



ISSUE 01 World Federation of  
January Engineering  
2014 Organizations

# CDRM Newsletter

Newsletter of  
Standing Technical Committee on Disaster Risk Management

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## Annual report of the CDRM, 2012 to 2013

The annual report covering activities from 2012 to Aug.-2013 of the standing technical committee on disaster risk management was submitted to the WFEO Headquarters. The following is a summary of the report. For the full report please visit the WFEO Website.

➤ **JFES-JSCE-AIJ-WFEO Joint International Workshop on Natural Disaster Mitigation:** The international symposium was held at Nagoya Univ. (Japan) in Sept. 2012, collaborated by four engineering-related organizations and supported by one academic council. Some topics from the lecturers included the Tohoku Earthquake & Tsunami disasters.

➤ **Financial Report:** The budget balance for the CDRM 2012-2013 activities showed a revenue of 4000 EURO which was allocated by WFEO and a spending of 5239.50 EURO. Therefore, the budget was negatively balanced from April 2012 to March 2013. The deficit was supported by Japan Federation of Engineering Societies (JFES) and among other organizations.

➤ **New Subcommittee:** A new subcommittee, Capacity Building for Natural Disaster Risk Management (CBNDRM), was established and will be led by Dr.Kanga (Australia).

➤ **2012 Strategic and Action Plan and its Realization:** (a) Recruitment of new members, (b) Update of the official CDRM website, (c) Publication of the newsletter, (d) Creation and preparation of DRM Guidelines for earthquake, water-related drought and storm surge disasters, (e) Holding of the International Joint Symposium for DRM, (f) Session preparation for the World Engineering Forum in Slovenia (Sept., 2012), (g) International collaboration with UN organizations OECD etc., and (h) DRM contributions to international conferences. In term of fulfillment of the above goals, (a), (b), (c), (e), (f), (g), and (h) were satisfied, but (d) is still on-going.

➤ **2013 Strategic Plan:** New leadership for the 2<sup>nd</sup> term (2013-2017) of CDRM was proposed (including a new Chair, Leader of subcommittee water-related DRM and Secretary). Other plans are (A) Recruitment of new members, (B) Update of the CDRM website, (C) Publication of the newsletter, (D) Creation of DRM Guidelines, (E) Holding of the International Symposium, (F) Preparation for the DRM Face-to-Face Meeting at the World Engineering Summit (Sept., 2013), (G) Cooperation with the UN and other international organizations.

## CDRM New Action Plan (2nd-term, 2013-2017)

- **Two major purposes:**
    - (1) Active collaboration with other international organizations
    - (2) Practical development of DRM adaptation technologies
  - **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
      - Holding of conferences and workshops for water-related DRM
    - (s2) Earthquake-related DRM
      - \* Still under deliberation
    - (s3) Capacity Building DRM
      - Creation of practical and training manuals for CBNDRM
      - Establishment of web-based communication of information
      - Holding of seminars, workshops etc.
- from the 2013 Face-to-Face*

## WECSI 2014

World Engineering Conference on Sustainable Infrastructure 2014

2-7 November Abuja, Nigeria | www.wecsi2014.org



### World Engineering Conference on Sustainable Infrastructure 2014,

The WECSI will be held in Abuja (Nigeria) in Nov. 2014 and will focus on the development of sustainable infrastructure in Africa. Although there are no specific sessions about DRM discussion, about flood control, urban planning, sustainable infrastructure, etc. will likely be based on DRM. Topics at WECSI2014 could be of interest to CDRM members.

Welcome to Kyoto

## WECC2015

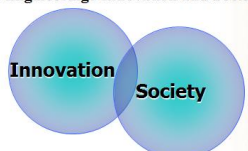
World Engineers' Conference & Convention

### World Engineering Conference and Convention 2015,

The WECC2015 will be held in Kyoto, Dec. 2015 with the theme "Engineering: Innovation and Society." CDRM members could be interested in the sub-topic Urban Development & Building for its discussion of DRM. A unique KYOTO program for attendees will highlight the city.

