



**World Federation of Engineering Organizations  
Committee on Engineering and the Environment – 2011-2015**

**FACE-TO-FACE MEETING #8  
Kyoto, Japan – a November 28, 2015**

**Meeting Summary**

**Actions and ideas to be followed up are highlighted in yellow**

Item	Summary of Discussion	Decisions:
1.	<p><b>WELCOME AND INTRODUCTIONS</b></p> <p>Chair D. Danyluk welcomed everyone. He noted this meeting culminates eight years of much good work done by many great people.</p> <p>All attendees introduced themselves and their affiliations. The list of participants who attended all or part of the meeting is attached. Several were representing the CEE member for their country.</p> <p>This meeting was the final one with Engineers Canada serving as host and chair of the Committee.</p>	None
2.	<p><b>REVIEW SUMMARY OF MEETING #7 AND ACTION LIST</b></p> <p>The draft summary for Meeting #7, held at UNESCO offices in Paris, France on 8 December, 2014, was approved as written. Motion to approve from M. van Veelen, seconded by F. Thabet was approved unanimously.</p> <p>The action list was reviewed by D. Lapp. He noted that all items were either completed or would be covered in this meeting.</p>	Summary of Meeting #7 approved as written.
3.	<p><b>REVIEW AND APPROVAL OF AGENDA</b></p> <p>The Chair reviewed the agenda with participants. He proposed adding Item 9.1 for the Committee to pass a motion to formally endorse ICE as the new host with Jean Venables as the new Chair, effective after completion of the 2015 General Assembly later in the week. This was agreed.</p> <p>There were no other additions or changes proposed and the agenda was approved as modified.</p> <p>The Chair was given discretion to re-arrange the order of the agenda to accommodate the availability of participants.</p>	<p>Agenda approved as amended.</p> <p>Chairman's Discretion accepted</p>
4.	<p><b>CHAIR'S ACTIVITY REPORT</b></p> <p>The Chair referred to the two Progress Reports covering the period from December 2014 to December 2015 that were included in the agenda book.</p> <p><b>4.1 WFEO Executive Board Meetings – March 2015</b></p> <p>The series of meetings of the Executive Board and Standing Technical Committee (STC) Chairs were held the week of March 23. Draft minutes of the Executive Board and notes from the STC Chairs meeting were included in the agenda book. The Chair provided highlights of these meetings:</p> <ul style="list-style-type: none"> <li>Approved a limit to the number of STCs that can be hosted by one country. The new policy is one country can only host one STC.</li> </ul>	No decisions in this section of the Agenda – Information & discussion only



Item	Summary of Discussion	Decisions:
	<ul style="list-style-type: none"> <li>• No funds were allocated to the STCs for the 2015 budget year due to budgetary constraints. Our Committee had normally received 6,000 euros in previous years. However the CEE received a special contribution of 5,000 euros towards the organization of the Engineering Summit at COP-21.</li> <li>• Approved organizing and hosting a one-day Engineering Summit at COP-21. The event is scheduled for December 8 in Paris. A linkage has been established with France (INRS) to help promote the event and provide one or more speakers.</li> <li>• Upcoming meetings were noted as follows:               <ul style="list-style-type: none"> <li>• Executive Board – Paris, March 2016 (and each year following)</li> <li>• Executive Committee – Lima, Peru, Fall 2016</li> <li>• General Assembly – Rome, December 2017</li> <li>• Executive Committee and WFEO 50<sup>th</sup> Anniversary– London, Fall 2018 (proposed)</li> <li>• General Assembly – Melbourne, November 2019</li> <li>• General Assembly – Prague, Fall 2023 (proposed).</li> </ul> </li> </ul> <p>Other activities by STCs such as workshops and conferences are organized throughout the year. Efforts are made for STC representatives to attend UN meetings.</p> <p><b>4.2 STC Chairs Meetings</b></p> <p>The STC Chairs meet to discuss topics of mutual interest and to collaborate on specific initiatives. Notes of the last meeting in March 2015 and the agenda for their December 1<sup>st</sup> meeting was included in the agenda book. The current Chair is Sam Grossman, the STC Energy Chair.</p> <p>Chair D. Danyluk noted that the STCs have improved remarkably in the past eight years. The improvement is being aided by an STC performance process that provides mentoring and advice to STCs to improve their operations, outputs and outcomes.</p> <p>STC activity reports are reviewed to look for synergies. For example, at the United Nations Framework Convention on Climate Change (UNFCCC), capacity-building became a topic of discussion. The WFEO Manual on Capacity-Building was brought to the attention of the Durban Forum for Capacity Building within the UNFCCC as an example approach for them to consider.</p> <p>President Elect J. Spitalnik welcomed the participants to the CEE meeting and noted that the STCs are the pillars of the WFEO.</p> <p><b>4.3 Collaboration with the World Meteorological Organization (WMO)</b></p> <p>The Chair reported that he had attended a GCOS/IPCC/UNFCCC Workshop "Enhancing observations to support preparedness and adaptation in a changing climate - Learning from the IPCC 5th Assessment Report" 10 - 12 February 2015 in Bonn, Germany. The invitation to participate was under the auspices of the WFEO/WMO MOU. From this meeting, it was apparent that WMO is willing to listen to the engineers' perspective but doesn't want to bring in engineering as a full partner. We need to cross that threshold of recognition and that could be achieved by further efforts towards the commitments made in the MOU. However, it is a logistical challenge to fulfill these because of resource limitations within WFEO.</p>	



