



# **WORLD FEDERATION OF ENGINEERING ORGANIZATIONS**

## **PROGRESS REPORT STANDING TECHNICAL COMMITTEE ON DISASTER RISK MANAGEMENT 2022 ACTIVITIES**

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WFEO/CDRM Chairman

Dr. Lizett López S.  
WFEO/CDRM Secretary

October 24, 2022

Lima, Peru

## 1. INTRODUCTION

This report to the WFEO Executive Council gives an outline of the activities that the Committee on Disaster Risk Management (CDRM) has performed from October 2021 to October 2022.

## 2. BRIEF BACKGROUND

The WFEO during its General Assembly held in Italy in December 2017 approved that the Peruvian Engineers Association (CIP, *Colegio de Ingenieros del Perú*) became the chair of the CDRM for a period of four years. The CIP requested the renewal of the CDRM mandate for a new four-year term and this was approved at the WFEO General Assembly held in Costa Rica in March 2022.

## 3. PLANNED AND EXECUTED ACTIVITIES

In the period from October 2021 to October 2022, the following activities were carried out by the CDRM:

Activities	Status
Preparation of the strategic plan for CDRM 2022-2025	Finished
Launching of the book on Resilience in English version	Finished
Launching of the book on Resilience in Spanish version	Finished
Organization international webinars	Finished
Elaboration of post-event booklet	In progress
Call for new members	In progress
Coordination meetings	Finished

### 3.1 Preparation of the strategic plan for CDRM 2022-2025

The strategic plan for the new mandate was elaborated and agreed among the committee members, and finally presented and approved at the WFEO meeting, in Costa Rica.



### 3.2 Launching of the book on Resilience in English version

On May 5 at 7:30 am (NY time), the conference Engineering Resilience in Disaster Risk Management for Sustainable Development was held. It was a side event to the Seventh Annual Multi-Stakeholder Forum on Science, Technology and Innovation for the SDGs. WFEO-CDRM, CIP, UNESCO, ISC and ASCE joined forces to organize this event.

About 100 people from different parts of the world participated in the event.

<https://www.youtube.com/watch?v=0R7t5ibS06g&t=54s>



### 3.3 Launching of the book on Resilience in Spanish version

On June 9, within the framework of the 60th anniversary of the CIP, the book was launched in its Spanish version. Prof. Dr. José Vieira, President of WFEO, participated in the release of the book, the speakers were members of the working groups and the panel of commentators was made up of Peruvian and Colombian specialists.

Around 150 participants from different parts of Latin America joined the event.

<https://www.youtube.com/watch?v=FECf1TZw7Rc>



### 3.4 Organization of international webinars

CDRM working groups, with the support of the Secretariat organized four international webinars, with the aim of adding more case studies and new discussions to those already developed in the book.

Some CDRM members participated as speakers in these events. Several external specialists were also invited to participate.

In the organization of these events, in some cases, WFEO national members (Engineers Australia, Ghana Institution of Engineers, The Hong Kong Institution of Engineers, Science Council of Japan and Institution of Civil Engineers) were involved, as well as UNESCO.

The events were broadcasted in Spanish and English, and managed to attract between 100 and 200 participants from different parts of the world.

The recordings of the events are on the CIP YouTube channel.

<https://www.youtube.com/watch?v=YU1c2tvN948>

<https://www.youtube.com/watch?v=IFGn6T-AX4Y&t=4212s>

[https://www.youtube.com/watch?v=DOm8xUywn\\_E](https://www.youtube.com/watch?v=DOm8xUywn_E)

<https://www.youtube.com/watch?v=LJTGPOUmBe0&t=2881s>



## INTERNATIONAL WEBINARS

Organized by:






**INTERNATIONAL WEBINAR:**  
**INFRASTRUCTURE SYSTEMS FOR RESILIENT SOCIETIES**

**SPEAKERS:**

- DAVE BRUNSDON**  
New Zealand Lifelines Council  
New Zealand
- CARLIEN BOU-CHÉDID**  
Ghana Institution of Engineers  
Ghana
- STEFAN SCHAUER**  
Austrian Institute of Technology  
Austria
- YOSHIHISA MARUYAMA**  
Chiba University  
Japan
- YOLANDA ALBERTO**  
University of Chile  
Chile

**MODERATOR:**

- JOSÉ MACHARÉ**  
WFEO-CDRM chairman  
Peru

**JULY 12**  
**4:00pm** (Lima time)

**FREE EVENT**  
Simultaneous interpretation

 

Organized by:




**INTERNATIONAL WEBINAR:**  
**INSTITUTIONAL FRAMEWORKS AND PUBLIC POLICIES FOR RESILIENT SOCIETIES**

**SPEAKERS:**

- MYLES LIND**  
Institute of Public Works  
Engineering Australasia  
New Zealand
- MASAMITSU ONISHI**  
Disaster Prevention  
Research Institute of Kyoto  
University Japan
- NORLANG GARCÍA**  
Secretariat for Integrated Risk  
Management and Civil  
Protection  
Mexico
- MARIA PECCE**  
University of Naples  
Federico II  
Italy

