



BIENNIAL REPORT

2009/2011





FOREWORD



The role of engineering in addressing the challenges faced by all societies is more and more recognized and acknowledged worldwide.

The World Federation of Engineering Organizations (WFEO) is the sole Body representing the engineering profession of all kind and disciplines at World Level.

WFEO is an international platform where such issues as engineering in:

- economic and social development,
- poverty reduction,
- decreasing the gap between developed and developing countries in terms of technology and knowledge,
- new energy production models and new patterns of consumption...

are discussed and addressed.

Sharing engineering knowledge and experience among engineers is one of the main WFEO objectives. Discussions within WFEO aim at ensuring that knowledge is serving humanity.

Engineering is also facing challenges of its own.

The dramatic changes brought about by the globalization, competition and new technologies have set new frontiers for engineers. The engineering profession is nowadays a very complex and global activity.

In order to tackle it, there is a need for technology indicators and statistics about engineering and engineers. The new engineering frontiers are no longer regional.

The World Federation of Engineering Organizations stands here at the 21st century to serve their Members and the Society at large.





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PRESIDENT'S REPORT

Maria PRIETO LAFFARGUE

The world's engineering community will be gathering in the city of Geneva this September, 2011, when this report will come out.

The objective is to analyze, debate and provide society with the best recommendations with regards to a subject with profound strategic repercussions for the world: Energy.

The World Engineers' Convention, with its drawing power and the excellence of its participants, already constitutes early evidence of the clout which the World Federation of Engineering Organizations is acquiring as a body functioning as a voice for the engineering profession on a global level.

A new period for the organization will also get underway, with a new executive elected democratically by the General Assembly, which will celebrate its biennial meeting as hosted by the WFEO Swiss National Member.

On behalf of the WFEO Executive Council and I, we would like to express our appreciation of their generosity.

It is now time to present an assessment of the road travelled thus far, since Kuwait in 2009, and to submit to the Assembly, the WFEO supreme body, the decisions made, the projects undertaken and the agreements signed.

The **presentation of the World Federation's key facts** will also allow external observers of the Federation and those interested in it, to find out something more about this organization representing the engineering profession – a field pivotal to the social and economic progress of peoples around the world.



November 2009 – September 2011. These twenty two months have been a decisive period for the world.

The financial, economic and social crisis worldwide is transforming many approaches which until now were immutable.

It is making more pressing the search for a new globalization model based on reducing poverty and respecting environmental ethics.

In addition, the tragic disasters, both natural and man-made, that hit Haiti, Chile, Pakistan, New Zealand, Japan and the Gulf of Mexico, (with the Macondo well spill), showed us our weaknesses and strengths as a world organization.

Weaknesses: because there is so much more to be done by WFEO in its role as the body representing the engineering profession worldwide.

Strengths: because many of the complex challenges that society at large faces today can be addressed only through collaboration with engineers and resorting to engineering worldwide.

And this is the WFEO leitmotiv, the true mission of the WFEO, and one which bestows upon us a huge and unique opportunity.

In my duty as president I have made every effort to respond to this challenge and have always strived to follow the 2009-2011 guidelines presented and approved by the Executive Council when I took over the presidency in Kuwait.



Here are the key facts:

1 - VISION INTO ACTION: WFEO Visibility:

1.1. UNITED NATIONS

1.1.1. UN Women: The United Nations Entity for gender equality and the empowerment of women

Aiming at opening new lines of contribution to put engineering at the service of the millennium goals and increasing the WFEO visibility, I shared the WFEO views with Ms. Michelle Bachelet, the Under-Secretary-General for UN Women.

In a meeting with her on 4 May, 2011 we discussed in depth about how WFEO could work strategically in support of gender equality.

I offered her the capacities of the WFEO's Standing Technical Committees in order to undertake a creative approach with medium-term projects to improve the welfare of women in rural areas and in developing countries.

A clear program of UN Women-WFEO cooperation in the short, medium and long term is now underway.