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	<p>Discussions were underway with WMO senior staff to organize a one day workshop for senior engineers involved in design of infrastructure together with senior meteorologists and climatologists. The agenda would focus on current and projected climate data requirements for design codes and standards. WMO would fund the workshop and travel for participants in need of support. WFEO would identify and secure the participation of senior engineers. <b>The workshop remains in the planning stages and the hope is that this initiative could be picked up in 2016.</b></p> <p>Ideally one person from WFEO should be dedicated to liaise with WMO. However, most people are volunteers and staff support for this work is extremely limited. It was noted that WFEO resources to hire new staff is limited. <b>There was a suggestion to link with other organizations that are in a position to work with WMO to produce documents and foster liaison and communication.</b></p> <p><b>WFEO through CEE should continue to pursue partnerships with WMO on side events at future UNFCCC meetings in Bonn as well as at COP meetings.</b> Such liaison will be at the discretion of the new CEE host. A national member could be delegated to maintain the relationship on behalf of WFEO. Alternatively the WURC could assume the responsibility.</p> <p><b>4.4 United Nations Framework Convention on Climate Change</b></p> <p>The UNFCCC met in Bonn Germany for negotiation meetings over two weeks in June 2015. There were over 2,000 delegates. Chair D. Danyluk and Secretary D. Lapp attended on behalf of CEE and WFEO. The trip report was included in the agenda book. Activities this year included:</p> <ul style="list-style-type: none"> <li>• Attendance at side events and workshops</li> <li>• Organizing, for the first time, an informal meeting of engineers attending the Bonn meetings</li> <li>• Attendance and participation of two engineering graduate (PhD and Masters) students/post docs and two undergraduates from the University of Calgary as part of the WFEO delegation</li> <li>• Witnessing ministerial statements at the SBSTA and SBI plenary sessions</li> <li>• Delivering a side event “Public Policy, Adaptation Planning and Implementation of Resilient Infrastructure”</li> <li>• Attendance at several sessions of the 4th Durban Forum on Capacity Building</li> <li>• Participation in meetings of the Nairobi Work Program</li> <li>• Meeting with the German International Development Agency (GIZ) to discuss collaboration on infrastructure climate risk assessment and capacity-building</li> <li>• Several informal meetings with country delegates and observers to discuss potential collaboration with WFEO and the CEE</li> <li>• Operating an exhibit booth and distributing information about WFEO and CEE for both weeks of the conference.</li> </ul> <p>The delegation this year included six engineering students from University of Calgary and Crakow University in Poland. It was an intense exposure to the real world and a tremendous growth opportunity. Students wrote their own reports as part of their obligation to their Deans. The success of the engagement has prompted the University of Calgary to encourage student engagement at subsequent events.</p> <p>Some of the students that attended the June meetings are returning to attend the COP-21 meeting for one week as WFEO delegates. <b>The internship</b></p>	



