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## World Federation of Engineering Organizations Standing Committee on Engineering and the Environment 2008-2011

Teleconference Meeting No. 3  
Thursday July 22, 2010 – 0600 GMT

### Minutes

#### 1.0 Time and Place

The third teleconference meeting of the World Federation of Engineering Organizations Committee on Engineering and the Environment (CEE) 2008-2011 was held on Thursday, July 22, 2010, beginning at 0600 GMT. The primary objective of the meeting was to receive mid-year progress reports from the Chair and Theme Leaders and discuss next steps as well as some administrative and communications matters.

#### 2.0 Attendance

CEE Chair:	D. (Darrel) Danyluk, P.Eng.
CEE Vice-Chairs:	Engineer S. (Spryros) Papagrigoriou – Greece
CEE Past-Chair:	Engr B. (Bhagwanji) J. Vasoya - India
CEE Participants:	Engineer A. (Abdelkader) Ali – Morocco Engineer K. (Kwabena) Safo-Debrah - Ghana Engineer M. (Mounir) Ghribi - Italy P. (Paul) Jowitt, C. Eng. – United Kingdom B. (Babagana) Mohammed, C.Eng. – United Kingdom Engineer A. (Arvind) Poothia - India C. (Charles) Willmot, FIPENZ – New Zealand
CEE Member (Regrets):	Eng. M. (Mohammad) Al-Rasheedi - Kuwait Engineer I. (Irene) Campos – Costa Rica Eng. S. (Sandra) Fernandez – Argentina T. (Tony) Marjoram, CPEng – UNESCO D. (Don) Schutz – United States Eng. Z. (Zeljko) Vukelic - Slovenia
Observers:	M. (Mike) Sanio, ASCE

CEE Secretary: D. (David) Lapp, P.Eng.

### **3.0 Call to Order and Approval of Agenda**

Chair D. Danyluk called the meeting to order and a roll call of members present was completed. The Chair asked those present for any additions and changes to the agenda. There was one addition from the Chair:

- Item 8.8 – Update on Future Climate Project – Danish Society of Engineers

The agenda was approved with the additional items.

### **4.0 Approval of Minutes**

The unapproved minutes from the in-person meeting held on November 2, 2009 were reviewed. The minutes were distributed shortly before the teleconference so the Chair suggested that the minutes be received at this meeting and approved at the face-to-face meeting in Buenos Aires in October. This was agreed by the members present.

*Action:* D. Lapp to include these minutes in the next agenda for approval by the committee.

### **5.0 Business Arising and Review of Action Items**

D. Lapp reported that all action items arising from the November 2009 meeting were completed and that any remaining items were included in the agenda for this meeting.

### **6.0 Chair's Activity Report**

#### **6.1 WFEO Executive Board Meeting – March 2010**

The Chair reported that he attended the meeting which was held in Barcelona. He reported on four items of interest to the committee members:

- The budget for 2010 was reduced to 5,000 euros due to an overpayment in 2009. This budget is used for communications such as this teleconference call, the newsletter, webinars, printing and reproduction and related expenses.
- Japan submitted a proposal to host WEC 2015, which was approved by the Executive Board and forwarded to the Executive Council for approval at their October 2010 meeting in Buenos Aires (Note that WEC 2011 will be in Geneva)
- Major changes to the website are underway through a service agreement with India (Dr. R. Gupta). Financing of these changes is provided by the Kuwait Society of Engineers. The website portal will be changed from wfeo.org to wfeo.net. Standing committees have been requested to provide content for the new website and the WFEO-CEE Secretariat is currently compiling materials for submission by the end of August.

- The Executive Board approved Lebanon as the new Chair for the Standing Committee on Education in Engineering. Argentina had also submitted a proposal.