1.1.2. United Nations Commission on Sustainable Development (UNCSD)

Due to the tireless efforts made by WFEO past presidents, Dato Lee Yee Cheong, Kamel Ayadi, Barry Grear and the WFEO liaison for UN CSD, Jorge Spitalnik, the WFEO contributions to the UNCSD are steadily becoming more significant.

I led a delegation to the UNCSD in May 2011 (CSD-19) supported by the WFEO Committee Chairs on Energy, Engineering Capacity Building and Engineering and the Environment.

1.1.3. United Nations Framework Convention on Climate Change (UNFCCC)

In order to support and enhance the fine work done by WFEO Vice President, Darrel Danyluck, I got in contact with the UN FCCC Executive Secretary Ms. Figueres.

I provided her with information about WFEO and conveyed to her the lines of activities already pursued in reference to adapting to climate change.

I asked her to explore together how to bolster the contribution of the engineering community, and the steps that could be taken to integrate the analysis and outcomes of the WFEO Steering Committee on Engineering and The Environment into the UN FCCC's action plans and budgets. The WFEO Chair of said committee is pursuing these tasks.

1.1.4. UNESCO (United Nations for Education, Science and Culture)

A new UNESCO Director General, Ms. Irina Bokova, was nominated in November 2009.

In January 2010 I met with her and mentioned to her, after presenting the WFEO in more detail, that the objective was to inject substance into the UNESCO-WFEO framework agreement and to promote collaborative work done by WFEO STCs in UNESCO programs.

I am very pleased to indicate that a "Feasibility study" for a "UNESCO International Engineering Program" was concluded six months later (July 2010) with clear, positive recommendations for the initiation of this IEP.

The IEP was examined in October 2010 by the UNESCO Executive Board and General Conference and hopefully will be approved soon.

I met, once again, with Ms. Bokova in March 2010. She organized the UNESCO New Board on 20 June 2010 with Mr. Engida as Deputy Director-General and Ms. Gretchen Kalonji as Assistant Director General for Natural Sciences.

I met with Ms. Kalonji in September 2010 and focused the discussion on drawing her attention to the need to strengthen engineering within UNESCO and asked for her support to expedite the implementation of the International Engineering Program.

I had the opportunity to exchange views with the Deputy Director General Mr Engida in April 2011 in Paris and offered him the WFEO Secretariat as the IEP Secretariat, should this program be implemented, to carry out specific activities through the WFEO Standing Technical Committees.





I was invited to serve as a member of the Advisory Board for the UNESCO program on “Development Innovation”.

I attended in my role as WFEO president and presented the WFEO capabilities in the area of innovative engineering applications for rural and urban sustainability.

1.2. ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD) – WFEO-OECD RELATIONS

Immediately after the General Assembly in Kuwait, I got in contact with OECD Secretary General Mr. Angel Gurría, sharing information about collaboration with WFEO with him.

He answered immediately and proposed a meeting to discuss the World Federation of Engineering Organizations at length.

In February 2011 I met with him.

The OECD groups representatives from 30 countries committed to democratic government and market-based economics.

As it is the Organization’s essential mission to work for a stronger, cleaner, and fairer world economy, and as the engineering profession represents a fundamental pillar of social and economic progress, cooperation between the OECD and the WFEO would appear to make great sense.

The WFEO proposed, and, the OECD approved, to work together on innovative engineering applications to promote more sustainable economies around the world.

In order to enable the WFEO able to provide the OECD with indicators, case-studies and methodologies regarding the influence of engineering on wealth creation, WFEO needs to rethink some of its work procedures. Today we are moving to do so.

The first achievement in WFEO-OECD relations was the signing of a Statement of Intent on 13 July, 2010 in Paris, five months after talks had started.

1.3. WORLD TRADE ORGANIZATION (WTO) – WFEO RELATIONS

In today’s technologically rapidly changing world,

where globalization and the exchange of goods and services are the key drivers of economic and social progress, the WFEO is firmly dedicated to engineering education.

The WFEO mission includes keeping engineering knowledge up to date, promoting engineering skills, and enhancing shared knowledge and work experiences among engineers.

During my discussions with the WFEO National Member Engineering Institutions and their governments, I realized the importance of mobility and the issue of accreditation for engineers’ development and contribution to the trade system.

