

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

**In Person Meeting No. 1
Recanto II Room
Brasilia, Brazil**

**Monday December 1 (a.m) and
Tuesday December 2 (p.m.), 2008**

Draft Minutes

1.0 Time and Place

The first in person meeting of the World Federation of Engineering Organizations Committee on Engineering and the Environment (CEE) 2008-2011 was held on the morning of December 1 and the afternoon of December 2, 2008. It was held in conjunction with the meetings of the WFEO Executive Committee and the World Engineering Convention 2008 held in Brasilia, Brazil.

2.0 Attendance

CEE Chair:	D. (Darrel) Danyluk, P.Eng.
CEE Vice-Chairs:	Engineer S. (Salim) George Aoun - Lebanon Engineer S. (Spryros) Papagrigoriou – Greece
CEE Past Chair:	Engr B. J. Vasoya - India
CEE Members:	Engineer N. (Naeemah) Al-Hay - Kuwait Eng. C. (Carlos) Ballester - Argentina Engineer R. (Ravind) P. Gupta - India Engineer Y. (Yumio) Ishii - Japan Engineer P. (Paul) Jowitt – United Kingdom T. (Tony) Marjoram, CPEng – UNESCO Engr. A. (Arvind) K Poothia - India Engineer M. (Mohammad) Sadek – Syria Engineer L. (Lina) Sergie - Syria Eng. C. (Crotmir) Remec - Slovenia D. (Donald) Schutz, PE – United States of America Engineer N. (Nguyen) Son Hung – Japan
Observers:	S. (Suzelle) Barrington, P.Eng. - Canada J. (John) Boyd, P.Eng. – FIDIC (December 2 a.m. only)

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 asked members to introduce themselves, including name, country and affiliation. Observers were asked to identify themselves. Past-Chair Dr. Vasoya was asked to address the committee.

The Chair then provided a brief overview of each item on the morning's agenda, which included the business meeting and items under other business. He noted that the Theme Leaders would be reporting at the afternoon session on the second day of the meeting.

The agenda was approved with no changes.

4.0 Approval of Minutes

D. Lapp reported that the minutes from the November 12, 2007 meeting of WFEO-CEE in New Delhi, India were not available. He provided a brief summary of the highlights of the meeting which included:

- A report from Chair B.J. Vasoya on the activities of the committee over the past year;
- An exchange of information among committee members on their activities over the past year;
- A presentation from incoming Chair D. Danyluk to discuss membership, communications and short term (4-6 months) actions, including the development of a four-year strategic plan.

The minutes of the June 19, 2008 teleconference were reviewed. This was the first teleconference of committee and was timed to best optimize the time zones of the members. The Chair noted the technology and the voice quality worked reasonably well, and the call was inexpensive (about 400\$CAN for the 2 1/2 hour call). There were a couple of problems – incorrect telephone numbers and incompatibilities between country providers but these can be corrected for the most part. The scheduled time for the call 0400 GMT seemed to work for the participants. The Chair asked that anyone who could not participate because of the time of the call contact the Secretariat so that such feedback can be considered when the next call is scheduled.

There were a few minor editorial corrections to the minutes. The minutes of the teleconference were unanimously approved as amended.

5.0 Business Arising and Review of Action Items

D. Lapp reported that all action items arising from the June teleconference had been completed or would be discussed as part of this meeting.

There was one outstanding action item - Item 6.4: Contacting Engineers without Borders and Engineers for a Sustainable World to establish connections to younger engineers that may wish to become involved with the work of the committee. D. Danyluk noted that WFEO has not established linkages with Engineers without Borders.

P. Jowitt and T. Marjoram noted that Engineers without Borders consists of chapters covering individual countries or regions that operate differently. Relationships need to be developed on a country-by-country basis.

Action: T. Marjoram to draft a proposal to set up a standard communications document for each CEE member to set up links with individual chapters of Engineers without Borders.

6.0 WFEO-CEE Business Meeting

6.1 Chair's Activity Report

The Chair reported on several international meetings he attended on behalf of WFEO and the CEE, noting that written reports were included as part of the meeting materials.

