralized one, a trend noted as more coastal radio stations migrate to remote operation from a single location. The importance of accurate positions is to negate interference problems when using propagation diagrams.

Some discussion followed concerning the format for antenna positions. In general, the Sub-Committee agreed that the positional format should mirror the Joint IMO/IHO/WMO Manual on Maritime Safety Information (MSI). However, the IMO International NAVTEX Co-ordinating Panel Chairman injected that a format change to the way positions were written in Annex 7 would create inconsistency throughout the document. The WWNWS Chairman recognized this point and reminded the Sub-Committee that changes to the GMDSS master plan cannot originate from the WWNWS Sub-Committee, but must come from a Member State. The Sub-Area I Co-ordinator recommended changing the name of column nine from “Status of Implementation” to “Operational”. The Sub-Committee considered this but decided to make no change; the footnote in column nine sufficed to achieve the desired outcome. There was further discussion between the delegate from Turkey and the NAVTEX Co-ordinating Panel Chairman regarding the need for positional accuracy of NAVTEX stations, and that these same positions were in an International Telecommunication Union (ITU) document. The NAVTEX Co-ordinating Panel Chairman agreed that the ITU document should agree with the GMDSS Master Plan.

The Sub-Committee endorsed the paper and will submit it to COMSAR 17. In conjunction, the NAVTEX Co-ordinating Panel Chairman offered to assist IMO Secretariat to reformat Annex 7 prior to the end of the year, reflecting the paper’s recommendations.

## **3 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)**

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

#### **3.1.1. Outcome of the Sixteenth Session of the IMO’s Sub-Committee on Radiocommunications and Search and Rescue (COMSAR 16) 12-16 March 2012**

The Chairman and Secretary reviewed the matters considered, and decisions taken, during COMSAR 16, referring to document WWNWS4/3/1A. In particular, COMSAR 16 approved the proposal to cancel COMSAR/Circ.36, submitted by the IHO, the World Meteorological Organization (WMO) and the International Mobile Satellite Organization. COMSAR/Circ.36 concerns warnings for natural disaster and tsunamis. This will come into effect on 1 January 2013 when the revised NAVTEX Manual enters into force. Also of importance, COMSAR 16 prepared a draft work plan for the modernization of the GMDSS – review to be undertake 2013-2015 with implementation commencing 2017.

### **3.1.2 Outcome of the 90<sup>th</sup> Session of the IMO's Committee on Maritime Safety (MSC 90) 16-25 May 2012**

The Chairman and Secretary reviewed the matters considered, and decisions taken, during MSC 90, referring to document WWNWS4/3/2A. They noted that MSC 90 approved the withdrawal of COMSAR/Circ.36, approved the draft revision of Annex 8 to MSC/Circ.1382/Rev.1, and approved the draft revised Work Plan on the "Review and Modernization of the GMDSS". They also noted that MSC 90 recognized the need to raise awareness concerning ECDIS operating anomalies and invited the IHO to re-promulgate the IHO ECDIS/ENC Data Portrayal and Performance check data set.

### **3.1.3 Outcome of the 58<sup>th</sup> Session of the IMO's Sub-Committee on Safety of Navigation (NAV 58) 2-6 July 2012**

The Chairman and Secretary reviewed the matters considered, and decisions taken, during NAV 58 referring to document WWNWS4/3/3A. Of relevance, NAV 58 considered the importance of an e-Navigation Strategy Implementation plan. It noted the completed gap analysis and it endorsed the preliminary list of potential e-navigation solutions. Also of relevance, it noted the development of policy and new symbols for AIS Aids to Navigation (AtoN). NAV 58 re-established the Correspondence Group (CG) on AIS AtoN and instructed it to develop symbols for AIS AtoN, taking into account all relevant guidelines, standards and publications, and to report to NAV 59.

### **3.2 NAVAREA Assessments of Navigational Warnings Services by Co-ordinators**

The representatives of the 13 NAVAREAs and one Sub-Area present were invited to introduce their MSI Self Assessments. The Chairman briefly reviewed pertinent items from the Self Assessments of those NAVAREA Co-ordinators not present at the meeting. The MSI Self Assessment document requires NAVAREA Co-ordinators to complete an MSI Quality Management Survey and the collated results of this survey are at Annex F. The Chairman thanked all NAVAREAs and Sub-Areas for providing a Self Assessment. However, he noted that NAVAREA XX and XXI, as of the time of meeting, had not submitted a Self Assessment.

#### **NAVAREA I (UK)**

The NAVAREA I representative introduced and presented his Self-Assessment Report, document WWNWS4/3/2-I. He noted the key operational issue during the reporting period was the introduction of a new Norwegian NAVTEX station in the Skagerrak and consequential changes to B<sub>1</sub> Transmitter Identification Characters. He commented on the timeliness of the 332 NAVAREA I warnings issued, of which 11 fell into the immediate category requiring promulgation within 30 minutes. NAVAREA I met that requirement for all 11 immediate warnings and added that the average time taken to process each of these warnings was 11 minutes 50 seconds. He suggested this type of information may be a useful addition to the standard Self-Assessment form – 'average time to process and promulgate immediate warnings'. Concerning NAVTEX, he explained NAVAREA I had broadcasted Coastal Warnings via SafetyNET to the affected NAVTEX areas, using rectangular addressing over the past 12 months, due to occasional unavailability of NAVTEX transmitters.

#### **NAVAREA I Sub-Area Baltic (Sweden)**

The Baltic Sea Sub-Area representative introduced and presented his Self-Assessment Report, document WWNWS4/3/2-Ib. He stressed information about changes to NAVTEX Service Areas and the BALTICO MEETING 2012. In his report he further recommended NAVAREA Co-ordinators and National Co-ordinators follow the ongoing revision of the IHO publication S-23, Limits of Oceans and Seas, to determine the appropriate designation in all media that convey navigational information to mariners, e.g. paper charts, ENC, Nautical Publications, NAVTEX and SafetyNET. The report also included a recommendation to discuss whether it is still appropriate to have a specific NAVTEX subject indicator character (B<sub>2</sub>) dedicated for GNSS, as GNSS has become almost

ubiquitous. His concern was that users could program their receiver to reject the GNSS B<sub>2</sub> character “J” and unknowingly miss important maritime safety information. In lieu, he recommended users choose the B<sub>2</sub> character “A” for GNSS warnings, which cannot be rejected. This is the practice Sub-Area I follows. All agreed that this recommendation seemed logical. However, with the Revised NAVTEX Manual due to come into force on 1 January 2013, Sub-Area I expressed concern with the ability to make this change in a timely manner. The WWNWS Document Review Working Group agreed to consider this issue when it meets in January 2013.

### **NAVAREA II (France)**

The NAVAREA II representative introduced and presented his Self-Assessment Report, document WWNWS4/3/2-II. He noted the increase in pirate activity in the Gulf of Guinea and added that NAVAREA II often received notification of these events 24 hours after the attack, whether by HYDROLANT or via e-mail from NAVAREA IV. He noted the rather significant increase in requests, by e-mail, for NAVAREA II in-force warnings; users entering NAVAREA II submitted 264 requests between January 1 and August 15, 2012. The Chairman asked how many in-force requests other NAVAREAs received. Most had received them, but not to the level NAVAREA II experienced. The Chairman reminded all that, while email was certainly a valid vehicle to provide in-force warnings, their web sites provide a valuable service for such information. NAVAREA I reminded all that GMDSS is not only for vessels over 300 gross ton; it is for every vessel no matter the size. The NAVTEX Co-ordinating Panel Chairman inquired on the status of Casablanca Radio in Morocco, which is labeled “Planned” in the GMDSS Master Plan. He commented that the addition of this station, if it becomes operational, would provide another level of redundancy to the two stations that already cover the area. NAVAREA II did not have an update on the progress of the Casablanca Station and offered that communication with some national co-ordinators is challenging.