Consequently, the need to strengthen the relationship between the WTO and the WFEO, and the search for a formal alliance was placed on my agenda at the beginning of the year.

In my role as president I sought to forge ties with the World Trade Organization, based in Geneva, last March 2011, and a formal meeting is scheduled for June 2011 with the WTO Director and with Deputy Director General Harsha Vardhana Singh.

1.4. WFEO AND THE ORGANIZATION OF AMERICAN STATES (OAS)

Relations with the Inter-American Council for Integral Development (CIDI) have been intensified, and WFEO was invited to participate in the Inter-American Committee on Science and Technology (September 2010).

The aim of WFEO is to promote cooperation policies on innovative technologies and engineering applications among the OAS Member States, and promote the role of Engineers in enhancing human prosperity.

2 – WFEO MEMBERSHIP INTEGRATION, COMMUNICATION AND ADDED VALUE

The 2009-2011 guidelines, unanimously endorsed by the WFEO General Assembly, sought to boost membership and communication with the WFEO National and International Members in order for them to obtain what they expect from the World Federation.



In this context the WFEO, represented by its president, has been present in National Member countries each time it was requested, either to address specific events or meet with their government ministers.

Those meetings are summed up in the next lines:

2.1. ASIA: SINGAPORE

In November-December 2009 I met in Singapore with the WFEO Asian societies and the Asia and Pacific Engineers Societies attending the 17th FEIAP General Assembly and the 27th CAFEO Conference, with the presence of Mr. Mah Bow Tan, Minister for National Development.

On that occasion Past President Barry Grear was named Engineer of the Year.

2.2. AFRICA: EGYPT

In January 2010 I met with some African engineering societies and the WFEO international member, the Federation of African Engineering Organization members and the WFEO Associate the African engineering Forum.

The meeting was possible thanks to the generosity and efforts of the WFEO president elect Adel Al Kharaifi.

I was very pleased to realize that, while some of the African engineering societies cannot afford to pay for WFEO membership, all of them were eager to contribute and be active within WFEO.

In my duties as president I am seeking a solidarity fund to offer them some mechanism through which to join WFEO in accordance with the terms of the WFEO Constitution.

2.3. EUROPE: CZECH REPUBLIC

In March 2010 I met with the "Czech Association of Scientific and Technical Societies" for the celebration of their 20th Anniversary.

On this occasion WFEO Executive Council Member and current Director General of the German Engineering Societies, Engineer Willi Fuchs, was granted the highest engineering distinction: the Christian Wilenberg Medal.

2.4. EUROPE: POLAND

In April 2010 I met with the Polish Federation of Engineering Associations.

I discussed at length with President Ms. Mankiewicz-Cundy and her team the engineering profession's challenges in Poland, and we prepared together the handover of the WFEO Standing Technical Committee on Education in Engineering.

This Committee was hosted by Poland since 2005 thanks to the outstanding dedication of Professor Włodzimierz Miszański, and the excellent support of its Secretariat.

I would like to take advantage of this report to publicly recognize and thank the Polish Engineering Association.

During my visit to Warsaw I paid my respects, on behalf of all WFEO members to the Polish people after the national tragedy during which the Polish president and top officials perished.

2.5. LATIN AMERICA: ARGENTINA

Over the last week of April 2010 I led a WFEO Delegation to the Argentine Engineering Societies (UADI and CAI) to oversee and discuss the progress of the "Engineering 2010" International Congress.

We met with Argentine entrepreneurs, ministers and top officials in government to promote the engineering profession and to advance the role of Argentinean engineers in the economic and social development of their country.

2.6. EUROPE: HUNGARY

In May 2010, in response to a request by the Hungarian WFEO Member (MTESZ) and the president of the Hungarian Engineering Academy, I addressed them on the occasion of the Hungarian Engineering Day, speaking about "What Engineers can do for Sustainable Growth."

I met as well with the president of the WFEO Hungarian NM, the Federation of Technical and Engineering Societies, Mr. Gordos, and his top officers to discuss the main concerns facing Hungarian engineering, its future roles and its difficulties in the short





term to afford WFEO membership, due to specific problems.