The UN Committee on Sustainable Development (UN-CSD) held its meetings over a two week period in May 2008 where WFEO presented the views of the world engineering community. The WFEO representatives included the WFEO President B. Grear and the Chairs of the standing committees for Engineering and the Environment (D. Danyluk), Energy (J. Spitalnik) and Capacity Building (D. Clinton). WFEO has participated in these meetings for the past three years, moving from virtual non-recognition of the engineering community to become a major contributor to the policy discussions. The next meeting (UN-CSD #17) will be held in May 2009 with a preparatory meeting in February 2009 which will be attended by the same WFEO representatives.

The Chair noted that UN-CSD has asked for experts to make presentations to member countries to address identified issues. So far few engineers have participated and there is a desire to increase our participation through WFEO-CEE. A. Poothia volunteered to help with this activity.



The Chair and P. Jowitt were able to present a side event at the June 2008 meeting of the UN Framework Convention on Climate Change (UNFCCC) in Bonn, Germany. The two-hour event had a good turnout. Information and contacts from the UNFCCC Bonn meetings and the presentations from the side event are available to CEE members from the Chair and Secretariat. Contacts were provided to Dr. Ishii at the WFEO December meetings.

WFEO applied for observer status at future UNFCCC meetings and received the status in September 2008. This status enables the WFEO to hold side events, our own parallel event as well as participate in most meetings. Part of the work in the UNFCCC includes participation in the Nairobi Work Program, which focuses on actions around adaptation to climate change. The UNFCCC meets twice yearly, including a Conference of the Parties Meeting Number 15 (COP-15) in Poland that is at the same time as our current meeting. The next meeting is June 2009 in Bonn.

The Chair also participated with the WFEO President and others at a meeting of the UN Economic and Social Council (ECOSOC) in early July 2008. ECOSOC is a higher level policy advisory committee in the UN that receives input from the UN-CSD as well as the UNFCCC. The ECOSOC invited WFEO participants to attend a minister's breakfast hosted by UNESCO. D. Danyluk was given three minutes to summarize WFEO activities that support the agenda of this UN committee. He was recently asked to speak at a minister's meeting in Spain but declined due to scheduling conflicts. As our profile increases there will be more opportunities to speak and participate at meetings.

The Chair noted that WFEO is the only engineering organization without special interests at the UN table. The longer-term objective of our participation is to raise the profile of engineering so when there are questions at the UN the choice is to consult the engineering community through the WFEO. The WFEO can be viewed as the "UN of engineering" since it has no vested interests and can provide advice to address world problems that require engineering. In 2009, the intent is to broaden participation in these meetings as well as the COP-16 in December.

Upcoming events in 2009 also include UN-CSD preparatory meetings in February 2009. Our Chair will likely attend this meeting as well the CSD meeting in May 2009.

The Chair noted that the CEE is in a position to take a more active role in upcoming UNFCCC meetings. The Chair suggested that our work could be sufficiently advanced such that results from any of our six theme areas could be presented at the December 2009 UNFCCC COP-16 meeting. He noted that there is no funding from CEE to support travel expenses – this has to come from the organization or country. In the case of Canada, the Chair received funding for travel costs for the UN-CSD and UNFCCC meetings in 2008 because the government saw benefits in his participation. Once our participation and input really gets going, it is likely that WFEO member countries will be willing to put resources into this long-term effort.

The Chair asked for feedback from CEE members on his proposals.

P. Jowitt commented that our participation in the 2008 Bonn event was very useful and supported participation at COP-16, which will be held in Copenhagen Denmark. There is a need to define outputs and desired outcomes from our participation to make sure we deliver. He also complimented WFEO on achieving observer status for future UNFCCC meetings and events.

T. Marjoram noted that UNESCO has a centre for technical education located in Bonn, and has an open invitation to visit any time. He indicated that he could time a visit as well as help from the staff in Bonn for the June 2009 meeting.

A. Poothia noted that the Institute of Engineers of India is attending the COP-15 in Poland. They are preparing a country-wide energy plan with 19 other country institutions as input to a global plan. The deadline for the country plans is the end of February 2009. An integrated plan will be submitted to the UN by July 2009 for discussion at the next Conference of the Parties meeting in Copenhagen.

There was agreement to form a small Task Force to oversee CEE participation in the UNFCCC 2009 meetings.