### **NAVAREA III (Spain)**

The NAVAREA III representative introduced and presented his NAVAREA III Self-Assessment Report, document WWNWS4/3/2-III. He highlighted that four new NAVTEX stations became operational since WWNWS3: La Maddalena, Sellia Marina and Mondolfo from Italy and Kelibia from Tunisia. In conjunction, Italy decommissioned NAVTEX stations at Cagliari, Trieste and Augusta. He raised concerns regarding gunnery exercises in the Aegean Sea that seem to be on-going throughout the entire year, and have been for many years. While Greece continues to request broadcast of such information, NAVAREA III proposed that these areas become chart corrections due to the regularity of the exercises. NAVAREA III expressed concern that these exercises might not actually occur year round. NAVAREA I noted that the affected area fell within NAVTEX and the warning should not be broadcast via SafetyNET. The Chairman commented that broadcasting via NAVTEX, regarding such a warning, would serve a narrower user group and, quite possibly, not provide enough advanced warning to all SOLAS vessels transiting through the area. Sub-Area I added that he did not require NAVAREA I to transmit gunnery exercises, and the like, in the Baltic area based on SOLAS requirements. NAVAREA X added, supporting Sub-Area I, that the WWNWS should follow its guidance documents and refrain from rebroadcasting coastal warnings. The Chairman requested that NAVAREA III provide copies of the warnings to him for further assessment.

The NAVTEX Co-ordinating Panel Chairman commented on NAVTEX Service Areas for stations of La Magdalena, Sellia Marina (Italy), Kelibia (Tunisia), Malta and La Garde (France), in respect to correspondence from Italy seeking assurances from adjoining administrations that they could cooperate with relaying Distress Alerts within the Italian SRR. He explained that NAVTEX Service Areas and SRRs are distinct from each other and suggested that France, Italy, Tunisia and Malta should convene in the margins of COMSAR 17 to sort out the matter. In addition, he offered to assist NAVAREA III with drafting a letter to Italy to facilitate a better understanding of the issue.

Lastly, NAVAREA III noted that the MSI he received from Egypt, hardcopy through the mail, made it very difficult to generate warnings from the information due to its timeliness. The Chairman and

Secretary agreed to assist NAVAREA III with drafting a letter to Egypt to promote more efficient MSI.

#### **NAVAREA IV & XII (USA)**

The NAVAREA IV & XII Co-ordinator, introduced and presented his Self-Assessment Report, document WWNWS4/3/2-IV&XII. He 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 collaboration with the International Ice Patrol (IIP) and NAVAREA IV's new responsibility to broadcast the IIP Iceberg Bulletin. Lastly, he described his work with the U.S. Coast Guard to bring their NAVTEX station broadcast start times into alignment with international standards.

#### **NAVAREA V (Brazil)**

The NAVAREA V representative introduced and presented her Self-Assessment Report, document WWNWS4/3/2-V. She noted the contingency plan between Brazil and Argentina to promulgate MSI in case of emergency is in its final phase of development. NAVAREA I requested clarification on operational issue 4.3.2: SAR warnings transmitted simultaneously by AOR-E and AOR-W. NAVAREA V responded that it had resolved the issue and it was no longer a problem.

#### **NAVAREA VI (Argentina)**

The NAVAREA VI representative introduced and presented his Self-Assessment Report, document WWNWS4/3/2-VI. He noted a contingency plan between NAVAREA VI and NAVAREA V to broadcast all MSI warnings is in its final stage of development. He provided that the Buenos Aires NAVTEX Station range changed from 560 nm to 280 nm and that NAVTEX station La Paloma (Uruguay) remains off air – since June 2005. The NAVTEX Co-ordinating Panel Chairman noted the overlapping coverage in NAVAREA VI and recommend reducing broadcast ranges. He added that when the same message is rebroadcast from a different station, the same B<sub>1</sub> character should be used. The delegate from Turkey expressed concern regarding how to best determine if a warning was already broadcast in order to choose the correct B<sub>1</sub> character.

#### **NAVAREA VII (South Africa)**

The Chairman briefly introduced and presented the Self-Assessment Report, document WWNWS4/3/2-VII. He noted that NAVAREA VII only broadcasts warnings once per day and should be doing so twice per day in accordance with the GMDSS Master Plan. NAVAREA I confirmed this comment. The Chairman discussed NAVAREA VII's proposal to provide MSI in Lake Victoria. He echoed their acknowledgment that it is not currently governed by SOLAS, which directly precludes the WWNWS from establishing and providing MSI services. All countries bordering Lake Victoria need to agree to endorse and enforce SOLAS regulations before MSI services can be provided. The Chairman noted NAVAREA VII's work with NAVAREA II and X to establish contingency operations.

#### **NAVAREA VIII (India)**

The NAVAREA VIII representative introduced and presented his Self-Assessment Report, document WWNWS4/3/2-VIII. He also noted the challenge establishing communications, despite attempts, with Seychelles, Tanzania, and Kenya. The IHB Secretary and Chairman took this as an action to remind those countries of their SOLAS responsibilities. The NAVTEX Panel Co-ordinating Panel Chairman complimented NAVAREA VIII on their plans to upgrade their NAVTEX service and the open lines of communication he has had with them. Lastly, the Chairman thanked and complimented India for its effective piracy support throughout the year.

## **NAVAREA IX (Pakistan)**

The NAVAREA IX representative introduced and presented his Self-Assessment Report, document WWNWS4/3/2-IX. He noted that the Karachi NAVTEX station is not operational because it is currently undergoing improvements and upgrades. The NAVTEX Co-ordinating Panel Chairman kindly requested a status report when it is operational again. NAVAREA IX noted that it has 16 countries within its area of responsibility and communications with some is often challenging. The IHB Secretary and Chairman agreed to provide assistance to facilitate better coordination with those countries. Lastly, the Chairman thanked and complimented Pakistan for its effective piracy support throughout the year.

## **NAVAREA X (Australia)**

The NAVAREA X representative introduced and presented his Self-Assessment Report, document WWNWS4/3/2-X. He noted that there are nine SafetyNET coastal areas in NAVAREA X and no NAVTEX coverage. He commented on the quality management survey in respect to “In-Force” warning messages and its narrow applicability to NAVAREA X. He noted that Australia and South Africa have an agreement-in-principal to develop a mutual contingency plan to provide back-up communications on SafetyNET in the event of a major failure of capability to broadcast navigational warnings. NAVAREA X discussed its work to assist Papua New Guinea (PNG) and the Solomon Islands with promulgating coastal SafetyNET warnings. The Chairman complimented NAVAREA X on its work with PNG and noted that PNG’s SafetyNET certificate would be for broadcasting navigation warnings in Area “P”, not meteorological or search and rescue; the latter two require additional approvals. Prior to endorsing a SafetyNET certificate, the Chairman requested that NAVAREA X provide PNG’s processes and procedures and their broadcast times. The NAVAREA I coordinator commented that the Solomon Island’s warning Area “S”, overlapped NAVAREA XI; NAVAREA X added that any concerns would be sorted out prior to the Solomon Island’s area becoming fully operational.