## **6.2 UN Commission on Sustainable Development (UN-CSD)–Meeting No 18**

D. Danyluk, along with STC Energy Chair - J. Spitalnik and STC Capacity Building Chair - D. Clinton (“WFEO Task Force to the UN-CSD”) participated in UN-CSD 18 meetings in New York in May 2010. The report on this meeting was included with the agenda materials and will be attached to the final minutes as well as on the website.

The meeting included another successful side event organized by the Scientific and Technological Major Group (co-Chaired by the World Federation and the International Science Union) entitled: “Capacity-Building: Words Into Action 2010 – Transport Efficiency and Waste Avoidance – Input for Policy Makers”. The event included three excellent presentations from distinguished leaders in automotive technology, adoption of alternate fuels for transport and sustainable transportation of fertilizer. Copies of their presentations are available and will be placed on the website.

Participation at UN-CSD also included submitting interventions on specific subjects being covered in this round of the UN-CSD. Normally 5-6 topics are selected for study and research/consultation in the first year of a two year cycle. The second year consists of the development of policy recommendations by the UN-CSD Chair through a consultation process that includes interventions to finalize them for submission to the UN General Assembly.

The Chair reported that the United States will propose a Task Group on Mining and Sustainable Engineering at the upcoming meeting of the CEE in October 2010. It will initially work as a theme area within CEE and part of its focus will be to support topics of current interest to the UN-CSD.

**Action:** CEE Secretariat to submit the UN-CSD meeting report to the website, including pdf copies of the three presentations that were presented at the May 2010 side event.

## **6.3 UN Framework Convention on Climate Change (UNFCCC)**

The Chair reported that the WFEO–CEE had delivered a side event on infrastructure climate risk assessment as an important and early element of adapting infrastructure to a changing climate at the Bonn Climate Talks in June 2010 in addition to attending meetings and other side events during the 12 day conference. A trip report on the meetings and the side event was included in the agenda materials and will be submitted to the website.

The number of delegates at Bonn Climate Talks in June 2010 was approximately 2,000, a sharp reduction from previous years leading up to COP-15 in Copenhagen in December 2009. The next meeting COP-16 will be held in Cancun Mexico at the beginning of December. A request for a side event was submitted for approval later in the summer (**Secretary’s Note:** This request was later withdrawn due to the high number of applications from other groups and the unavailability of results from the Costa Rica project by the time of the event).

Chair Danyluk summarized his impressions of the recent COP-15 in December 2009, the Bonn Climate Talks and the objectives of continued WFEO involvement in the process:

- COP-15 was a success in that all the major emitters (countries) attended the conference;
- There was agreement to continue the discussions;
- World Federation of Engineering Organizations is a new stakeholder that is one of the many committed NGO's now involved in the process;
- A growing presence and role at the UNFCCC meetings with a focus on becoming a trusted, valued contributor should be a strategic objective of the Federation.

D. Danyluk reported that he will be attending the COP-16 in Cancun and asked the members present if there was any interest to attend the meeting (at their own expense). He must submit a letter to the UNFCCC by late August with the list of delegates from WFEO.

*Action:* CEE Secretariat to email members to confirm and interest to be registered as part of the delegation to UNFCCC COP-16 in Cancun, Mexico Copenhagen as part of the WFEO delegation.

## **7.0 WFEO-CEE Theme Leader Progress Reports**

### **7.1 Theme 1 – Environmental Impacts of Olympic Events**

D. Danyluk thanked Theme Chair S. Papagrighoriou for his written contributions to the spring 2010 newsletter, which focused on the theme of engineering and major sporting events. The newsletter has been well-received by the World Federation of Engineering Organizations' community as well as outside organizations.

S. Papagrighoriou presented his draft final report and asked members to provide any comments in the coming weeks to enable him to finalize the document for publication following approval of the committee at the next face-to-face meeting in October 2010. He briefly summarized the scope and content of the document.

It is a compilation of issues and elements to be taken into account when planning and executing major sporting events around the world. It reflects the experiences, the successes, and the failures of the Athens, Sydney, Beijing and Barcelona Olympic Games. It provides a methodology to consider among other things construction materials, the natural environment, climatic change and technological innovation to give a clear picture of the issues and a methodology to develop solutions.