Action: CEE members to indicate their interest in participating in a Task Force to plan and oversee our participation in the 2009 UNFCCC meetings. (**Secretary's Note:** The deadline for declaring interest and participation is January 31, 2009. Please submit your interest to the Secretariat via email).

Y. ISHII reported that Japan has allocated 400M US\$ to help developing countries address the impacts of climate change and noted that engineering input is required. He offered to contact the proper authorities to get details on the program.

Action: Y. ISHII/N. Guyen to obtain information on Japanese program and pass along to the Secretariat.

6.2 Review of WFEO-CEE Terms of Reference

The Chair referred to the document "Rules for Standing Committees" which was included in the meeting materials. The rules are very general, and enable standing committees to operate differently, but within a common framework.

The WFEO President, B. Gear addressed the committee at this point in the meeting. He noted that the changing climate is a major concern for many countries. Part of the role of this committee is to draw people's attention to the impact of climate change on other aspects of engineering besides the environment e.g. energy and the developing world. He also noted the importance of the work with the United Nations and particularly the CSD and UNFCCC.

He encouraged the committee to define its outcomes and how they will contribute to the WFEO agenda and to work towards them not repeating what has been done before.

6.3 WFEO-CEE Membership

The current version of the membership list was briefly reviewed and passed around to meeting participants for corrections.

Action: CEE members to provide corrections to the master mailing list. (**Secretary's Note:** Please provide corrections via email by January 31, 2009).

6.4 Strategic Plan Ratification

The Chair asked if there were any further changes or additions to the latest version of the plan included with the other meeting materials. He noted that the plan will serve as our foundation document that will guide our work for the next few years. However there will be changes and deviations as the work proceeds.

There being no further comments or changes tabled, the Strategic Plan, Version 2.1 dated November 20, 2008, was formally ratified.

Action: WFEO-CEE Secretariat to submit the ratified plan to the WFEO Secretariat for the record (Secretary's Note: The final version of the plan without the detailed membership list will be submitted to WFEO for posting on the website. The membership list will be submitted separately).

6.5 Theme Task Group Rosters

The Chair reported that some themes had experienced difficulties in recruiting members to participate in their task groups. The purpose of the discussion was to determine what might be the causes and what the committee as a whole can do to address them. He asked the theme leaders to comment on how the recruiting is going, what countries are represented so far, what are the plans to increase participation and how the main committee can help.

Theme 1 leader S. Papagrigoriou outlined the status and approach:

- An initial list of participants has been completed; however, more representation is needed to provide perspective from a wider selection of past games;-
- Contacting those countries who have held or will be holding Olympic games, through the WFEO country representatives as well as standing committee chairs;
- Direct contact through his network as well as those already on the task group.

Another strategy is preparing the first draft of the work of the task group and sending it through WFEO member country representatives that have had Olympic Games.

Another option is to invite all of the countries to attend an organized meeting.

Theme 3 leader Dr. Ishii offered the following comments:

- It has been difficult to recruit members from countries outside of Japan;
- Tried recruitment through official channels through the WFEO Chair and this did not work very well. However, official channels cover the world and therefore should still be used since personal networks are limited;
- Better results were achieved through contacts made with the personal network of Dr. Ishii;
- The task group now has 30 members with a great degree of competence in the area and good participation so far;
- Continuing recruitment efforts are a good way to enhance the visibility of the work and the profile/influence of the WFEO.

Theme 4 leader Paul Jowitt has not started recruiting, but intends to begin after this meeting.

Theme 5 leader D. Lapp reported that a relatively small task force is being assembled to work on the international guideline. It will consist of four members from Canada who have been recruited, as well as four from the WFEO-CEE membership that are still to be confirmed. There are no anticipated issues with recruitment for this theme

Theme 6 leader A. Poothia provided the following status report:

- His task group consists of members located in India only – there is an urgent need for more support from other countries;
- Will send out documentation of their work to date through UNESCO and Dr. Vasoya and ask for volunteers to join the group;
- He noted the strong need to get participants who have practical experience, particularly from those countries who have had to deal with disasters as well as in rural and urban infrastructure

D. Schutz noted that the problem is getting volunteers and not paid people. Volunteers may have to fund their own travel if there is no such support from their employer. This limitation limits participation and dictates how the work is done. It is easier to get volunteers when the committee is producing things of value, which increase the prestige of the committee. We should ensure that what is produced by each theme is practical and useful and this will in turn help with future recruitment.