## **NAVAREA XI (Japan)**

The NAVAREA XI representative introduced and presented his Self-Assessment Report, document WWNWS4/3/2-XI-Rev1. The NAVAREA XI Co-ordinator reported that NAVTEX station Manila is now operational and he provided an impressive PowerPoint presentation on development work on ‘Navigational Warning Maps on the Web’, which summarized the service his NAVAREA provides, focusing on the geographic representation of warnings, including NAVTEX, on their website; the geographic display is a new capability it added this year. NAVAREA XI warnings and coastal warnings are available on its website concurrently with the corresponding SafetyNET and NAVTEX broadcast – as soon as the warning is broadcast it is posted to the NAVAREA XI website. The NAVAREA I Co-ordinator complimented NAVAREA XI on its website and its highly efficient access to maritime safety information. He offered that NAVAREA I was beginning a trial on a similar system. In response to this discussion, there were requests for a copy of NAVAREA XI’s presentation, which was made available on the website.

## **NAVAREA XII (USA) (See NAVAREA IV above)**

## **NAVAREA XIII (Russian Federation)**

The Chairman briefly introduced and presented the NAVAREA XIII Self-Assessment Report, document WWNWS4/3/2-XIII. He noted that their website is now operational, but that it only provides access to notice to mariners; navigation warnings are currently not available. He briefly highlighted developments in the Caspian Sea area, noting the new NAVTEX station Jiloy in Azerbaijan. The Chairman recognized NAVAREA XIII’s support for more formal discussion – with all Caspian Sea coastal states – regarding the establishment of WWNWS Navigation and Meteorological Areas in the that region.

#### **NAVAREA XIV (New Zealand)**

The Chairman briefly introduced and presented the NAVAREA XIV Self-Assessment Report on behalf of New Zealand, document WWNWS4/3/2-XIV. He noted that, like Australia, New Zealand only uses SafetyNET and does not have any NAVTEX stations. The Chairman commented on NAVAREA XIV's attendance at WWNWS2 (Australia) in 2010. He highlighted the importance of different countries hosting the meeting as it provided opportunities for attendance that ordinarily did not exist.

#### **NAVAREA XV (Chile)**

The Chairman briefly introduced and presented the NAVAREA XV Self-Assessment Report on behalf of Chile, document WWNWS4/3/2-XV. He noted that NAVAREA XV does not have any contingency plan for its warnings. However, the report stated that it did have a contingency plan for NAVTEX warnings. The NAVTEX Co-ordinating Panel Chairman noted that NAVAREA XV NAVTEX stations broadcast in Spanish on 518 kHz, this frequency is reserved for international NAVTEX and warnings on that frequency are to be broadcast in English.

#### **NAVAREA XVI (Peru)**

The NAVAREA XVI representative introduced his Self-Assessment Report, document WWNWS4/3/2-XVI. He noted that NAVAREA XVI does not yet operate on a 24 hour continuous basis, and he understood that it was a requirement for a NAVAREA Co-ordinator. He added that Mr. Edgard Cabrera, Head of Marine Meteorology and Ocean Affairs Division of the World Meteorological Organization, at the Fourth Session of the Joint WMO-IOC Technical Commission for Oceanography and Marine Meteorology in Yeosu, Korea, requested to give the responsibility of METAREA XVI to Peru due to the quality and accuracy of its forecasts and the modernization of its equipment. The Chairman noted this request and indicated that the United States is still providing this service on METAREA XVI's behalf. He suggested that NAVAREA XVI request a SafetyNET certificate specifically to broadcast meteorological information.

#### **NAVAREA XVII and XVIII (Canada)**

The NAVAREA XVII and XVIII representative introduced and presented his Self-Assessment Report, document WWNWS4/3/2-XVII&XVIII. The Canadian representative noted that its two NAVAREAs are in their second full year of operation. They provide a weekly In-Force bulletin and warnings are posted, in near real time, on the Canadian Coast Guard website. He noted that all NAVAREA warnings are also transmitted by HF NBDP (8416.5 kHz) to ensure maximum coverage for its areas of responsibility. He noted that Canada is conducting a radio reception survey of its Arctic NAVTEX coverage. Additionally, he reported that Greenland established NAVTEX service on its west coast. The Chairman thanked Canada for its great work and contributions to the WWNWS.

#### **NAVAREA XIX (Norway)**

The NAVAREA XIX representative introduced and presented his Self-Assessment Report, document WWNWS4/3/2-XIX. He noted that the B<sub>1</sub> character for NAVTEX Station Vardø was successfully changed from "V" to "C", bringing it into compliance, and he thanked Kazakhstan and Russia for their cooperation to successfully implement this change. Like Canada, all NAVAREA warnings are also transmitted by HF NBDP (8416.5 kHz) to ensure maximum coverage for its area of responsibility. The Chairman asked if either Canada or Norway had noted increased maritime traffic in the Arctic; neither had additional information to indicate an increase or decrease. In regard to the MSI survey, Canada commented that most traffic in its Arctic NAVAREAs, 85% of it, is on a repeat voyage. He believed this led to a disproportionately low response to the survey. The Chairman thanked Norway for the great work it has done and its contributions to the WWNWS.

## **NAVAREA XX and XXI (Russian Federation)**

The Russian Federation did not submit Self Assessments for NAVAREA XX and XXI. The IHB secretary will query the Russian Federation for the missing documents.

### **3.3 Broadcast Systems and Services**

#### **3.3.1 Report of the IMO NAVTEX Co-ordinating Panel**

The Chairman of the IMO NAVTEX Co-ordinating Panel introduced and presented document WWNWS4/3/3/1, which highlighted the main matters raised with the Panel. He noted that Mr. William Van-Den-Berg had assumed the post of Secretary of the NAVTEX Co-ordinating Panel. He indicated that the reassignment of B<sub>1</sub> characters within NAVAREA I, as proposed at WWNWS3, was completed in May 2012. This allowed the B<sub>1</sub> character "M", previously assigned to Oostende, to be reassigned to Norway's new station at Jeloya, which commenced operations in April 2012. He commented on the planned two new stations in the Philippines, at Davao and Puerto Princessa. He queried NAVAREA XI on the status of operations of each. NAVAREA XI had no new information to report, but confirmed that work continues. He queried the representative from Islamic Republic of Iran concerning Azerbaijan's new station at Baku, which commenced operations in May 2012, and if IR of Iran noted any interference with its station at Fereydoonkenar. The representative from IR of Iran noted none and followed with a request to discuss the progress of designating the Caspian Sea as a Sub-Area. He noted IR of Iran's consultation with Russia and that progress was slow moving. In addition, the representative from IR of Iran requested that the IHO assist in organizing a meeting, possibly at COMSAR 17, with the five countries that border the Caspian Sea to discuss the designation of the Caspian Sea as a Sub-Area. The IHO took the request under consideration. The NAVTEX Co-ordinating Panel Chairman reminded all that the Caspian Sea's status is still undetermined and the IMO is not in a position to make an arbitrary declaration as to the application of SOLAS in the absence of agreement by the littoral States concerned; document CPRNW 10/3/4/4/ dated 21 August 2008 refers.

Lastly, the Panel made significant progress with the United States towards realigning its B<sub>1</sub> characters and times in accordance with the NAVTEX Manual, which resulted in the United States completing this realignment in August 2012.