However, Hungarian engineering is more interested than ever in actively participate in WFEO and, once again, in my duties as president I identified the need to search for mechanisms to help engineering Societies around the world during these times of temporary crisis.

We, as a WFEO family, should give this some thought.

2.7. EUROPE: SWITZERLAND

In May 2010, as a guest of the organizing committee of the WEC 2011, I visited Lausanne (Switzerland) to be briefed on planning for the WEC 2011.

A WFEO delegation was received by the Swiss Federal Government Counselor

2.8. LATIN AMERICA: BRAZIL

August, 2010. In response to a request by the Brazilian Engineering Society (CONFEA) I met with them on the occasion of their 67th Official Week and the 7th National Engineering Professional Congress.

I addressed them regarding the subject “Challenges and Opportunities during the International Post-crisis Period.” I had the opportunity to talk with the Brazilian engineering societies about Brazilian engineering and the crucial and relevant role that Brazil is playing in the global economy.

In Rio de Janeiro I met with FEBRAE’s delegation, learning about their expectations with regards to WFEO.

2.9. ASIA: CHINA

In September, 2010 invited by Sha Zukang, Under-Secretary-General for Economic and Social affairs and the Shanghai Municipal People’s Government, I attended the Global City Informatization Forum (CIAPR), which is focused on bridging the digital divide between the UN Millennium Summit and the ECOSOC Ministerial Declaration.

Asked by WFEO national member, CAST, I addressed them on the subject of “Leading the Way in The Urban Life of the Future through ICT Innovation.”

The WFEO participation was under the auspices of the United Nations Alliance for ICT and Development, and the WFEO contribution was made possible thanks to the tireless efforts undertaken by past WFEO presidents and ex WFEO Vice President Prof. Yi Xin Zhong from China.

2.10. EUROPE: FRANCE

The WFEO French National Member nominated a new president: Julien Roitman.

As soon as he took over his presidency I contacted him to congratulate him and listened to his views on how WFEO could better serve the goals of the French engineering community.

On November 3rd I attended a reception with the French Prime Minister on the occasion of the 150th anniversary of the “*Ingénieurs et Scientifiques de France*”, recognizing this institution for its services to the French Society.



2.11. AFRICA: NIGERIA

In December, 2010, invited by the WFEO Nigerian national member, the Nigerian Society of Engineers, I joined them at their 2010 International Conference and Annual General Meeting.

I addressed them, as requested, on “What the WFEO Can Do to Build Engineering Capacities in Africa.” I also talked at length with the NSE about the Federation’s commitment to strengthening Africa’s engineering institutions.

Together with the NSE’s Board of Directors, we met with the Nigerian Vice-Prime Minister and analyzed



the role of the Nigerian engineering community in the nation's social and economic development.

I visited as well the Polytechnic University of Mina to explore future Engineering students' involvement in WFEO activities and how to help them in their understanding of global engineering practices.

2.12. LATIN AMERICA: PERU

February, 2011. The increasing efforts by Peruvian engineering to contribute to the economic and social progress of their country led the "Colegio de Ingenieros de Peru" to request the support of WFEO for them to become more aware of the changes in the globalization of the engineering profession.

In February I travelled to Lima, Trujillo and Cuzco, addressing their departmental engineering councils about "The World Today: An Engineering Approach."

I met with Peruvian Ministers of Education and Industry in order to explore the establishment of links between engineering representatives and government institutions.

2.13. OCEANIA: AUSTRALIA

July, 2011. Invited by the WFEO Australia National member, Engineers Australia, I will meet in Adelaide with them.

In my role as WFEO president I will attend the 15th International Conference of Women Engineers and Scientists (ICWEST 15), and address them about "Leadership in Technology-intensive Corporations."

I will also meet with Engineers Australia to discuss how information technologies and innovative engineering applications can contribute to urban sustainability.



3 – WFEO-SPONSORED CONFERENCES

One of the WFEO major missions is to promote and open qualified discussions on engineering related topics.

Over the course of 2009-2011, more than fifty conferences were held around the world as organized by sister engineering institutions.