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	<p>program will be continued and brought to the attention of the UN Relations Committee to consider expansion into other thematic areas of the UN.</p> <p>The Chair reported briefly on the upcoming COP-21 meetings, noting that WFEO had been allocated 10 spots for each of the two weeks. There are over 40,000 registered delegates for COP-21.</p> <p>The CEE, in partnership with UNESCO and with sponsorship from WFEO, ICE and Past-President Adel Kharafi, has organized a COP-21 Engineering Summit for December 8 in Paris. The outcome will be a statement indicating the role and engagement of engineers and engineering to turn words into action towards achieving the outcomes of the Paris agreement. <b>A report will be submitted to the Executive Board.</b></p> <p><b>4.5 WFEO UN Relations Committee (WURC)</b></p> <p>This Committee of the President was started eight years ago at the 2007 GA in New Delhi. Its role is to coordinate WFEO's involvement with the UN. Many of the STCs are involved with various UN entities, and <b>this work needs be tracked and coordinated to maximize WFEO's effectiveness.</b></p> <p>Terms of Reference to make the WURC a Standing Committee have been drafted and were provided for information in the agenda book. These have not been submitted and will not be until the role of WURC is determined as part of the next WFEO Strategic Plan.</p> <p><b>4.6 2015 Committee Review</b></p> <p>The results of the STC Review Committee for the CEE were included in the agenda book for the information of members and observers. The review process has been around for two years and it is still evolving. It is meant to provide constructive feedback and encouragement to STCs. In the case of the CEE our review was positive but understanding this is the last year with Engineers Canada as host.</p> <p>Engineers Canada achieved its big goal to find a new host in 2015. This was a key objective in the 2011-2015 strategic plan.</p>	
5.	<p><b>ROUNDTABLE OF MEMBER/OBSERVER ACTIVITIES AND ISSUES</b></p> <p>The Chair convened a roundtable session in which participants briefly described activities, upcoming events and particular issues or concerns. The following is a brief summary of remarks by particular individuals.</p> <p><u>Institution of Engineers Singapore – Engineer SC Tan</u> The Singapore government is undertaking much more work on building resilient infrastructure to withstand impacts from climate change. Sea level rise and coastal protection are priorities. Another significant issue is surface runoff and how to manage to avoid flooding problems during rain events. Widespread surface paving in urban areas contributes to the problem.</p> <p>IES has implemented a program known as Active Building Green (ABG), which includes training of engineers and architects in these practices. The scope includes how to beautify river and drainage systems</p> <p>Singapore is emphasizing renewable energy sources particularly solar. Energy conservation, recycling and reducing waste and making full use of resources from population growth are other areas of emphasis where engineers contribute.</p>	No decisions in this section of the Agenda – Information & discussion only