#### **3.3.2 Report of the IMO SafetyNET Co-ordinating Panel**

The Chairman noted that the work of this Panel is covered in numerous other agenda items and there was no need to summarize it here. Suffice to say that many good things have taken place to include: the Arctic NAVAREAs completing their second year of service; MSI training; updates to all applicable documents; contingency plans; the establishment of numerous websites; and the creation of new broadcast categories of port/coastal security, tsunamis, piracy and health alerts.

#### **3.3.3 WMO Liaison Report**

The representative from the WMO introduced and presented the WMO Liaison Report, document WWNWS4/3/3/3. He highlighted the major outcomes of the Joint WMO/IOC Technical Commission on Oceanography & Marine Meteorology (JCOMM). He noted that the Commission adopted the specifications for ice information in SafetyNET bulletins, including the definition of ice-edge and the common set of Sub-Areas agreed by Preparation Services. He added that updated versions of both the Manual on Marine Meteorological Services (WMO-No. 558) and the Guide on Marine Meteorological Services (WMO-No. 471) have been prepared and will be available online. He noted that the Commission re-emphasized the usefulness of graphical products for mariners. He added that the European Telecommunications Standards Institute (ETSI) has been developing the Ice Objects Catalogue and is engaged in developing the S-1xx version (latest IHO standards) of this catalogue. However, NAVAREA I commented, in support of paragraph 1.7 of the paper, that not all SOLAS

vessels are ENC equipped. There is still a need to broadcast MSI in a text format to support the widest possible user base, and that the pursuit of a graphic representation should proceed with prudence. NAVAREA I followed with a query to the WMO regarding whether the new abbreviations concerning ice, mentioned in paragraph 1.1, would be ready for inclusion in the MSI manual. WMO agreed to investigate.

### **3.3.4 Contingency Planning**

The NAVAREA I Co-ordinator presented paper WWNWS4/3/3/4A on behalf of International Mobile Satellite Organization (IMSO). The thrust of the paper is to recognize that the entire GMDSS service is critical, not only from the Inmarsat satellite constellation to the Land Earth Station (LES), but including NAVAREA/Sub-Area and National Co-ordinators, such that everyone needs to have a contingency plan in place in case of any disruption of service, whether temporary or more permanent. The NAVAREA I Co-ordinator relayed the comments from the Deputy Director of the International Mobile Satellite Organization (IMSO), Mr. Andy Fuller, who visited the United Kingdom Hydrographic Office just prior to WWNWS 4. Mr. Fuller commended the contingency work undertaken by each NAVAREA and how much progress each had made. In particular, he noted the work of NAVAREA V and NAVAREA VI and the framework they established to transmit each other's warnings should a contingency arise.

### **3.3.5 Navigation Warnings Concerning EM Radiation Interference**

The Chairman introduced the topic and the progress that the Document Review Working Group made in March 2012. NAVAREA I offered that the United Kingdom is developing a process to evaluate such interference and expects to have a service for mariners operational by the end of 2013. NAVAREA IV commented that it has ongoing work with the National Oceanic and Atmospheric Administration's Space Weather Prediction Centre regarding the same. NAVAREA I proposed a system to notify all NAVAREA co-ordinators in a timely manner when space weather events occur and are forecast to occur. All agreed that there needs to be a common and expeditious process to pass such information to those affected, from a dissemination and user perspective.

## **3.4 Developments in the WWNWS**

### **3.4.1 Inmarsat-C EGC SafetyNET Report**

See Inmarsat Fleet Broadband report, paragraph 3.5.2.

### **3.4.2 Review of the WWNWS element of the GMDSS**

NAVAREA I introduced document WWNWS4/3/4/2A, the results of the first MSI survey conducted by the WWNWS and it generated a great deal of discussion. All 21 NAVAREAs broadcast the MSI survey warning, which contained a link to the online questionnaire, for a period of 6 weeks in late 2011; 120 users completed the survey. The intent was to solicit input from SafetyNET and NAVTEX users to assure that MSI distribution within the GMDSS was meeting their needs. The primary concern from the Sub-Committee was that the length of the survey was too short – the length of time allotted for users to participate. More time would allow more users to participate and provide a better cross section of users. The representative from IR of Iran suggested a rewrite of the survey to obtain more actionable data. NAVAREA XIX recommended the timeframe of the survey to include the summer months of northern hemisphere, which is when its users are more likely to operate and would be able to complete the survey. The representative from Turkey suggested that the WWNWS offer an incentive for completing the survey. The group debated this for some time but could not agree upon a suitable incentive.

The IHB agreed to co-ordinate a Quality Management System Correspondence Group to re-evaluate the current MSI questionnaire and make changes prior to COMSAR 17/Document Review Working Group 11. Seven countries volunteered to participate in the Correspondence Group: Australia

(NAVAREA X), Sweden (Sub-area I), Norway (NAVAREAE XIX), United Kingdom (NAVAREA I), United States (NAVAREA IV/XII), France (NAVAREA II), and IR of Iran.

The next WNWNS survey will run from 1 April 2013 to 1 April 2014 and the results reported at WNWNS 6. Once the Correspondence Group finalizes the survey, the Chairman will send to all NAVAREA Co-ordinators for dissemination.

### **3.4.3 Review of the WNWNS element of GMDSS**

The IHB Secretary introduced and briefly discussed the topic, primarily focusing on the depiction of MSI in an e-navigation environment. The Chairman raised a concern shared by all regarding the potential operational impact to NAVAREA Co-ordinators, with the advent of multiple systems entering GMDSS. While likely providing a greater service, it would inherently require the NAVAREA Co-ordinator to disseminate MSI in multiple formats, possibly, via multiple systems. The Chairman requested that the IHB provide a summary on the status of the GMDSS modernization and e-navigation projects as they progress. NAVAREA I commented on the need for the WNWNS to have representation in the GMDSS Modernization Correspondence Group and stressed the importance of being a proactive participant.

## **3.5 Emerging Technologies**

### **3.5.1 Update on other Service Providers in accordance with IMO Resolution A.1001 (25)**

No other applications from providers have been received for GMDSS services in accordance to IMO Resolution A.1001 (25).

### **3.5.2 Inmarsat Fleet Broadband**

The Inmarsat representative briefed the meeting (see document WNWNS4/3/5/2A) on its fleet broadband capability and also provided an insight into what the future may hold for Inmarsat services. He noted that there are currently over 246,000 maritime terminals in service and more than 148,000 Inmarsat C/mini-C terminals, which are the only conventional satellite systems required by the IMO SOLAS Convention, Chapter IV "Radiocommunications". He discussed Inmarsat's 11-satellite constellation, consisting of generation 2, 3, and 4 satellites. Specifically, he noted that Inmarsat's fourth generation satellites, which operate simultaneously alongside generation 3's, will not be compatible with current Inmarsat C and Mini-C terminals – when Inmarsat decides to decommission generation 3. However, he indicated that the implementation date for this project was undetermined, and when Inmarsat decides to move forward, it would provide a five-year lead-time, at least, to allow users to upgrade hardware. In addition, when Inmarsat implements generation 4, and discontinues generation 3, it will provide global coverage with only 3 satellites. There was concern over gaps in the coverage created by having only 3 satellites; for example the entire east coast of Greenland and half of its west coast appeared to be no longer covered.

The Inmarsat representative requested information on the creation of new C2 (Service) codes, and/or whether they are still even required. The Chairman queried the Sub-Committee and its response was that C2 codes were still required and that at least one new one should be created, a code set aside solely for meteorology. It should not be grouped with its current C2 code (13) so that mariners can more easily distinguish between navigational warnings and meteorological information. The Chairman inquired if there should be an additional C2 code set aside for space weather events. The Sub-Committee, after discussion, decided that there was not a need for a separate C2 code for space weather. However, most agreed there should be a C2 code for piracy and tsunamis. The Sub-Committee agreed to review additional C2 code requirements at the next Document Review Working Group. NAVAREA I offered to track new C2 change proposals and coordinate with NAVAREA coordinators for approval.

