

World Federation of Engineering Organizations (WFEO), ISSUE #1, January 2018

# WFEO - CDRM E-Newsletter

E-Newsletter of Standing Technical Committee on Disaster Risk Management (CDRM)

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Photos in the #8 face-to-face meeting of WFEO-CDRM in Rome (Italy), on November 27, 2017

# CDRM (Disaster Committee): Action Plans for the 2nd-term (2013-2017)

### • Major purposes:

- Active collaboration with other international organizations
- (2) Awareness campaign though holding international symposiums
- (3) Practical developments of disaster risk management (DRM) and adaptation technologies under global climate change
- Subcommittee plans: (s1) Water-related DRM
- Development of methods, tools, and guidelines for water-disaster risk management/prevention, warning systems etc. based on a standardized procedure (s2) Earthquake-related DRM
- Contributions/inputs to an international conference for DRM by engineering views.

# (s3) Capacity Building for Natural DRM

- Creation of practical and training manuals for Capacity Building
- Establishment of web-based communication of information
- Holding of seminars, etc.

# The activity report of the WFEO-CDRM during 2017

The 2017 activity report of the WFEO-CDRM was submitted to the WFEO headquarters in October 2017. The summary of the report is as follows. Note that, for the full-text report, please visit the WFEO-CDRM homepage on the STC websites.

>Organizing structure: The WFEO-CDRM changed the organizing structure (one chair, three vice-chairs, three subcommittee leaders, and two secretariat staffs) in 2016 spring when the former subcommittee leader (Dr. Kanga, Australia) of the CBNDRM was switched into Er. Basa (India) and in 2016 winter when Dr. Hurtado (Peru) took a vice chair position. The membership in the early December 2017 had 22 active members from 7 countries (see Page 6).

>International Symposium: The WFEO-CDRM held the 11th international symposium on Disaster Risk Management in Fukuoka (Japan) in September 13, 2017 with seven disaster-professional speakers and 50 attendees (see <a href="Page 3">Page 3</a>). This symposium was continuously held since December, 2009 when the WFEO-CDRM was established.

>Financial Report: As to the accounting balance for the WFEO-CDRM activities during 2017, all expanses including travelling and personnel fees took 12,000 EUR. The expenses were supported by WFEO-CDRM secretariat (Kyushu Univ.), SCJ, and JFES.

>International Collaboration: Dr. Tsukahara (WFEO-CDRM secretary) participated in the Global Platform 2017 in Mexico for reviewing and improving the progress of the Sendai Framework, made by the UN-ISDR, partly related to the UN-SDGs in disaster aspects. He had inputs in the conference as a WFEO-CDRM delegate.

>Individual Activities: Some WFEO-CDRM members who belong to universities and research institutes published academic papers related to natural disasters. Several members worked for the local activities like a workshop to civilians for disaster prevention and reduction, and the actual reconstruction from flood disasters in Lima (Peru).

### >Other Remarks:

The 8th annual face-to-face meeting of the WFEO-CDRM was held in November 27, 2017 during the WFEO General Assembly in Rome, Italy (see <a href="Page 2">Page 2</a>).

>Near-future Plans: From January 2018, the new host (CIP). The old host (SCJ) needed to work for the smooth transfer to the host.

Note: CBNDRM= Capacity Building for Natural Disaster Risk Management; CIP= Peruvian Association of Professional Engineers; JFES= Japan Federation of Engineering Societies; SCJ= Science Council of Japan: STCs= WFEO Standing Technical Committees; UNISDR= United Nations Office for Disaster Risk Reduction; UN-SDG= United Nations - Sustainable Development Goals.

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

### Report on the 8th face-to-face CDRM in Rome

World Federation of Engineering Organizations
Fédération Mondiale des Organisations d'Ingénieurs



The eighth annual face-to-face meeting for WFEO-CDRM was held at Hall Tiziano in Sheraton Roma Hotel & Conference Centre, Rome (Italy) from 9:00 to 11:00 on Monday, November 27, 2017. Approximately 30 participants (including observers) engaged in many valuable discussions mainly for 2017 activity report and 2018-2021 strategic plan of a new host (Peru). The minutes are described as follows.

