**WIGOS Workshop for Regional Association VI (RA-VI) with Focus on Marine Meteorological and Oceanographic Observing Requirements (Split, Croatia, 5-7 September 2016)**

**PROPOSED WORKSHOP RECOMMENDATIONS**

**(DRAFT/NOT DISCUSSED YET)**

**Group 1 - Observational user requirements and gaps filling**

1. More marine meteorological and oceanographic observations are needed in support of WMO Application Areas and Maritime Safety in particular. Efforts are being made to bringing services of NMHSs and their partner organizations to a common service level. It is critical to collect more data using weather radar, HF radars, moored buoys (incl. wave buoys), voluntary observing ships, profiling floats (Argo), in particular in the Adriatic sea.
2. Regional mechanisms must be put in place to complement the WMO Rolling Review of Requirements and better identify regional observational user requirements and gaps and propose strategy and implementation to address those gaps, in particular through enhanced partnerships. RA-VI is invited to take action in this regard, and initiate a strategy and work plan.
3. RA-VI Members, if not having done so, are urged to nominate national focal points for OSCAR/Surface and national focal points for the monitoring of actions of the EGOS-IP.
4. For storm surge and coastal inundation prediction and services,
5. For storm surge and coastal inundation prediction and services,
	* there is a need to better observe and predict wind (both direction and speed), air pressure, and sea level in particular using well positioned tide gauges where data are needed;
	* flood warnings should be included in meteoalarm;
	* efforts should be made to enhance exchange of tide gauge data between countries and between oceanographic and meteorological institutes/agencies around the Adriatic;
	* there is a need to better understand the causes of the noted forecasting errors and what observations are needed for improving storm surge forecasting; ECMWF and NWP centres should be invited to make impact studies and provide information on the causes of forecasting errors and what observations are needed to minimize them;
	* MedGOOS and MonGOOS are working on storm surge prediction in the Mediterranean Sea whereas ICPSM is concentrating on the city of Venice; there is a need to further develop such activities for the whole Adriatic area;
	* participants of the workshop involved in storm surge prediction are invited to participate in the WMO Coastal Inundation Forecasting Demonstration Project (CIFDP[[1]](#footnote-1));
	* there is a need to improve the legal framework and define responsibilities for implementation of measures for flood protection from the sea.
6. ???

**Group 2 - Data and metadata exchange**

1. The workshop encourages exchange of data in real-time, near real time and delayed mode between all actors in the region and above all sub-region, in particular where gaps exist. The workshop noted that working with governments, there is a process to increasingly make NMHSs data openly available. Efforts should be made at the national level while finding regional partners. NMHSs should also be pro-active to collaborate with the ocean community and existing programmes and projects such as MonGOOS and EuroGOOS.In this framework, NMHSs are encouraged to share data with the ocean community
2. Members are encouraged to be part of the operational weather radar data exchange, and RWCs should be able to play a role in this regard.
3. WMO and NMHSs should take steps to facilitate access to marine meteorological and oceanographic data from WIS by the oceanographic community and vice versa; beyond obligation of Members per existing data policies such as Res. 40 (Cg-12).
4. NMHSs and their partner organizations making marine meteorological observations using data buoys, ships, profiling floats, and tide gauges are urged to provide the WIGOS metadata about these observing systems to OSCAR via JCOMMOPS (exchanging metadata does not necessarily mean that the observational data are exchanged in real-time, but gives visibility to the activities of the data producers, and helps WMO to identify potential partnerships and take action).
5. WMO is invited to introduce a filter on OSCAR/Surface so that only active observing platforms are displayed on the home page.
6. JCOMM is invited to consider and take action for transitioning WMO Publication No. 47 (i.e. voluntary observing ship metadata) to WIGOS Metadata Standard and their recording in OSCAR.
7. JCOMM is invited to engage in HF radar activities and coordinate with EuroGOOS, MedGOOS, and other groups involved in such activities, with the goal to better standardize practices and data exchange protocols and formats, and promote cross-boundary data exchange.
8. Efforts must be made to better coordinate and develop common vocabularies and/or translators interfacing vocabulariesin the WIGOS framework, and in cooperation with partners (e.g. SeaDataNet via JCOMM). JCOMMOPS to assist with regard to referring and mapping existing vocabularies within WMO and with partner Organizations.
9. If/once established, MedOS is invited to contribute data in real-time to WMO applications, including through regional WIS DCPCs.

**Group 3 – Partnerships and Regional WIGOS Centres (RWCs) and WMO-IOC Regional Marine Instrument Centre (RMIC)**

1. Participants at the workshop are invited to discuss at the national level in the view to have their home institution/agency to
	* participate and contribute to WIGOS implementation at the national level
	* strengthen existing partnerships among Members of RA-VI, or
	* have them to consider becoming partners through either existing or proposed or new mechanisms (e.g. JOZO, national board, EuroGOOS, MedGOOS, E-SURFMAR, EMODnet, MedOS, Copernicus).
	* *Demonstrate socio economical benefits of observing systems with their governments helping making the case for these systems and getting them funded, including for the longer term.*
2. Partnerships could be realized by contributing to some functions of the future Regional WIGOS Centre(s), and/or Regional Marine Instrument Centre(s) in RA-VI.
3. RA VI Members should make efforts to better collaborate at the Europen level, particularly with Copernicus. WMO and its RA-VI should reach out and make the case with the European Commission in this regard.
4. NMHSs and their partner organizations must provide feedback on how they can benefit from the Regional WIGOS Centres (RWCs).
5. Croatia to consider making an application for becoming a WMO-IOC Regional Marine Instrument Centre (RMIC), possibly in partnership with other partner organizations in Croatia and, if appropriate, other partners in RA-VI.
6. Germany, Turkey are candidate for hosting a Regional Instrument Centre (RIC), and there may be an opportunity for them to also provide the function of WMO-IOC Regional Marine Instrument Centre (RMIC). They are invited to discuss the issue with Croatia in the view to elaborate proposal(s).
7. *The workshop agreed that assuring operations and long term maintenance of the observing systems is important, and that there are opportunities for sharing resources in this regard.*
8. *The workshop agreed that new positions with new competencies should be opened in NMHSs to foster cooperation, collaborations, and sustainability of activities related to marine meteorology (and therefore oceanography) and that are increasingly becoming operational for the provision of services to society.*

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1. <http://www.jcomm.info/index.php?option=com_content&view=article&id=167> [↑](#footnote-ref-1)