### **3.5.3 Presentation by potential service providers**

There were no presentations made at this meeting. However Mr Michael White from the UK Admiralty Warning and Navigation Information Service (AWNIS) gave a comprehensive brief on the work of the AWNIS, demonstrating the key similarities that exist between those provided by the NAVAREAs and the military AWNIS. He also highlighted the confusion and lack of understanding of the 2 services by a number of top naval military commanders. An issue, which he considered needed to be addressed as a matter of some urgency, in view of the close operating circumstances which now exists, particularly in legal aspects.

## **4 REVIEW OF GUIDANCE DOCUMENTS**

The Chairman noted that the 10<sup>th</sup> meeting of the Document Review (DocRev) Working Group was held at IMO Headquarters the week following COMSAR 16. He intended to convene the 11<sup>th</sup> meeting, also at IMO Headquarters in London, from 29-31 January 2013, i.e. in the week following COMSAR 17, and asked the WWNWS-SC Secretary to make the necessary arrangements with IMO.

### **4.1 Document Review Status Report**

The Secretary introduced document WWNWS4/4/1B reporting on the state of all documents being revised as part of the holistic review of WWNWS documentation and document WWNWS3/4/1A, which listed the action items from the DocRev 10 meeting. He noted that NAVAREA II coordinated with Kenta Electronic (France) to demonstrate its NAVDAT software at WWNWS 4. Unfortunately, Kenta Electronic was unable to attend. NAVDAT, in very general terms, is a system developed to automatically provide a geographic representation of NAVTEX data. The Chairman requested that France continue to work with Kenta Electronic to arrange a NAVDAT demonstration at WWNWS 5.

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. He noted the extensive week-long review sessions following COMSAR during the last several years that have achieved the quality documents which are available today. Marked up copies of all the documents will be made available on the WWNWS web page of the IHO website and everyone is invited to submit comments, aimed at consistency between the documents to the Chairman and the IHB, these will then be considered at DocRev 11. The intention is to finalize the review at WWNWS 5 in 2012, and, after seeking IHO and WMO endorsement, submit to COMSAR 18 in 2014.

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

The representative from NAVAREA X introduced document WWNWS4/4/3C, which was prompted by NAVAREA I's document 4/4/3B and which proposed that the term "In-force bulletin" be deleted from A.706(17) and be replaced by "In-force Warning", and the In-force Warning (list) would include all warnings currently in force, vice the last six weeks per current guidance; warnings are removed from the In-force bulletin list, and no longer broadcast, as they are published in the Notice to Mariners or through some other medium. NAVAREA X's proposal was considered with the document WWNWS4/4/3B and is reported below in Paragraph 4.3.

At DocRev 10, NAVAREA I introduced a revised graphic to A.705(17), Section 1.2 for the maritime safety information service of the GMDSS. The new graphic properly separates SAR from maritime safety information and more accurately depicts the flow of MSI via NAVTEX and SafetyNET. The Sub-Committee approved the new graphic.

### **4.3 Joint IMO/IHO/WMO Manual on MSI**

NAVAREA I introduced document WWNWS4/4/3B on "The inconsistent procedures NAVAREA Co-ordinators follow with respect to In-force bulletins". The paper reviewed relevant guidance from

A.706(17) and the Joint Manual on MSI and provided documentation, by NAVAREA, depicting inconsistencies and listed those NAVAREAs that did not provide In-force bulletins: NAVAREA V, VI, IX, and X. It proposed providing further explanatory notes in the Joint Manual regarding In-force bulletins and much closer adherence to the guidance documents concerning In-force bulletins. Lastly, NAVAREA I recommended that In-force bulletins list ALL messages still in force, not just those issued in the last six weeks.

This paper, in conjunction with WWNWS4/4/3C submitted by NAVAREA X, which rigorously opposed this change to their present operating procedures, generated much debate by the Sub-Committee, including the relevance of In-force bulletins themselves. In the end, the Sub-Committee agreed that In-force bulletins shall:

- Be part of the numbered NAVAREA Warning series, and be issued via SafetyNET as an individual numbered message which remains in force for one week;
- Include the DTG of when it was prepared;
- List ALL warnings still in force, not just those issued within the past 6 weeks;
- Include details of where mariners can obtain copies of those messages which remain in force, but are no longer being broadcast, as they are more than 6 weeks old; and
- Have commas separating the list of in-force warnings

The Sub-Committee recommended the review of the SafetyNET manual Annex 4, Part A and update in accordance with the proposed changes.

The IHB agreed to assist with developing and creating an implementation plan for In-force bulletins with NAVAREA V, VI, IX, and X and would follow up to ensure each meets the requirement.

NAVAREA X introduced WWNWS4/4/3A on proposed navigational warning text regarding AIS Aids to Navigation for inclusion in the Joint MSI Manual. The discussion involved real, synthetic and virtual AIS AtoN. NAVAREA I recommended placing the examples in Section 1. Sub-Area I recommended adding clear definitions for each type of AIS AtoN to avoid confusion. The representative from IR of Iran noted that examples should model IALA standard language to make it as clear and versatile as possible. The Chairman agreed with all comments and recommended that DocRev 11 finalize examples for AIS Aids to Navigation.

The WMO raised a concern over the separation of MET data and NAV data within the document, each now having a distinct section. He recommended combining both types of data, since it is published as a joint manual, which would make it more useful and functional. The Sub-Committee debated and decided to keep MET and NAV data separate, and agreed to further refine this decision at DocRev 11.

#### **4.4 IMO International SafetyNET Manual**

This revised document came into force on 1 January 2012.

#### **4.5 IMO NAVTEX Manual**

This document was not discussed or reviewed at this meeting; it is scheduled to come into force 1 January 2013.

#### **4.6 IMO resolutions MSC.306 (87) and A.664 (16) “Performance Standards for Enhanced Group all Equipment”**

Documents not discussed or reviewed at this meeting.

**4.7 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 briefly discussed the document. He recommended that NAVAREA VIII and IX should be added to the direct distribution list concerning acts of piracy to facilitate more efficient processing of information and dissemination to mariners.

**4.8 COMSAR Circ.36: “Broadcast of warnings for tsunamis and other natural disasters”**

With the release of the revised NAVTEX Manual, which comes into force 1 January 2013, this circular will effectively be cancelled in accordance with the submission made at COMSAR 16.

**4.9 Terms of Reference (ToR) for the WNWWS Sub Committee**

The Chairman reported that he had not received any proposed changes to the ToR since it was extensively reviewed at CPRNW 10 and adopted by IHO in July of 2009. For future changes, he requested that a date stamp be added referencing the last time the IHO updated it.

**4.10 IMO resolution on Met-Ocean services**

Document not discussed or reviewed at this meeting.

**4.11 Inmarsat SafetyNET Users’ Handbook**

The Chairman briefly discussed this document and reiterated that Inmarsat expected the 5<sup>th</sup> Edition to be available by the end of the year.

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

**5.1 Update on WNWWS 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 eight courses taught since 2006 covered some 70 countries with 125 participants trained. While it has been mostly undertaken by the UK, US 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 WNWWS knowledge across the globe. While many nations have participants trained, one of the shortfalls noted is that these personnel move on and their knowledge is not transferred to incoming staff.

