

REPORT OF THE FOURTEENTH MEETING OF THE WWNWS SUB COMMITTEE (WWNWS14)

**Geneva, Switzerland
12 to 16 September 2022**

NOTE: The Joint meeting between the World Meteorological Organization (WMO) Advisory Group on the Worldwide Met-Ocean Information and Warning Service (WWMIWS) Sub-Committee (AG-WWMIWS-SubC) and the International Hydrographic Organization (IHO) World-Wide Navigational Warning Service Sub-Committee (WWNWS) was held on 12, 13 and 16 September 2022 at WMO Headquarters, Geneva, Switzerland. This meeting brought together the METAREA and NAVAREA communities with 80 participants, mostly in person. Representatives from the International Maritime Organization (IMO), International Mobile Satellite Organization (IMSO) and Satellite Communication companies attended as well. The joint session was chaired by Ms. Justyna Wodziczko (Vice-Chair AG-WWMIWS-SubC, Norway) and Mr. Christopher Janus (Chair WWNWS, United States).

This report is a record of the deliberations of the separate WWNWS14 sessions. It should be read in conjunction with the report of the joint sessions which can be found on the WWNWS14 [web page](#).

For ease of reference, the joint report deals with the following agenda items:

- Outcomes of MSC 105, NCSR 9, and preparation for the IMO.ITU EG 18
- Broadcast Systems and Services: NAVTEX, Report of IMO EGC Coordinating Panel, METAREA and NAVAREA roles and responsibilities in response to natural hazards and emergencies for early warnings at sea—you will find the Task Team on Volcanic Activity and Safety of Marine Navigation established under that agenda item
- Developments in GMDSS: Inmarsat Services update, Iridium Service update, BDMSS technical assessment and recommendations update, BeiDou Message Service System (BDMSS) progress update, NAVDAT progress update
- Review of Guidance Documents and Other Related Documentation: Joint IMO/IHO/WMO Manual on MSI
- IMO Member State Audit Scheme (IMSAS)
- EGC-API Correspondence Group
- Recognition and Implementation Framework for future methods to provide MSI

This report is structured as per the Agenda agreed during the meeting. Agenda items do not necessarily reflect the chronological order in which they were discussed during the meeting.

1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS

The Chair opened WWNWS14 and welcomed participants. He recapped the meeting schedule and how this would fit around the joint agenda items with WWMIWS.

.1 Adoption of the Agenda

The Agenda was presented and adopted

Decision 1. Agenda adopted

.2 Review of Action Items from WWNWS13

The secretary led the review of action from WWNWS13

.3 Report from IRCC14 - Report

The Chair gave a summary of the report delivered to IRCC14 and associated outcomes. He went through dates of previous meetings and the key outputs and went through the SPIs related to MSI. He recapped that the goal by 2026 is that 90% of coastal states are MSI capable. He gave an update on the Joint MSI manual and the progress that was reported including the target dates for delivering to NCSR for approval. He noted that the IRCC had been informed the 20th meeting of the WWNWS Document Review Working Group agreed that IMO Resolution MSC.305(87) is no longer required through the success of the maritime safety and security coordination in that region of the world and that this would be communicated to IMO. He raised the issue of Iridium SafetyCast Implementation noting Iridium's offer to postpone charging until the cost issue is resolved. On capacity building, he provided an update by region noting that to date, 121 different courses and 349 total students had been taught. On S-124, he reported to IRCC that Edition 1.0.0 would be submitted to HSSC15 or 16

In response, Chile noted that whilst phase 0 capacity building is important, teaching in the native language is essential.

The issue of C-55 revision was discussed and the UK asked whether C-55 should reference MSI or NAV?

Action 1. Explore how WWNWS engages with C-55 and centralises the metrics it is gathering to minimise duplication of data

Action 2. Provide clarification of availability S-124 training

2 PROMULGATION OF MARITIME SAFETY INFORMATION (MSI)

.1 Self Assessments by NAVAREA Coordinators

Highlights of NAVAREA Self Assessments were given by NAVAREA Coordinators

NAVAREA I – [Self Assessment](#)

NAVAREA I Coordinator delivered his report and requested the group to note the key points.