### 1. Opening Remarks

The committee chair (Prof. Komatsu) had a short comment related to appreciation for his chair-term ending and expectation to a new host of this committee.

### 2. Self-introductions

Each participant introduced himself/herself briefly by stating their names and affiliations. Official CDRM members were only a few from China, Japan, Kuwait, Peru, and USA. Most participants were observers from at least nine countries. The one third of the participants were Peruvian people, including the ambassador of Peru in Italy.

### 3. Summary of the 7th face-to- face meeting

Using distributed prints, the moderator briefly explained last minutes of face-to-face meeting in Lima, Peru.

### 4. Activity reports for 2016

The chair (Prof. Komatsu) made the reports of the 2013-2017 strategic plan, the current organizing structure (chair, three vice-chairs, secretary and deputy secretary, and three subcommittee leaders, totally 22 members from seven National Members of WFEO), and the 2017 activities mainly conducted by CDRM secretariat and individual activities done by several CDRM members. For example, Dr. Peng (China), Eng. Ruiz (Peru) and Dr. Delgado (Peru) had local activities on disaster risk management in their countries and Dr. Fan (China) and Dr. Wirasinghe (Canada) greatly contributed academic products related to disasters. In particular, the emphasized activities were as follows: (1) we held the 11th international symposium on disaster risk collaborated with management local engineering association and academic societies (e.g., JSCE) in September 13, 2017, in Fukuoka, Japan, and (2) we sent the CDRM delegate to the Global Platform 2017 (GP2017) in Mexico, which was held by UN-ISDR for reviewing and improving the progress for the Sendai Framework for Disaster Risk Reduction that mostly contributes to the UN-SDGs for the disaster prevention and reduction.

### 5. New host's strategic plan

Peruvian Association of Professional Engineers (CIP) will take charge of the CDRM as a new host from 2018. They have made a new strategic plan during 2018-2021, based on the continuity of what Japan sides (SCJ, JFES, and Kyushu University) had done during past eight years, the extended scopes including climate- and tsunami-induced disasters, the improvement of international collaboration with UN-bodies and other international organizations, and the disaster prevention practice sharing with NMs over the world. Participants provided several comments and questions for the CIP strategic plan. Those are listed as the following several items.

Organizing structure: vice president (Dr. Mujumdar) and subcommittee leaders (Prof. Tsukahara and Er. Basa) keep working for the renewal CDRM; Renewal subcommittees consist of extended scopes of climate (e.g., El Niño impact)-induced and tsunami disasters.

Ambitious plans: many activities are planned to perform during coming four-year term. Although an ultimate goal is to perform the collaborations with all NMs, a new host could start from the South American countries and could be supported by Japanese engineering societies; another potential possibility is to collaborate with local events for disasters (e.g., China) and even online workshop or seminar over the world.

Funding issue: Peruvian mining companies may help the new CDRM; the CIP members also help provide the money for activities; the renewal CDRM will propose to the world-level funding/project organizations like World Bank.

Disaster-related guideline and leaflet: publishing a

<u>Disaster-related guideline and leaflet</u>: publishing a guideline for water-related disaster is pending; this can be passed to CIP.

Others: disaster preparedness is also important to reduce disaster risks; extended scopes of natural disasters were discussed for drought and wildfire, but territory of disasters depends on the new host.

### 6. Other business

UN-ISDR is an important partner and collaborator because some NMs have already collaborated with the UN bodies. The committee chair had edited a book that describes the state-of-the-art implementation of climate change adaptation technologies.

### 7. Closing remarks and adjournment

The committee chair expressed his appreciation to the participants who had contributed to a valuable discussion and requested their continued support to the committee activities.