It was suggested and agreed that all CEE members should join one or more of the six theme task groups. The Chair and Secretariat will communicate with all members asking them to declare where they wish to be involved and this will be passed along to the theme leaders.

The Chair noted that all themes should remain open to additional participation from individuals at any stage in the process.

6.6 2009 Budget Request

The 2008 budget for the committee that was approved by the Executive Council was 3,000 euros. The budget was spent on communications – including teleconferences and webinars.

There was brief discussion of the budget request for 2009. The intent is to hold more international webinars delivered by the six themes and to hold the next teleconference meeting in a webinar format. Based on the strategic plan and the anticipated activities in the six theme areas, committee members asked the Chair to request a budget for 5,000 euros for 2009. The Chair noted that, as a minimum, the CEE should receive the same budget as 2008.

Action: Chair and Secretariat to prepare the 2009 budget request for CEE at 5,000 euros and submit to the WFEO Secretariat for the next Executive Council meeting in February 2009.

6.7 Review of WFEO-CEE Website and Newsletter

The Secretariat noted that the previous committee published a quarterly newsletter that was published and distributed in hard copy as well as placed on the WFEO-CEE website. Costs for printing and distribution were covered by India. The last newsletter was published in the fall of

2007. No newsletter was produced in 2008 while the strategic plan for the committee was developed. The ensuing round table discussion centred on three questions:

- Should the newsletter be continued?
- What formats should it be published and distributed – soft/hard copy, website, distribution through WFEO members?
- Frequency and content?

The Chair noted that there is a substantial cost involved in producing and distributing a hard copy version of the newsletter. An alternative would be to publish an annual report in hard copy that is nicely put together, and use the newsletter to provide updates and progress/interim results on the work of the theme task groups. He suggested that reports from the theme task groups could be published in hard copy.

T. Marjoram suggested the better option is to publish it on the website and send an email reminder to the WFEO community. The website could also be used to invite articles from experts on topics related to the environment and sustainability. Eventually we could build a catalogue of such articles to create a virtual library. We would need to obtain copyrights for any article that would be placed on the website.

D. Schutz expressed strong support for the newsletter, finding the articles were on relevant topics and the availability of hard copy was useful. Publishing the newsletter on the website is a cost-effective alternative, but not having a hard copy is giving up a tool that can be used to portray the quality and scope of the work of the committee to potential sponsoring organizations. He suggested we also consider ways we could contribute our information and views on environment and sustainability issues to Wikipedia as a means to widely disseminate information.

N. Son Hung supported publishing the newsletter on the web to save costs and provide the ability to download any documentation in pdf format. Recently the Disaster Risk management Task Group published the first proceedings of their first symposium on DRM in pdf and made it available to WFEO and the Japanese government. He encouraged all national members to introduce WFEO work into their countries through all means possible

N. Al-Hay supported publishing the newsletter electronically on the website and printing an annual report once per year in hard and electronic copy. The annual report could then be translated into the local language through the WFEO representative or the country representative on the WFEO-CEE.

A. Poothia strongly supported the continuation of the newsletter to cover activities and articles. He agreed that hosting it on the website and emailing an electronic copy to a distribution list would be cost-effective.

B. Vasoya supported publishing the newsletter every six months. He noted that the general public is another important target audience for the newsletter.

C. Ballester agreed with the idea of a published annual report for distribution to other organizations to show what WFEO is doing with respect to environment and sustainability issues. He agreed with a reporting mechanism through the website which could include updates on activities and recent decisions of the WFEO in our area of concern.

P. Jowitt reviewed the purpose of such communications: 1) to inform ourselves, 2) to inform others in WFEO, and 3) to inform others outside of WFEO. The third audience is what makes it worth the effort. The production of a newsletter is labour intensive and we must carefully consider the costs and the effectiveness of this approach.

To close the discussion, the Chair conducted a poll of members to develop consensus on next actions. The following was agreed:

- Rather than a newsletter, prepare an interim report (6 months into the year) and annual end-of-year report for inclusion on the website and produce hard copies for targeted distribution;
- WFEO national members to be responsible for translation and distribution of these reports for their country;
- Periodically solicit for, and publish submitted articles on the website, subject to review and approval by CEE in a process to be determined;
- Investigate Wikipedia option and report back to the committee at the next meeting.

