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## REPORT OF THE WORD-WIDE NAVIGATIONAL WARNING SERVICE

### SUB-COMMITTEE (WWNWS-SC) TO THE IRCC 7

#### SUBMITTED BY CHAIRMAN: PETER M. DOHERTY – USA

The WWNWS-SC monitors and guides the International Hydrographic Organization (IHO)/ International Maritime Organization (IMO) World Wide Navigational Warning Service (WWNWS) which includes NAVAREA and coastal warnings. The WWNWS-SC is responsible for studying and proposing new methods to enhance the provision of navigational warnings to mariners at sea, facilitating the implementation of the major changes in procedures for dissemination of navigational warnings and providing appropriate guidance to concerned IHO Member State Representatives to further the evolution of the WWNWS.

The sixth meeting of the WWNWS Sub-Committee (WWNWS 6) was held in Wellington, New Zealand, from 18th to 22nd August 2014 under the chairmanship of Mr Peter Doherty (USA). The meeting was attended by 27 delegates from 14 IHO Member States, the International Hydrographic Bureau (IHB), the Secretariat of the International Maritime Organization (IMO), the Secretariat of the World Meteorological Organization (WMO), the IMO NAVTEX Panel, the IMO SafetyNET Panel, Inmarsat and Iridium. The delegates included representatives of 11 NAVAREA Coordinators, one Sub-area Coordinator and four National Coordinators. The WMO held its 2nd Maritime Safety Services Enhancement Workshop concurrently.

All meeting documents are available from the IHO web site at:  
[http://iho.int/mtg\\_docs/com\\_wg/CPRNW/WWNWS5/WWNWS5.htm](http://iho.int/mtg_docs/com_wg/CPRNW/WWNWS5/WWNWS5.htm).  
The full report of the meeting is also available from this site.

#### **Joint Session of NAVAREA and METAREA Coordinators**

The WWNWS-SC and the WMO Maritime Safety Services Enhancement Workshop met in joint session for one and a half days during the meeting period. This allowed NAVAREA and METAREA Coordinators to discuss topics of mutual interest and to receive briefings and background presentations on the IHO, WMO and IMO structures.

The current state of the documentation related to Maritime Safety Information (MSI) was discussed at the joint meeting. The next publications to be reviewed were highlighted; these included the IMO NAVTEX Manual and IMO Resolution A.1051(27) on the IMO/WMO Worldwide Met-Ocean Information and Warning Service. The joint session received progress reports on the development of Product Specifications based on the IHO Universal Hydrographic Data Model S-100 which are relevant to worldwide navigational warning services: S-124 - Navigational warnings, S-411 - Sea ice and S-412 - Met-ocean forecasts.

The IMO Secretariat provided background presentations on the projects related to the modernization of the Global Maritime Distress and Safety System (GMDSS) and e-Navigation, noting that engagement and input from both the NAVAREA and METAREA Coordinators were vital to the eventual successful conclusions of both projects. The IMO Secretariat encouraged closer cooperation and interaction between the IMO, IHO and WMO and the attendance of more METAREA Coordinators at the meetings of the IMO Sub-Committee on Navigation, Communications, and Search and Rescue (NCSR) and the WNWNS-SC Document Review Working Group (DRWG). The DRWG normally meets during the week following the NCSR.

**Some of the major initiatives of the WNWNS-SC over the past year include:**

**WWNWS Documentation Review/Update**

The 12<sup>th</sup> meeting of the DRWG was reviewed. In particular, the proposed editorial amendments to the IMO International SafetyNET Manual and sections of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual, which had been requested for review by the IMO Secretariat, were highlighted and approved by the Sub-Committee. Subsequently the amendments to the IAMSAR Manual were submitted to the IMO Secretariat. The SafetyNET Manual is being circulated to IHO Member States and the WMO for comment and approval prior to submission to NCSR 3.