The excellent job done by past president Barry Gear allows WFEO Headquarters to promote these events among members.

Herein I will only mention those International Congresses and Conventions organized by a WFEO National Member or Associate under the sponsorship of WFEO and/or with a WFEO authorization, using the Federation's logo and support:

3.1. The 2nd International Conference on Ethics and Human Values in Engineering (Barcelona, Spain 2010)

3.2. The international congress "*Ingeniería 2010: tecnología, innovación y producción para un desarrollo sostenible*" or "Engineering 2010: Technology, Innovation and Production for Sustainable Development." (Buenos Aires, Argentina, October, 2011.)

3.3. WEC 2011. (September 2011) The World Engineers' Convention, in its fourth edition, under the theme "Engineers Power the World: Facing the Global Energy Challenge," is to be held in Geneva (Switzerland).

The WEC is the flag event of WFEO that is organized every four years by a National Member under the umbrella of WFEO.

This fourth WEC edition is organized by the Swiss National Engineering Committee, made up of Swiss Engineering, the Swiss Association of Engineers and Architects and The Swiss Academy of Engineering Sciences.

"Through innovative engineering solutions, the WEC 2011 seeks to encourage the globally sustainable use of energy," to quote its organizers.

Without any doubt, the WEC 2011's outcome will illustrate the role of engineers in sustainable energy solutions and encourage the younger generation to tackle energy and environmental issues.





In my role as WFEO president I will give an address during the opening ceremony.

4 – THE WFEO INTERNATIONAL MEMBERS' INNOVATION FORUM

WFEO International Members are fundamental so that the WFEO, as the sole body representing the engineering profession worldwide, can issue harmonized engineering policies and recommendations with strong repercussions and influence.

This is why, immediately after I took over the presidency in Kuwait (November 2009), I called for the first WFEO International Members Round Table.

The WFEO IMF was devised as a mechanism of dialogue and best practices for exchange between all the Regional Engineering Umbrella Federations covering all the world's economies.

It should deal with global issues and be able to offer engineering-related gauges and indicators.

5 – THE WFEO VIRTUAL SERVICE CENTER

As described in the 2009-2011 guidelines endorsed by the General Assembly in Kuwait, a new project was implemented.

The WFEO Virtual Service Centre seeks to enhance the visibility of the engineering representation through a strong presence on the Internet, with the right information about its members, the engineering community, and society at large.

The WFEO VSC is a long-term project.

It should feature the ICT cutting-edge tech tools to serve its members and society, with reliable and user-friendly communications and information services.

Intellectual property management and control is undertaken by the WFEO Headquarters.

The technical implementation of the project's design and development was carried out by the WFEO National member "The Institute of Engineers India" (IEI), which kindly formed a full-time technical team to develop it.

In March 2010, the WFEO Executive Board approved the signing of a Memorandum of Understanding

between the WFEO and the IEI, with detailed descriptions of tasks and budgets.

From May 2011, once iterations 1 and 2 of the Project were completed as defined in the MOU, the Project was transferred to Paris Headquarters for ongoing improvement and maintenance.

The project is a pivotal one for the WFEO and its success will depend upon the commitment of all of us, and especially on the Editorial Network created for this purpose, and obviously on proper management by WFEO Headquarters.

I encourage you, National Members, International Members and third- parties related to engineering issues to supply the WFEO website with news, articles and comments, and the WFEO's STCs to enrich the VSC Knowledge Base.

6 – THE WFEO SENIOR ADVISORY BODY (SAB)

A WFEO Senior Advisory Body was launched in March, 2011, made up of former WFEO presidents.

The SAB aims to assist the president and the Executive Board by drawing on the experiences and knowledge of former WFEO leaders.

The WFEO SAB is a consulting body and, as such, its recommendations are not binding decisions.

All members may be asked for their views about matters to be decided by the Executive Board and presented by the president.

On a voluntary basis, the members of the WFEO SAB will be gathered on the occasion of the WFEO General Assembly.