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	<p>The WFEO and CEE can realistically support this regional work by sharing experiences from other geographic zones in these subjects in a more structured way through workshops and webinars.</p> <p><u>Bahrain Society of Engineers (BSE) – Eng. Majeed Al Gassab</u> Several conferences on oil and gas were organized in 2015. There is an international energy conference scheduled for December 6 in which Sam Grossman, WFEO STC on Energy Chair, will be a keynote speaker. Attendance is expected to be around 800 people.</p> <p>The Model Code on Sustainable Development and Environmental Stewardship was promoted in 2015. D. Lapp delivered a presentation at the 2<sup>nd</sup> Corporate Social Responsibility Conference in February 2015. BSE organized a regional webinar with Engineers Canada that delivered the Train the Presenter presentation to approximately 30 engineers in four countries. The presentation was also delivered at the university and at a meeting of practitioners.</p> <p>BSE offers a continuing and wide variety of professional development conferences, workshops and seminars to engineers in the Middle East region and beyond. Many of these cover subjects related to the environment and sustainable development.</p> <p><u>World Council of Civil Engineers – Engineer Alfonso A. Gonzalez Fernandez</u> The WCCE has established a standing committee on sustainability. It is presently defining issues to pursue. WCCE will collaborate with the work of the CEE.</p> <p><u>Tsinghua University – Environment (China) – Dr. Jianping Wu</u> Urbanization has been a big issue in China over the past 10-20 years and this continues. Major issues include flooding and air quality (with links to transportation). Environment and energy issues and links to climate change are increasing areas of focus.</p> <p>There are many things to be done in China to address environmental concerns. The government is spending to make sustainable urbanization.</p> <p><u>Institute for Civil Engineers and Commonwealth Engineers Council – Dr. Paul Jowitt</u> The CEC is interested to develop an infrastructure report card amongst CEC and WFEO members to inform policy-makers. This item will be pursued in the coming year.</p> <p>The ICE will be assuming the host and chair of CEE at the beginning of 2016. During the past few years there has been a cooperative initiative with IMechE on climate change mitigation. A side event is organized for December 10 at COP-21.</p> <p><u>Federação Brasileira de Associações de Engenheiros (FEBRAE) – J. Spitalnik</u> Drought has been very intense in Brazil and critical for big cities. The reservoir in Sao Paulo is nearly empty. Occasionally there have been heavy rains which have caused flooding and negative impacts on sewage systems. Climate change is mentioned often in Brazil.</p> <p>A policy question is whether engineers should advocate limits to the size of cities because of water supply limits. These issues extend well beyond Brazil – many Caribbean Islands have problems of sustainable water supply.</p> <p>Brazil is organizing an International Conference on the Sustainable Supply of</p>	





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	<p>Water and Energy to be held in Brasilia, Brazil at the end of February 2016. Although the deadline for abstracts is past, new abstracts can be submitted to J. Spitalnik but this should be done as soon as possible.</p> <p>Singapore also suffers from water shortages and has implemented a recycle sewage water strategy with new technology and research that has relieved the problem. A challenge is people psychologically accepting to drink recycled sewage water. SC Tan will invite experts to present this approach at the Brasilia conference.</p> <p><u>Engineering Council of South Africa – Martin van Veelen</u> Drought is a big issue which has been ascribed to El Nino. The public thinks it is due to climate change. The government works only in crisis mode and is only reactive to events.</p> <p>Water quality is an issue in addition to drought. De-salinization and high costs of energy limit this option. The socio-economic status within countries needs to be considered in establishing priorities. For example, Mali residents spend roughly 20% of their disposable income on potable water versus other African countries where residents spend 20% on public transportation.</p> <p><u>Institution of Engineers of Kenya – Engineer J.M. Riungu</u> The National Environment Management Authority (NEMA) is a government agency responsible for the management of the environment, and the environmental policy, of Kenya. The core functions of the organization are (from website <a href="http://www.nema.go.ke/index.php/about-us/functions">http://www.nema.go.ke/index.php/about-us/functions</a>):</p> <ul style="list-style-type: none"><li>• Coordinating the various environmental management activities being undertaken by the lead agencies.</li><li>• Promote the integration of environmental considerations into development policies, plans, programs and projects, with a view to ensuring the proper management and rational utilization of environmental resources, on sustainable yield basis, for the improvement of the quality of human life in Kenya.</li><li>• To take stock of the natural resources in Kenya and their utilization and conservation.</li><li>• To establish and review land use guidelines.</li><li>• Examine land use patterns to determine their impact on the quality and quantity of natural resources.</li><li>• Carry out surveys, which will assist in the proper management and conservation of the environment.</li><li>• Advise the Government on legislative and other measures for the management of the environment or the implementation of relevant international conventions, treaties and agreements.</li><li>• Advise the Government on regional and international treaties.</li></ul> <p>The Institution of Engineers of Kenya is working to increase the engagement of engineers with NEMA, noting that there are many infrastructure projects in Kenya that must consider the environment.</p> <p>This year El Nino is anticipated and there are efforts underway to mitigate the anticipated effects.</p> <p><u>Engineering Council of Zimbabwe - Ben Rafemoyo</u> There are two important bodies in Zimbabwe dealing with environment and sustainability issues.</p> <p>The Environmental Management Agency (<a href="http://www.ema.co.zw">http://www.ema.co.zw</a>) is a statutory</p>	