It was agreed that this would be a particularly valuable document for countries which are planning to apply to organize future games. Our distribution list should include such organizations where they can be identified.

B. Vasoya asked if the document covered the impact of the games on air, noise and human health and suggested that a paragraph or two be added on public health issues. The current

document does not cover noise although this could be added in the future. As for health it was suggested and agreed that B. Vasoya would prepare a section on health that could be included in the current or future edition depending on when it was submitted.

The steps following approval of the document in October will be to publish and distribute it in 2011. One question to be resolved is who should receive this report. It was agreed that a list of organizations which are involved in the subject e.g. International Olympic Committee, Commonwealth Games etc. should be compiled to facilitate an effective distribution.

**Action:** S. Papagrigoriou to prepare an initial list of receiving organizations for the published report for the October meeting.

## **7.2 Climate Change Adaptation**

D. Danyluk reported that Engineers Canada recently received funding from Canada's Department of Foreign Affairs and International Trade to undertake a knowledge development and capacity building project with the Costa Rica Colegio. This project will use the Canadian infrastructure climate risk protocol and train Costa Rican engineers to assess the climate vulnerability of a sewage treatment plant in Costa Rica. A copy of the technical proposal was included with the meeting agenda materials. The first visit of the Canadian training team is scheduled for mid-August. If the project is sufficiently well-advanced, the intent is to present the results through a side event at the UNFCCC COP-16 meeting in December 2010.

Both India and Ghana expressed an interest to do a pilot study of infrastructure climate risk using the protocol. This would establish its application within these countries as well others in their respective regions.

D. Danyluk noted that there are other tools to assist in adaptation, and that a technical session on adaptation and tools is being organized at the upcoming engineers conference in Argentina.

In March 2010, the CEE in cooperation with Unión Panamericana de Asociaciones de Ingeniería (Unión Panamericana de Asociaciones de Ingeniería ), delivered a successful training workshop in Recife, Brazil on the principles and application of infrastructure climate risk assessment.

A. Ali noted the importance of the role of engineers can play in climate change adaptation and addressing infrastructure vulnerability. Countries in Africa are very vulnerable to climate change and there is a need to develop projects in the next few years. A critical success factor is to build the capacity to adapt, which can be achieved in part through training. The Africa Union of Engineers is planning some training sessions on climate change and would be interested to explore possibilities for the type of training being undertaken by Canada. Similar interest was expressed by India through B. Vasoya.

C. Willmot noted that there are very important differences between mitigation of climate change and adaptation to climate change. The majority of assistance that engineers can provide is to adapt our designs to future climate.

### **8.3 Engineering and Agriculture**

D. Danyluk reported that Engineer Sandra Fernandez from Argentina had volunteered to lead a new theme on engineering and agriculture to replace the disaster risk management team that has become its own standing committee. He requested Sandra to develop a work plan for approval of CEE in Buenos Aires. This plan will be integrated into the CEE Strategic Plan.

A key task is to secure volunteers with the appropriate subject matter expertise and CEE members were asked to identify potential experts in their respective countries that could be contacted to solicit their interest and participation.

### **8.4 Sustainable Development**

P. Jowitt explained that he had tabled a series of incomplete matrices of CEE and World Federation of Engineering Organizations activities within a sustainability framework at the Brasilia meeting in 2008. The aim is to determine the relationships between them and identify where the work of the World Federation of Engineering Organizations and its standing committees could have an impact.

He requested that the theme leaders fill out these matrices to the best of their ability for discussion at the next CEE meeting. Once received he will review and edit these as necessary then send to the Secretariat.

### **8.5 Environment and Sustainability Practices**

D. Lapp reported that work on this guideline has been stalled due a lack of time to create an initial draft. The basic outline is complete and acceptable enough to prepare a written draft but lack of time and other resources has prevented the writing to proceed.