Note: CIP= Peruvian Association of Professional Engineers; JSCE= Japan Society of Civil Engineers; JFES= Japan Federation of Engineering Societies; SDGs= Sustainable Development Goals; SCJ= Science Council of Japan; UN= United Nations; UN-ISDR= UN- Office for Disaster Risk Reduction.

# Report on "The 11th joint international symposium on disaster risk management in Fukuoka, Japan"

<u>Held by</u> the World Federation of Engineering Organizations – Committee on Disaster Risk Management (WFEO-CDRM), the Federation of Engineering Societies (JFES), the Japan Society of Civil Engineers (JSCE), the Architectural Institute of Japan (AIJ).

Supported by Science Council of Japan (SCJ).



Guest speakers and organizing committee's members



Dr. Komatsu (WFEO-CDRM chair) had the opening remarks.

The joint international symposium on Disaster Risk Management was held in the morning on September 13, 2017, in Kyushu University, Fukuoka (Japan), collaborated with the Japan Society of Civil Engineers, Architectural Institute of Japan, Japan Federation of Engineering Societies, and WFEO-CDRM, and supported by the Science Council of Japan. The symposium has been annually held since 2009 to disseminate that the DRM is a key to promote disaster prevention and reduction. The symposium attracted approximately 50 participants. Severn guest speakers presented their great expertise and valuable experiences for natural disasters. They were invited from five countries. Three Japanese professors (Dr. Mazda, Dr. Shimizu, and Dr. Shimatani) reported the situations of severe earthquake- or water-related disasters that recently occurred in Japan. Dr. Mujumdar (USA, WFEO-CDRM vice-chair) talked about the framework for resilience and sustainability. Dr. Saber (Egypt) and Dr. Sutcu (Turkey) presented the updated technologies locally developed against disasters. Dr. Lai (Taiwan China) showed the hazard mapping for severe landside disasters. The audience was interested in their talks and had several questions and comments to the guest speakers. For example, one discussed with Dr. Mazda the broken bridges over highways during Kumamoto Earthquake through specific breaking mechanism. The symposium was successfully ended with greatly valuable talks by the speakers and their constructive discussions with the audience.

### Individual activities



Keynote presentation in WEF2017 (Rome) by Dr. Toshimitsu Komatsu (WFEO-CDRM Chair). Dr. Komatsu presented a keynote speech in the natural disaster-related session in the World Engineering Forum (WEF) in Rome (Italy), November 29, 2017. He presented the recent situation of natural disasters and prospective countermeasures using an example of flood disasters in Kyushu (Japan) during torrential rain. His speech was a hot topic in Japan. Approximately 500 attendees listed to his speech. He attracted the audience and got plenty of praise from the audience after his speech.

The activity report by Dr. Kan Kazutoshi (a member in Subcommittee on Water-related Disaster Risk Management [WDRM]). The meeting that studied large-scale natural disaster prevention was held in Shizuoka City (Japan) in November 11, 2017. We exchanged the views about the role of the disaster prevention, which power area possesses. After the meeting, we visited the off-site center for nuclear disaster prevention in Shizuoka Prefecture. This center is located close to Shizuoka Airport. The center is supposed to serve as the headquarter of Shizuoka Prefecture Government for severe disaster controls and countermeasures, when not only nuclear disasters but also natural disasters occur in Shizuoka (see the right photo).



