



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**

Working Group B

Session 3: Outcomes

**Operational cooperation of the NMHS and DRM agencies
and service delivery for MHEWS**



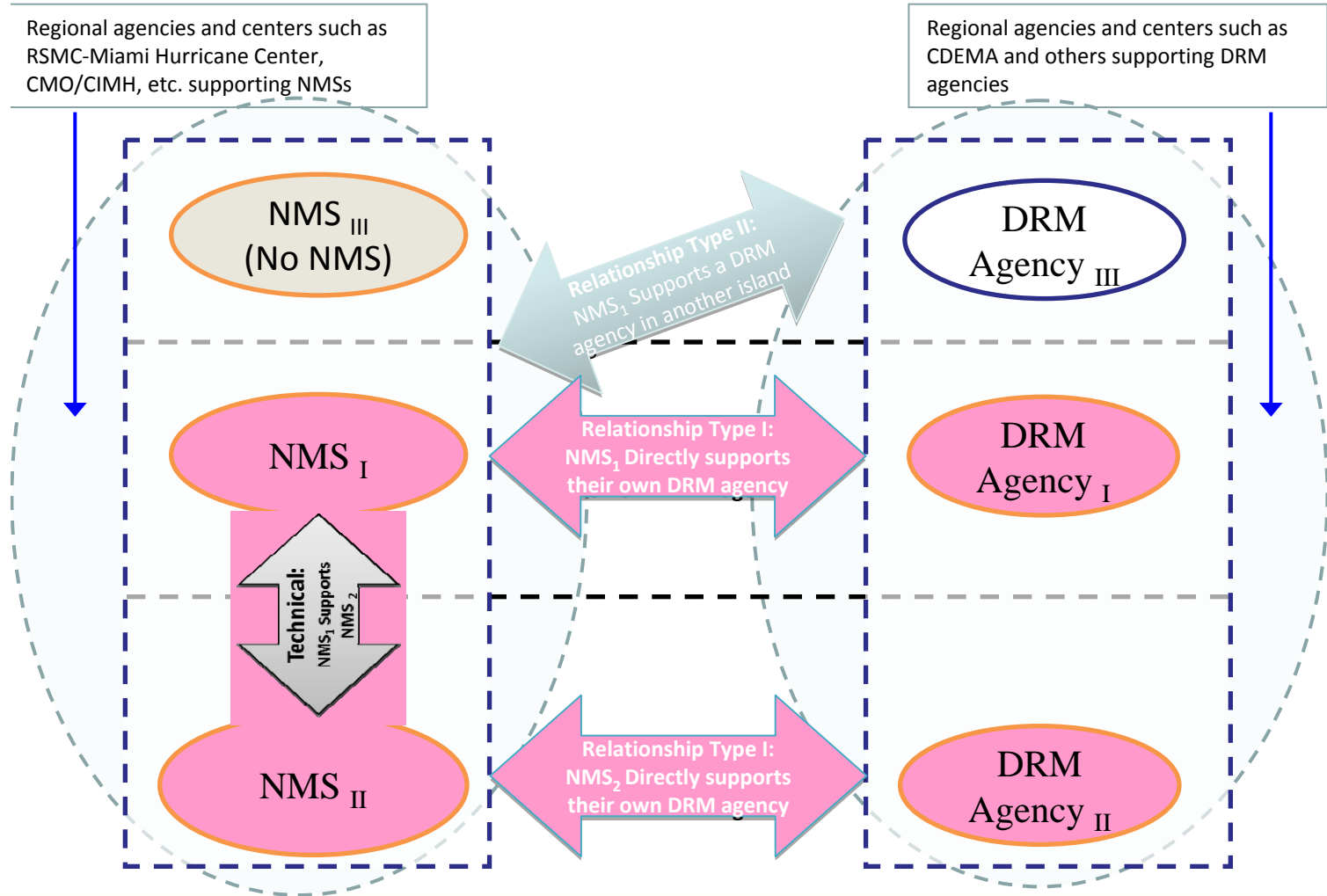
Outline

- Relationship Type II review
 - Operational cooperation of the NMHS and DRM agencies: Needs and Gaps
 - Revision and Prioritization of Doc 4 Section 4.3.1
 - Prioritization and Revision of Doc 4 - section 5.2
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Different relationships between Disaster Management Agencies and Meteorological Services

- Antigua & B.
- Bahamas
- Barbados
- Belize
- Cayman
- Cuba
- Curaçao
- Dominican Rep.
- Guadeloupe
- Guyana
- Haiti
- Jamaica
- Martinique
- St Lucia
- Suriname
- Trinidad & T.
- Aruba
- Dominica
- Grenada
- St Marteen
- St Vincent & G.





Operational Coordination: Needs and Gaps

- Need capacity development for implementation of **QMS system** that documents the relationship between the Meteorological Services and DRM agency
 - Need for **formal documentation (MoU, SOPs, etc) of relationship type II** (Meteorological service supporting another Meteorological Service)
 - Need for formal documentation (MoU, SOPs, etc) of **relationships among DRM agencies and technical services** (e.g. Meteorological / Hydrological Services)
- Need for national government to facilitate a **framework** (e.g. legislation) for **EWS stakeholder relationships** (Political Buy-in)



Operational Coordination: Needs and Gaps (continued)

- Need for a more formalized sharing of hydrometeorological data & information through **defining protocols of data and information exchange** (e.g. MoU, SOPs) among EWS stakeholders
 - DRM agencies expressed a need for **better understanding of products and services** available from meteorological and hydrological services
 - Need for strengthening a **user focused product development mechanism** for the Meteorological Services
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Operational Coordination: Needs and Gaps (continued)

- Need for strengthening mechanism for **near real-time and real-time coordination and collaboration** between the Meteorological Service and Disaster risk Management agency
- Need for **specialized training** for:
 - Disaster managers on interpretation and use of hydrometeorological tools and products
 - Meteorologists to present hazard information to media and public
 - Meteorologists on disaster management processes and needs
 - Meteorologists on use of new technologies and methods



Revision and Prioritization of Section 4.3.1

1. Enhancing of relationships and cooperation and coordination mechanisms to **improve understanding** of Meteorological and Hydrological Services and DRM agencies respective **capacities, needs and challenges** with regards to MHEWS through:
 - multi-EWS stakeholder workshops and trainings at national and regional level
 - MoUs, SOPs etc;
 2. Strengthening of **communication protocols** (e.g. CAP) among EWS stakeholders, including DRM agencies and Meteorological Services;
 3. Strengthening of the operational EWS through systematic **post event evaluations** of EWS stakeholder interactions
 4. Enhancing feedback mechanisms by conducting coordinated **multi-EWS stakeholder drills and exercises**, especially for relationship type II.
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Prioritization and Revision

(Doc 4 - section 5.2): Dissemination Mechanisms

1. Full redundancy at national level and back-up systems through regional arrangements to ensure continuity
 2. Use of harmonized and documented (e.g. MoU, SOP) protocols and systems between Meteorological Services, DRM agencies and EWS stakeholders that enable end to end efficiency and control
 3. Capacities for web site management in the Meteorological Services or at national and regional approach
 4. Use of alternative media for dissemination of warnings (e.g. SMS, social networking such as Facebook, Twitter)
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Prioritization and Revision of Doc 4 - section 5.2: Communication

1. Improve relationship with the media through bilateral training
 2. Use of specific production system dedicated to TV/Radio broadcasting
 3. Use of TV/Radio automated interrupt mechanism for communication of warnings and alert messages to the public
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Thank You