In 2013, MSI courses had been requested in each of the following Regional Hydrographic Commissions: MESO American & Caribbean Sea (MACHC), East Asian (EAHC), and Southern Africa and Islands (SAIHC), although at present it appears no funding has been allocated as no host

had been identified. Again, as at WWNW 3, the question was raised whether the CB fund might be able to finance instructor's travel.

### **5.3 WWNWS CD-ROM**

The Chairman pledged to circulate the September 2012 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 WWNWS5**

The Chairman announced that the next meeting would be held at the IHB in Monaco with dates set for 24-27 September 2013; a formal invitation for this meeting, to include the venue details, will be sent out to all members before the six month deadline required by the Rules of Procedure for the WWNWS Sub-Committee. In addition, he solicited the Sub-Committee for volunteers to host WWNWS 6 in 2014, noting the 5<sup>th</sup> Extraordinary International Hydrographic Conference (EIHC 5) is due to take place in Monaco 6-10 October 2014. No country, at this time, was able to commit to hosting.

### **6.2 DRAFT AGENDA FOR WWNWS 5**

A provisional agenda for the WWNWS 5 meeting was displayed and agreed by those present. There will be a further review of this agenda at the DocRev 11 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 5 is at in Annex E.

## **7 REVIEW OF ACTION ITEMS FROM WWNWS 4**

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

## **8 ELECTION OF A VICE-CHAIR AND CHAIRMAN**

The Sub-Committee did not submit any alternative names for either the Chairman or Vice-Chair positions. The Sub-Committee unanimously re-elected each for another term.

## **9 ANY OTHER BUSINESS**

### **9.1**

No other business to report.

## **10 CLOSURE OF THE MEETING**

The Chairman thanked everyone for attending and for the hard work that they had put in to achieve everything that was necessary. He graciously thanked the Japan Hydrographic and Oceanographic Department (JHOD) and NAVAREA XI for their outstanding preparations, arrangements, and support in hosting the meeting. Comments from the group in closing noted that the week's session was very interesting, helpful and productive. They supported comments that the Sub-Committee is a real team and genuinely strives for results while working for the benefit of all mariners in terms of maritime safety.

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

Annexes:

- Annex A    Agenda for the 4<sup>th</sup> Meeting of WWNWS
- Annex B    Participants at WWNWS 4
- Annex C    List of Documents submitted to WWNWS 4
- Annex D    List of Action Items as of 14 December 2012
- Annex E    Provisional Agenda for the 5<sup>th</sup> Session of the IHO WWNWS Sub-Committee
- Annex F    MSI Quality Management Survey Summary
- Annex G    Justifications for broadcasting MSI

**PROVISIONAL AGENDA OF THE FOURTH MEETING OF THE WWNWS  
SUB COMMITTEE (WWNWS4)**

**To be held at the offices of JHOD, Tokyo, Japan  
From 24 – 28 September 2012**

**1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS**

- .1 Opening Remarks and Introductions
- .2 Welcome by the IHB and host nation
- .3 Working Arrangements
- .4 Administrative Arrangements
- .5 Adoption of the Agenda
- .6 Review of Action Items from WWNWS3
- .7 Report from IRCC4

**2 MATTERS RELATING TO THE GMDSS MASTER PLAN**

- .1 IMO Update
- .2 ITU Issues
- .3 Report of IMSO Assemble22
- .4 Review content of GMDSS Master Plan Annexes 7 & 8

**3 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)**

- .1
  - .1 Outcome of the 16<sup>th</sup> Session of the International Maritime Organization's Sub-Committee on Communications and Search and Rescue (COMSAR 16) 12 – 16 March 2012
  - .2 Outcome of the 90<sup>th</sup> Session of the International Maritime Organization's Committee on Maritime Safety (MSC 90) 16 – 25 May 2012
  - .3 Outcome of the 58<sup>th</sup> Session of the International Maritime Organization's Sub-Committee on Safety of Navigation (NAV 58) 2 – 6 July 2012
- .2 Self Assessments by NAVAREA Coordinators
- .3 Broadcast Systems and Services
  - .1 Report of the IMO NAVTEX Co-ordinating Panel
  - .2 Report of the IMO SafetyNET Co-ordinating Panel
  - .3 WMO Liaison Report
  - .4 Contingency Planning
  - .5 Navigation warnings concerning EM radiation interference
- .4 Developments in the WWNWS
  - .1 Inmarsat-C EGC SafetyNET Report
  - .2 WWNWS Survey Review
  - .3 Review of the WWNWS element of the GMDSS
  - .4 E-navigation

- .5 Emerging Technologies / Modernisation
  - .1 Update on other service providers in accordance with IMO Resolution A.1001(25)
  - .2 Inmarsat Fleet Broadband Presentation
  - .3 Manufacturers' presentations (NavDat; Navtex in ECDIS – Subject to availability)
- .6 Transmission by private companies via e-mail and other media.

#### **4 REVIEW OF GUIDANCE DOCUMENTS**

- .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 Joint IMO/IHO/WMO Manual on MSI (MSC.1/Circ.1310) and IHO Publication S-53 - New warning categories / recommended formats and examples.
- .4 IMO International SafetyNET Manual (MSC.1/Circ.1364)
- .5 IMO NAVTEX Manual (MSC/Circ.1403)
- .6 IMO resolutions MSC.306(87) and A.664(16) "Performance Standards for Enhanced Group Call Equipment".
- .7 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))
- .8 COMSAR Circ.36: "Broadcast of warnings for tsunamis and other natural disasters."
- .9 Terms of Reference for the WWNWS Sub Committee (IHO Circular Letter 46/2009)
- .10 WMO - IMO resolution on Met-ocean services Assembly resolution A.1051(27)
- .11 Inmarsat SafetyNET Users' Handbook
- .12 MSI element of IHO Publication C-55 – "Status of Hydrography and Nautical Cartography World-Wide".

#### **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 ELECTION/RE-ELECTION OF THE CHAIR AND VICE CHAIR**

In accordance with WWNWS SC Rules of Procedure Article 2

#### **7 NEXT MEETING**

- .1 Dates and venue for WWNWS5 in 2013
- .2 Draft Agenda for WWNWS5

#### **8 Review of Action Items from WWNWS4**

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

#### **10 CLOSURE OF THE MEETING**

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**Documents Submitted to WWNWS4**

<b>Document No</b>	<b>Document Title</b>
ACTION ITEMS	ACTION ITEMS - Corrected to 26 July 2012
WWNWS4 Self Assessment Template	Template to be used for the submission of NAVAREA Self Assessments - amended 21 March 2012
WWNWS4 Document Template	Template to be used for the submission of documents, other than Self Assessments.
WWNWS4 Letter of Invitation	Letter of Invitation
WWNWS4_Programme	Programme for WWNWS4-SC meeting
WWNWS4_Provisional- Agenda	Provisional Agenda for WWNWS4
WWNWS4_Provisional List of Participants	Provisional List of Participants
WWNWS4-1-7	Report to IRCC4
WWNWS4-2-1A	COMSAR 16-WP.6-Scoping Exercise
WWNWS4-2-2A	ITU Resolution 360
WWNWS4-2-3	IMSO Assembly 22 Report-GMDSS
WWNWS4-2-4	Changes to Annex 7 GMDSS Master Plan
WWNWS4-3-1-1A	Outcomes of COMSAR 16
WWNWS4-3-1-1B	Extracts COMSAR 16 Final Report
WWNWS4-3-1-2A	Outcomes of MSC 90
WWNWS4-3-1-2B	Extracts MSC 90 Final Report
WWNWS4-3-1-3A	Outcomes of NAV 58
WWNWS4-3-1-3B	Extracts NAV 58 Final Report
WWNWS4-3-2-I	Self Assessment NAVAREA I
WWNWS4-3-2-Ib	Self Assessment NAVAREA Ib
WWNWS4-3-2-II	Self Assessment NAVAREA II
WWNWS4-3-2-III	Self Assessment NAVAREA III
WWNWS4-3-2-IV_XII	Self Assessment NAVAREA IV & XII
WWNWS4-3-2-V	Self Assessment NAVAREA V
WWNWS4-3-2-VI	Self Assessment NAVAREA VI
WWNWS4-3-2-VII	Self Assessment NAVAREA VII
WWNWS4-3-2-VIII	Self Assessment NAVAREA VIII
WWNWS4-3-2-IX	Self Assessment NAVAREA IX