Group photo after the workshop

### CDRM host: Transfer from Japan to Peru in WFEO General Assembly (Rome)

The Science Council of Japan (SCJ) had served as the host of WFEO-CDRM for eight years since 2009. The eight-year period had two terms on chairpersonship. The first term was handled by Dr. Ishii (Japan) during 2009-2012. He made the foundation of the strategic plan, involving committee activities, organizing structures and so on. Then, the successor in the second term (2013-2017) was Dr. Komatsu, who continued the strategic plan of the first term and partly changed the organizing structure. For the committee activities, the international symposium on disaster risk management was continuously held every year up-to the 11th symposium. The activities were slightly extended in the international collaborations. For example, he co-organized the international conference with the International Institute for Infrastructure Renewal and Reconstruction (I3R2) in Seoul (South Korea) and Kandy (Sri Lanka). In addition, several committee members have currently worked actively for local events related to disaster prevention and reduction. Now, the new host, Peruvian Association of Professional Engineers (CIP), takes charge of this committee after the end of the WFEO General Assembly in December 2, 2017, Rome (Italy). The new chair (Dr. Hurtado) expectedly will handle well and develop this disaster committee.



Switching the old chair (left) to a new one (right)

### New CDRM members from January 2018.

CDRM Secretary General: Dr. Javier Arrieta Freyre (Peru)



CDRM Deputy Secretary: Dr. Lizett Lopez Suarez (Peru)



Tsunami) leader Dr. Javier Piqué del Pozo (Peru)

CDRM Subcommittee of ETDRM (Earthquake &



Engr. Jorge Bustamante (Peru)



Peruvian Association of **Professional Engineers** (CIP)

Dr. Miguel Estrada, Director, Japan Peru Center for Earthquake Engineering Research and Disaster



Dr. José Macharé, Advisor in Geoscientific Research at INGEMMET (Peru)



Other potential members from the following National Members



Malawi Institution of **Engineers** 



Philippine Technological Council



Kuwait Society of **Engineers** 



**Chamber of Certified Architects** and Certified Engineers of Republic of Macedonia

# **Upcoming events**

### Announcement of Global Engineering Congress in London (UK)

The Global Engineering Congress will be held by Institution of Civil Engineer (ICE) and worldwide engineering organizations in London (UK) in late October, 2018. The Congress will provide valuable discussions of the UN's Sustainable Development Goals. The WFEO 50th anniversary is also held during the event. (www.ice.org.uk/events/).





The Committee on Disaster Risk Management of the World Federation of Engineering Organizations (WFEO), the National Engineering University and the Peruvian Association of Professional Engineers (CIP) are organizing this important event that will focus on the Reconstruction of areas affected by disasters. The damage caused by disasters will increase as climate change, urbanization and migration accelerate. Thus, reconstruction will be an increasingly relevant and necessary process, since it must be designed so that any country or region returns, as soon as possible, to the normal conditions of development, which it enjoyed before the disaster or improves these conditions. In the world, there are cases of slow or unsatisfactory reconstruction processes that end up reproducing the existing risk conditions prior to the disaster. By contrast, there are successful reconstruction processes that have been planned before the disaster occurs. Learning from the good experiences of reconstruction is of vital importance for Peru, as well as for other countries that have recently been affected by disasters and that are vulnerable to the occurrence of these. The main objective of the Symposium is to analyze experiences and good practices in reconstruction processes to formulate public policy guidelines, associated with the Sendai Framework for Disaster Risk Reduction and the UN's Sustainable Development Goals (SDGs).

**Date and time:** September 5-8, 2018. **Venue:** Lima Convention Center, Lima, Peru.

Admission: General USD 200, CIP members USD 150, Professor USD 100, Student USD 50.

Language: English and Spanish.

### **Preliminary program:**

	Wednesday 5	Thursday 6	Friday 7	Saturday 8
09:00 - 10:30		Keynote Speaker II	Keynote Speaker IV	
10:40 - 11:00		Coffee break	Coffee break	Technical
11:00 - 12:30		Thematic panel	Conclusions round table	
12:30 - 14:00		Lunch	Lunch	
14:00 - 15:30	Registration	Keynote Speaker III	Conclusions round table	Visits
15:30 - 16:00	Opening ceremony	Coffee break	Coffee break	
16:00 - 17:30	Keynote Speaker I	Thematic panel	Final conclusions / closing	