Key discussion points:

- NAVAREA IV&XII congratulated on creation of the MSI and asked whether NAV warnings were sent out. The answer was yes for the telephony issue but for the email it automatically reverts to the secondary system.
- The Chair noted that the web statistics were very useful in tracking activity.
- The Chair noted the recommendation to provide specific requirements in terms of broadcast data

NAVAREA Ib – [Self Assessment](#)

NAVAREA Ib Coordinator delivered his report and requested the group to note the key points.

Key discussion points:

- Chair asked whether there was difficulty with the 10 min timeslot in terms of making decisions as to when to broadcast and when not to. Reply was that this is an issue and it is difficult to choose what not to broadcast sometimes.
- NAVTEX Panel Chair noted the challenges that NAVAREA1b has with the 10 min timeslot.
- NAVAREA1 asked whether the group should develop means for handling unresponsiveness of national coordinators.
- NAVAREA XIV confirmed that they have the same issue and as a consequence some of their warnings stay in force for significant amounts of time.
- NAVAREAXIX noted that whilst S-124/S-125 will show all of the information (defective AtoNs), a method for coping with the issue of unresponsive national coordinators will still be required as ECDIS screen will become very cluttered

Action 3. Consider whether 10 min timeslot could be extended

NAVAREA II – [Self Assessment](#)

NAVAREA II Coordinator delivered her report and requested the group to note the key points.

Key discussion points:

- NAVAREA XIX asked whether they have any plans for implementing Iridium SafetyCAST. She replied that for SAR they are already working on the contracting and training with this system and the NAVAREA will follow in due course.
- IMO reminded through the chair that during implementation (plan, through trial through to operational) it is important to update in the GMDSS (GISIS) master plan.
- Chair asked for timescale. Timescale couldn't be given but the commitment to do so has been made.
- NAVAREA I asked about the future status of CORSEN NAVTEX station. She replied that the CORSEN station will be replaced by a new NAVTEX Station as soon as possible.
- NAVAREA II provided an update on the Nigerian MSO website.

NAVAREA III – [Self Assessment](#)

NAVAREA III Coordinator delivered their report and requested the group to note the key points.

Key discussion points:

- The number of NAVAREA III warnings for the last three years continue decreasing as this report makes it clear. La Garde NAVTEX station has not been operational since the beginning of 2020, consequently the Italian NAVTEX Service (Center) resends the messages from the La Garde NAVTEX Service to the NAVAREA III Coordinator for broadcast as NAVAREA III warnings through SafetyNET II. He noted that national coordinators that request NAVAREA III to broadcast a navigational warning should only provide information concerning the safety of navigation as stated in IMO Resolution A.706 (17) and not for any other reason. He noted that the Libya NAVTEX Station remains under construction.
- The Chair asked when SafetyCast will become operational. NAVAREA III noted that it was conducting training expected to finish on 31 Dec. It expected to be operational from 1 Jan 2023.
- Malta noted that its NAVTEX station is available to cover the gap in coverage created by the Libyan NAVTEX station

- NAVAREA II wished to recognize the work of NAVAREAIII to cover the long running outage of the La Garde NAVTEX Station.
- NAVAREA Ib asked about the misuse of MSI in the Black and Asov Seas.
- IMO noted the difficult situation and noted that there is no easy solution but that it is up to the rest of the community to decide what measures can be taken.

Action 4. Arrange a dedicated forum for discussing the misuse of MSI for political purposes

NAVAREA IV & XII – [Self Assessment](#)

NAVAREA IV & XII Coordinator delivered their report and requested the group to note the key points.

Key discussion points:

- The NAVAREA IV & XII coordinator noted the support from NAVAREA XVII/XVIII regarding NAVTEX service; NAVAREAS VI, VII, VIII, X, XIV, XV, and XVI for supporting Space Operations; and Fort de France and the Dutch Caribbean Coast Guard for providing national coordinator contact information.
- NAVAREAXIV noted the difficulties with promulgating information related to space MSI, particularly with interpreting unfamiliar formats from a range of sources and asked to collaborate in the future on this.
- NAVAREAXV asked whether there is contingency planning between NAVAREAs.
- Inmarsat confirmed that this is possible subject to agreements – same is true for Iridium.
- It was also noted that remote functionality of the EGC systems negated the need to have inter country contingency arrangements.
- Chair asked whether the French Departments within the NAVAREA IV are likely to follow the lead of NAVAREAII with Iridium implementation.

NAVAREA V – [Self Assessment](#)

NAVAREA V Coordinator delivered their report and requested the group to note the key points.