**MODERATOR:**

- JOSÉ MACHARÉ**  
WFEO-CDRM chairman  
Peru

**JULY 19**  
**6:00pm** (Lima time)

**FREE EVENT**  
Simultaneous interpretation

 

Organized by:






**INTERNATIONAL WEBINAR:**  
**LAND USE PLANNING FOR RESILIENT SOCIETIES**

**SPEAKERS:**

- IR JENNY YEUNG**  
Hong Kong Institution of Engineers
- KENICHI TSUKAHARA**  
Science Council of Japan
- LAURIE A. JOHNSON**  
Laurie Johnson Consulting

**MODERATOR:**

- JOSÉ MACHARÉ**  
WFEO-CDRM Chairman

**AUGUST 09**  
**7:00pm** (Lima Time)

**FREE EVENT**  
Simultaneous Interpretation  
<https://bit.ly/3NpriHF>

 

[MORE INFORMATION](#)

Organized by:




Supported by:




**INTERNATIONAL WEBINAR:**  
**ENGINEERING: DRIVER FOR THE RISK INFORMED DEVELOPMENT**

**SPEAKERS:**

- SAITURO NISHIKAWA**  
Professor, Disaster Mitigation  
Research Center, Nagoya University
- TATSUO NARAFU**  
Technical Advisor, JICA Japan  
International Cooperation Agency
- SOICHIRO YASUKAWA**  
Chief of the Disaster Risk Reduction  
Unit Natural Sciences Sector / UNESCO

**MODERATOR:**

- VALENTINA PUTRINO**  
WFEO-CDRM leader of working group  
Catastrophe Risk Analyst, ARRI, RE

**15 SEPTEMBER**  
**8:00am** (Lima Time)

**FREE EVENT**  
Simultaneous Interpretation  
<https://bit.ly/3TE2mVa>

 

### **3.5 Elaboration of post-event booklet**

Summaries of all the presentations from the international webinars are being prepared and will be converted into a booklet. The cases presented in this booklet will complement the book Engineering Resilience in Disaster Risk Management for Sustainable Development.

### **3.6 Call for new members**

As agreed at the CDRM annual meeting on 25 February this year, members who do not renew their membership would be removed from the committee.

So, the committee has added new members representing WFEO member nations, as well as leading experts from major research institutions. CDRM has members from the five continents.

### **3.7 Coordination meetings**

On 24 June, Dr. Marlene Kanga and the CDRM chairman had an online meeting with Dr. Rashmin Gunasekera, senior Disaster Risk Management specialist and leads the Global Program for Disaster Risk Analytics at GFDRR/World Bank, to exchange information on the activities of each institution, to explore possible interactions on subjects of common interest, and to invite him to join the CDRM as a member. Dr. Gunasekera nominated his colleague James Daniell to join the committee.

On 8 July, CDRM received an invitation from the International Coalition for Sustainable Infrastructure (ICSI) to participate in a global consultation to collect views from members of the engineering community on topics related to the implementation of disaster risk management, resilience and sustainable development in the built environment. This is with the aim of developing a Policy Paper representing the views of the global engineering community to feed into the mid-term review of the Sendai Framework. Interviews were conducted, as well as a survey in Spanish and English was circulated among CDRM members and other specialists.

On 22 August, the chairman of WFEO-CDRM met with Dr. Davide Stronati, Chair of the All Committees' Chairs board committee, in order to report on the organization and development of CDRM activities, as well as on the opportunities of inter-STCs collaboration, and challenges ahead.



Meeting with Rashmin Gunasekera from  
WB/ GFDRR



Meeting with Davide Stronati and the  
ICE staff

**WFEO-CDRM Secretary**

Dr. Lizett López  
Peruvian Engineers Association  
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E-mail: [llopezs@cip.org.pe](mailto:llopezs@cip.org.pe)

## WFEO-CDRM CURRENT MEMBERS

Country	Name and title	Position
Australia	Marlene Kanga	Engineers Australia
Austria	Stefan Schauer*	Austrian Institute of Technology
China	Fang Chen	China Association for Science and Technology
China	Lei Wang	International Research Center of Big Data for Sustainable Development Goals
China	Xu Tang	IRDR International Center of Excellence for Risk Interconnectivity and Governance on Weather/Climate Extremes Impact and Public Health (RIG-WECEIPHE) at Fudan University
Costa Rica	Marcial Rivera Rodríguez	Colegio Federado de Ingenieros y de Arquitectos de Costa Rica
Czech Republic	Karel Vancura	The Czech Association of Scientific and Technical Societies
France	Soichiro Yazukawa*	UNESCO Paris
Ghana	Carlén Bou Chedid	Ghana Institution of Engineers
Greece	Vasilios G. Bardakis	Technical Chamber of Greece
Hong Kong, SAR of China	Jenny Yeung	The Hong Kong Institution of Engineers
India	Navinchandra B Vasoya	The Institution of Engineers, India
Italy	Barbara Polidoro*	ARUP Milan
Japan	Kenichi Tsukahara	Science Council of Japan
Kuwait	Ahmad H. Bahman	Kuwait Society of Engineers
Macau	Timothy TANG Un Fong	The Macau Institute Of Engineers
Macau	Wu Chou Kit	The Macau Institute Of Engineers
Malaysia	Dato' Ir. Nor Hisham	The Institution of Engineers, Malaysia
New Zealand	Dave Brunsdon	Engineering New Zealand
New Zealand	Myles Lind	International Federation of Municipal Engineering (IFME)
Peru	José Macharé (Chair)	Peruvian Engineers Association
Peru	Lizett López	Peruvian Engineers Association
South Africa	Refilwe Buthelezi	Engineering Council of South Africa
Spain	Arturo Muiña Dominguez	Instituto de la Ingeniería de España
Switzerland	Federico Ferrario	Swiss Society of Engineers and Architects
Switzerland	Silvia Hostettler*	Ecole Polytechnique Fédérale De Lausanne
Taiwan	Ting-Chi TSAO	The Chinese Institute of Engineers
United Kingdom	Valentina Putrino	Institution of Civil Engineers
United Kingdom	Viviana Novelli*	Cardiff University
USA	Vilas Mujumdar *	Expert member