It was agreed that the 13<sup>th</sup> meeting of the Document Review WG (DRWG 13) should undertake a review of the IMO NAVTEX Manual and prepare proposed amendments for consideration at WNWNS 7 and later submission to NCSR 3 in 2016. Subsequently the DRWG 13 meeting completed the review of the IMO NAVTEX Manual at its meeting after NCSR 2. In addition work was commenced on IMO Resolution A.1051(27), in preparation for submission to NCSR 3 in 2016. Representatives from IMO national delegations are encouraged to take part in these reviews and are invited to attend the DRWG meetings.

All draft documents under development by the Sub-Committee are available via the WNWNS-SC page on the IHO web site ([www.iho.int](http://www.iho.int)). Member States are invited to submit comments to the Chair of WNWNS-SC and the IHB. Any suggested changes or amendments and further work will be undertaken at DRWG 14, which will be held at IMO Headquarters the week after the third session of the IMO NCSR from 29<sup>th</sup> February to 4<sup>th</sup> March 2016. The work will then be finalised at the next meeting of the WNWNS-SC prior to submission to IHO Member States, the WMO and the IMO.

**MSI Capacity Building Training Course**

The meeting received updated information on the delivery of MSI training courses and the need for the NAVAREA Coordinators to work closely with the Regional Capacity Building (CB) Coordinators to help developing nations to reach the IHO CB Phase 1 level (- collection and circulation of nautical information, necessary to maintain existing charts and publications up to date) of the IHO CB Strategy. The WNWNS Sub-Committee continued to deliver its comprehensive training course that provides practical guidance to relevant authorities in countries that are drafting navigational warnings or broadcasting Maritime Safety Information

(MSI) for the high seas under the Global Maritime Distress and Safety System (GMDSS). The objective of the course is to increase the flow of MSI to NAVAREA Coordinators for promulgation, and ultimately to emphasize the importance of establishing expertise in the countries within these NAVAREAs, to fulfill their role of National Coordinators.

The first of three MSI courses was held from 25 to 27 August in Wellington, New Zealand, in support of the South West Pacific Hydrographic Commission. 15 students attended from 13 different countries. The second MSI course was conducted in Muscat, Oman, from 15 to 17 December, in support of the ROPME Sea Area and North Indian Ocean Hydrographic Commissions. Twenty-five students attended from 15 different countries. The third MSI course was conducted in Abidjan, Côte d'Ivoire, in support of the East Atlantic Hydrographic Commission. 13 students attended from 9 different countries. The first course of 2015 was held in Tokyo, Japan, in support of the East Asia Hydrographic Commission. 10 students attended from 8 different countries.

It also noted that a further course has been funded for Mediterranean and Black Seas Hydrographic Commission in 2015.

The meeting recorded its thanks to Australia, France, UK, and USA for their extensive support in conducting the training courses and the work undertaken in the continuing requirement to review the training material to ensure consistency with the amended supporting documentation.

### **GMDSS / MSI Briefing**

The Sub-Committee received MSI self-assessment reports from all 21 NAVAREAs. The Chair agreed to assist NAVAREA Coordinators, through the IHB, to gain the support of National Coordinators in ensuring that all SOLAS MSI responsibilities were being met.

The Secretariat of the IMO provided a brief to the WNWNS 6 on the GMDSS modernization and the GMDSS Master Plan. A revised process for up-dating Annexes 7 & 8 of the Master Plan was explained. Noting that the responsibility for inserting new data would be passed directly to the Member States, it was confirmed that a validation check would be undertaken by the IMO Secretariat. The representative of the IMO Secretariat urged direct engagement by all Area Coordinators with the GMDSS modernization Correspondence Group (CG). The contents of the relevant Annexes of the GMDSS Master Plan were reviewed. As a result, METAREA Coordinators were requested to liaise with their respective NAVAREA Coordinators to ensure the information being submitted to the IMO was correct.