Key discussion points:

- It was noted that the Brazil MSI Messages Monitoring System is a very important tool to confirm the receipt of the Navigational Warnings throughout the NAVAREA V region.
- The contingency plan with NAVAREA VI ensures that there will be no interruption in the broadcast of navigational warnings within NAVAREA V.
- The Chair asked for an update on NAVAREA V's Iridium SafetyCast implementation plan. It was noted that if assistance with cost is required, then the IMO should be contacted.
- NAVAREAV agreed to contact the IMO for assistance.
- The Chair of the IMO EGC Coordinating Panel noted that they will contact NAVAREAV to provide assistance in the implementation of Iridium.

Action 5 Discuss with NAVAREA V the possibility of requesting assistance with implementation of Iridium SafetyCAST

NAVAREA VI – [Self Assessment](#)

The Chair provided the NAVAREA VI report due to absence and requested the group to note the key points.

Key discussion points:

- NAVAREA VI in-force bulletins are issued weekly on SafetyNET, twice a day every Wednesday at 14.00 UTC and 02.00 UTC. Warnings are broadcast for 42 days. Those older than 42 days are included in the Notices to Mariners which are monthly issued. During this period, NAVAREA VI has kept 6 operational NAVTEX stations for broadcasting warnings on 518 kHz and 490 kHz, each with a 280 NM coverage range.
- No plan for implementing Iridium SafetyCast noted in the report.

Action 6. Contact Argentina for update on plan for implementation of Iridium SafetyCAST.

NAVAREA VII – [Self Assessment](#)

NAVAREA VII Coordinator delivered their report and requested the group to note the key points.

Key discussion points:

- The lack of NAVTEX Stations north of South African borders, namely Angola, Mozambique and Madagascar, is a persistent challenge. The installation of radio communication network equipment, and operator training, are the two most important components that need to be addressed.
- The slow progress and the lack of adequate MSI implementation by States in the Great Rift Valley in the Southern African region remains a persistent matter of concern.
- South Africa continues to assist and cooperate with Iridium SafetyCAST testing within NAVAREA VII, broadcasting both MSI as well as meteorology warnings and broadcasts via the South African Weather Service.
- Despite the challenges of COVID-19, South Africa maintained full operational status, implementing robust internal contingency plans when and where appropriate.
- It was asked whether there have been any plans to migrate SA e-learning material into IHO e-learning platform? It was reported that material has been shared but it is very specific to SA region.
- NAVAREAXV recommended that the elearning course be shared with the Ocean Teacher Global Academy (OTGA) IOC learning platform.
- Chair noted that NAVAREAVII was on the threshold between trial and operational status, and asked whether they would consider themselves operational pending a contract. He noted that the process of getting a contract in place is a diplomatic exercise. The chair suggested that NAVAREAVII could declare themselves operational today and the contract be subject to process. This was confirmed by Iridium. No barrier to declaring operational was presented.

Action 7. Send link to WWNWS-SC Secretary for eLearning material

Action 8. Explore IOC/OTGA eLearning platform and report back to group as to utility

Action 9. NAVAREA VII to declare Iridium SafetyCAST operational status and update GISIS accordingly

NAVAREA VIII – [Self Assessment](#)

NAVAREA VIII Coordinator delivered their report and requested the group to note the key points.

Key discussion points:

- The NAVAREA VIII self-assessment report highlights MSI activities for the period 2021-22. India is actively involved with various IHO committees and working groups.
- Iridium trials are going very well.
- NAVTEX Panel Chair asked for an update on the Kukuta NAVTEX station – Answer was that more information will be coming in due course.
- Chair asked whether there is an expected date for becoming operational with SafetyCAST.
- NAVAREAVIII confirmed that they expect to declare themselves operational as soon as they have approval from the relevant authorities.

NAVAREA IX – [Self Assessment](#)

NAVAREA IX Coordinator delivered their report and requested the group to note the key points.

Key discussion points:

- Coordinator NAVAREA-IX transmits MSI for the 16 countries in the region.
- Navigational Warnings are promulgated via INMARSAT and IRIDIUM with all warnings being included in the Notice to Mariners which is published once per week.
- All in-force warnings and NTMs are regularly posted and monitored on NAVAREA IX website as well.
- NAVAREA IX accesses both service providers via internet and all broadcasts of both systems are monitored. Karachi NAVTEX station is under up gradation and hence Coastal Warnings are also being transmitted via SafetyNET/Safetycast.
- The reception of all the NAVAREA warnings promulgated through SafetyNET/Safetycast and coastal warnings are monitored at NHO through respective terminals at communication centre.

