



World Meteorological Organization

Working together in weather, climate and water

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

Session 5: Monitoring, Forecasting and Watch and Warning Systems

National and regional perspectives

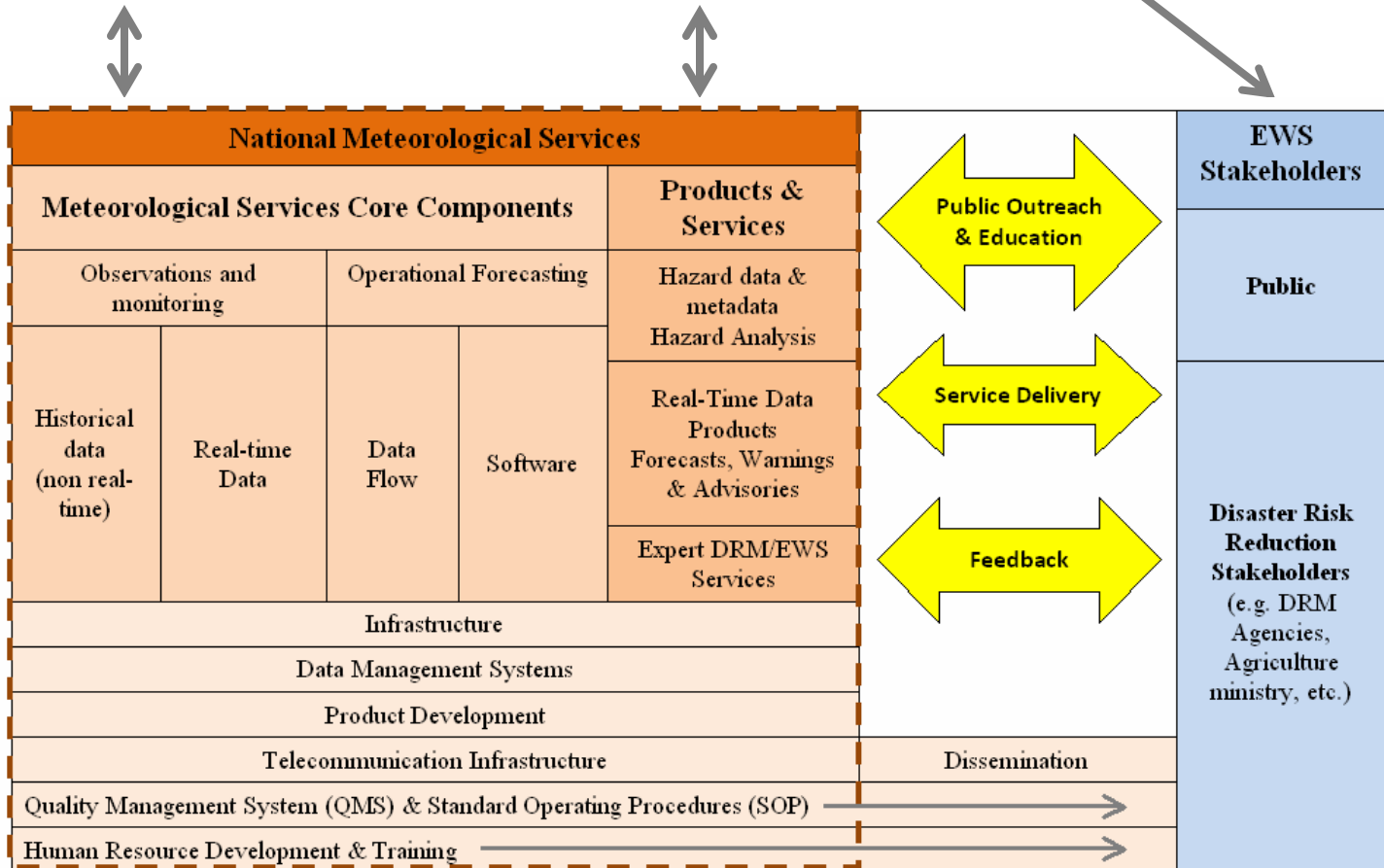
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Chief of Disaster Risk Reduction Programme

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Accra Beach Hotel & Spa
Christ Church, Barbados



Linkages of Meteorological Services with EWS stakeholders and core capacities of Meteorological Services to support EWS and DRM stakeholders

Other Technical Services Cooperating with NMSs and DRM Stakeholders
(e.g. Hydrological Service, Ocean Services)





Specific areas from the report

DOC 4 Sections:

4.5.1 - Monitoring and observing networks

4.5.2 – Operational forecasting

4.5.6 – Operational relationship with hydrological institution

4.8 – Watch and Warning Systems

Highest Priorities from the assessment are found in:

4.5.7 – (bullets 1-3)

4.8.3

Recommendations

5.2 (bullets 3 & 5)



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Presentation of the Panel

➤ Regional Capacities and initiatives in support of Hydro-meteorological Forecasting and opportunities for climate analysis

Mr. Shawn Boyce – CIMH

➤ Progress and development with monitoring and forecasting of tsunamis in the Caribbean region

Dr. Lorna Inniss and Ms. Diana Patricia MOSQUERA - ICG Tsunami & UNESCO-IOC

➤ Opportunities for strengthening of regional cooperation in forecasting for Hydro-meteorological hazards (e.g., Sever weather, FFG, marine and coastal related hazards) and related training

Mr. Peter Chen and Edgard Cabrera, WMO

➤ Challenges and opportunities for coordination of Watch and Warning Systems in the Caribbean

➤ WMO RSMC Miami - Hurricane Centre *Lynn Maximuk, NOAA-NWS*

➤ Contribution of the Hurricane Committee *Dr. Jose Rubiera, RA IV Hurricane Com.*

➤ Reflections on the outcomes and relevance of various regional observation programmes and projects to support EWS

➤ RAIW WIGOS Task Team, *Mr. Glendell De Souza, CMO*

➤ Carib Radar Network, *Mr. Glendell De Souza, CMO*



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Questions for the working groups (1/4)

Forecasting capacities and expertise and related telecomm. issues

Data, information and models for forecasting

- What are the sources of data, products and information that you are using for developing forecasts and warnings (e.g. internet, GTS, Regional, etc) in your country/territory? What models, data and information do you utilise from these sources to develop your forecasts and warnings?

Forecasting capacities

- Are your forecasters regularly trained in methodologies and forecasting techniques? What training programme are utilised. Are these training programmes sufficient? If not, what areas need improvement (e.g. numerical weather prediction products, basic meteorology, tropical meteorology, hydrology, climatology, modelling, etc)?

Coordination among technical agencies for forecasting activities

- Is there coordination among the technical agencies (e.g. Meteorological service, Hydrological service, Marine and Coastal Service, etc.) (real-time or not) to develop forecasts and warning products in your country/territory? Which agencies are involved in this coordination and how is it done?



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Questions for the working groups (2/4)

Forecasting capacities and expertise and related telecomm. issues

Products from regional centres

- What regional centres do you utilise for developing your forecast and warnings (e.g. CMO/CIMH, RSMC-Miami Hurricane Centre, etc.)? What products do you utilise from these centres? Could this regional cooperation be improved and strengthened, and in what areas?

Telecommunication networks

- What kind of telecommunication network do you utilise for exchanging forecasts and warnings data information and products at the national, regional and international levels? Are these capacities sufficient and reliable? If not, how should these capacities be improved or strengthened?

Regional cooperation

- Reflect on your priorities for strengthening of existing regional cooperation mechanisms and regional institutional capacities in support of the above-mentioned issues in this section.



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Questions for the working groups (3/4)

Observing networks and monitoring and related telecomm. issues

Meteorological observation network

- Does your meteorological service operate an observation network? Please describe this network specifying its spatial coverage and whether it is real or not real-time.

Other observation networks and cooperation

- Are there any other agencies that are operating other meteorological, hydrological and other observation network in your country/territory? If yes please specify what agency, the kind of observation network it is, and if there is a coordination mechanism for data exchange.

Regional cooperation

- Do you exchange and/or receive observations with regional centres and/or other neighbouring countries/territories? Please specify what kind of data and through what mechanisms. How could these mechanisms be improved?
- Reflect on your priorities for strengthening of existing regional cooperation mechanisms and regional institutional capacities in support of the above-mentioned issues in this section.



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Questions for the working groups (4/4)

Coordination of multi-hazard watch and warning systems

Mandate and stakeholders for watch and warnings

- Please specify the institutions in your country/territory have the mandate to issue watch and warnings and for what hazards?

Coordination mechanisms

- Is there a coordination mechanism among EWS stakeholders particularly between the NMHS and DRM agency for watch and warning issuance? Describe this mechanism specifying whether this is a formal (eg SOP or MoU) or informal mechanism

Regional cooperation

- Does your country/territory coordinate with regional centres or institutions for issuance of watch and warnings? If yes please describe this mechanism, specifying whether this is a formal (eg SOP or MoU) or informal mechanism.
- Reflect on your priorities for strengthening of existing regional cooperation mechanisms and regional institutional capacities in support of the above issues for Watch and Warning systems.



Thank You



http://www.wmo.int/pages/prog/drr/events/Barbados/index_en.html