The current WFEO SAB members are: past President Sadok Ben Jamaa from Tunisia, past President William Carroll from United States of America, past President Conrado Bauer from Argentina, Jose Medem from Spain, past President Dato Lee Yee Cheong from Malaysia, past President Kamel Ayadi from Tunisia and past President Barry Gear from Australia.

Through this Report the WFEO would like to express its appreciation for their contributions and their generosity in serving the WFEO.



7 - CONDOLENCES

It is with profound sadness that I, once again, on behalf of the WFEO Members, acknowledge the death of FEANI Vice-president and WFEO Executive Council Member Alcide Gava.

An Italian engineer, Mr. Gava served engineering institutions for many years, including Italian and European institutions and the World Federation of Engineering Organizations.

On the occasion of the Executive Council meeting in Buenos Aires (October 2010), WFEO paid its respect to his wife and daughters and honored his memory.

8 - LINKS WITH WFEO INTERNAL PARTNERS

With regards to the extension of cooperation with relevant international partners, the 2009-2011 period has been a very productive one.

8.1. FIDIC (INTERNATIONAL FEDERATION OF CONSULTING ENGINEERS)

A stronger collaboration has been pursued by both the WFEO and FIDIC, which held several successful meetings in Madrid and Geneva.

FIDIC was presented at the WFEO's Argentina Congress, "Ingeniería 2010," and WFEO was invited to the FIDIC's Annual meeting.

The creation of a World Engineering Award granted by a Joint WFEO/FIDIC Body has been agreed upon, and WFEO/FIDIC is working on it.

8.2. IEEE (THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS)

As the IEEE is the world's largest technical society, I focused my attention on establishing some kind of WFEO/IEEE collaboration.

I got in contact with the IEEE through its officers in the USA and chapters in Spain and Italy, and initiated positive discussions about mutual contributions.

The last meeting was held in Paris, in March 2011, with the IEEE president-elect for 2012 defining some initiatives to be explored.

An IEEE delegation is going to join us in Geneva in

September 2011.

8.3. ISTIC (UNESCO KUALA LUMPUR SCIENCE CENTER FOR SOUTH-SOUTH COOPERATION)

In my role as the WFEO President, I was invited to be part of the Governing Board of the ISTIC.

I accepted and nominated Datuk Rosaline Ganendra, WFEO Malaysia National Member Delegate to the WFEO Executive Council, as the WFEO alternate president. She accepted, honored to have been nominated.

I am convinced that any joint effort by WFEO and ISTIC, will be of benefit to both Organizations and to society at large.

9 - FINANCIAL SITUATION, BUDGET AND NEW TRENDS

I am very pleased to see that the guidelines defined for 2009-2011 with regards to the WFEO budget are being observed and achieved, step by step.

Thanks to support from WFEO National Member The Kuwait Society of Engineering (KSE), financial reserves are substantially improved, at the same time that the WFEO was able to start the Communication and Knowledge Base Project (WFEO VSC), funded by an extra budget.

The support of president elect, Adel Al Kharafi has allowed some WFEO National Members who lack funds to attend the WFEO General Assembly meetings, and relevant in-person meetings, permitting them to be more active in the Organization.

The prestige of using the WFEO logo and name has started to yield benefits.

The Al-Mal Investment Group, in partnership with the WFEO, attended WFEO meetings in Egypt and Barcelona, presenting and sharing its activities among the WFEO delegates.

The Al-Mal investment Group granted the WFEO with stipulated funds.

10 - CONCLUSIONS



AND ACKNOWLEDGMENT

I have understood the Kuwait 2009 General Assembly Mandate and, consequently, my duty, as having two dimensions:

Firstly, lobbying for the engineering profession among the world's multilateral agencies and institutions.

I did this and have paved the way to secure a place for WFEO at global institutions and decision-making centers levels.

I offered them the support of the engineering community to adapt their structures to the new global scenario of the 21st century Society in order to pursue their goals of peace and prosperity for humankind.

And secondly, I envisioned my mission as helping the WFEO National and International Members to make their institutions stronger and more relevant in their countries. I did this by meeting with their governments each time any of them requested it.

