

## First Regional Summit between National Meteorological and Hydrological Services (NMHSs) and National Disaster Risk Management Offices (NDRMOs)

### "Strengthening collaboration and coordination between NMHSs and NDRMOs in Multi-hazard Early Warning Systems (MHEWS): Challenges and Opportunities"

27 February 2023

9AM to 5:30PM

Enjoy Hotel, Punta del Este, Uruguay,  
Room C, Building Rio de Janeiro

Hybrid connection via ZOOM

<https://wmo-int.zoom.us/j/83417498744?pwd=Sk1kWm9BVC95YXhaQXByYVpoa3NLdz09>

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## Background

The Sendai Framework, through its Target G, aims "to substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030"<sup>1</sup>. Progress towards Target G enables governments to assess their availability of, and access to, Multi-hazard Early Warning Systems (MHEWS), along with necessary governance arrangements for its implementation, contributing to the overall efforts in implementing the Sendai Framework.

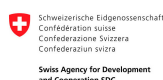
Early Warning Systems are a proven, effective, and feasible climate adaptation measure, that saves lives and provides at least a tenfold return on investment. The WMO State of the Climate 2021 Report shows that extreme weather, such as floods, droughts, heatwaves and storms, led to hundreds of billions of dollars of economic losses and wreaked a heavy toll on human lives and wellbeing. The IPCC's Sixth Assessment Report on Impacts, Adaptation, and Vulnerability recognized early warning systems and disaster risk management activities as key cross-cutting adaptation options, that enhance the benefits of other adaptation measures when combined.<sup>2</sup>

The Early Warnings for All Initiative Executive Action Plan 2023-2027 (EW4ALL) identifies key areas for **advancing universal disaster risk knowledge (pillar 1)**, and outlines the priority actions required to achieve this, building on the aforementioned Sendai Target G report. It prioritizes the top technical actions required to **enhance capacity to detect hazards, close the observations gap, and advance global forecast data processing systems and data exchange (pillar 2)**, optimizing international efforts. The plan highlights both the infrastructure, governance and people-centered approach required to **effectively disseminate and communicate warnings (pillar 3)**. And it outlines the policies, capacities, finance and collaboration needed to **improve preparedness and response capabilities (pillar 4)** over the next five-years. This Multi-Hazard Early Warning System (MHEWS) should be people-centered to empower those threatened by hazards to act in sufficient time and in an appropriate manner and must build on partnerships within and across relevant sectors.

<sup>1</sup> UNDRR and WMO (2022) "[Global status of multi-hazard early warning systems: Target G](#)", United Nations Office for Disaster Risk Reduction

<sup>2</sup> [Executive Plan of Action for the Early Warning for All Initiative](#)

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The National Meteorological and Hydrological Services (NMHSs) who are members of the World Meteorological Organization (WMO) serve public good by providing reliable and timely weather, climate, hydrological and related information to the community at large. These services have an essential role to play in bringing about disaster risk reduction through delivery of quality public weather services, including the provision of weather forecasts, early warnings on hazardous weather, outreach activities to enhance public awareness of weather hazards, interpretation, and use of the weather information, as well as collaboration with disaster relief organizations to minimize loss of life and property.

Governments, concerned with the security of citizens threatened by both natural and human-induced hazards, will increasingly turn to national scientific institutions, such as the NMHSs for information in support of reducing these risks. More will be expected from them, especially with the increasing frequency of extreme hydrometeorological events and the critical need of more accurate forecasting and timely early warning. NMHSs will also be expected to deliver impact-based forecasts as well as specific forecasts of environmental conditions that may lead to disease outbreaks and to deliver advance warnings of these to public health communities and other important specific sectors. However, the operational work and overall standardized articulation between NMHSs and National Disaster Risk Management Offices (NDRMOs) is the most critical pillar for the effectiveness of an Early Warning Systems and solid risk management support.

For this meeting, it is expected to gather Government representatives, key stakeholders, institutions, UN agencies and other international cooperation agencies to actively participate in a dialogue oriented to define challenges and opportunities in the implementation of the Initiative EW4ALL at national and regional level, to strengthen the operational work and institutional coordination between NMHSs and NDRMOs in each country following the national legislation. In this context, the context of the VIII Regional Platform for Disaster Risk Reduction for the Americas & the Caribbean is an excellent opportunity to discuss these issues and establish a precedent of collaboration across the mentioned stakeholders.

### Objectives of the meeting

- a) To provide clarity on the **role** of NMHSs and NDRMOs in the design, development implementation, and monitoring of MHEWS
- b) To discuss gaps and **challenges** that NMHSs must improve in the context of MHEWS, and how they can coordinate their work with NDRMOs following the national legislation.
- c) To provide a better understanding of the **tools** such as Impact based Forecasting (IBF) and the use of Common Alert Protocol (CAP) to enhance the MHEWS considering the current observation, monitoring, analysis and forecast capabilities in each country and in the region (Pilar II) and the disaster risk knowledge (Pilar I).
- d) To discuss the most adequate strategies for strengthening **coordination mechanisms**, and therefore an effective communication among NHMSs and NDRMOs, in order to ensure an effective dissemination of early warnings (EW) to individuals, communities, businesses, and institutions (Pillar III); and that they count with the necessary capabilities to respond to those warnings.