More information will be published soon, on the CIP website: www.cip.org.pe

### Committee on DRM Membership & Organization (As of December 2, 2017)

- 22 members from 7 countries.
- Chair: Dr. Toshimitsu Komatsu
- Vice chairs: Dr. Jorge E Alva, Dr. Syunsuke Ikeda, Dr. Vilas Mujumdar
- Subcommittees
  - \*Water-related Disaster Risk Management (WDRM), Leader: Prof. Kenichi Tsukahara
  - \*Earthquake-related Disaster Risk Management (EQDRM), Leader: Dr. Akira Wada
  - \*Capacity Building for Natural Disaster Risk Management (CBNDRM), Leader: Er. Ashok Basa

### New Host (CIP, Peru) organizing structures (at glance):

- More than 20 members (several new members are coming now!)
- New Chair: Dr. Jorge E. Alva Hurtado (CIP, Peru)
- Vice chairs: Dr. Syunsuke Ikeda (SCJ, Japan), Dr. Vilas Mujumdar (AAES, USA)
- Subcommittees
- \* Water and Climate-related Disaster Risk Management (WCDRM), Leader: Prof. Kenichi Tsukahara (SCJ, Japan)
- \* Earthquake and Tsunami-related Disaster Risk Management (ETDRM), Leader: Dr. Javier Pique del Pozo (CIP, Peru)
- \* Capacity Building for Disaster Risk Management (CBDRM), Leader: Er. Ashok Basa (IEI, India)

Updated information of strategic plan and membership for the new host (CIP, Peru) will be coming soon. Please visit the WFEO-CDRM homepage

Committee on Disaster Risk Management E-Newsletter Issue 01, January 2018

# WFEO - Committee on Disaster Risk Management (WFEO-CDRM), 2013-2017 Strategic Plan:

### **Background**

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

#### Vision

The WFEO-CDRM introduces and recommends appropriate knowledge and experiences to protect/ reduce natural disasters and promote sustainable development in our societies, and contributes to identification, evaluation and mitigation of, and adaptation to disasters which are related to all aspects of human life, economy, social activities and environment.

#### **Mission**

The WFEO-CDRM promotes

- to exchange, share and transfer knowledge, technologies and expertise which are useful to reduce disaster risks by identifying, evaluating, mitigating, and adapting to disaster risks,
- to perform foster studies and investigations which are useful to disaster risk management including examples of the best practice and implementation, and make the documents of the recommendations, guidelines, reports and booklets,
- to gather and disseminate information and provide recommendations on the mitigation of and adaptation to disaster risks to national members of WFEO, engineering societies and leading engineers,
- to facilitate capacity building of engineers in these areas.

### Goals

The WFEO-CDRM does

- > create awareness of disaster risk, and introduce knowledge and experience to avoid disasters,
- > make the documents of recommendations, guidelines, reports and booklets to foster disaster risk management,
- disseminate the information through national members of WFEO, which is linked to decision makers, governmental organizations, engineering societies and leading engineers,
- coordinate international efforts related to disaster risk management,
- > organize and support conferences, presentations and workshops related to disaster risk management.

The WFEO-CDRM that took charge of the 2013-2017 term worked harder for the above strategic plan. The coming new host (CIP, Peru) of the WFEO-CDRM will continue the above and further extend the strategic plan. The renewal plan will be uploaded soon on the WFEO-CDRM website.

Editing postscript: As long as I know, issuing an E-newsletter of CDRM like this form started at fall 2013 during the Singapore General Assembly of WFEO. The E-newsletter definitely has contributed to the visibility of CDRM activities, open to the world, although some people might criticize only little impact by the E-newsletter. The former secretariat (Dr. Ito Kazumasa and I) successfully created the E-newsletter every year with helps by the CDRM members who prepared articles although we had to make many efforts of editing. In particular, Peru team helped make this E-newsletter. I hope that a new secretariat (Peru team) could continue to issue an E-newsletter. By the former deputy secretary (Dr. Kimura)