In defining the strategic path to be pursued I conveyed to the WFEO STCs the fundamental criteria that their outcomes should be directed to through: progress on timely global matters, including food security, clean water, sustainable and clean energy, adaptation to climate change, natural disaster mitigation, engineering capacity building, and creating innovative technologies for rural and urban sustainability.

Challenges include how to use engineering and

information technologies for development, how to mitigate the underrepresentation of women in engineering, engineers' mobility and accreditation, and ethics in engineering practices, which must be key topics for WFEO as it seeks to speak out with a clear and coherent voice.

I am very pleased to inform you that all of these goals are today being pursued by the WFEO committees with a real sense of purpose.

WFEO is a truly great organization.

WFEO is a huge, relevant institution that belongs to all of us, who are, in turn, its greatest asset.

The WFEO is moving ahead.

My deepest gratitude to all the members, especially to the Executive Council and Executive Board, upon whom I have relied during my presidency.

I am profoundly indebted to Jaime Santamaria, Treasurer and Deputy Treasurer Pierre de Boigne, former President Barry Grear and President Elect Adel-Al Kharafi, and Vice Presidents Jean-Claude Badoux and Marwan Abdelhamid who have given me all the support that I needed.

I would like to recognize the significant support as well of our Executive Director, Tahani Youssef and my colleagues among Spanish engineers, the Institute of Spanish Engineering, and the Association of Telecommunications Engineers.

My esteemed colleagues, I will forever harbor fond memories of and only the best wishes to the WFEO for continued success.



MESSAGE FROM THE PRESIDENT ELECT

By Adel AL KHARAFI



“It is time for our WFEO General Assembly and time for me to become the President of WFEO. I am really looking forward to the challenge and the responsibility.

I have a great WFEO team of dedicated professionals that will help me implement our plans to lead the organization forward! We will continue to focus on expansion and exposure of WFEO and its activities”.

WFEO is very fortunate to have so many professionals who dedicate their time and expertise to make their Federation as best as it can be. I was so proud during my President Elect mandate to have accomplished many missions in WFEO: I organized a workshop in Cairo for all African national members, I increased the number of volunteers in the Standing Technical Committees, helped increase the Federation’s membership, had successful meetings with the leading American Engineering Associations, attended a conference of Engineers Without Borders in London, helped upgrade the WFEO headquarters in Paris, signed an agreement between OECD and WFEO on behalf of WFEO President Eng. Maria Prieto Laffargue, organized a diplomatic dinner at Hotel Ritz, Paris for Ambassadors to France and to UNESCO in order to enhance the WFEO exposure.

My WFEO heart is beating fast! But, we can’t rely on our great accomplishments only. I remain confident that the new Executive Council together with the Committee chairs and members, will promote our or-

ganization to the next level.

WFEO is very lucky to have Mrs. Maria Jesus Prieto Laffargue as President. She is not only a superbly talented professional, but a woman of seemingly endless resources, energetic and well-organized, a wonderful colleague. I seize this opportunity to thank her for her wonderful leadership which further advanced WFEO. I am confident that she will continue to provide WFEO with her expertise and skills.

Together, we can make a difference. I would like to see more WFEO professionals “present” at all our upcoming conferences. After all, we are the “Knowledge Base” for young engineers, students, leaders and governments around the world.

I’m looking forward to seeing you at the World Engineers’ Convention 2011 in Geneva, Switzerland. Remember, **THE FUTURE OF WFEO IS IN YOUR HANDS.**





REPORT OF THE EXECUTIVE DIRECTOR

Tahani YOUSSEF (France)



STAFF

Three people are working at headquarters in addition to a communication engineer based in Spain.

FINANCIAL SITUATION

Despite the world financial crisis, the Federation's income from subscriptions has steadily increased since 2009. Thanks to the efforts made by headquarters and WFEO officials, I remain confident that we shall be able to exceed our 2011 budgeted income before the end of the year.

WFEO has now a stable financial situation with reserves of more than half a million Euros also due to generous donations from members and subventions to specific projects. However, WFEO should adopt a conservative financial policy at all times and should always have sufficient reserves to cover the Federation's administrative cost for one year.

