



World Meteorological Organization

Working together in weather, climate and water

WMO

Marine Meteorology and Oceanography Programme

WWNWS-8, September 2016

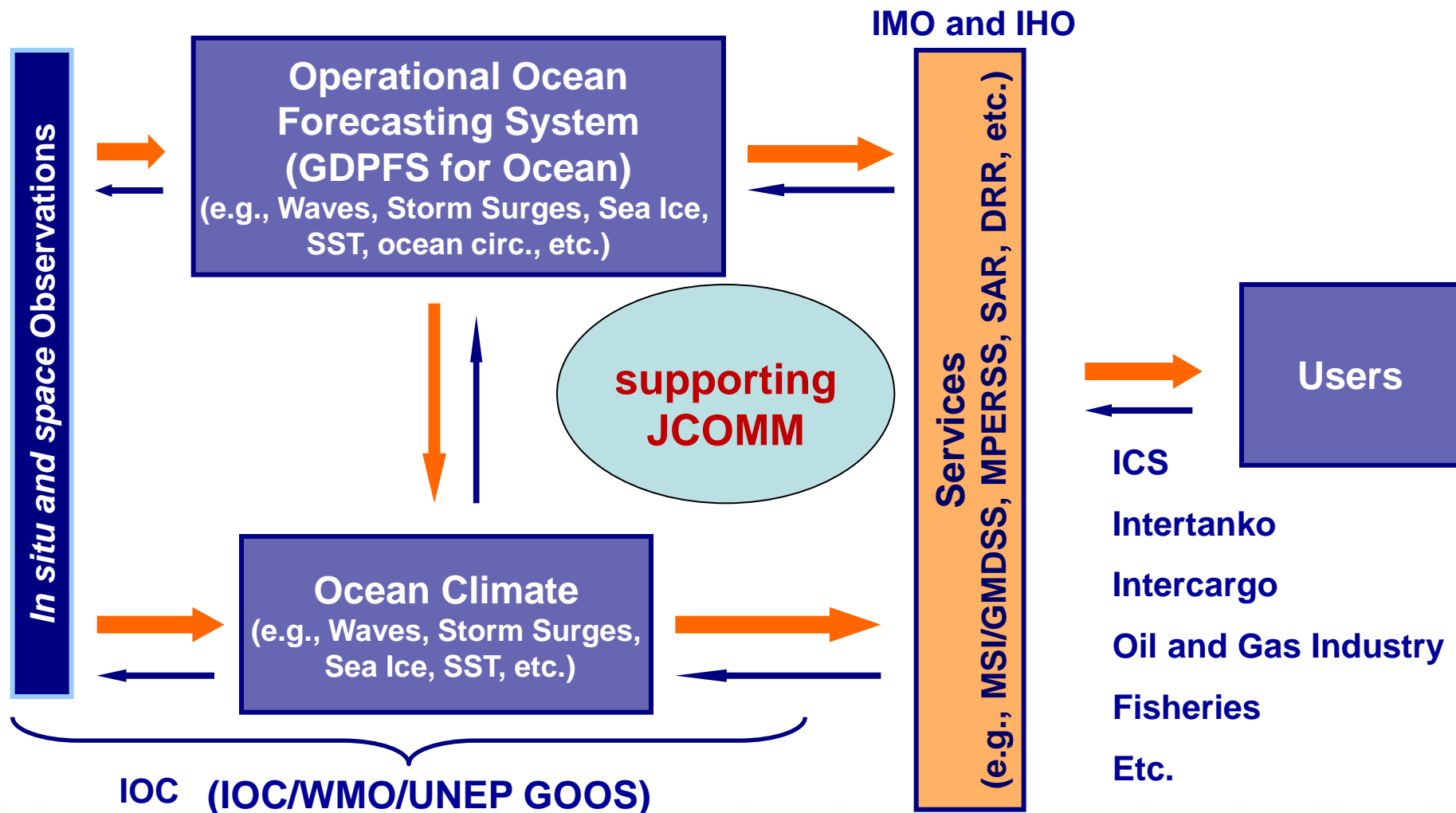


A Key Operational Programme: assisting Members with sustained provision of global & regional coverage of marine observational data, products & services

- Supports Members in addressing the continued & expanding requirements of the maritime user community for met-ocean services and information, focusing on safety of life and property at sea, integrated coastal management & societal impacts.
 - Extensive inter-agency coordination & collaboration required to effectively deliver the MMOP.
 - Supports the Joint WMO-IOC Technical Commission for Oceanography & Marine Meteorology (JCOMM)
 - Cg-17: discussion to raise the profile of marine activities in WMO.
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Marine Meteorology & Oceanography Programme (MMOP)