(\*) Observers



## SUMMARY OF CDRM MEMBERS' ADDITIONAL ACTIVITIES

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### DAVE BRUNSDON

CDRM Handbook development – Chapter 2, CDRM Handbook Launch (May), Handbook Spanish Launch (June), and Seminar on Infrastructure Systems for Resilience Communities (July).

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### STEFAN SCHAUER

CDRM Handbook development – Chapter 2 and Seminar on Infrastructure Systems for Resilience Communities (July).

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### MYLES LIND

CDRM Handbook development – Chapter 5, CDRM Handbook Launch (May), Handbook Spanish Launch (June), and Seminar on Frameworks and Public Policies for Resilience Communities (July).

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### JENNY F Yeung

Speaker for a webinar on Land-use Planning held in August 2022.

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### FEDERICO FERRARIO

Participated in the Swiss natural hazards' society and Swiss federal natural hazards group meetings. He was a speaker at events on the subject of natural disasters.

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### XU TANG

Organizer and presenter at the Workshop on Climate Change and Extreme Disasters Management along the Belt and Road was held on 11 - 15 July 2022.

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### Ting-Chi TSAO

Speaker on "Landslide and debris flow hazard mapping - from earth science to mitigation application" at the Department of Earth Science, National Central University, on March 2022. Joined the TC21 session of CECAR9 Conference held by the Asia Civil Engineering Coordinating Council, on September 2022. Title: Disaster management and evacuation under COVID19 in Taiwan.

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### FANG CHEN

Attendee, 11 March 2022, United Nations World Data Forum Webinar Series "Enabling a data-driven culture between the national and city level: How can national statistical offices and city data officers work together"; 26-27 April 2022, BRICS Forum on Big Data for Sustainable Development and 23-28 May 2022, 7th Session of the Global Platform for Disaster Risk Reduction.

Speaker, 5-6 May 2022, Side event "Engineering Resilience in Disaster Risk Management for Sustainable Development" of 7th Multi-stakeholder Forum of Science, Technology and Innovation for the Sustainable Development Goals; 6-8 September 2022, 2022 International Forum on Big Data for Sustainable Development Goals and 29 August - 9th September 2022, 2022 International Training Workshop on Open Science and SDGs.

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### LEI WANG

Attendee, 26-27 April 2022, BRICS Forum on Big Data for Sustainable Development. Speaker, 6-8 September 2022, 2022 International Forum on Big Data for Sustainable Development Goals and 29 August - 9th September 2022, 2022 International Training Workshop on Open Science and SDGs.

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### BARBARA POLIDORO

Currently organizing a field trip to the Italian region of Marche, recently struck by a flooding. Funding will be sought from the universities of UCL and Bristol to investigate, whether the event is related to climate change and whether the damage is in line with existing vulnerability models. Supported by contacting Dr. Maria Pecce, speaker of the July CDRM webinar.

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### AHMAD BAHMAN

Participated as an attendee in the "23rd Gulf Engineering Forum" titled: The

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Engineer And Disasters Challenges which held on 20-22 March 2022, Muscat, Oman.

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**HISHAM GHAZALI**

Organized a meeting to scope disaster risk reduction and mitigation measures for mud flood area of Hulu Langat in the upper Langat River, Selangor, Malaysia in January 2022. Attended meeting of Central Committee for Disaster Management (Federal Govt. level) in February 2022. Attended site visit and meeting on progress of construction of Sabo structure in Yan district, Kedah on March 2022. (Site of unprecedented debris and mud flood occurred in Aug 18, 2021).

Attended meeting of Special Task Force on Mitigation and Disaster Risk Reduction (Ministry of Environment and Water) from July through August 2022, I chaired the inception and progress meetings of the Technical Working Group on Vulnerability and Adaptation for the preparation of the 4th National Communication report to the UNFCCC.

Attended webinar "Land Use Planning for Resilient Societies" organized by CDRM in August 2022.

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**MARCIAL RIVERA**

Participated as an attendee of the different webinars organized by CDRM.

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