Main Theme

Engineering: Innovation and Society



## The 7th JFES-JSCE-AIJ-WFEO Joint International Symposium on Disaster Risk Management, Sep. 5, 2013, Chiba, Japan.

**Organized by**  
World Federation of Engineering Organizations (WFEO)  
Japan Society of Civil Engineers (JSCE),  
Architectural Institute of Japan (AIJ), and  
Japan Federation of Engineering Societies (JFES)  
**Supported by**  
Science Council of Japan (SCJ)



The International Symposium associated with Disaster Risk Management (DRM), an effective collaboration among several international and Japanese organizations, was held at Nihon University (Narashino City, Japan) from 9:00 to 12:00 on Sept. 5, 2013 during the 2013 JSCE annual meeting. This international symposium has been continually running since 2007 to provide the global community an opportunity to discuss disaster restoration, better mitigation techniques and prevention plans for severe future disasters based upon past experiences world-wide. Eight guest speakers from Japan, Iran, Taiwan, and Philippines who belong to a university or a research institute and have the research background in DRM or disaster prevention were invited. They gave unique presentations about DRM based upon a varieties of themes, including civil engineering, architectural engineering, financial policy, and legal policy. Immediately following, the speakers and audience (approximately 50 people) engaged in useful and practical discussions.

Details of the presentations and discussions are the following: In opening remarks, Dr. Ishii (WFEO-CDRM Chair) emphasized the importance of DRM to prevent economic loss and human suffering. Sequentially, the guest speakers' presentations were conducted about these topics: (1) Development of a forecast system for guerrilla-type heavy rain (Prof. Yamada, Chuo Univ.), (2) Example of a typhoon-induced catastrophe in Taiwan (Dr. Lai, Cheng Kung Univ.), (3) Resistant tests for tall

building under huge earthquake loads (Prof. Nakajima, Kyoto Univ.), (4) Gap between reality and ideality in damage recovery processes due to the Great East Japan Earthquake (Prof. Ubaura, Tohoku Univ.), (5) How to handle trans-boundary disaster risk management (Prof. Ali, Iran University of Science and Technology), (6) Spatial mapping of economic loss against disaster vulnerability (Prof. Kazama, Tohoku Univ.), (7) Development of the investment model for disaster prevention used in the world-wide political framework (Dr. Takeya, JICA), and (8) Example of the legislation about disaster prevention and risk management in the Philippines (Prof. Pacheco, Univ. of the Philippines Diliman). After that, Q & A between speakers and the audience resulted in a valuable discussion, including the gap between the civil engineering and architectural viewpoints on DRM and political problems about the reconstruction process in Tohoku (Japan). Finally, Prof. Komatsu (CDRM Subcommittee leader) closed the symposium by addressing the importance of DRM once again.

This symposium, held by several engineering associations, offers multi-faceted examples and ideas about DRM. The next symposium is planned next year during the AIJ annual conference (Kobe City, Japan).



Dr. Ishii (former CDRM Chair) gave opening remarks at Nihon Univ., Japan..

[http://www.wfeo.net/stc\\_disaster\\_risk\\_management/](http://www.wfeo.net/stc_disaster_risk_management/)

## CDRM Face-to-Face Meeting No. 4, Sep. 9, 2013, Singapore.

The fourth face-to-face meeting was held at the Marina Bay Sands, Sands Expo and Convention Centre (Room 3011) in Singapore from 9:00 to 13:00 on Mon., Sept. 9, 2013. Approximately 30 members & observers from 15 countries attended. The agenda & minutes were:

1. Welcome and Introductions
2. Meeting Summary: No.3 Face-to-Face (Sept, 2012)
3. Activity Report (overall & subcommittees)
  - 3.1 Overall Report from 2012 to Aug. 2013
  - 3.2 Subcommittee (SB) Water-related DRM Report
  - 3.3 SB Earthquake-related DRM Report
  - 3.4 SB Capacity Building NDRM Report
  - 3.5 Discussion, Q&A
4. New CDRM Member Approval
5. Chair report (from Dr.Ishii)
6. Activity Plan for the 2<sup>nd</sup> Phase (till 2017)
  - 6.1 Introduction of New Organization

### Message from Dr. Yumio Ishii (Former Chair)

Finishing my term as the Chair of the Committee on Disaster Risk Management, I am most thankful to the committee members for their positive participation in the activities of CDRM. It also made me happy that the "Report Card" by the WFEO Executive Board Advisory Group on STC Performance headed by Dr. Peter Greenwood graded CDRM as B+. I am very sure Prof. Toshimitsu Komatsu, my successor, will lead CDRM more actively and internationally.