The year-long WNWNS customer survey questionnaire results were reviewed and various issues identified for individual NAVAREAs to address. Inmarsat gave a general brief on issues identified for the SafetyNET service relevant to both NAVAREA and METAREA Coordinators. It was noted that many of the comments and problems submitted by users were identified as system and equipment related and reflected a lack of understanding on the part of the users. The IMO Secretariat was asked to consider if this situation could be brought to the attention of the appropriate IMO bodies to explore ways to improve GMDSS training.

## **S-124 Progress Report**

NAVAREA II provided an overview presentation on the S-124 to the joint session, which included a description of the Product Specification, what had been achieved and what were the next stages in development. The relevant parts of the e-Navigation were provided and how the S-100 was a significant part of the e-Navigation.

NAVAREA II gave a further presentation to the WWNWS 6 on the development and current state of progress for the development of the S-124 Product Specification; particular focus was on:

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

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

The ToRs for the S-124 CG were reviewed and agreed

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

A representative from Inmarsat introduced and presented his paper. 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.

## **Iridium Satellite System Presentation**

Iridium gave a detailed presentation on the application for Iridium to become a recognized mobile satellite GMDSS service provider. The presentation generated considerable debate and numerous questions.

## **Outcome of the 93<sup>rd</sup> and 94<sup>th</sup> Sessions of the IMO's Committee on Maritime Safety (MSC 93 and MSC 94) May and November 2014**

The WWNWS-SC reviewed the matters considered and decisions taken during MSC 93 and MSC 94. The MSC noted the approval by the IMO Sub-committee on Navigation, Communications and Search and Rescue at its first session (NCSR 1) of the High-level Review of the Global Maritime Distress and Safety System (GMDSS) and, due to the on-going detailed work, agreed to extend the planned output by an additional year to 2018. The MSC approved MSC.1/Circ.1310/Rev.1, the revised Joint IMO/IHO/WMO Manual on Maritime Safety Information (IHO Publication S-53), which will come into force on 1 January 2016.

The current presentation of the hardcopy version, through the IMO Publications portal, is not considered appropriate for a Joint manual; it is titled Manual on Maritime Safety Information with only the IMO logo on the cover. This has been raised at the DRWG and a request for the IHO and WMO logos to appear on the front cover to acknowledge the contributions made by these organizations, even if the title cannot be changed, feedback has been requested at WNWNS 7. Additionally with the publication of the MSC Circ, the need for the IHO to publish S-53 as a separate publication has been reviewed. Two options are proposed: withdraw S-53 and replace it with the MSC Circ as issued by IMO or take the MSC Circ annex and place the IHO S-53 cover and the present, but up-dated, Preface onto it, thus presentationally maintaining a separate publication. This second option is the preferred option of the Directing Committee and the WNWNS-SC. The tri-lingual status will be maintained as the IMO publishes the MSC Circ in 3 languages, so the IHO will only need to provide the translated cover and the Preface.

It was agreed at MSC 94 that the International Mobile Satellite Organization (IMSO) would undertake the technical assessment and system evaluation of the Iridium mobile satellite system as part of the process for it to be recognised as a mobile-satellite service provider of the GMDSS in accordance with IMO Resolution A.1001(25), as amended, and taking into account the guidance laid down in MSC.1/Circ.1414. The IMSO was directed to convene a Group of Experts and to provide the evaluation report to the NCSR. The IMO Secretariat was instructed to oversee the evaluation process. It was agreed that any additional concerns regarding the use of the Iridium system held by Member States, particularly those not covered by IMO Resolution A.1001(25), as amended, and MSC.1/Circ.1414, should be submitted to NCSR 2 for further consideration.

#### **Outcome of the 1<sup>st</sup> Session of the IMO's Sub-Committee on Navigation, Communications, and Search and Rescue (NCSR 1) July 2014**

The WNWNS-SC reviewed the matters considered, and decisions taken, during NCSR 1. The Sub-Committee considered a proposal submitted by the USA (NCSR 1/12) for the Iridium mobile-satellite system to be considered for recognition in the Global Maritime Distress and Safety System (GMDSS) in accordance with the criteria and guidance of IMO Resolution A.1001(25) and MSC.1/Circ.1414. The NCSR supported the recognition of new satellite service providers as part of the GMDSS, in general.