Highlighted Activities of MMOP

- Implementing IMO-WMO World-Wide Met-Ocean Information & Warnings Service; further development of METAREAS including closer collaboration with NAVAREAS
- Supporting improved ocean analyses and forecasting products, especially for safety at sea.
- Coordinating 4 projects under joint JCOMM-CHy Coastal Inundation Forecasting Demonstration Project (CIFDP); effectively demonstrates the values of the Multi-hazard Early Warning System (MHEWS).
- Developing/delivering capacity development activities and support to regional/national projects (eg West Africa, Mexico)
- Development of quality management and marine competencies.
- Review Manual on Marine Meteorological Services (WMO 558 - 471)





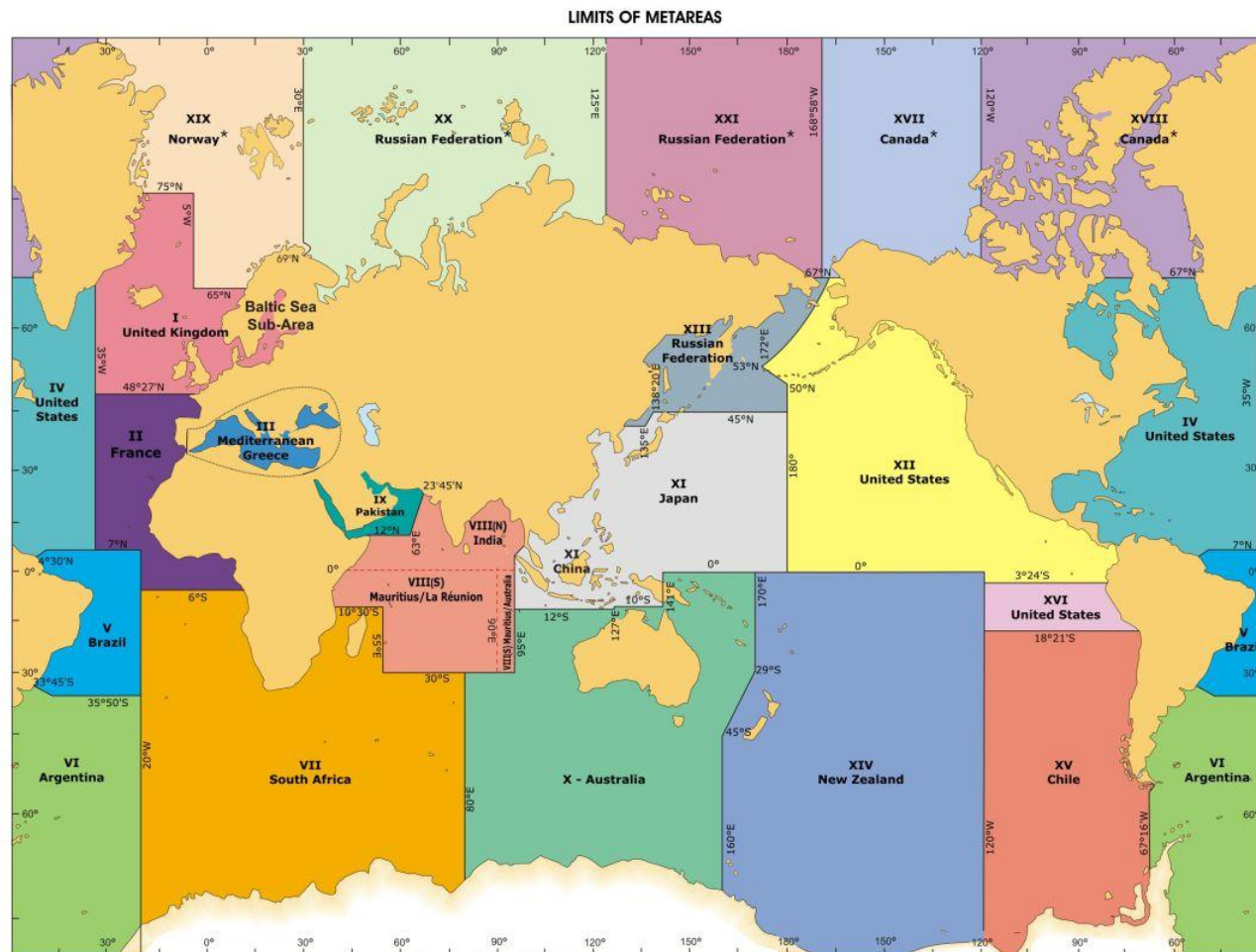
Maritime Safety Information (MSI)

- SOLAS states...
”Contracting Governments are obliged to provide and promulgate meteorological information & warnings to shipping”
- And also...
Forecasts, warnings, synoptic & other meteorological data intended for ships shall be issued and disseminated by NMHS in the best position to serve various coastal & high seas areas, in accordance with mutual arrangements made by Contracting Governments, in particular as defined by WMOs
GMDSS.





