

World Federation of Engineering Organizations (WFEO), ISSUE #2, August 2020

# WFEO - CDRM E-Newsletter

Standing Technical Committee on Disaster Risk Management (CDRM)

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# From the Chair

Dr. José Macharé Ordoñez WFEO CDRM Chairman



During the last 40 years, the world is doing much efforts to mitigate the impact of disastrous natural and man-made hazards. The International Decade for Natural Disaster Reduction (1990-1999), designated by the United Nations was the first global initiative in this way. The following signatures of the Hyogo Framework for Action (2005-2015) and the current Sendai Framework for Disaster Risk Reduction (2015-2030) continued showing the importance of the international cooperation to this goal.

While we were after a better understanding of hazards, improving processes to reduce vulnerability, and preparing responses face to our known enemies: floods, earthquakes, volcanic eruptions, wildfires, or mass movements, Covid-19 took not only the world population and governments by surprise, but also a large part of the disaster risk management community.

Although epidemics and pandemics are known in terms of the extension and life losses from previous occurrences, it appeared that most national DRM systems failed in the prospective phase and the effective communication of the risk. The subsequent response the response was in some cases too late and / or with too many trialand-error attempts. Finally, this event is showing the lack of society's awareness of risk of life loss and damage due to pandemics.

In transit to the "new normal conditions", the CDRM is called to lead a profound and global analysis on our previous misunderstanding on the enormous destructive power of pandemics, the need for improved risk scenarios, early warning, and education to recommend prompt, effective and agreed measures, customized to each society to build resilience and avoid future global disasters.

## CDRM Meeting in Melbourne, Australia



Annual face-to-face meeting for WFEO-CDRM, Australia 2019

The annual face-to-face meeting for WFEO-CDRM was held at the Engineers Australia's headquarters, Melbourne, Australia on Monday, November 18, 2019. The participants were engaged in many valuable discussions related mainly to the mission of the committee and projected activities 2020. The highlights of the meeting were:

#### 1. Opening Remarks

Dr. José Macharé, Peruvian member, chaired the meeting and presented the meeting agenda.

#### 2. Attendants

A total of 20 participants, including observers, came from 10 countries: US, India, Japan, Kuwait, Peru, Myanmar, Czech Republic, Spain, Australia and China. CDRM members were seven.

#### 3. Activity reports for 2019

Dr. José Macharé presented the report of the 2019 activities (see next page).

#### 4. Proposals for 2020

The Chair proposed: a. To continue online courses on DRM; b. Constitution of an expert advisory group and c. Scientific and, technical cooperation agreements.

Considering that different dimensions of vulnerability vary from country to country, CDRM

should contribute to customize the bases for resilience framework in different regions. It should be noted that the framework of resilience crosses all different disasters, so it is important to give it an appropriate approach.

Members highlighted that there is a need for the committee to develop contents for those resilience frameworks; it was proposed to draw upguidelines to support public policies.

#### 5. Review strategic plan

A small working group was established to review and improve the Strategic Plan. The mission of this group will be to define short and specific goals related to the Sustainable Development Goals-SDG.

#### 6. Membership

The current composition of the CDRM and its organization in three sub-committees, inherited from the previous management, were discussed by the members.

They also mentioned that the committee members are concentrated in two countries: Japan and Peru. In the end, the members agreed to restructure the composition of committee members considering only one official voting member from each country and a few number of non-voting members, according with the WFEO Rules of Procedure. Activity report of the WFEO-CDRM during 2019

The 2019 activity report of the WFEO-CDRM was presented to the face-to-face committee meeting in November 2019. The summary of the report is given bellow. For the full-text report, please visit the WFEO-CDRM homepage on the STC websites.

#### International Symposium:

The 13th Symposium was organized in October, in Peru. The focus was on the theme of the meeting "Risk reduction in lifelines systems". Outstanding international speakers who were identified and convened to share their knowledge and experiences. This symposium has continuously been held since December, 2009 when the WFEO-CDRM was established.