D. Lapp noted that more time will be available later in the year to develop the first draft. Once that is done the review process can begin.

T. Marjoram suggested the title of the document might be re-worked so that it does not just appear focused on engineers. This may limit its take-up by other stakeholders.

### **8.6 Infrastructure in Developing Countries**

Cdr. A. Poothia explained three recent activities completed over the past year:

1. Infrastructure Management and Maintenance Workshop

This very successful workshop was organized to run from 31 May to June 5, 2010 and attended by participants from 14 African and ASEAN countries. The intent is to organize more of these workshops with dates planned in Kuala Lumpur (March 2011) and Nairobi Kenya (June 2011).

2. Recommendations on High Rise Buildings

There is tremendous pressure to more effectively utilize urban space in developing countries. High rise buildings as needed to meet this need. The recommendations focus on good maintenance practices, eco-friendly architecture, improved air quality are explained for

### 3. Use of Plastic Waste in Road Construction

This practice involves plastic bags as infill and has been found to improve road safety and resiliency. It has a savings of over 15% compared to bitumen.

## **8.8 Technical Webinars for Themes**

This discussion was deferred and will be added to agenda for the next face-to-face meeting of the CEE in October.

## **9.0 WFEO-CEE Face-to-Face Meeting No 3 – Buenos Aires, Argentina October 2010**

The preliminary agenda for the October meeting was included with the agenda materials for this meeting.

There were no additions or changes. Since this is a preliminary draft, it is open and subject to change in the coming months. All members were encouraged to review the agenda and are free to suggest additions or changes up to about two weeks before the meeting.

## **10.0 Other Business**

### **10.1 UNESCO Update Report**

This item was deferred to the October meeting.

### **10.2 WEC 2011 Update**

D. Danyluk reported that the Secretariat is submitting a concept proposal to the WEC 2011 Organizing Committee to run a full day parallel session climate change – both adaptation and mitigation. There will be separate but parallel sessions on adaptation and mitigation with keynote speakers and invited panelists.

The proposal will be considered by the Organizing Committee in October. If approved, this will become a significant activity in this theme area for the remainder of 2010 and much of 2011.

### **10.3 Sustainable Cities Award**

M. Sanio reported that the World Bank wishes to get engineers involved to identify cities that have implemented sustainability into their planning and operations. A working group has been established chaired by the United states (Jack Fritz) that is currently developing a Terms of Reference.

The next steps are to undertake consultations at the Buenos Aires meetings including a discussion at the CEE meeting. After these consultations a more detailed discussion will be held in March 2011 in conjunction with the meeting of the Executive Board.

#### **10.4 IDA Future Climate Project**

D. Danyluk briefed the group on the IDA (Danish Society of Engineers) report on this project, which includes 13 country reports and strategies to mitigate climate change through GHG reductions and other methods. He encouraged everyone to review the report which is available at ([www.futureclimate.info](http://www.futureclimate.info)). The report suggest that engineering solutions exist today to mitigate emissions – but it will take political will and resources

IDA is planning a second phase to the project and wishes to get CEE involved. A conference on the second project will be held in two years. It was agreed to discuss this further at the next face-to-face meeting.

#### **10.5 WFEO-CEE Newsletter**

The next newsletter will be published in October, prior to the Executive Council and standing committee meetings. This issue will focus on Theme 6 – Infrastructure in Developing Countries, supported by Cdr A Poothia.

D. Danyluk noted that the Secretariat has a writer available to format and edit material provided by the theme leaders and paid for through the CEE budget.

#### **11.0 Next Meeting and Adjournment**

The Chair thanked all participants who were able to participate. He noted the amount of work that has been completed by the committee was awesome.

The next face-to-face meeting will be held in Buenos Aires, Argentina as part of the standing committee meetings held in conjunction with the Executive Council meeting. A three-day engineering conference follows the World Federation of Engineering Organizations meetings.

Prepared by:

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