

**WMO Liaison Report**  
Submitted by WMO

**SUMMARY**

**Exec Summary:**

This document provides a brief report on the activities of the World Meteorological Organization (WMO) since WWNWS-8, mainly enacted through the work of the Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM) in providing marine weather information for the GMDSS, and focusing on improving the resilience and reliability of the WWMIWS.

Significant work has been undertaken to review the user requirements and subsequent service standards that are documented in the WMO Manual and Guide on Marine Meteorological Services WMO-558/471.

**Action to be taken:**

- 1) Note and comment on the information provided
- 2) Provide recommendations and suggestions as appropriate

**1. WMO Executive Council - 69th Session**

The 69<sup>th</sup> session of the WMO Executive Council (EC) was held in Geneva, Switzerland, from 10 to 17 May 2017. One information document was submitted: Meteorological Services for Marine Operations (attached), on the main activities in relation with the Marine Meteorology and Oceanography programme. The full report of the EC is available from the WMO website: [https://library.wmo.int/opac/doc\\_num.php?explnum\\_id=3645](https://library.wmo.int/opac/doc_num.php?explnum_id=3645)

**2. WMMWIS**

**ETMSS-5 meeting, (Helsinki, 28 February to 3 March 2017)**

A meeting of the Expert Team on Maritime Safety Services was held in Helsinki in February 2017. It involved 10 of 16 METAREA Coordinators and representatives from IHO, IMO, IUMI, IMSO and satellite service providers. Information of the meeting, including the agreed list of actions, is available on JCOMM website: [http://www.jcomm.info/index.php?option=com\\_oe&task=viewEventDocs&eventID=1951](http://www.jcomm.info/index.php?option=com_oe&task=viewEventDocs&eventID=1951)

The **Priority** themes (under four service components) for the next period include:

**1. Know your customer:**

- Enhanced customer engagement with industry through partnerships eg, Ports, IUMI, Cruise Industry;
- Setting service standards for IMO Audit team to assess the WWMIWS component in each country.

**2. Know your product:**

- Assess capability and user requirements for risk based services (probability e.g. 30% change of gale winds, hazardous phenomena, climate change, implementation);
- Standard specification (S-412)

**3. Service Delivery:**

- Implementation of marine competencies (monitored through Coordinator self-assessments).

**4. Overall Sustainability of WMMWIS, through:**

- Establishing focal points for National Marine Services in each WMO Member State;

- Enabling the WMO Global Data Processing and Forecasting System (GDPFS) for best efficiency of maritime safety services;
- Capacity development/training to assist delivery in countries where there is a lack of maritime safety services;
- Developing guidelines for verification and performance reporting;
- Increasing the frequency of Manual revisions and communications on WMMIWS activities.

### **Resilience activities in support of the WMMIWS**

The list of METAREA Coordinators is regularly updated and maintained on a dedicated webpage:

[http://www.jcomm.info/index.php?option=com\\_oe&task=viewGroupRecord&groupID=144](http://www.jcomm.info/index.php?option=com_oe&task=viewGroupRecord&groupID=144)

The ETMSS Chair, at the ETMSS-5 (February 2017), requested the WMMIWS Coordinators to improve relationships and interactions with NavArea Coordinators. This aspect is being monitored in the self-assessment reports to emphasize the importance of this interaction.

A regular video coordination meeting has been established between WMO and METAREA Coordinators. The aim of the video meetings is to enhance the importance of the MetArea Coordinator role, and to share information between members. The video meetings are attended by all Coordinators except New Zealand due to time zone difference. In recognition of this time zone difficulty, an Asia-Pacific video coordination meeting is held to develop relationships and focus on this area of the WMMIWS. Industry representatives have been invited to the meetings with Inmarsat providing a brief on SafetyNET2, and the US Coast Guard providing an update on S-412 specifications.

### **Update of WMMIWS documentation**

#### *Review of WMO 558/471 – Manual on Marine Meteorological Services*

Work has been completed for the review and update of the *Manual on Marine Meteorological Services* (WMO-No. 558), and the *Guide on Marine Meteorological Services* (WMO-No. 471). The Manual contains the regulated service standards for marine products and the standards for High Seas forecasts, Ocean Wind Warnings and Sea-ice products have been reviewed against the latest user requirements. The Guide has been significantly revised and now contains all the user requirements for marine services, covering industry needs, element based requirements, and dissemination considerations. The documents are being prepared for submission to the *5th session of the WMO/IOC Joint Technical Commission on Oceanography and Marine Meteorology* (JCOMM-5) in November 2017.