NAVAREA X – [Self Assessment](#)

NAVAREA X Coordinator delivered their report and requested the group to note the key points.

Key discussion points:

- The NAVAREA X Coordinator reported that they are a proactive participant and coordinator of international and regional activities associated with the WWNWS.
- NAVAREA X has maintained regular communication with its National Coordinators.
- IMO asked whether they have any views on their experience of not having any NAVTEX stations at all. NAVAREA X responded by saying it's difficult to comment as Australia's situation is very different from other nations but noted that they augment their EGC satellite services with HF digital selective calling (DSC) and radiotelephone.
- NAVAREA X confirmed that they were on trial since 2020 for SafetyCAST but there remain operational integration issues. There is no timeline but they are investigating solutions to allow them to become fully operational.

NAVAREA XI – [Self Assessment](#)

NAVAREA XI Coordinator delivered their report and requested the group to note the key points.

Key discussion points:

- No significant change from last year was reported. They noted a new NAVTEX station in Thailand and that they have attended the SWPHC19 meeting.
- Chair asked whether they would be able to implement Iridium SafetyCAST sooner than reported. Answer was that delay was due to the requirement to liaise with other national stakeholders.
- They undertook to see whether the date of being operational could be brought forward.
- NAVAREAIV&XII thanked NAVAREA XI for their support given the NAVTEX station in GUAM remains unserviceable.

NAVAREA XIII – [Self Assessment](#)

The Chair gave the NAVAREA XIII report in the absence of the NAVAREA and requested the group to note the key points.

Key discussion points:

- After test broadcasting NAVAREA XIII is ready to use SafetyCast system. Further progress depends on the actions of the national authorized body under Ministry of Transport. There are no significant changes since NAVAREA XIII report to WWNWS13.

Action 10. Check IHO website for link to new XIII Nav warnings website

NAVAREA XIV – [Self Assessment](#)

NAVAREA XIV Coordinator delivered their report and requested the group to note the key points.

Key discussion points:

- The NAVAREA XIV self-assessment report highlights MSI activities for the period since WWNWS13. New Zealand is actively involved with a number of IMO and IHO Sub-Committees and Working Groups; and capacity building in the SWP region for MSI, charting and hydrography. New Zealand has declared to IMO all GMDSS services (MET, NAV and SAR) “Operational” via all recognized mobile satellite services.
- NAVAREA XIV suggested that the new data usage EGC metrics requested in the NAVAREA Self Assessment were not easy to collect and calculate, even with the guidance the WWNWS provided. He suggested that the WWNWS provide a workshop to explain the process, which would likely contribute to more realistic and accurate results. It was agreed that this could be elaborated on during WWNWS15.
- NAVAREA XIV noted that urgent navigational warnings and the requirement to capture the elapsed time to transmit them were omitted from the WWNWS14 self assessment template.
- Chair clarified that this was a conscious decision as it was difficult to find the justification or use for gathering this information.

- NAVAREAIV&XII informed NAVAREA XIV that he was able to provide a POC for American Samoa, which NAVAREA XIV requested.

NAVAREA XV – [Self Assessment](#)

NAVAREA XV Coordinator delivered their report and requested the group to note the key points.

Key discussion points:

- The Chilean Navy Hydrographic and Oceanographic Service (SHOA) is the NAVAREA XV coordinator and Coordinator of the National Radio Navigational Warning System.
- Likewise, the Chilean Navy Meteorological Service is constituted as Coordinator of METAREA XV.
- .
- Notice to Mariners and Coastal Warnings are prepared by SHOA and transmitted daily by the Valparaiso NAVTEX Station (CBV) at scheduled broadcast times. If this system fails, SHOA can provide this same information via any of its other 5 NAVTEX stations.
- Chair asked whether it is difficult to coordinate with adjacent NAVTEX stations if you have to send out a VITAL warning where the time slots are not coterminous – answer was that it takes priority and interrupts the scheduled broadcasts.