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	<p>body responsible for ensuring the sustainable management of natural resources and protection of the environment, the prevention of pollution and environmental degradation, and the preparation of Environmental Plans for the management and protection of the environment.</p> <p>The Business Council for Sustainable Development Zimbabwe (BCSDZ) (<a href="http://www.bcsdz.co.zw">http://www.bcsdz.co.zw</a>) actively promotes awareness, knowledge and practical expertise in Sustainable Development in business. It is a long-standing partner in the World Business Council for Sustainable Development (WBCSD), The BCSDZ has six Technical Committees on Climate Change &amp; Emissions; Energy; Environmental Management Act (EMA); Water; Waste; and Sustainability Reporting. A Technical Committee on Biodiversity &amp; Business is being resuscitated.</p> <p>A committee has been established within the Council to work on environment and sustainability issues.</p> <p>Zimbabwe has been affected by drought and high temperatures which has affected their capacity to generate hydro-electric power. The country has brought in diesel generators for local power generation.</p> <p><u>American Society of Civil Engineers - Meggan Maughan-Brown</u> The ASCE has published a White Paper on “Adapting Infrastructure and Civil Engineering Practice to a Changing Climate”. <a href="http://ascelibrary.org/doi/pdfplus/10.1061/9780784479193">http://ascelibrary.org/doi/pdfplus/10.1061/9780784479193</a></p> <p>Chair D. Danyluk thanked everyone for their information and comments. He noted there are many links between issues especially climate change. Many pieces are needed to achieve the sustainability objective and dealing with climate change is one of them.</p>	
6.	<p><b>WFEO-CEE NEWSLETTER</b></p> <p>The Secretary reported that Newsletters #12 and #13 were published in July and November 2015 respectively. Issue #12 focused on the Sustainable Development Goals and was published two weeks prior to the UN General Assembly where the SDGs were adopted. Issue #13 served as a wrap-up of the Committee’s current work under its 2011-2015 Strategic Plan.</p> <p>Hard copies of both issues were printed and distributed. Electronic copies are available on the WFEO website.</p> <p>It was noted that language is a barrier in some countries where their engineers do not know English. It was suggested that the newsletter be translated into other languages. This is an issue that should be raised with the Executive Council. In many cases it is a question of resources to do such translations. The Chair noted, however, that the Model Code of Practice for Sustainable Development and Environmental Stewardship had been translated into Spanish, Arabic, Chinese and French through volunteer contributions from national members.</p> <p><b>It was also suggested that the frequency should be increased to four times per year from the present two.</b> There is a wealth of material that could be presented. This decision will be left to the discretion of the new host and based on the availability of sufficient human resources and material to support the increased frequency.</p>	



