

## WMO Disaster Risk Reduction Road Map

### A Summary

The WMO Disaster Risk Reduction Road Map was published in 2017. While it is not considered a final draft WMO publication, it is available from the WMO e-Library at [https://library.wmo.int/index.php?lvl=notice\\_display&id=19866#](https://library.wmo.int/index.php?lvl=notice_display&id=19866#).

As of 2021, Disaster Risk Reduction is currently the focus of the Standing Committee on Disaster Risk Reduction and Public Services, under the WMO Technical Commission on Services (SC-DRR, <https://community.wmo.int/activity-areas/sercom/sc-drr>), which will promote new materials on the concept of Multi-Hazard Early Warning Systems. Within the WMO Secretariat, Disaster Risk Reduction is under the oversight of the [Disaster Risk Reduction and Public Services Branch](#).

Following

- Resolution 8 (EC-64) – Enhanced capabilities of Members to reduce risks and potential impacts of hazards caused by weather, climate, water and related environmental elements
  - the Sendai Framework Priority 4: “Enhancing disaster preparedness for effective response and build back better in recovery, rehabilitation and reconstruction”,
- the Disaster Risk Reduction (DRR) Roadmap was driven by several compelling organizational and societal demands and thus encourages the move to increase offerings for collaboration among different institutions.

WMO identifies learning opportunities, whether from the WMO community or partners, to expand outreach and build capacity and awareness of communities to adopt practices with the aim of reducing the impacts of hydrometeorological hazards.

Recognizing that the complexity of the Earth system and the interconnections of weather, water, climate and related environmental processes are increasingly challenging, WMO is therefore forging and working in partnerships with stakeholders for meeting the objectives of supporting National Meteorological and Hydrological Services (NMHSs) to improve the quality and delivery of information, products and services.

Communication and outreach are essential. NMHSs need to be willing to take the time to understand their users’ information requirements and what they use the hydrometeorological information and products for. User interface mechanisms to collect this information as well as any feedback need to be established or enhanced.

Every major disaster triggered by hydrometeorological hazards together with the response and assistance provided by the NMHS and whether the performance of the NMHS was affected, should be systematically evaluated for the purposes of continuous learning and the continuous improvement of products and services

WMO and NMHSs are strengthening cooperation and partnerships in national, regional and international user forums, mechanisms and structures for the implementation of DRR. Effective “end-to-end” and “people-centred” early warning systems include four interrelated key elements:

1. Risk knowledge based on the systematic collection of data and risk assessments;
2. Detection, monitoring, analysis and forecasting of the hazards and possible consequences;
3. Dissemination and communication of authoritative, timely, accurate, and actionable warnings and associated information on likelihood and impact; and,
4. Preparedness and capabilities to respond to the warnings received.

These four interrelated elements need to be coordinated within and across sectors at multiple levels for the system to work effectively, and effective feedback mechanisms need to be in place for continuous improvement.

Failure in one component, or lack of coordination across them, could lead to the failure of the whole system – a critical issue since an Early Warning System that does not warn effectively will not be trusted.

The Common Alerting Protocol (CAP) provides the international standard for emergency alerting and public warning for all hazards. This Protocol also applies to all media, including communications media ranging from sirens to mobile phones, faxes, radio, television and various web-based communication networks. The majority of NMHSs also disseminate alerts and warnings directly to the public, for example through radio, television, SMS, the internet and smartphone applications.

## **Motivations for this Workshop**

Based on DRR practices promoted by the WMO, the underpinning goal of this workshop is to support Multi-Hazard Early Warning Systems (MHEWS) which are defined as “an interrelated and connected set of hazard monitoring, risk assessment, communication and preparedness activities that enable individuals, communities, governments, businesses and others to take timely action to reduce their risks in advance of hazardous events.

The Workshop focuses on development and implementation of an effective mechanism to provide relevant and useful hydrometeorological information from NMHS for decision making in DRR processes at the national and regional levels. It offers an opportunity to discuss why organizations need to know how each other works and to understand their needs to coordinate the best possible in case of a disaster.

Efforts should also be made to examine what specific preventative measures have been undertaken (for example on droughts and floods), how they performed, and in conjunction with partner agencies, what additional preventative measures might contribute most to reduction of future losses by reducing overall societal exposure to risk.

This workshop helps national institutions improve their synergistic relationships, responding to the needs to communicate, coordinate and build an interdisciplinary team among international and regional and national organizations that collaborate and share to achieve improvements in DRR.