Action: WFEO-CEE Secretariat to investigate costs of translation and hard copy production and advise members.

Action: Chair and Secretariat to produce a draft of the first interim report for the next meeting in June 2009.

The Secretary noted that he would be contacting the theme leaders in April/May for progress reports that he would integrate into the interim report.

Action: D. Schutz to investigate the Wikipedia option and report back at the next meeting.

6.8 International Webinar Report

A report on the first international webinar, held October 23, 2008 was included as part of the meeting materials. CD copies of the webinar were distributed to the members and the CD itself was demonstrated.

The Chair reported that the total cost of the webinar, given twice on the same day, was 1700 CAN\$. The main problem encountered was wrong telephone numbers. There were also difficulties accessing our members in China. However, it was concluded that this technology can be used for teleconferences that involve presentations.

The Chair also noted the first international teleconference meeting of the committee as whole in June 2008 was successfully completed at a modest cost. He recommended that the CEE and its task groups seriously consider using international teleconference calls and webinars as the cost-effective way to conduct their business. Such communications methods can be arranged through the service provider used by Engineers Canada.

Although the costs of an individual call or webinar are relatively modest there are still budget implications if most or all groups adopt this approach. We will need to confirm the decision to operate this way so that the 2009 budget request can be altered in time for consideration at the next WFEO Executive Council meeting in February 2009.

Action: Theme Chairs to consult with their task groups on needs (and if possible tentative scheduling) for teleconferences and webinars and confirm these by email to the Secretariat by January 31, 2009.

6.9 Review of Upcoming Events and CEE Participation

The most recent listing of upcoming events (workshops, conferences, symposiums etc) was included with the materials for the meeting. The Chair explained that the WFEO President - B. Gear issues this list at the beginning of each month. The list is also posted on the WFEO website.

Action: Secretariat to circulate the list of upcoming events to all CEE members for information.

Action: On-going action on CEE members to submit any upcoming engineering-related events in their country or region to the WFEO Secretariat (T. Youssef – tl.fmoi@unesco.org) or the CEE Secretariat (D. Lapp – david.lapp@engineerscanada.ca).

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6.10 – WFEO-CEE International Conference on Climate Change

D. Danyluk indicated that Engineers Canada is interested in hosting an international conference on climate change and engineering in the second quarter of 2011 (April-June). The objective is to demonstrate world-wide engineering leadership on this issue. It would become one of the main activities within Theme 2 of the strategic plan. The Secretariat will prepare a proposal for this conference for the approval and support of WFEO-CEE for June 2009.

T. Marjoram reported that UNESCO is involved in planning a technology conference on climate change adaptation, mitigation and engineering with Australia. A concept paper was created about one year ago and more details and decisions around this conference will be available by June 2009. He suggested a coordinated series of events on climate change and engineering issues over the next few years would be timely and welcome. It would be best if we linked these together rather than have isolated events.

C. Ballester noted that the upcoming engineering conference in Buenos Aires, Argentina in 2010 associated with the WFEO Executive Council meeting includes energy and climate change as important themes.

N. Son Hung suggested that climate change could be an important theme for WEC 2011.

It was concluded there is interest to organize such a conference and that it be held in Canada. Due consideration should be given to coordinating it with other regional or international conferences so that it compliments rather than competes. A final go-no go decision would be made the next teleconference of the committee in June 2009.

Action: Secretariat to prepare a proposal for an international conference on climate change and engineering for approval at the next meeting.

6.11 Report to WFEO Executive Council

D. Danyluk noted that he will be presenting the progress report on our work (included in the meeting materials) with an update from this meeting to the WFEO Executive Council. He thanked the theme leaders for their work and leadership that demonstrates progress on our strategic plan.

The results of the WFEO Executive Council meeting, including reaction and feedback on our report will be presented to the CEE when the meeting resumes on December 2.

