



World Meteorological Organization

Working together in weather, climate and water

**Issues, Challenges and Opportunities for
Harmonisation, Exchange and Real time
Coordination of Hydro-Meteorological Observation
Networks, Forecasting Expertise and Watch and
Warning Systems**

Technical Workshop for Development of the Caribbean Regional Cooperation
Programme in Multi-Hazard Early Warning System
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Group C



Working Group C

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Forecasting Capacities and Expertise and Related Telecommunication Issues (National and Regional Aspects)

Gaps and Needs

- Need to strengthen modeling capacities through better access to NWP model products especially for meso-scale (localised) forecasts and coastal marine forecasts
 - Need for redundancy and back-up for reception of forecasting and monitoring information in NMHSs.
 - Need to increase the coverage, variety and frequency of radar data for sharing throughout the Region and upgrading to doppler radar systems.
 - Need to ensure that all data from automatic weather stations is transmitted in real time throughout the Region (e.g. on the GTS)
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Forecasting Capacities and Expertise and Related Telecommunication Issues (National and Regional Aspects)

Gaps and Needs

- Need for training in:
 - Marine meteorology
 - Communication skills and media issues
 - Climatology
 - Information Technology (IT)
 - Need to enhance distance learning while ensuring adaptation to local needs
 - Need for training through cross attachment and exchange of forecasters between NMHSs
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Forecasting Capacities and Expertise and Related Telecommunication Issues (National and Regional Aspects)

Gaps and Needs

- Need to strengthen the collaboration among the small islands (especially in those of type 2 relationships) for the harmonization of weather observation and monitoring equipment
 - Need to increase the installation of webcams as new observation instruments
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Forecasting Capacities and Expertise and Related Telecommunication Issues (National and Regional Aspects)

Gaps and Needs

- To expand the scope of CIMH in way that will facilitate training and interaction among non-CMO members



Real-Time Coordination

Gaps and needs

- To strengthen real-time coordination mechanism between NMHS/NMHSs; NMHS/DRMs; and DRMs/DRMs considering:
 - Where NMHSs are not 24/7 operational
 - Where NMHSs supports DRM agency in another country
 - Frequent turn-over of staff
 - Difficulty to contact focal points when required
 - Need for enhancing real time mechanism for better monitoring, downscaling and decision-making (observation/informaton exchange)
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Real-Time Coordination and watch and warning systems

Gaps and needs

- Need for better national and regional coordination for non tropical cyclone extreme weather
 - Need to strengthen communication and coordination between neighboring forecast offices
 - Need to identify national focal points and institutions responsible for tsunami warnings at national level
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Real-Time Coordination

Recommendations

- To develop SOPs for real time coordination involving DRM agencies, NMHSs and Focal Points
 - Update list of contacts routinely
 - To strengthen the role of regional centres in watch and warning coordination especially for non tropical cyclone events
 - To institute a mechanism for developing consensus forecast and guidance products for non-tropical cyclone forecasts
 - To develop, at national level, a watch and warning systems that meet the needs of DRM agencies and other stakeholders (lead time, national constraints in responding to threat), aligned to existing regional warning system
 - To develop a specific watch and warning at national level for tsunami based on regional warning system
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