# Report of the WWMIWS-1 meeting

## Executive Summary

The first meeting of the WMO Worldwide Met-Ocean Information and Warning Service Committee (WWMIWS) was conducted between 27 and 31 August 2018 at the offices of the International Hydrographic Organization (IHO) in Monaco. This meeting was held in parallel with the IHO Sub-Committee for the World-wide Navigational Warning Service WWNWS, so that further progress could be made in developing the liaison and coordination between NAVAREA and METAREA Coordinators.

The WWMIWS Committee endorsed the following priorities for submission to WMO Congress (2019):

* The Committee agreed that a cost sharing model should be proposed to WMO Congress in relation to the cost to broadcast EGC bulletins on satellite, in recognition of the new requirement to broadcast on multiple satellite systems.
* Develop a model training course and proposal to WMO Congress to support Members in implementing the Guide to Marine Meteorological Services (WMO No.471).
* Establish a network of new marine-related RSMC’s categories to further support and enhance marine service delivery.
* Develop a competency framework for METAREA Coordinators.

The WWMIWS Committee agreed to prioritise the following items on its workplan:

* The Committee agreed to highlight the challenge and dangers of small scale weather features and communication of danger to non-SOLAS vessels.
* The Committee agreed to prioritise the workplan item to improve education material about the WWMIWS, and promote and distribute this information to maritime users.
* The Committee agreed to reinforce the need for greater consistency of bulletins and terminologies.
* The Committee agreed to finalise the skills development matrix to present to the JCOMM Capacity Development officer to incorporate into the capacity development workplan.
* The Committee agreed to the strong recommendation for WMO to facilitate a Spanish and French version for the METAREA Coordinator Operations Handbook as priority, and Chinese and Russian versions as secondary priority.

## Next WWMIWS Committee meeting

The Committee noted the support from WMO and the endorsement by IHO and IMO to conduct a WWMIWS and WWNWS joint meeting in 2020.

The D/WDS agreed to provide MMOP with additional budget to support the joint meeting.

## Full report

### Scene setting overview

A joint meeting between the WWMIWS Committee and WWNWS Sub-Committee heard updates from the relevant organizations involved in the Global Maritime Distress and Safety System (GMDSS), including the International Maritime Organization, International Maritime Satellite Organization, Inmarsat, Iridium, International SafetyNET Coordination Panel, and International NAVTEX Panel. The meeting discussed implementation aspects and issues related to the introduction of multiple satellite providers within the GMDSS.

Following the joint meeting, the 1st meeting of the WWMWIS Committee was focused on service delivery and quality management best practices. METAREA Coordinators provided updates on their implementation progress and challenges, and the Committee discussed operational issues related to the provision of WWMIWS bulletins and issuing them on the GMDSS. A key outcome was the update of the IMO Resolution A.1051 for the WWMIWS.

The Chair highlighted that 8 females represented the METAREA Coordinators. There are currently 2 females represented in the NAVAREA Coordinators.

The Committee heard that the Manual on Marine Meteorological Services (WMO No.558) and Guide to Marine Meteorological Services (WMO No.471) had been finalised by the WMO Publications Unit. The Committee held a discussion about not forgetting about education and promotion to ensure mariners are able to use our services effectively and make decisions that benefit their safety and economy.

## METAREA Coordinator Operations Handbook

The Committee reviewed the draft Operations Handbook for METAREA Coordinators, following the development by the working group. The Committee decided that the following amendments are required before submitting a version 1.0 to WMO publications unit.

The Committee decided to include three new chapters on reporting NAVTEX issues, and list of topics to discuss with NAVAREA Coordinators, and ongoing coordination of the WWMIWS Committee and workplan.

* Develop list of acronyms
* Change WWMWIS Committee in partnership landscape diagram
* Add A.705 to diagram in Chapter 3
* Polar Code – add reference to sea-ice products
* IMO will assist to check the list of IMO resolutions and circulars in chapter 4
* Consider a minimum time requirement for advising WMO of changes to the METAREA Coordinator. Recommend 6 months.
* Confirm EGC terminology
* Add SafetyNET II option to backup section 3.
* Action: Add an escalation process in the METAREA Coordinator Operations Handbook for issues related to sending SafetyNET bulletins.
  + gmdss@imso.org
  + [maritime.safety@inmarsat.com](mailto:maritime.safety@inmarsat.com)

The Committee agreed to the strong recommendation for WMO to facilitate a Spanish and French version for the METAREA Coordinator Operations Handbook as priority, and Chinese and Russian versions as secondary priority.

## WMO No.9, Volume D

The Committee discussed the format of the details presented for METAREA Coordinator contacts.

* Keep email address – recommend that each METAREA develops a generic email alias for their organisation.
* Keep consistent with IHO details

The Committee agreed to investigate whether all members can setup a generic email address before changing the details in WMO No.9, Volume D.