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- e) To explore coordination mechanisms with other non-climate related EWS aiming to ensure the **multi-hazard approach** in a way that addresses the systemic nature of risk.
- f) To identify **priority needs** to be addressed in further initiatives on Early Warning - Early Action (through regional projects, platforms, and networks), and ensure synergies with the existing ones.
- g) To discuss innovative **approaches** for mainstreaming MHEWS in climate change adaptation and sustainable development efforts.
- h) To provide key **messages** and propose actions to be reflected in the RP23 Ministerial and High-level Authorities' Declaration.
- i) To establish a **roadmap** of multi stakeholder collaboration in the region (and sub-regions) to implement the EW4All Action Plan.

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## Provisional agenda High-level meeting

Monday, 27 February 2022

Time	Session	Presenter(s)
09h00-09h20	<b>Opening remarks</b>	<ul style="list-style-type: none"> <li>- Authorities, Uruguay</li> <li>- WMO, Petteri Taalas (Video)</li> <li>- UNDRR, Mami Mizutori</li> </ul>
09h20-09h40	<b>Keynote messages</b> "Strengthening the operational and institutional coordination between NMHSs and NDRMOs: A must for ensuring EW4ALL target."	<ul style="list-style-type: none"> <li>- Elizabeth Riley, CDEMA</li> <li>- Arlene Laing, CMO</li> </ul>
09h40-10h40	<b>Introduction to the Group Discussion</b> [20 Minutes]  <b>Groups discussion – Part I</b> Guidance question: - What are the main challenges to improve disaster risk knowledge (Hazards, Vulnerability/Exposition and capacities)? [40 Minutes]	<ul style="list-style-type: none"> <li>- Bárbara Tapia, WMO</li> <li>- Jair Torres, UNDRR</li> </ul> Group Discussion (4 groups) <ul style="list-style-type: none"> <li>• US, Canada – English Caribbean (CDEMA's sub regions North and West)</li> <li>• English Caribbean (CDEMA's sub regions East and South)</li> <li>• Central America + Cuba, Dominican Republic and Mexico</li> <li>• South America</li> </ul>
10h40-11h00	<b>Coffee break - Photo</b>	
11h00-12h20	<b>Groups discussion – Part II</b> Guidance questions : - What are the main actions required to improve collaboration to ensure an efficient monitoring, detection and forecasting; and Impact-based forecasting? [40 Minutes]  - How can we improve governance mechanisms for EWS? And how can WMO/UNDRR help in the process? [40 Minutes]	Group Discussion (4 groups) <ul style="list-style-type: none"> <li>• US, Canada – English Caribbean (CDEMA's sub regions North and West)</li> <li>• English Caribbean (CDEMA's sub regions East and South)</li> <li>• Central America + Cuba, Dominican Republic and Mexico</li> <li>• South America</li> </ul>
12h20-13h00	Group Discussion – Reporting	
13h00-14h30	<b>Lunch break</b>	

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14h30-16h00	<p><b>Contributions by regional projects to Early Warning Systems</b></p> <p><b>Part I - Initiatives on Early Warning - Early Action through regional projects, platforms, and networks</b></p> <p>Lessons learnt and opportunities for articulation, coordination and scaling up [20 Minutes]</p> <p><b>Part II – Panel Discussion</b></p> <p>Finding synergies among donors and international financing institutions. [70 Minutes]</p>	<ul style="list-style-type: none"> <li>- Raul Polato, WMO</li> </ul> <p><b>Panelist</b></p> <ul style="list-style-type: none"> <li>- Francis Pigeon, MET Canada</li> <li>- Pedro Basabe, CREWS</li> <li>- Markus Repnik, SOFF</li> <li>- Sezin Tokar, USAID/BHA</li> <li>- Camile Flückiger COSUDE</li> <li>- Jorge Tamayo, CIMHET</li> </ul> <p><b>Moderator</b></p> <ul style="list-style-type: none"> <li>- Jair Torres, UNDRR</li> </ul>
16h00-16h30	<b>Coffee break</b>	
16h30-17h20	<p><b>Key messages of the joint session</b></p> <p>Structuring general recommendation to consolidate the collaboration of NMHSs and NDRMOs on the implementation of the EW4ALL initiative</p>	<p>Moderated by WMO, UNDRR and the Rapporteurs</p> <p><b>Rapporteurs</b></p> <ul style="list-style-type: none"> <li>- Dr. Kerry Hinds, DEM, Barbados</li> <li>- Dr. Pablo Cabrera, INUMET, Uruguay</li> </ul>
17h20-17h30	<p><b>Closing remarks and key messages</b></p>	<ul style="list-style-type: none"> <li>- National authority, Uruguay</li> <li>- WMO</li> <li>- UNDRR</li> </ul>