MSI: METAREAS



* The GMDSS is under implementation for the Arctic METAREAS and is expected to be fully operational by 2010/11

WMO Metareas align with IMO Navareas



Challenges for Implementation

- Budget constraints
- Partnerships (marine meteorology is cross-cutting)
- Inter-agency coordination (UN-Oceans)
- Inter-departmental coordination



INTERNATIONAL HYDROGRAPHIC ORGANISATION



A Marine Services assessment is underway, to identify strengths, gaps & improvement



WMO activities since WWNWS7

Major outcomes of the 68th Session of the WMO Executive Council

WMO Manual on Marine Meteorological Services (WMO-No.558 & WMO-No.471

Quality Management & Marine Competencies

Joint IMO/WMO/IHO “Secretariat Group

Enhancements to the Metarea network and provision of MSI



WMO activities since WWNWS7

Major outcomes of the 68th Session of the WMO Executive Council

- **The work on marine warnings and forecasts, as enacted through the World-Wide Metocean Information & Warnings Service (WWMIWS) under the auspices of IMO Assembly resolution A.1051(27) and**
 - **the formation of a small group of WMO Members to undertake a Technical Assessment of the Marine Meteorology and Oceanography Programme within WMO. This Group aims to align the work of WMO's Marine Programme with the overall WMO Strategic Plan and the users of the marine outputs, including the GMDSS.**
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WMO activities since WNWNS7

WMO Manual on Marine Meteorological Services (WMO-No.558 & WMO-No.471)

- **The WMO Executive Council at its 65th session (2013) endorsed the proposal by JCOMM to review the overall structure of the WMO-No.558 and WMO-No.471, in view of new structures for those mandatory publications avoiding duplication and/or potential conflict in contents.**
- **Work has continued to review and update, specifically, WMO-No.558 – the Manual on Marine Meteorology, which forms the basis of the meteorological input to the Joint IMO/IHO/WMO Manual on Maritime Safety Information. This has proved to be a complex review, requiring not only updating of the “MSI” information, but also coordination with other WMO regulatory material relating to Port Meteorological Officers (PMO), the Voluntary Observing Ship (VOS) programme; additionally,**



WMO activities since WWNWS7

Quality Management & Marine Competencies

- **As outlined at WWNWS7, a set of competency requirements for marine weather forecasters (MWF) has been developed by JCOMM. Work is now underway to implement these competency standards, alongside Quality Management Frameworks, at offices producing marine weather output. Consideration is also being given to aligning this with the IMO Audit Scheme to provide a comprehensive assurance of the quality of MSI available to the mariner..**



WMO activities since WWNWS7

Joint IMO/WMO/IHO “Secretariat Group”

- **As briefly outlined at WWNWS7, to improve coordination of the content and delivery of MSI, a joint IMO/IHO/WMO “Secretariat Group” was established towards the end of 2015. This group has met twice (generously hosted by IMO at their London headquarters) with the next meeting planned for December 2016 (hosted by WMO in Geneva).**



WMO activities since WWNWS7

Enhancements to the Metarea network and provision of MSI

- **Over the recent period, a number of National Meteorological Services have expressed a wish to become a Preparation or Issuing Service for meteorological aspects of MSI; these include Peru, Qatar and Papua New Guinea.**
 - **After finalising a suitable framework for enabling such expansion to the network, WMO were pleased that, during August 2016, Peru commenced the issue of forecasts for Metarea XVI on a trial basis, for assessment by the JCOMM Expert team on Maritime Safety Services. This trial is scheduled to last until mid-September and, if successful, it is envisaged that Peru will become the formal Issuing Service shortly after, subject to agreement on a date for the transfer of responsibility from the USA.**
 - **Whilst it is apparent that the introduction of Papua New Guinea may take slightly longer, Australia is monitoring the output, again on a trial basis, with a view to advising when it feels that PNG may be ready to undertake a full trial.**
 - **Although at an early stage, work is underway for Qatar to become a Preparation Service for Metarea IX (with Pakistan retaining responsibility as the Issuing Service).**
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