#### · CDRM webpage:

The CIP, as WFEO Peru national member gives support to the CDRM by hosting in its website a section dedicated to our committee courses, activities, announces and reports. Open access is a v a i l a b l e through the address http://courses.cip.org.pe/. Permanent coordination is made with the WFEO in Paris, so that the information generated in this new website passed to the CDRM section of the Federation.

#### · DRM online courses:

A platform, based on the Moodle system, has been created to offer free online courses in different topics of DRM. http://grdcursos.cip.org.pe/. A pilot course on the theme "Development of a Seismic Hazard Project" started on December 22, 2019. The course had more than 100 participants.

#### · CDRM national members:

Letters were sent to 21 WFEO national members reporting on the WFEO-CDRM and proposing to consider implementing their DRM committees. There were no favorable responses. The CIP approved the creation of a national committee in DRM, in Peru.

#### · Financial:

CIP was the only sponsor to this year's activities. The fund granted for the development of the activities of the CDRM.

The funds were used mainly in the organization of the International Symposium and in the online platform for courses, as well as participation in the WEC2019 and the WFEO General Assembly in Melbourne.

# Keynote presentation in WEC2019, Melbourne



WFEO-CDRM Chair Dr. José Macharé presented a keynote spe<u>ech</u>

The WFEO-CDRM Chair presented a keynote speech in the Natural Disaster Risk Management session in the World Engineering Congress (WEC) in Melbourne (Australia), November 20, 2019. His presentation was titled "Earthquake effects in Peruvian Jungle caused by 26/05/19 Lagunas Earthquake" and was co-authored by Jorge Alva and other collaborators. It deals with issues for seismic risk management in the long sub-Andean region considered of low-hazard level but where the regional soil conditions are so bad that extensive and strong damage often affect the populations' infrastructure and activities.

### 13th International Symposium on Disaster Risk Management in Lima, Peru



The committee wanted to follow up on the event organized by the previous Japan headquarters since 2009, organized for the second consecutive year the Symposium in its 13th edition. In this opportunity, the event's theme was Risk Reduction in Lifelines Systems, because the interruption of them would generate severe and sensitive losses, especially in case of destructive events, such as earthquakes and floods.

The 13 ISDRM joined specialists with the objectives of disseminating vulnerability analysis methodologies, identifying applied technologies to reduce risk in lifelines, as well as identifying risk scenarios and business continuity plans for lifelines.

The Symposium took place the 9th and 10th of October, 2019 at the SENCICO auditorium (Lima) and included the participation of 310 face-to-face participants and 70 virtual ones from the public sector, the country's regional and municipal governments, academia, the private sector, and the general public.

The event's keynote speakers from Austria, Chile, Ecuador and Mexico presented experiences and studies regarding risk reduction in water and energy services, as well as in transport infrastructure. These topics were widely discussed in thematic sessions composed of national and international specialists.

The event was opened by Peru's Minister of Housing, Construction and Sanitation. Welcome words to the event were given by Dr Jorge Alva, president of the WFEO-CDRM. During his closing remarks, Eng Carlos Herrera, president of CIP, stressed the importance of establishing national DRM committees in every country, with an incountry focus, as Peru had yet done.

The Symposium ended with the reading of the conclusions of the 3 technical workgroups. The symposium was successfully ended with greatly valuable talks by the speakers and their constructive discussions with the audience.



Dr Gustavo Ayala Milian



The speakers and their constructive discussions with the audience

The course on risk management for tsunamirelated disasters started on April 6, 2020. There were more than 120 registered participants, mostly Peruvian engineers, but also from other countries. Courses have been offered in English and Spanish. www.grdcursos.cip.org.pe Here the topics of the course:

M1	essons from the past tsunami events and future perspectives or. Shunichi Koshimura (Tohoku University, Japan)
M2	sunamis: modeling technology and its application for tsunami warning Dr. Anawat Suppasri (Tohoku University, Japan)
М3	<b>sunami impact to infrastructures</b> Dr. Ioan Nistor (University of Ottawa, Canada)
M4	Artificial Intelligence and remote sensing technology for tsunami damage Dr. Bruno Adriano (RIKEN, Japan)
М5	<b>Jodeling tsunami evacuations</b> Dr. Erick Mas (Tohoku University, Japan)

### New CDRM members in 2020

In order for the CDRM to consolidate a network of specialist on DRM, it was thought to encourage some WFEO national members to propose a representative to become a member of the committee.