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7.	<p><b>2015 WORLD ENGINEERS SUMMIT ON CLIMATE CHANGE</b></p> <p>The Institution of Engineers Singapore (IES) organized the second summit held in July 2015 in Singapore. A report entitled “Insights from World Engineers Summit Industry Roundtable on Climate Change and Business” was included in the agenda book. It will be forwarded to WFEO for placement on the website. The report covers discussion at one of the roundtables examining the business perspective on climate change and how companies are getting ready. SC Tan delivered a presentation on the Summit and its results. A shorter version will be presented at the COP-21 Engineering Summit next week.</p> <p>The Chair attended the Summit to contribute his perspective and expertise on the issues. He noted the high caliber of the people involved and the technical level of discussion was very high. The discussions reflected the views of people who really understand the ramifications of climate change and what it means to their business.</p> <p>An outcome of the Summit was the creation of a task force to look at specific topics arising from the discussions. UNEP has agreed to work with IES as well as some NGOs and government policy makers.</p> <p>The 2017 Summit will be held July 19-21, 2017 in Singapore. Its theme is “Low Carbon Cities and Urban Energy Systems”. The CEE can contribute to the next Summit through the review of reports and contributing to the discussions. It is recognized there is a need to bring this subject and the results of regional discussions to global platforms and <b>this is where WFEO and the CEE can assist.</b></p>	<p>SC Tan to forward electronic copy of WES 2015 report to WFEO for placement on the CEE portion of the website</p>
8.	<p><b>UN SUSTAINABLE DEVELOPMENT GOALS REVIEW</b></p> <p>Included in the agenda book was a paper written by the WFEO UN Relations Committee (WURC) entitled “WFEO Engineers for a Sustainable Post 2015 – Version 1.6 dated 22 July 2015”. This paper was submitted to the United Nations in advance of the General Assembly held at the end of September where the 17 SDGs were adopted. Included in the paper was a table that listed the 17 SDGs and the engineering contributions of the various STCs towards meeting them. This table formed the basis for the discussion by the CEE. The following is a summary of comments:</p> <ul style="list-style-type: none"> <li>• <b>Add the WFEO CEE Task Group on Engineering and Agriculture as contributing to SDG Goal #1 (Poverty Reduction) and #2 (Food Security).</b></li> <li>• <b>Measurement of the success of the SDGs cannot be viewed as one size fits all. One metric cannot be applied to all the goals nor can it be applied to all regions of the world.</b></li> <li>• <b>There is a movement towards regionalization of the work on the SDGs e.g. Africa, Asia etc. WFEO’s worldwide network offers an advantage for participating in regional efforts provided we are coordinated.</b></li> <li>• <b>WFEO and WURC need to establish a process on how to move forward to provide clarity for STC involvement.</b></li> </ul>	
9.	<p><b>2011-2015 STRATEGIC PLAN FINAL REVIEW</b></p> <p>Each theme leader reported on their progress in the past year with some commenting on work that could be undertaken in the next term. The following is a summary of their remarks.</p> <p><b>THEME 1 – ADAPTATION OF INFRASTRUCTURE TO CLIMATE CHANGE</b></p> <p>Work on this theme focuses on climate risk assessment of infrastructure and promotion of best practice for engineers. Theme Leader Darrel Danyluk reported on activities and progress over the past year:</p>	





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	<ul style="list-style-type: none"> <li>• Written submission to UNFCCC Nairobi Work Program – March 2015</li> <li>• Workshop at the UNFCCC Bonn Meetings –June 2015</li> <li>• Attendance at UNFCCC COP-21 – Paris France (December 2015)</li> <li>• Engineering Climate Change Summit at COP-21 – Engineering Statement to UNFCCC</li> <li>• 2nd World Engineering Summit on Climate Change – Institution of Engineers Singapore – July 2015.</li> </ul> <p>D. Danyluk noted that UNFCCC COP-21 will be a major milestone in the climate change negotiations. It will be held November 30 to December 11 in Paris, which overlaps with the WFEO General Assembly in Kyoto. The CEE has organized a delegation to attend the conference to continue efforts to raise the profile of engineering in this community. WFEO is one of approximately 4,000 NGOs that are engaged with the UNFCCC.</p> <p>At the June 2015 Bonn meetings and COP-21 WFEO-CEE organized an informal session, inviting engineers from NGOs and delegations to attend.</p> <p>More case studies and assessments as well as capacity-building through training workshops are additional avenues to pursue subject to the availability of adequate financial and human resources.</p> <p><b>THEME 2 – CLIMATE CHANGE MITIGATION</b></p> <p>The Future Climate Engineering Solutions Project is now in Phase III to develop national energy plans that consider reducing GHGs through implementing existing technologies and processes.</p> <p>The Project is re-booting with a major side event being organized at COP-21 in collaboration with several new partners.</p> <p><b>THEME 3 – ENGINEERING AND AGRICULTURE</b></p> <p>Theme Chair F. Thabet noted that agriculture is vital to achieve food security and poverty reduction. There are 7 billion people to feed now and this is projected to increase to 9 billion by 2050. This will require production to increase by 50%, but climate change will reduce that significantly without intervention.</p>	
	<p>There are many engineers working in FAO and other UN agencies dealing with water and food security. WFEO needs to be involved more than it has so far. It has been very difficult to recruit members to join the Task Group as well as resource to do things. F. Thabet asked that each national member designate a person to join the Task Group with the objective to eventually become a full STC.</p> <p>There are 500 million farmers in the world who are difficult to reach and who therefore cannot take advantage of the results of research to help them. The question is one of knowledge and knowhow, not money.</p> <p>In 2013 a proposal was developed to hold a two-day workshop in Africa on food and water security. Attempts were made to secure sponsorship but so far this has not materialized. This workshop would be a very good first step towards engaging engineers with the agriculture It was noted that considerable efforts are underway in Nigeria. In 2016 there will be a conference on food security in Africa to be held in South Africa. WFEO could be a member of the planning committee for this conference.</p> <p>The WFEO-CEE continued to periodically provide engineering input to documents developed by the Farming First organization which is widely recognized by the United Nations Food and Agricultural Organization.</p>	<p>Theme Chair will continue efforts to recruit expertise and members for the Engineering and Agriculture Task Group and support its review and advisory work.</p>