After the WFEO general assembly meeting and WES2013 in Singapore in September, I attended the International Round Table on Disaster Risk Management of the Annual Convention of Philippine Institute of Civil Engineers held at Davao

- 6.2 New Action Plan (*see the front page*)
  - 6.3 SB Water-related DRM Plan
  - 6.4 SB Earthquake-related DRM Plan
  - 6.5 SB Capacity Building NDRM Plan
  - 6.6 Discussion, Q&A
  7. The 2<sup>nd</sup> Phase Plan Approval
  8. Other business
    - 8.1 Introduction of a Journal Paper related to Social Responsibility for Engineers
    - 8.2 Membership Review (exclusion for ghost members)
  9. Closing Remarks and Adjournment
- Note 1: After the General Assembly, the Chair was changed from Dr. Ishii to Prof. Komatsu, The Leader of Subcommittee Water-related DRM was switched from Prof. Komatsu to Prof. Tsukahara. Dr. Kanga became a vice Chair.
- Note 2: STC evaluation team observed and explained their task force during the meeting.

City, Mindanao in November and made a presentation on "International Cooperation against Global Disasters".



*Dr. Ishii with Ms. Li and Ms. Tahani at the General Assembly in Singapore*

### Coming event announced from the CDRM members

**The 6<sup>th</sup> International Conference on Flood Management (ICFM6)** marks the continued advancement of flood management practices and policies around the world. The first International Symposium on Flood Defence, held in Kassel, Germany in 2000, emphasized flood defense measures with each successive event (Beijing 2002, Nijmegen 2005, Toronto 2008 and Tsukuba 2011) evolving towards more integrative approaches, including risk, vulnerability and capacity building. The ICFM6 theme is "Floods in a changing Environment". ICFM is the only recurring international conference wholly focused on flood related

issues. It is designed to bring together practitioners and researchers alike, including engineers, planners, health specialists, disaster managers, decision makers, and policy makers engaged in various aspects of flood management. It provides a unique opportunity for these various specialists to come together to exchange ideas and experiences. ICFM6 will be held in São Paulo (SP), Brazil September 16-18, 2014. There is still time to join us (register and submit an abstract at <http://www.icfm6.com/>).

*reported by Prof. Slobodan Simonovic, University of Western Ontario.*

### Coming Event by Dr. Kanga (Vice Chair):

Invitation to the 10<sup>th</sup> Annual Conference of the International Institute for Infrastructure Resilience and Reconstruction (I3R2), Collaboration for Effective Disaster Mitigation, Response, and Recovery, Purdue University, May 20-22, 2014.

The 10<sup>th</sup> Annual Conference of the International Institute for Infrastructure Resilience and Reconstruction (I3R2) will be held at Purdue University. The focus will be on critical construction, disaster resilience and reconstruction. Participants present and learn results of research and discuss community impacts of hazards resulting from natural and manmade disasters, which damage or destroy the built environment.

The conference will also include a session on contributions relevant to the World Federation of Engineering Organizations Sub Committee on Capacity Building for Natural Disaster Risk Management.

Participants are invited to consider whether their research or professional work is suitable to contribute as a resource for dissemination.

Information on the Conference can be obtained from the Purdue I3R2 Conference Site

<http://www.cvent.com/event/s/10th-international-conference-of-the-international-institute-for-infrastructure-resilience-and-recon/event-summary-ccd9835b562a401fa90524ef8908f3c5.aspx>

## WFEO Sub Committee for Capacity Building for Natural Disaster Risk Management Presentation at Australian Earthquake Engineering Conference 15-17 Nov 2013, Hobart, Tasmania, Australia.

The Australian Earthquake Engineering Society is a Technical Society of the Institution of Engineers Australia. It held its annual conference in Hobart, Tasmania, Australia from 15-17 November 2013.

Keynote speakers at the conference included:

- Dr. Marlene Kanga, National President, Engineers Australia who spoke on seismic modeling methods for earthquake risk assessment and mitigation;
- A/Prof Charles Clifton, Assoc Professor of Civil Engineering, The University of Auckland who spoke on lessons learned for steel seismic design from the 2010/2011 Canterbury earthquakes
- Prof Kazuhiko Kasai, Division of Structural Engineering, Tokyo Institute of Technology, who presented the results of his research using full scale laboratory tests on the seismic performance of building protective systems and compared the results with actual earthquake observations
- Prof Paul Somerville, Deputy Director, Risk Frontiers, Macquarie University, NSW, who spoke on assessment of seismic design motions at low probabilities with a comparison of the experience of Australia and New Zealand.

The conference was an opportunity for Dr. Kanga to provide visibility to the work of the World Federation of Engineering Organizations Committee on Disaster Risk Management to Australian and New Zealand professionals involved in seismic studies and earthquake engineering. She presented the work done to date of the sub-committees. She called for contributions to the work of the CDRM sub-committee for resources for building capabilities for natural disaster risk management. There were a number of inquiries received as a result of this presentation.