Action 11. Check IHO website for status of Iridium SafetyCAST implementation and update to state Operational if required

NAVAREA XVI – Self Assessment

No report for NAVAREA XVI was received

NAVAREA XVII & XVIII – [Self Assessment](#)

NAVAREA XVII & XVIII Coordinator delivered their report and requested the group to note the key points.

Key discussion points:

- Canada declared Iridium SafetyCast operational on 1 May 2022.
- Noted one technical issue with the NAVAREA warning website due to webstie security requireemnts. It was quickly fixed once realized .
- Noted they are looking forward to testing the NAVAREA module in their Navigational Warning Issuing System (NIS) and providing training the late 2022 working towards operational status early in 2023.

NAVAREA XIX – [Self Assessment](#)

NAVAREA XIX Coordinator delivered their report and requested the group to note the key points.

Key discussion points:

- NAVAREA XIX is fully operational on Inmarsat SafetyNET II and Iridium SafetyCast.
- There are no significant changes since the previous report to WWNWS13.

Action 12. Provide an updated coastal state list for each NAVAREA to ensure it represents the current state of coordinators in each NAVAREA.

NAVAREA XX & XXI – Self Assessment

No report for NAVAREA XX & XXI was received

National Report – China - [Report](#)

China provided an update on activity since WWNWS13. The national Coordinator introduced the self –Assessment Report and noted that there were no significant changes from the previous report.

China gave an update on the translation of S-53 to Chinese.

Action 13. Upload translated version of S-53 to IHO Website

China demonstrated their MSI Visualisation tool.

.1 S-124 progress report

Eivind Mong (EM) gave an update of the work of the PT. He recapped what a product specification consists of. He included the core components but explained there are other optional components but these are not expected in Ed.1.0.0. He reported on the work undertaken finalise work on the NAVWARN types and subsequent submission to the GI registry. This took longer than expected but the submissions to the data dictionary register are now finalized. Work can now start on the creation of the feature catalogue. He recapped on the softlist and some of the assumptions that had been made in its creation. He noted that this has been uploaded to the webpage as an annex and noted the status of S-100 Ed. 5.0.0 being in the process of Member State approval. The consequence of this is that S-124 must comply with S-100 Ed. 5.0.0. The feature catalogue should be built using the S-100 Feature Catalogue builder. His best estimate was that S-124 can be submitted to HSSC for approval in February 2023. He did note that WWNWS-SC endorsement is required before any submission.

He gave an overview of SECOM. It was defined by IEC 63173-2:2022. It was discussed at NCSR9 and confirmed for further discussion at NCSR10. It is unclear if NCSR10 will improve SECOM in the ECDIS Performance Standard. He invited WWNWS14 to endorse SECOM as the primary data link to transmit S-124.

In summary, it was recommended that WWNWS- SC endorse S-124PT work on S-124, recognizing that both the Chair and Vice Chair of WWNWS-SC are members of the PT, and permit S-124 PT to submit S-124 to HSSC for approval to release as Edition1.0.0 when S-124PT consider the Product Specification documents are ready.

A number of questions were raised regarding whether S-124 was sufficiently well developed to be submitted to HSSC for endorsement of Ed1.0.0. It was clearly explained that the purpose of ed1.0.0 was to allow further testing so many of the questions posed cannot be answered or resolved until ed1.0.0 is in force.

A question was posed about whether the WWNWS-SC had sufficient expertise to endorse the use of SECOM. Answer was that the SC would have to trust the work

of the experts who are making the recommendation. It was also clarified that currently this is the only option with sufficient bandwidth, and is equipment agnostic, that can transmit S-124.

It was noted that S-124 provided under an IP system would not fall under the banner of SOLAS MSI as it is not broadcast. However, it was also noted that SOLAS and the GMDSS are written based upon the technology of the time. Therefore, in order to progress this method of dissemination, S-124 must have the opportunity to prove its worth. Regulation may/will come later. It was reiterated that it was impossible to move on without approval of Ed 1.0.0, as this was the testing phase.

Decision 2. SECOM Endorsed by WWNWS as the primary data link to transmit S-124

Decision 3. Approval given for the S-124 PT to decide when S-124 Ed1.0.0 is ready to submit to HSSC with de-facto endorsement from the WWNWS-SC

NAVAREA IV&XII gave an update on S-53 to S-124 conversion. He gave a quick overview of the draft S-124 encoding guide as an orientation. He covered S-124 Domain Model, NAVWARN Premable, NAVWARN Part, Spatial Attributes, References, Text Placement, S-124 Metadata and next steps.