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	<p><b>THEME 4 – ENGINEERING AND SUSTAINABLE MINING</b></p> <p>Theme leader J. Kogel delivered a presentation on progress in the past year with an outlook to the future. A copy of the presentation is attached to the meeting summary that provides the details of the work completed and underway.</p> <p>The Task Group is focusing its efforts towards Artisanal and Small Scale Mining. These are small operators performing subsistence mining without permits from governments. Their practices are primarily manual and employ 10 times the number of people than larger mining firms. These operators provide income for 20-30 million of the world’s poorest people and support livelihoods for 5 times that number.</p> <p>The Task Group aims to develop and expand its partnerships and collaboration. A significant challenge is how to coordinate people across the globe. Given all the time zones it is difficult to assemble everyone at once for a teleconference or webinar.</p> <p>In the medium to longer term, sustainable funding will be needed to continue the effort. An initiative with the World Bank is promising.</p> <p>The Task Group has committed to continue its work under CEE for the next term with Dr. Jessica Kogel as Chair.</p> <p>The Chair remarked that there is really good work going on in the Task Group and that it is a great example of international collaboration. He thanked J. Kogel for her presentation and the Task Group members as well as former chair N. Trivedi.</p>	
	<p><b>THEME 5 – WFEO MODEL CODE OF PRACTICE FOR SUSTAINABLE DEVELOPMENT AND ENVIRONMENTAL STEWARDSHIP</b></p> <p>The Model Code has been published and placed prominently on the WFEO website. In June 2014 a detailed presentation was developed to enable it to be communicated at conferences, meetings and events. The presentation is detailed enough to use for training purposes.</p> <p>D. Lapp reported that four train the presenter international webinars were delivered in 2015 – two in Latin America, one in Africa and one in the Middle East. Certificates of Participation were issued to all participants. In addition, it was presented at the 2<sup>nd</sup> Corporate Social Responsibility Conference held February 2015 in Bahrain and organized by the Bahrain Society of Engineers.</p> <p>SAC Tan reported that the Model Code was presented to over 300 engineers attending the FEIAP conference. Engineers Australia has modified their own guidelines and the AAES is using it as a source document to update their own. It was also noted that the Code was published in the Engineering Council of South Africa magazine. The Chair encouraged everyone to continue these efforts in their region or country.</p> <p>Another longer term objective is to get this material incorporated into engineering curriculum.</p> <p>These presentations have increased the awareness of the Model Code and its principles at the national and sub-national level. More of these need to be done in the coming years and D. Lapp encouraged CEE members and observers to request webinars and to become presenters of the Model Code.</p> <p>The longer term objective is to have the national and international members of</p>	