CDRM secretariat has received some

confirmations, so the committee will have new members from Bolivia, Costa Rica, China, Czech Republic, Ethiopia, Ghana, Hong Kong, New Zealand, Portugal and Spain. CDRM would also have observer members from China, Hong Kong, Spain and The United States.

Institution	Country	Members	
Sociedad de Ingenieros de Bolivia	Bolivia	Eduardo Velásquez	
China Association for Science and Technology	China	Jing Peng, Fang Chen	
The Institution of Professional Engineers	New Zeland	Dave Brunsdon	
The Czech Association of Scientific and Technical Societies	Czech Republic	Karel Vancura	
Ordem dos Engenheiros	Portugal	José Manuel Brazao Andrade da Silva Branco	
Instituto de la Ingeniería de España	Spain	Roberto López Casasola / Arturo Muiña Dominguez*	
Colegio Federado de Ingenieros y de Arquitectos de Costa Rica	Costa Rica	Marcial Rivera Rodríguez	
Ethiopian Association of Civil Engineers	Ethiopía	Tihtina Laeke Hailu	
Ghana Institution of Engineers	Ghana	Carlien Bou Chedid	
The Hong Kong Institution of Engineers	Hong Kong	Eric Ma / Edwin Chung*	
Non-voting	USA	Vilas Mujumdar*	

# **WFEO-CDRM** Strategic Plan

#### WFEO-Committee on Disaster Risk Management (WFEO-CDRM), 2018-2021 Strategic Plan:

#### Background

The WFEO-CDRM was originally established at the General Assembly held in December 2009, Kuwait.

#### Vision

To be a permanent international platform for support on Disaster Risk Management (DRM), through which knowledge and sustainable practices are integrated and disseminated to reduce vulnerability and increase resilience of populations.

#### Mission

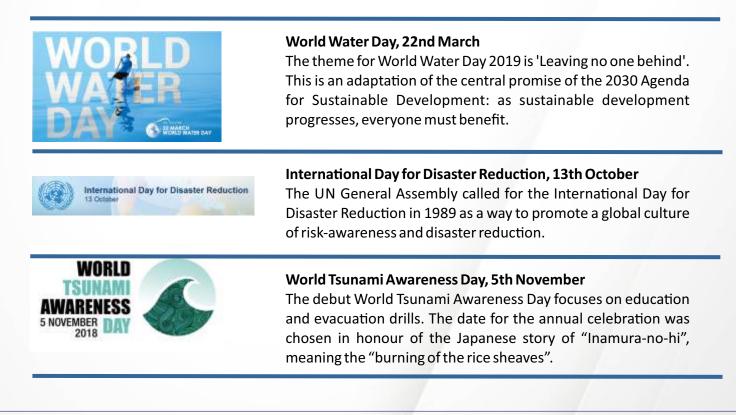
As a standing committee of WFEO, the CDRM

aims to promote the culture of disaster risk management through the dissemination of applicable knowledge and best engineering practices. To promote research and exchange of experiences in DRM at local, regional and global levels.

#### Mandate

- Encouraging and supporting CDRM team leaders to organize international webinars, technical-scientific events and publication related to their work within the strategic plan.
- Developing and promoting DRM policies, strategies and practices to reduce disasters caused by natural phenomena.
- Strengthening the committee's visibility and presence in the public sector, academic institutions, and multilateral organizations.

### **Important Dates**





WFEO-CDRM website: http://www.wfeo.net/stc\_disaster\_risk\_management/

WFEG 7 FM0

Contact: Dr. Lizett López, WFEO CDRM secretariat http://www.wfeo.org/committee-disaster-risk-management/