.2 EGC-API CG report - [Report](#)

The EGC-API Chair gave an update on the work of the correspondence group. He noted that WWNWS13 endorsed the API proposed in WWNWS13-3-4-4 and reported progress on its development to NCSR 9. NCSR 9 considered a proposal to invite WWNWS-SC to include SAR related information (shore-to-ship) and distress communication (ship-to-shore) within scope of the API. He proposed that WWNWS14 re-establish a correspondence group to continue development of an API to enable machine-to-machine transfer of (shore to-ship) MSI and SAR-related information between information provider and RMSS providers for promulgation by EGC.

Decision X. Approval given for the re-establishment of a correspondence group to report to the next session of WWNWS.

.3 Security of Navigation Stabilisation, Advice and Training (SONSAT) - [Report](#)

Michael White (MW) gave an update and how to enhance collaboration for mutual aims. He noted that the aim of SONSAT is restore Freedom of Navigation where it has been disrupted. The concept of operation is the Navigation information cycle – which is directed, collected, processed and disseminated. He gave a brief on what SONSAT does day to day, including internal UKHO support. He reiterated the groups went through the intended outcomes including safety of navigation, economic development, security and defence and environmental protection. He noted the guidance instruments that they operate under being UNCLOS, SOLAS, Hague Convention 1907, San Remo Agreement, SUA Treaty, A.705(17), 706(17) and S.53.

He gave a number of examples of declassified information being made available to civilian authorities and how this results in action. A question was asked as to how to bridge the gap between classified and declassified information. The answer given was that the responsibility of the military is that even in times of conflict

they are required under international law to make the civilian authorities aware of potential dangers to navigation. He clarified that the Allied Worldwide Navigational Information System (AWNIS), as a tool to facilitate this doctrine, sits within the military command structure.

3 REVIEW OF GUIDANCE DOCUMENTS AND OTHER RELATED DOCUMENTATION

.1 Document Review Status Report – [DR Spreadsheet](#)

The chair led the group through the status of the documents and publications for which they are responsible. He highlighted key upcoming deadlines and the phasing of approval either through IMO and/or IHO parent bodies.

.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 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))

The Chair recapped the content of MSC.305(87) and noted that it was largely superfluous and could be rescinded. The mechanism for doing this was discussed and it was agreed that the cancellation of the resolution would be suggested to NCSR10 together with submission of the MSI Manual.

.4 Joint IMO/IHO/WMO Manual on MSI (MSC.1/Circ.1310) and IHO Publication S-53

The joint IMO/IHO/WMO Manual on MSI was reviewed in detail. The session was led by the Chair and the Deputy NAVAREA IV/XII Coordinator, Timothy Stacy (TS). A recap of work undertaken to date was given and an orientation of the clean and redline versions were provided. It was noted by the Chair that at this stage, the final changes were being presented as a summary of what has already been agreed via the drafting team, and that only significant issues should be tabled. It was noted that any changes or other adjustments to the document made in this session would be recorded in the redline version of the document. It was noted that the intent was to finish this final review and to submit to NCSR10.

During deliberations, it was suggested that references to IMSO would be removed. In response to this, IMSO made the following statement and requested it be maintained verbatim as a record in the meeting report.

IMSO Statement:

Mr. Chair,

Following Tuesday’s discussion on the revision of the Joint IMO/IHO/WMO Manual on MSI, IMSO notes the decision of the meeting not to retain a reference to IMSO in the revised MSI manual.

However, we would like to reiterate that IMSO is responsible for ensuring that the requirements for the broadcast of MSI and SAR related information through the EGC systems of recognized mobile satellite service providers are being followed.

Our proposal was intended to provide a means by which IMSO could receive independent information to perform its oversight role effectively.

Our intention is not to restrict others from receiving essential and timely information but to enhance the role that IMSO can play in the oversight of recognised service providers.

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

The Chair introduced the IHO Publication C-55, its purpose and its current status. He noted that there is currently a team that is reviewing C-55 and that this is relevant to WWNWS as there is a dedicated section on MSI. The Secretary noted that this was important as it was the principle reference document that would be used for MS IMSAS audits, primarily with regard to status of hydrographic surveying in waters under national jurisdiction, but also for MSI provision. Further, he noted that consideration should be given to harmonising the way information is gathered through the self-assessment process and presented in C-55. The Chair undertook to liaise with the C-55 team to agree a way forward and the scope of WWNWS involvement.