The NCSR supported the application by Iridium to be evaluated as a GMDSS mobile-satellite service provider and invited the MSC to consider and decide on which independent body should produce a technical and operational assessment and provide a report to the Sub-Committee for evaluation. It was also agreed that the MSC should consider convening a group of experts to participate in the evaluation process and provide technical advice. This should include requesting support from other international organizations, particularly the IHO and the World Meteorological Organization (WMO).

The Sub-Committee considered the elements related to the review and modernization of the GMDSS in the reports from the Joint Working Group between the International Civil Aviation Organization (ICAO) and the IMO and from the Joint Expert Group between the IMO and the International Telecommunication Union (ITU). The NCSR endorsed the draft outline of the detailed review presented by the Correspondence Group (CG). The outline of

the detailed review acknowledged that the on-going work in the IHO and WMO must be taken into account when addressing issues related to Maritime Safety Information.

This review continued at 2<sup>nd</sup> session of NCSR, where it was agreed to re-establish the CG under the coordination of the USA and tasked it to report on further progress to NCSR 3. Additionally the Sub-Committee agreed on the principle to coordinate this work item with the development of e-navigation; however the methodology on how to achieve this was not confirmed.

The Sub-Committee considered the proposed amendments to the Joint IMO/IHO/WMO MSI Manual (IHO Publication S-53 - MSC.1/Circ.1310) submitted by the IHO and the WMO (NCSR 1/15/1/Rev.1). The NCSR endorsed the draft new edition with minor editorial amendments proposed by the Chair of WWNWS-SC. The Sub-Committee instructed the Secretariat to prepare a revised draft MSC Circular on amendments to MSC.1/Circ.1310 for approval by MSC 94.

### **WWNWS CD-ROM**

The WWNWS-SC continues to produce a “WWNWS CD-ROM” as an effective way to keep all members informed on the progress of the work of the Sub-Committee. The CD provides each NAVAREA Co-ordinator with a common platform for the multitude of historical guidance documents, manuals, publications, diagrams, meeting minutes, points of contacts, websites and major initiatives since WWNWS-SC inception, including additional MSI sources from the IHO, IMO and WMO. The Chairman requests that all members review the content of the CD-ROM as it is a standing agenda item for delegates to provide any updates, comments, and additional information they deem worthy for inclusion.

### **Next Meeting**

The seventh meeting of the WWNWS-SC (WWNWS 7) will take place at the IHB in Monaco from 24 to 28 August 2015. All NAVAREA Coordinators and National MSI Coordinators are encouraged to attend the meetings of the WWNWS-SC to broaden their experience and interact with each other.

### **Conclusion**

The interaction between the IHO and WMO that occurred through the collocation of meetings was very beneficial and improved the understanding of issues common to the operation of NAVAREAs and METAREAs. It was agreed that a further collocated meeting should be considered with a target year of 2017. In the meantime, regular discussions between NAVAREA and METAREA Coordinators of the same Area are encouraged to minimize the duplication of effort and maximize the transfer of relevant information.

Member States with responsibilities for the NAVAREA system should:

- Encourage regular attendance at WWNWS-SC meetings;
- Seek or maintain close engagement with National MSI Coordinators within their NAVAREA;
- Establish and maintain liaison with their respective METAREA Coordinator;

- In cooperation with their respective Regional Capacity Building Coordinator, seek to identify coastal States within their NAVAREA in need of support and MSI training;
- Encourage engagement with the GMDSS Modernization CG and, through national delegations to the IMO, raise awareness of progress and impact of e-Navigation on the provision of MSI; and
- Monitor progress of the establishment of contingency plans with adjacent NAVAREAs and encourage regular exercising of plans already established.

### Action requested

The IRCC 7 is invited:

- to take note of the information provided in this report;
- to approve the action proposed for S-53; and
- to take any other action it considers appropriate.