## Summary from METAREA presentations

* The Committee agreed that a cost sharing model should be proposed to WMO Congress in relation to the cost to broadcast EGC bulletins on satellite, in recognition of the new requirement to broadcast on multiple satellite systems.
* The Committee agreed to highlight the challenge and dangers of small scale weather features and communication of danger to non-SOLAS vessels.
* The Committee agreed to prioritise the workplan item to improve education material about the WWMIWS, and promote and distribute this information to maritime users.
* The Committee endorsed the proposal to establish a network of new marine-related RSMC’s categories to further support and enhance marine service delivery.
* Develop a competency framework for METAREA Coordinators.
* The Committee agreed to invite Helge to provide an update on the Autotext project at a future video meeting in early 2019.
* The Committee agreed to review forecast areas (size) and assessment on suitability to mariner requirements and forecasting capabilities.
* The Committee agreed to reinforce the need for greater consistency of bulletins and terminologies.
* Elke to lead development of national report template for future meetings [Add to WWMIWS workplan]

## Iridium

The Committee highlighted the need to agree to system metadata formats well in advance so that technical specifications can be planned.

The Committee agreed to outline its requirements for reporting the performance of messages sent on Iridium.

The Committee agreed to continue discussions with Iridium on most suitable way to address messages to the Arctic Ocean (covering multiple METAREAs, or using a rectangular address, or a circular address centred on the pole).

The Committee agreed that an internet webpage for monitoring and backup purposes is suitable.

Action: Iridium to provide an email address and ftp address for WMO METAREA Coordinators to provide start sending messages into for testing.

## Inmarsat

The Committee agreed to prioritise focus on the I3-I4 transition during the remainder of 2018 for phase 3 and phase 4, and to work with countries that require changes to the broadcast arrangements.

The Committee agreed to continue to support the development of specifications for the machine to machine transfer protocol to Inmarsat.

There was discussion about using rectangular addressing to overcome the need to send to two satellites. WWMIWS Chair to confirm situations where countries need to send to two satellite footprints.

At end of phase 4, potentially only India and New Zealand are the main countries that must send to two satellites because their region is now not under a single footprint.

## S-412 update

The Committee heard that:

* Version 4 has functionality for streaming data, and drawing GML
* 90% completion of S-412 application schema
* 75% of the GML schema
* 43 features, 51 complex attributes

The Committee noted the need to reach consensus on some aspects of the weather portrayal catalogue.

The Committee discussed two options to progress further. Continue on an all-inclusive specification, or move to a modal specification. The Committee noted that further discussions were required before a final decision.

The Committee noted that S-412 consideration on presentation and combining overlays with the planned work for S-411 by ETSI.

## IMO update

The IMO provided an overview of the SOLAS convention and applicability to meteorological services. The IMO also provided an overview of the relevant governance structures related to maritime safety. The Committee heard about the various procedural and formatting rules for updating the IMO Resolution A.1051 relating to the WWMIWS.

The Committee noted that current GMDSS regulations require ships to receive information via text. The Committee heard that IMO Member States have the ability to bring forward proposals to update the regulations and agreed to.

The Committee heard that the IMO Member State Audit Scheme will provide observations back to the Member State to address any gaps with complying with SOLAS regulations. It is up to the Member States to decide on what action to take.

## IMO A.1051 review

The Committee noted the work of the working group in formulating the text update to the IMO Resolution A.1051.

The Committee reviewed the proposed amendments to the document, and received guidance from IMO in relation to formatting, definitions and procedural requirements.

The Committee agreed to further review the final changes via email, and finalise the changes for submission to the 6th meeting of the IMO Sub-Committee on Navigation, Communication, Search and Rescue in 2019. The deadline for submission is 16 October 2018.

## WWMIWS web portal

The Committee noted the development work conducted by Meteo-France to develop the mockup of the website. The Committee heard an overview of the new website concept by Meteo-France.

The Committee updated the specifications to support the website development.

## GDPFS Manual

The Committee reviewed the content for RSMCs relevant to the delivery of marine services, including wave model centres, ocean model centres, tropical cyclones.

The Committee supported the proposal to introduce new RSMC designations for regional wave model centres, and preparation services for the GMDSS.

The Committee recommended the following changes to existing centres:

Wave model centres

* Propose change to spatial resolution from 0.5 degrees to 0.2 degrees.
* Wave verification – add a metric for reliability percentage within 0.5 metres.

Marine Safety Services

* Add a section on Mandatory Products (aligned with IMO A.1051)

## Marine Competency and training priorities

The Committee reviewed the Marine Competency Framework and the plans and responsibilities of the Task Team to assist implementation of marine competencies globally.

The Committee scoped out a skills development priority matrix for developing skills for METAREA Coordinators and Marine Forecasters. The matrix outlined the priorities for training, meetings/experiential learning, and equipment requirements.

The Committee agreed to finalise the skills development matrix to present to the JCOMM Capacity Development officer to incorporate into the capacity development workplan.

## Next meeting

The Committee noted the support from WMO and the endorsement by IHO and IMO to conduct a WWMIWS and WWNWS joint meeting in 2020.

The D/WDS agreed to provide MMOP with additional budget to support the joint meeting.