7. Other Business

7.1 UNESCO Report on Activities and Upcoming Events

UNESCO is preparing for a soft launch of their upcoming report "Engineering Issues and Challenges for Development" that focuses on the UN Millennium Goals. He expressed his appreciation to those who contributed to the document. The launch will happen at the closing ceremonies of WEC2008. The 250 page report will be published in hard copy by April 2009.

In 2008-09 UNESCO started a third round of engineering awards to young engineers for teamwork on designs to address the UN Millennium Goals. There are 300,000 euros in prizes and the sponsor is Daimler-Chrysler. The deadline for submissions is December 2009, and over 500 groups involving thousands of young engineers are registered.

T. Marjoram is one of the very few engineers working for UNESCO. None of the upper management of UNESCO are engineers. This may change in 2009 when new leadership takes over. Engineering is overlooked, ignored or considered part of the problem when it comes to sustainable development. Regardless of the new leadership, it is incumbent that we get on their agenda to get engineering back on the radar screen. We need to develop and provide a message and information on the role of engineers in climate change/sustainability issues, which should be presented by the country ambassadors to UNESCO.

There is a general decline in the number of young engineers worldwide, and this a problem that needs to be addressed. Also only 20% of young engineers are women. There was a question on whether the decline is generic or are there differences between countries. T. Marjoram noted the reasons he believes are the cause of the decline include that engineering is boring and a difficult subject, it impacts negatively on the environment and the jobs are not well-paid.

He asked how we could improve engineering education to make it more attractive. Engineering is a major part of the solution to climate change and sustainable development, and we should use this to attract the young people who have a high concern for these issues.

There are also other factors noted in the decline of engineering, which include the current international economic crisis, whereby education funding and research and development will no doubt be cut. Investments in environmentally sustainable technology, especially the engineering, will be constrained by the current and upcoming situation.

7.2 UNFCCC Letter of Commitment

A first draft of a letter of commitment was tabled at the meeting for comments. It was not included with the meeting materials distributed in advance of the meeting.

D. Danyluk explained that the intent is to raise the profile of WFEO at the United Nations and gain further political recognition that we are an important player that should be at the table to

discuss solutions to this global issue. He noted that other organizations have submitted similar statements. A final version of this statement, endorsed by the WFEO would be a recognized achievement among WFEO members to improve its image and status within the United Nations.

T. Marjoram expressed his strong support and suggested that it would be a mistake just to focus on infrastructure. However, if that becomes the common ground for agreement we should emphasize the importance and contribution of engineering for solutions to this issue.

The committee agreed with further development of the statement over the next several months. The objective is to submit a finalized, approved statement to the UNFCCC before its next meetings in June 2009.

Action: Secretariat to distribute current draft of the letter of commitment to all committee members.

Action: All CEE members to provide comments and suggested changes/additions to the Secretariat by January 31, 2009

The Chair adjourned the meeting to the next day, when each theme leader presented their work plans and progress in 2008 with an outlook for 2009.

8.0 Theme Leader Reports and Presentations

The meeting re-convened in the afternoon of December 2, and was dedicated to more in depth discussion of each of the six themes in the Strategic Plan. Each theme leader was given time to provide a status report on 2008 activities, objectives and plans for 2009 as well as discussion and feedback from those present at the meeting.

8.1 Theme 1 – Olympic Sporting Events – S. Papagrigoriou

The Chair presented the proposed work plan and scheduled outcomes for the work of the task group. He reported that the task group membership is partially filled with representatives from several Olympic countries. Additional representation is being sought.

Action: Secretariat and CEE members to assist in identifying and recruiting country representatives from past and future Olympic Games.

The idea of assessing the impact of Olympic Games from an engineering perspective was originally proposed by Greece after the 2004 Athens Games. The idea is to develop an engineering strategy in planning and designing infrastructure for the games, which enables the assessment of the environmental impacts and how the games can be a good opportunity to

improve the environment, engineering performance of infrastructure and so forth. The visibility of this work will be very high. The work is to produce recommendations and guidelines for engineers involved in future games as well as for the International Olympic Committee. These documents would likely apply not only to Olympic Games but also for other national or international games such as Pan Am Games, World Cup etc.

An interim report on the work to date will be delivered at the next in person meeting of WFEO-CEE in Kuwait in November 2009.

T. Marjoram suggested that such work could also be applied to other smaller sporting events and activities. For example, golf course have a major environmental impact at a local and, in certain cases, regional scale.