#### *Development of an Operations Manual for METAREA Coordinators*

An Operations Manual has been finalized in July 2017 to improve the consistency of practices between METAREA Coordinators. The Operations Manual will also improve WMO's ability to maintain corporate knowledge which is a key requirement of the WMO Quality Management Framework for Marine Meteorological Services.

The Operations Manual collates the key information on the operations of the WMMIWS and tasks required by a METAREA Coordinator such as Backup guidelines for WMMIWS production and dissemination systems, key documents and overview of the WMMIWS and GMDSS, and how to request changes to WMO 9, Vol D, Information for Shipping.

### **S-412 Specifications**

At ETMSS-5 an update was provided, including highlights and challenges, and future developments. ETMSS experts has been working with other working group owners, and has identified that some features be removed from the initial S-412 catalogue to prevent redundancy within various S modes. Many new features have been added to S-412. Recent progress includes establishment of a relationship with Korea to develop a test bed to demonstrate the overlays. Vector portrayal (wind, swell, current) is also a challenge with various symbols globally. There is an issue when data crosses the international dateline. ETMSS proposed to convey to the S-100 Working Group meeting, the necessity for a seamless transition of data across the

International Dateline, if possible. A Universal Set of Colour Ramps within S-100 was also discussed. This is a feature that the S-412 should also use.

### **Maintenance of the WWMIWS website and planned improvements**

The WWMIWS website (<http://weather.gmdss.org>), hosted by MeteoFrance, underwent a re-branding in May 2017. A number of explanatory pages were updated to reflect the latest descriptions of the WWMIWS and GMDSS, and to remove duplicate content available on other authoritative organization websites.

Further improvements are planned for the next 12 months. These include:

- Standardization of product descriptions
- A new web server and URL structure
- Improved search engine optimisation
- Ability to designate dedicated URL's for each METAREA

### **Engagement with MSI satellite providers**

WWMIWS have engaged with the two MSI satellite providers to reinforce requirements for meteorological MSI broadcasts. WWMIWS have provided requirements to Inmarsat for automated delivery of meteorological products to Inmarsat's servers. An audit of delivery arrangements has been conducted to identify two key delivery methods. WWMIWS have also maintained a conversation with Iridium and are in the process of identifying a country to participate in live trials of Iridium broadcasts at some point in the future.

### **Enhancements to the METAREA network and provision of MSI**

Peru became an Issuing Service for METAREA XVI on 30 June 2017, taking over responsibility from the USA. This achievement followed a period of transition where Peru produced MSI forecasts, and then established the arrangements with an LES to disseminate the forecasts on SafetyNET. A METAREA Coordinator has been designated and this person has attended a number of WWMIWS video meetings over the past year to develop their knowledge and understanding of the WWMIWS and GMDSS.

### **Joint meeting of METAREA & NAVAREA Coordinators**

The ETMSS-5 agreed to support a WWMIWS & WNWWS Coordination meeting in Monaco 2018.

## **3. Other activities of interest for WWMWS**

### **Fifth session of the Joint WMO/IOC Technical Commission on Oceanography and Marine Meteorology (JCOMM-5).**

The fifth session of JCOMM will be held in Denpasar, Bali, Indonesia, from 25 to 29 October 2017. Prior to JCOMM-5 and at the same venue, there will be a Women in Marine Leadership Workshop (21 to 22 October) and a Marine Technical Conference (TECO) with the theme "Toward an Integrated Met-ocean Monitoring, Forecasting and Service System" (23 to 24 October).

It is expected that the Services and Forecasting Systems Programme Area (SFPSA) will be restructured to ensure the compliance with the mandatory obligations of Safety of Life at Sea and the associated Worldwide Met-Ocean Information and Warning Service (WWMIWS), and emerging activities such as marine environmental emergency response, coastal services, and long-standing responsibilities on sea ice and waves. The restructuring also aims to strengthen the interaction with other supporting WMO and IOC Programmes, and activities by other partners (e.g. IMO, IHO).

Several WMO Technical Regulations (revised and/or new) will also be presented for approval by JCOMM, including the WMO 558/471 – Manual/Guide on Marine Meteorological Services.