WWNWS4-3-2-X	Self Assessment NAVAREA X
WWNWS4-3-2-XI	Self Assessment NAVAREA XI
WWNWS4-3-2-XIII	Self Assessment NAVAREA XIII
WWNWS4-3-2-XIV	Self Assessment NAVAREA XIV
WWNWS4-3-2-XV	Self Assessment NAVAREA XV
WWNWS4-3-2-XVII_XVIII	Self Assessment NAVAREA XVII & XVIII
WWNWS4-3-2-XIX	Self Assessment NAVAREA XIX
WWNWS4-3-2-XX	
WWNWS4-3-2-XXI	
WWNWS4-3-3-1	NAVTEX Panel Report
WWNWS4-3-4-2A	WWNWS Survey Summary
WWNWS4-3-4-2B	WWNWS Survey Summary Spreadsheet
WWNWS4-3-4-4A	ITU Resolution 359
WWNWS4-3-5-1A	MSC Circ-1414
WWNWS4-3-5-2	ASS-22-6-GMDSS Report
WWNWS4-4-1A	Actions from DocRev WG 10 Meeting
WWNWS4-4-1B	Document Review Status Report
WWNWS4-4-2A	Assembly TR 705(17) Final Draft
WWNWS4-4-2B	Assembly TR 706(17) Final Draft
WWNWS4-4-3A	AIS Aids to Navigation
WWNWS4-4-3B	In-force Bulletins
WWNWS4-4-3C	In-force Bulletins - An Alternative View
WWNWS4-9A	Development of S-100 Based Product Specification for Ocean Forecasts

LIST OF WWNWS ACTION ITEMS  
(As of 22 November 2012)

Agenda Item	Subject	Status / Due Date	Comments	Action By
WWNWS1 3.2.III(2)	IR of Iran to raise the issue of creating a Sub-Area for Navigational Warnings for the Caspian Sea at the next meeting of the Caspian Sea Regional States and report back to IHO/IMO	WWNWS4 WWNWS5	The IR of Iran is keen to establish a NAVAREA III Sub-Area for the Caspian Sea and would be prepared to volunteer as the Sub-Area co-ordinator. This matter was not raised at the April 2010 meeting but is being pursued by the IR of Iran WWNWS3- IHB to contact IR of Iran for update and to inform them of Azerbaijan request for NAVTEX station. (Email sent by IHB to IR of Iran 14/9/11) Reply received from IR of Iran 17/9/11 indicating that this matter had been discussed during a meeting with representatives of the Russian Federation from whom a formal response is still awaited. IR of Iran to provide full details of discussions with bordering states to IHB and explanation of assistance required from IMO/IHO to facilitate a meeting in Tehran	IR of Iran/IHB
WWNWS2 3.2.IX	Chairman to contact NAVAREA IX co-ordinator to seek clarification of the statement in section 13 of their Self Assessment	WWNWS4 Complete	<i>“Because of concerns about the reception of MSI from certain NAVTEX stations in the region, most Coastal Warnings are re-transmitted via SafetyNET as well, depending on a case to case basis.”</i> WWNWS3 Chairman has not received any answer to his requests. Chairman to try again. Email sent 19 September 2011. No reply to be contacted again in March 2012. Details provided at meeting by	Chairman

Agenda Item	Subject	Status / Due Date	Comments	Action By
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	<del>WWNWS4</del> <del>WWNWS5</del>	Nothing progressed, for discussion as agenda item	NAVAREA XV and XVI
WWNWS3 4.2 A	<del>Document review WG to consider the inclusion of suitable text in the WWNWS documentation to provide guidance on how NAVAREA Co-ordinators provide information on “In Force” messages.</del>	<del>Doc Rev WG-10 meeting</del> <del>WWNWS4</del> <del>Complete</del>	<del>See proposal in WWNWS3/4/2B. Considered to be already covered in the MSI manual. To be discussed in agenda 4/4/3B.</del>	ALL
WWNWS4 3.2.III	NAVAREA III Self Assessment	WWNWS5	Continuous broadcast of gun exercises over islands of Aegean Sea, Chair to liaise with Greece to seek clarification of issue; Spain to provide background information and recommended action	NAVAREA III
WWNWS4 3.2.III	NAVAREA III Self Assessment	WWNWS5	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.III	NAVAREA III Self Assessment	<del>WWNWS5</del> <del>Completed</del>	Obtain contact for Egypt	IHB
WWNWS4 3.2.VIII	NAVAREA VIII Self Assessment	<del>WWNWS5</del> <del>Complete</del>	<del>IHB to send note to Kenya, Tanzania and Seychelles to remind of SOLAS MSI responsibilities in support of NAVAREA VIII Coordinator</del>	<del>IHB</del>
WWNWS4 3.2.IX	NAVAREA IX Self Assessment	<del>WWNWS5</del> <del>Complete</del>	<del>IHB to send note Yemen, Sudan and Somalia to remind of SOLAS MSI responsibilities in support of NAVAREA IX Coordinator</del>	<del>IHB</del>
WWNWS4 3.2.X	NAVAREA X Self assessment	WWNWS5	WMO to work with PNG representative for Met Warning Services in Area P with oversight from NAVAREA X Coordinator	WMO