Action 14. Chair to liaise with C-55 project team

- .6 Terms of Reference for the WWNWS Sub Committee (IHO Circular Letter 46/2009)

The Secretary introduced the ToRs and noted that no suggested changes had been received. It was agreed that the ToRs were confirmed as up to date and in force.

4 NEXT MEETING

- .1 Dates and venue for WWNWS15

It was agreed that WWNWS15 would be held week commencing the 4th September 2023 in Monaco.

- .2 Draft Agenda for WWNWS15

It was agreed that the Agenda for WWNWS15 would be circulated in due course, however the following items would be considered:

- Interaction/operational considerations for BDMSS

5 Review of Action Items from WWNWS14

The action items of the meeting were reviewed and agreed.

6 ANY OTHER BUSINESS

- .1 National Platform for Nautical Information (PING) presentation. [Presentation](#)

NAVAREA II gave an overview of the project. It was explained that the intent was the creation of a national platform for nautical information. The platform has three functional modules:

- Navigational warnings: production and delivery of navigational warnings
- Transmission of source information: way for the stakeholders (maritime services and users) to contribute to the nautical information

- Geo-regulation: delivery of geo-maritime regulation produced by French authorities

An overview of each of the modules was given. PING exists under the EU MED OSMoSIS Project which has been designed as a pilot study. Examples of the interoperability between different GIS systems were given and it was noted this has largely been successful.

Project conclusions where:

- NW production tools using S-124 data model
- Easy production in S-124 despite few ergonomics improvements and other good suggestions to be implemented into PING
- Significant advantage in order to promote and generalize the production of S-124 NW in a revolutionary way for the greatest benefit of the users
- S-124 data delivery using representational State Transfer (REST) API or files deposit
- WFS delivery: efficient, user-friendly, and requires minor effort to integrate into most GIS that natively import WFS layers. However, Web Feature Service (WFS) integration not always straightforward with some GIS software. Solution suggested was to go to WFS basic versions and Web Mapping Service (WMS).
- WFS Protocol not compliant with S-124 nor S-100 and there is a need for S-124 data to be transformed, making Navigational warnings difficult to understand in some instances.

In terms of ongoing activity included development of the transmission of source information module, including machine to machine interface (REST APIs) with the AtoN management system of the French AtoN administration, development of the Geo-regulation module. The next steps are:

- PING to be consolidated with S-124 ed. once published
- New SECOM standard (IEC 63173-2) to be considered
- Hosting of the platform with an availability higher than 99,9%
- PING to be deployed operationally in 2023 in mainland France, then in French overseas territories
- PING is planned to be available in open source

.2 National Navigational Warning (NAVWARN) Issuing System (NIS) demonstration. [Presentation](#)

NAVAREA XVII&XVIII gave an overview of the NIS. It was noted that the full presentation is available on the website. A demonstration of how to use the system was given which showed the user interface and key features. There were questions regarding stability/redundancy of internet and its dependency on this. It was noted that as more of these systems get developed, interoperability will become key and eventually consideration should be given to a global system.

.3 Source Maritime Automated Processing System (S-MAPS) navigation warning demonstration. [Presentation](#)

Due to time limitations, this paper was not given and will be deferred until WWNWS15. However, the paper is available of the WWNWS14 web page.

.4 Galileo Testing - Presentation

The Chair recapped a presentation on what would happen in the event of a GALILEO/EGNOS outages including key time frames, tech processes and sample alert

messages. He went through the proposed testing process and dates/timings. He noted that WWNWS13 had agreed to support this process. EUSPA clarified that the test will only be for Galileo. To clarify, The European Geostationary Navigation Overlay Service (EGNOS) is Europe's regional satellite-based augmentation system (SBAS) that is used to improve the performance of global navigation satellite systems (GNSSs), such as GPS and Galileo. It was committed to provide a brief technical note with the details of the test cases for the NAVAREA coordinators to be informed. Galileo is intended primarily for civilian use. The European system will only be subject to shutdown in extreme circumstances.. The email address is: userservices@gsc-europa.eu.

Decision 4. NAVAREAs I, Ib, II, III, IV, X, XI, XIV, XV, XVII & XVIII, XIX will participate in Galileo Testing

7 CLOSURE OF THE MEETING