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	<p>WFEO formally adopt the Model Code as standard practice for their engineers. A large uptake would demonstrate to the United Nations of the world's engineers commitment to these principles.</p> <p><b>THEME 6 – WFEO MODEL CODE OF PRACTICE – PRINCIPLES OF CLIMATE CHANGE ADAPTATION FOR ENGINEERS</b></p> <p>The proposed new WFEO Model Code of Practice on Principles of Climate Change Adaptation for Engineers was tabled for discussion and a motion to recommend approval of the document as written/as amended.</p> <p>D. Lapp explained that a Review Draft had been sent to CEE members in February 2015 for review. The comments received were incorporated into a revised Review Draft which was sent to all national and international members in July 2015. These were used to prepare an Approval Draft, which was the version discussed at the meeting.</p>	
	<p>D. Lapp noted that the most significant comments were received from the ASCE which expressed concern that an elevated standard of care was being established. This concern was addressed through changes in language provided by ASCE and the inclusion of a Foreword, which clearly indicates the code is voluntary unless adopted by a jurisdiction.</p> <p>There was considerable discussion concerning the titling of the document and its implementation. Suggestions included dropping the word "Model" to strengthen its authority which received a mixed reaction. There was concern that the document focuses only on what needs to be done and not on how to do it. Its introduction could be premature until we have developed the "how".</p> <p>It was agreed that the initial purpose of the document will be to raise awareness of the issues among engineers and to think about the how and implement measures as appropriate. It is clear the document is voluntary provided the word "Model" remains.</p> <p>There is an urgency to release this document in 2015 to coincide with COP-21 to show the world that engineers are engaged and will contribute solutions to adapt.</p> <p>The Committee passed a motion to recommend the Approval Draft as written be submitted to the Executive Council and General Assembly for endorsement and publication as a WFEO document.</p> <p>It was agreed that the language of the Model Code should be reviewed in two years after a period of implementation. It may also be possible to propose a formal WFEO policy on the subject that reflects the practice and current understanding at that time.</p>	<p>Motion to recommend Approval Draft be endorsed by Executive Council and General Assembly carried unanimously</p>
10.	<p><b>TRANSFER OF CEE TO THE ICE</b></p> <p>J. Venables thanked Chair D. Danyluk and Secretary D. Lapp for their efforts and leadership over the past eight years. D. Danyluk indicated he will support the transition and advise as requested.</p> <p>ICE assumes the duties of host and chair with enthusiasm and a commitment to support the work of members. J. Venables requested everyone to communicate their aspirations and plans to her. She will conduct individual discussions that will help shape the Strategic Plan for the Committee to ensure alignment with the UN Sustainable Development Goals.</p>	



Item	Summary of Discussion	Decisions:
	<p>ICE is hosting the 2016 Triennial Conference of the ICE, ASCE and CSCE on December 9-10 in London. J. Venables will represent WFEO and the CEE at this event. She will also engage with WURC on the discussions around WFEO involvement with the UN SDGs.</p> <p>The Committee passed the following motion:</p> <p><b>MOTION</b> (moved by D. Danyluk, seconded by M. van Veelen)</p> <p><b>That the CEE recommends to the Executive Council and the General Assembly that the Institute of Civil Engineers – United Kingdom be selected as its new host and Jean Venables assume the position of Chair for the 2016-2019 term.</b></p> <p>It was passed unanimously.</p>	<p>Motion to recommend ICE as host and J. Venables as Chair for 2016-2019 carried unanimously</p>
11.	<p><b>NEXT MEETING</b></p> <p>The next face-to-face meeting will be held in conjunction with the meeting of the Executive Council in Lima Peru in the fall of 2016. This will be the first face-to-face meeting with ICE – United Kingdom as the host and chair. Incoming Chair Jean Venables will be in contact in the coming months.</p> <p>Chair Darrel Danyluk remarked that this meeting marks 11 years of his involvement with the WFEO since 2004. Over this time the WFEO has achieved greatly increased recognition worldwide, especially at the United Nations. He has worked with great people in the CEE and the other STCs and encouraged colleagues to get involved and have more engineers contribute. Experts for UN agencies and their work are needed – academics are preferred.</p> <p>He noted that WFEO needs to improve its two way communication with national and international members and encouraged them to provide representatives at regional UN regional meetings. His last duties are to report to the General Assembly as well as Chair the WFEO COP-21 Engineering Summit in Paris next week on behalf of Incoming Chair Jean Venables. Engineers Canada President Digvir Jayas, FEC, P.Eng. thanked D. Danyluk for his many years of service as CEE Chair.</p>	<p>Next face-to-face meeting to be held in Lima, Peru in the fall of 2016 – date to be confirmed.</p>

**WFEO Committee on Engineering and the Environment  
Meeting #8 – November 28, 2015, Kyoto, Japan**

**List of Attendees**

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