Agenda Item	Subject	Status / Due Date	Comments	Action By
WWNWS4 3.2.X	NAVAREA X Self Assessment	<b>WWNWS5 Completed</b>	<del>IHB to issue approval to PNG for Area P broadcast of NAV Warnings with input and oversight from NAVAREA X Coordinator</del>	NAVAREA X/IHB
WWNWS4 3.2.VI	NAVAREA VI Self Assessment	<b>WWNWS5 Complete</b>	<del>IHB to send note to Uruguay to remind of SOLAS MSI responsibilities in support of NAVAREA VI Coordinator</del>	IHB
WWNWS4 3.3.5	EM Radiation Interference	<b>WWNWS5</b>	Initiate method and system for transmission to NAVAREA Coordinators of details of forecast solar events and potential interference to broadcasts and systems	NAVAREA IV
WWNWS4 3.4.2	WWNWS Survey Review	<b>1 Dec 2012</b>	WWNWS Survey Questionnaire to be distributed to WWNWS-SC GC for amendments and additions prior to re-issue	IHB
WWNWS4 3.4.2	WWNWS Survey Review	<b>1 Apr 2013</b>	Questionnaire to be re-issued for period of 12 months between April 2013 to April 2014	IHB
WWNWS4 3.4.2	WWNWS Survey Review	<b>1 Feb 2013</b>	DRWG to coordinate issue of NAVTEX message through NAVAREA, Sub-Area and National Coordinators advertising survey	Chair
WWNWS4 3.4.2	WWNWS Survey Review	<b>WWNWS6</b>	Results to be reported at WWNWS6-SC meeting	IHB
WWNWS4 3.4.2	WWNWS Survey Review	<b>1 Feb 2013</b>	Formulate alternative methods for distribution of the survey other than internet	DRWG
WWNWS4 3.4.4	WWNWS E-Navigation and GMDSS Modernization	<b>1 Jan 2013</b>	Extract relevant details from IMO CG documents concerning MSI and its delivery	IHB
WWNWS4 3.5.2	Inmarsat Fleet Broadband Presentation	<b>1 Apr 2013</b>	Provide input to Imarsat for C2 codes categories breakdown	ALL
WWNWS4 3.5.2	Inmarsat Fleet Broadband Presentation	<b>31 Oct 2012</b>	Distribute corrections to SafetyNET manual to all NAVAREA Coordinators	NAVAREA I
WWNWS4 4.1	GMDSS Master Plan Annexes 7 & 8	<b>Post COMSAR 17</b>	Distribute draft Annexes 7 & 8 to NAVAREA Coordinators, contingent on IMO	NAVAREA I
WWNWS4 4.1	Kenta NAVDAT	<b>1 Jun 2013</b>	Arrange demonstration in Monaco	NAVAREA II
WWNWS4 4.3	Joint IMO/IHO/WMO Manual on MSI	<b>1 Jan 2013</b>	Format, examples and amendments	WWNWS Doc Rev WG

<b>Agenda Item</b>	<b>Subject</b>	<b>Status / Due Date</b>	<b>Comments</b>	<b>Action By</b>
WWNWS4 4.3	Message Examples	<b>1 Nov 2012</b>	Provide example of message transmitted for radiation fallout for input into Manual as message example to sec DRWG	NAVAREA XI
WWNWS4 4.3B	In-force Bulletins	<b>1 Feb 2013</b>	Note requested actions and recommendations to disseminate In-force Bulletins	NAVAREAs V, VI, IX & X
WWNWS4 4.3B	In-force Bulletins	<b>1 Jan 2013</b>	Generate further explanatory notes for inclusions in Joint IMO/IHO/WMO Manual on MSI chapter 7 section on In-force Bulletins	DRWG
WWNWS4 4.3B	In-force Bulletins	<b>1 Jan 2013</b>	Review wording in document in regard to In-force Bulletin messages to ensure promulgation requirement (MSI Manual 3.2.1.9)	DRWG
WWNWS4 4.3A	AIS Aids to Navigation	<b>1 Jan 2013</b>	Refine examples of message transmitted for AIS Aids to Navigation for input into Manual on MSI as message example, to ensure consistency with IALA recommended guidance, provide to Sec DRWG	NAVAREA X
<del>WWNWS4 4.9</del>	<del>ToRs</del>	<del><b>31 Oct 2012 Completed</b></del>	<del>Add latest amendment date, clarify whether reference is Technical or Administrative Resolution</del>	<del>IHB</del>
WWNWS4 4.12	C-55	<b>WWNWS5</b>	Review national details and submit changes and amendments to IHB	ALL
WWNWS4 5.2	CB MSI Training Course	<b>1 Jan 2013</b>	Determine whether funding available from CB Fund to support attendance of trainers at courses	IHB

**PROVISIONAL AGENDA OF THE FIFTH MEETING OF THE WWNWS  
SUB COMMITTEE (WWNWS 5)**

**To be held at the offices of IHB, Monaco  
From 24 – 27 September 2013**

**1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS**

- .1 Opening Remarks and Introductions
- .2 Welcome by the IHB and host nation
- .3 Working Arrangements
- .4 Administrative Arrangements
- .5 Adoption of the Agenda
- .6 Review of Action Items from WWNWS4
- .7 Report from IRCC5

**2 MATTERS RELATING TO THE GMDSS MASTER PLAN**

- .1 IMO Update
- .2 ITU Issues
- .3 Report of IMSO Assemble23
- .4 Review content of GMDSS Master Plan Annexes 7 & 8

**3 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)**

- .1
  - .1 Outcome of the 17<sup>th</sup> 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 92<sup>th</sup> Session of the International Maritime Organization's Committee on Maritime Safety (MSC 92) 12 – 21 June 2013
  - .3 Outcome of the 59<sup>th</sup> 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
- .3 Broadcast Systems and Services
  - .1 Report of the IMO NAVTEX Co-ordinating Panel
  - .2 Report of the IMO SafetyNET Co-ordinating Panel
  - .3 WMO Liaison Report
  - .4 Contingency Planning
  - .5 Navigation warnings concerning EM radiation interference, review example text
- .4 Developments in the WWNWS
  - .1 Inmarsat-C EGC SafetyNET Report
  - .2 WWNWS Survey up-date on progress
  - .3 Review of the WWNWS element of the GMDSS
  - .4 E-navigation, IMO GC report

- .5 AIS Aids to Navigation, IMO CG report
- .5 Emerging Technologies / Modernisation
  - .1 Update on other service providers in accordance with IMO Resolution A.1001(25)
  - .2 Inmarsat Fleet Broadband Presentation
  - .3 Manufacturers' presentations (NavDat; Navtex in ECDIS – Subject to availability)

#### **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 Joint IMO/IHO/WMO Manual on MSI (MSC.1/Circ.1310) and IHO Publication S-53 - New warning categories / recommended formats and examples.
- .4 IMO International SafetyNET Manual (MSC.1/Circ.1364)
- .5 IMO NAVTEX Manual (MSC/Circ.1403)
- .6 IMO resolutions MSC.306(87) and A.664(16) "Performance Standards for Enhanced Group Call Equipment".
- .7 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))
- .8 Review on-line MSI Training Course
- .9 Terms of Reference for the WWNWS Sub Committee (IHO Circular Letter 46/2009)
- .10 WMO - IMO resolution on Met-ocean services Assembly resolution A.1051(27)
- .11 Inmarsat SafetyNET Users' Handbook
- .12 MSI element of IHO Publication C-55 – "Status of Hydrography and Nautical Cartography World-Wide".

#### **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 WWNWS6 in 2014
- .2 Draft Agenda for WWNWS6

#### **7 Review of Action Items from WWNWS5**

#### **8 ANY OTHER BUSINESS**

#### **9 CLOSURE OF THE MEETING**

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
<b>I</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>I Baltic Sub-area</b>	Yes	Yes	Yes	Yes	Yes	6 (Navtex)	Yes
<b>II</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>III</b>	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>IV</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>V</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>VI</b>	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>VII</b>	No	Yes	Yes	Yes	Yes	Yes	Yes <sup>1</sup>
<b>VIII</b>	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>IX</b>	No	No	Yes	Yes	Yes	Yes	Yes
<b>X</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>XI</b>	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>XII</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>XIII</b>	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>XIV</b>	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>XV</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>XVI</b>	Yes	Yes	Yes	Yes	Yes <sup>2</sup>	Yes	Yes
<b>XVII</b>	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>XVIII</b>	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>XIX</b>	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>XX</b>	-	-	-	-	-	-	-
<b>XXI</b>	-	-	-	-	-	-	-

<sup>1</sup> See paragraph 4 of NAVAREA VII Self Assessment (WWNWS4/3/2-VII)

<sup>2</sup> See paragraph 5 of NAVAREA XVI Self Assessment (WWNWS4/3/2-XVI)

**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)