



COMMITTEE ON DISASTER RISK MANAGEMENT Summary Report – October 2024

Overview

The Committee on Disaster Risk Management (CDRM) is composed by some 33 engineers representing WFEO members from all continents. It is aimed to contribute to the achievement of the SDGs, especially SDG 11 and related; with the ultimate goal being to prevent disasters and associated losses and damages.

Activities overview

Throughout the year, a series of virtual discussion meetings, shaped as webinars, were organized to address key topics relating engineering to societal processes:

- Networking governance for coordinating efforts in building community resilience.
- Resilient Cultural Heritage to build capacity and reduce disaster risk.
- Unveiling the 2024 Noto Province, Japan Earthquake – Insights from Seismology, Engineering, and Insurance.
- Creating and implementing a decision support environment for risk-sensitive, pro-poor urban planning and development of tomorrow's cities.
- Risk informed and participatory planning for resilient future cities - discussing tomorrow's Rapti, Nepal.

We appreciate the contributions of: Naim Kapucu (School of Public Administration U Central Florida); Barbara Mínguez (World Bank); Takumi Hayashida (IISE), Koichi Kusunoki (U. Tokyo), Hakan Yerlikaya (AON); Roberto Gentile, Gemma Cremen, Jamal Dabeek, Karim Aljawhari, and Mark Pelling (all from the Tomorrow's Cities, UCL Team); Vibek Manandhar and Prashant Rawal (NSET, Nepal). On behalf of CDRM, Valentina Putrino, vice-Chair leading the Capacity Building Working Group, convened and managed all these activities.

The CDRM co-organized the session Digital Technologies for Advancing Sustainable Development Goals - Youth Action, in the framework of the 4th International Forum on Big Data for Sustainable Development Goals (FBAS 2024).

Outcomes and planning 2025

The overall outcome is the reconnaissance that, since disaster risk management is a social process, its main actors are citizens. Engineers design, operate and monitor technical solutions, and decision makers should ensure the proper governance via legal framework and regulations.

The main results, conclusions and recommendations from the webinars are being prepared as brochures to be shared widely among the global engineering community. Of course, it is also desired to reach key decision makers for their implementation. Recordings of the main conferences and discussions are being made available through WFEO Academy as well as CIP and ICE media.

In the light of recent natural disaster events around the world, new content and updates to the booklet on Engineering Resilience in Disaster Risk Management for Sustainable Development (CDRM, 2022) are being identified to help and better serve communities, engineers and government officials. In 2025, we also hope to share progress in IA applied to early warning systems and the latest understanding on how the use of machine learning can be used to model climate change risks can and help develop an adaptive remediation programme to community infrastructure. These include, among others, case studies from New Zealand and China.

Report: José Macharé, CDRM Chair.

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