D. Ishii asked for clarification of the role of WFEO-CEE in the technical environmental aspects of this work. The reports and guidelines would focus less on detailed technical procedures and more on processes and the professional roles of engineers. He also suggested sending a message about this work through the official channels to the IOC to raise its profile (and possible support) with this community.

D. Schutz suggested that this work could be extended to other countries that are interested in bidding on future games.

8.2 Theme 2 – Adaptation and Climate Change – D. Danyluk

In the past few months, Canada has completed an initial assessment of the vulnerability of public infrastructure to climate change. This was done using a tool known as the PIEVC Engineering Protocol, which defines a structured process to assess infrastructure capabilities and limits with respect to climate change impacts, and includes what might be done to address those vulnerabilities. The Protocol is set up to assess one individual infrastructure at a time.

D. Schutz noted there is an incremental cost involved to adapt infrastructure to climate change and asked if there is any consideration being given to estimating costs for additions to the design to account for future climate change. D. Danyluk indicated that this will be one of the new additions to the PIEVC Engineering Protocol (the "Protocol") with new funding from the Canadian government.

The Protocol has been promoted at UN meetings and the World Bank has been approached about possible pilot projects in developing countries. The tool has the potential to become part of the basis for decisions on all World Bank infrastructure projects before it lends the money.

Dr. Ishii noted that infrastructure includes “soft” components that need to be adapted, e.g. People, operations and maintenance and emergency procedures etc.. For example, one strategy could involve a population retreat from a vulnerable area because of flooding from sea level rise.

D. Danyluk noted that the Protocol handles operations and maintenance procedures; however strategies such as abandonment are beyond the scope.

The idea under this theme is to broaden the audience for this tool through the WFEO-CEE. Part of the work will involve then identification of other decision-making tools for climate adaptation of infrastructure and to develop and disseminate a climate change adaptation catalogue which would include rating the tools.

8.3 Theme 3 - Disaster Risk Management – Dr. Ishii

The current task group consists of 33 members from 14 countries. There are two sub-groups; 1) Water-related disasters, led by Dr. Ishii and 2) Earthquake-related disasters led by Professor Kawashan Kazuhiko at the Tokyo Institute of Technology. The first meeting of the group was held in September 2008 in conjunction with the 2nd Symposium on Disaster-Risk Management. One of the first outputs of the task group is a draft document entitled “Guideline for Water-Related Disaster Risk Management” – September 2008. The guideline consists of five parts: 1) basics, 2) floods, 3) tsunamis, 4) storm surges and 5) droughts. The first three parts are completed in draft form (about 100 pages) and were tabled at the meeting. The last two sections will follow in the first part of 2009.

The objective of the guide is to inform younger engineers about disaster experiences in advanced countries as well as features and challenges in developing countries. It will include basic but crucial key points for engineers anticipating and dealing with these types of disasters. References on technical information and resources are also provided.

Dr. Ishii requests CEE members and their country experts to review the draft document and provide comments to Dr. Ishii/Dr. Nguyen.

Action: CEE members to facilitate reviews of the document by their country experts and to provide written comments and suggested changes/additions/ deletions to Dr. Ishii/Dr. Nguyen

Action: Secretariat to forward the draft document to CEE members for distribution to country experts. (Note: Secretariat will establish deadline for comments with theme leadership).

The goal is to have the final version completed and ready to be published by the time of WEC2011 in Switzerland.

Similarly the earthquake task group is preparing a report on retrofit technology for transportation facilities to be released in 2010.

The 3rd Symposium on Disaster Risk Management is scheduled for September 3, 2009

P. Jowitt mentioned that he has reference materials to send to the DRM task Group.

Action: P. Jowitt to send reference materials on disaster risk management to Dr. Ishii.

He agreed that there are hard and soft impacts of disasters and noted that tsunamis will create other impacts as well.

Dr. Ishii mentioned that a Panel on Disaster Risk Management has been arranged for December 4 at WEC2008, and will include six speakers. The Task Group has also scheduled a face-to-face meeting on December 3 for those members who are in attendance at WFWEO/WEC2008.