*Conference delegates at Gordon Dam, Tasmania*

### **Message from the New Chair, Prof. Toshimitsu Komatsu,**

This is Mr. Komatsu (a Professor Emeritus of Kyushu University in Japan), new Chair of CDRM since Sep., 2013.

I have worked for water-related disaster risk management in the Civil Engineering field for about 30 years and have served CDRM members as a leader of the subcommittee in recent years. Therefore, I believe that my experiences in Civil Engineering field will be well utilized for CDRM activities and WFEO administrative tasks. I am very happy to serve all the CDRM members as the Chair for the next three & half years. Additionally, I look forward to the positive contribution of every member to the CDRM activities. My vision for the CDRM organization involves some restructuring and further development. I wish to create a new subcommittee, MEGA DRM, which will focus on multiple and complex disasters like 2011 Tohoku Earthquake & Tsunami and Fukushima nuclear meltdown catastrophes. I also wish to develop practical adaptation technologies & methodologies for potential severe disasters under global climate change. I know these plans will be a big undertaking. Because of this, I anticipate contributions from each member of CDRM. I look forward to rewarding discussions about my vision with all members.

My detailed background can be seen on the following website:  
[http://www.wfeo.net/stc\\_disaster\\_risk\\_management\\_president/](http://www.wfeo.net/stc_disaster_risk_management_president/)



*reported by Dr. Marlene Kanga,  
CDRM Vice Chair and  
CBNDRM Leader*

## Related News:

CDRM contribution for Post 2015 (Sustainable Development Goals, SDGs): According to the reports from the UN Open Working Group on SDGs and other SDGs groups, disaster risks under global climate change have recently become a more serious problem, which negatively affects sustainable development. Therefore, a practical method/plan for reducing disaster risks is urgently needed.



## Upcoming Events

### WFEO Extended Executive Board Meeting, April 7-11, 2014, at UNESCO, Paris.

The semiannual Executive Board Meeting will be held in this April in Paris. The CDRM Chair, Prof. Komatsu, will attend the meeting to report the current CDRM activities.

### Face-to-Face Meeting No. 5, November 2-7, 2014, in Abuja, Nigeria.

The annual meeting of the standing technical committee on Disaster Risk Management will be held at Transcorp Hilton in Abuja City, Nigeria during the WECSI 2014, the meeting agenda and program are TBA.



### CDRM Membership & Organization (As of January, 2014)

-Approximately 35 members from 13 countries.

-Chair: Prof. Toshimitsu Komatsu

-Vice-Chairs: Dr. Marlene Kanga, Prof. Syunsuke Ikeda, Prof. Vilas Mujumdar

-Sub-Committees

\*Water-related Disaster Risk Management (WDRM), Leader: Prof. Kenichi Tsukahara

\*Earthquake-related Disaster Risk Management (EQDRM), Leader: Prof. Akira Wada

\*Capacity Building for Natural Disaster Risk Management (CBNDRM), Leader:

Dr. Marlene Kanga

Detailed information is available on in the CDRM website:

[http://www.wfeo.net/stc\\_disaster\\_risk\\_management/](http://www.wfeo.net/stc_disaster_risk_management/)

## WFEO Standing Technical Committee on Disaster Risk Management (CDRM)

### Background

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

### Vision

Introduce and recommend knowledge and experiences to avoid disasters and promote sustainable and sound development. Contribute 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

- Exchange, share and transfer knowledge, technologies and expertise which are useful for minimizing risks of disaster by identifying, evaluating and mitigating, and adapting to disaster risks.
- Foster studies and investigations which are useful to disaster risk management including examples of the best practice and implementation, and document the results in the form of recommendations, guidelines, reports and booklets.
- Gather and disseminate information and provide recommendations on the mitigation of and adaptation to disaster risks to WFEO member countries, engineering societies and leading engineers.
- Facilitate capacity building of engineers in these areas.

### Goals

- Create awareness of disaster risk, and introduce knowledge and experience to avoid disasters.
- Document recommendations, guidelines, reports and booklets to foster disaster risk management.
- Disseminate the information through WFEO member country linkages 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 CDRM has a role of minimizing the potential damage and risk to human life and damage through the proper application of technology. The disasters which are closely related to all aspects of human life, economy, social activities and environment should be considered in the CDRM. Because there are broad ranges of disaster, disasters to be focused on should be determined based on the interests and concerns of the members of CDRM taking account of its role and priority.