8.4 Theme 4 – Sustainable Development - P. Jowitt

P. Jowitt presented a first draft of a framework to map activities of the WFWEO and relate these to sustainability actions.

It was recommended that the framework be completed by the theme leader working with the Secretariat then send to CEE members for review. A later version of the draft document should be sent to all the standing committees for their input.

The objective is to have a completed draft document by November 2009 for presentation at the WFWEO General Assembly in Kuwait.

8.5 Theme 5 – Environment and Sustainability Practice Guidelines – D. Lapp

D. Lapp reviewed the draft workplan for creating an international guideline on environment and sustainability for engineers that was included in the meeting materials. He reported that all the source materials had been assembled and were under review to create a proposed table of contacts that would be vetted through the task force created to prepare this document. There were no questions or comments on the workplan.

The objective is to have a completed draft document for review at the next face-to-face meeting of the CEE in Kuwait, November 2009

Membership on the task force is nearly complete, with two more members from CEE to volunteer. CEE members are encouraged to volunteer and to submit an email to the Secretariat.

8.6 Theme 6 – Infrastructure in Developing Countries – A. Poothia

The task group is in the early stages of implementing a workplan based on recommendations from the 2007 New Delhi Congress. A. Poothia gave a presentation on the achievements to date. He noted that all activities e.g. conferences, meetings and seminars have so far occurred only in India. Almost all the task group members are from India. There is a great need to internationalize this work and get members from other countries to join them.

Action: CEE members to seek additional volunteers from member WFEO countries to join this task group.

He noted that a new approach to infrastructure development is required in the context of limited resources. Unfortunately there have been many examples of initiatives, which start out with great hope and plans only to fizzle out due to financial constraints. Public-private partnerships are required for developing countries.

P. Jowitt suggested we prepare a checklist of generic actions. An initial checklist could be developed and circulated to the other WFEO countries. T. Marjoram mentioned that infrastructure “report cards” had been prepared for various developed countries through the ASCE. Perhaps these could be used as a starting point

Action: T. Marjoram to obtain copies of infrastructure report cards and send to the Secretariat for distribution to CEE members.

(Secretary’s Note: Written materials tabled at the meeting by theme leaders for information and/or review have been included as attachments to these meeting notes. Any documents that require review or comments from CEE members will also be distributed separately along with a request for action as requested by the respective theme leader).

9.0 WFEO Executive Council Meeting

The Chair provided a brief report on the results of the meeting of the WFEO Executive Council, held in the afternoon of December 1 and the morning of December 2.

The Chair briefed the members present on the results of his presentation on the committee's work as well as important discussion points and decisions. A brief written bulleted report will be prepared for distribution to all members.

Action: Chair and Secretariat to prepare and distribute a brief bulleted report on the WFEO Executive Council meeting.

He noted that the council was highly complimentary on the progress achieved so far. The work and approach of CEE is a model to be followed. There were strong compliments to be passed to all members of our committee.

One of the key issues was standing committee budgets. The Executive Council formed a task force to develop a funding policy and input from committee chairs is required. The Chair identified the international webinars as the most significant new expense category for the CEE in 2009, depending on the number of webinars that would be held. He asked all theme leaders to identify their needs and scheduling for international webinars for 2009 so that a budget can be submitted to the Task Force and Executive Council in time for their next meeting in March 2009.

Action: Theme leaders to submit their plans (number and schedule) for international webinars in 2009 requiring financial support from WFEO-CEE to the Secretariat by January 31, 2009.

The Chair reminded everyone that our intent was to hold up to eight (8) webinars distributed among the six themes. Given this level of activity, it would be wise to spread them throughout the year.

Action: Theme leaders to advise Secretariat on potential dates for their respective international webinar(s) by January 31, 2009 so that a schedule can be drafted and communicated.

10.0 Next Meeting and Adjournment

The Chair thanked all participants and observers who attended.

The next meeting of the committee will be held in the second or third week of June 2009. It will be held in a webinar format. Details will be provided by the Secretariat.

The next face-to-face meeting will be held in conjunction with the WFEO Assembly in Kuwait City, Kuwait, to be held from November 2-7, 2009. The full day meeting of WFEO-CEE is planned for Monday November 2, 2009.

The meeting was adjourned at 5:15 p.m. on December 2, 2008.



Prepared by:

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