HEADQUARTERS' ACTIVITIES

Normal regular tasks were carried out by headquarters including involvement in the 2010 Engineering Congress, Buenos Aires, Argentina and the World Engineers' Convention 2011 in Geneva, Switzerland.

Together with the Institution of Engineers (India), the staff at headquarters worked towards the establishment of the WFEO virtual presence in the internet, mainly to optimize the website functionalities and increase its flexibility and interactivity. Work will now be continued from headquarters to improve the Federation's website and have more effective contacts with members.

The visibility and the marketing of the Federation is another new activity in which the staff was largely involved particularly in 2010. Under the leadership of the President, headquarters undertook a study to find out how WFEO is seen on the internet and how to improve the situation. This activity was encouraged by the President Elect and will be intensified during the coming years.

Thanks to the efforts made by the President and the President Elect, the staff at headquarters established direct contacts with UNESCO delegations and staff to attract their attention to the activities of the Federation. As a result, several engineering institutions from Africa and Europe joined the Federation.

Great endeavors were made towards Africa. African member organizations were contacted to find out how best WFEO can increase their involvement in the Federation and how to come up to their expectations.

Headquarters also coordinated work with UNESCO with a view of establishing an International Engineering Program at UNESCO.

COOPERATION WITH UNESCO

WFEO has a Framework Agreement with UNESCO covering the period 2009-2015 that was signed in 2010 by the President, Maria Prieto-Laffargue and the Assistant Director-General for Natural Sciences, Walter Erdelen.

The UNESCO Report, "Engineering: Issues, Challenges and Opportunities for Development" was



produced in conjunction with WFEO, CAETS and FIDIC, and published in 2010. The UNESCO Engineering Report has received widespread interest, support and acclamation, and is regarded as a flagship publication of UNESCO.

UNESCO continues to be closely involved and a patron and sponsor of the World Engineer's Convention, and will support the participation of engineers from developing countries at WEC2011 that will take place in Geneva, Switzerland, from 3-6 September.

WFEO Headquarters has enjoyed close cooperation with UNESCO over the last five years regarding the strengthening of engineering and establishment an International Engineering Program at UNESCO, as a joint activity with WFEO.

At the UNESCO Executive Board in May the Director-General announced a restructure of the Programme Sectors and the creation of sectoral cross-cutting initiatives. For the Natural Sciences Sector, it was announced that the Sector would have three divisions (water sciences, environmental science, science policy and capacity building) and

four cross-cutting initiatives (on engineering, disasters, biodiversity and science education).

The Basic and Engineering Sciences Division would therefore disappear, to be merged into science policy and capacity building. The engineering programme would become a "cross-cutting initiative" that was described in an Information Document.

The next UNESCO Executive Board is due to be held next September and the General Conference in October. The opinion of member states is sought on the proposed restructuring of the Natural Science Sector and the model for strengthening engineering at UNESCO.

APPRECIATION

I am particularly grateful to the President as well as the members of the Executive Council whose support and assistance made me able to carry out the tasks of the secretariat efficiently.





COMMITTEE ON WOMEN IN ENGINEERING

Chairwoman Marie-Hélène THERRE (France)

MEMBERSHIP

Since the inception of the WiE standing committee, hosted by the WFEO-FMOI French National Member “*Ingénieurs et Scientifiques de France*” (IESF, former CNISF). I am President of the French association *Femmes Ingénieurs* (Women Engineers) and have occupied the position of chairwoman of the WFEO WiE since its creation four years ago. In this capacity, I am also Vice-President and member of the Executive Council of WFEO-FMOI.

The WiE standing committee gathers 28 full members (whom 4 men) from over 19 WFEO-FMOI member countries. Efforts are made to continue to extend the membership to other WFEO-FMOI member countries representing North America, Asia/Pacific, Latin America, Europe, Mid-East, South and Central Asia, and Africa.

VISION, MISSION AND STRATEGIC PLAN

The Vision for the WFEO-FMOI WiE reads as follows: “Women and men engineers, in total equal opportunity, to work to constructively resolve international and national issues thanks to their diversity and their differences to the benefit of humanity”.

The WiE mission is i) to develop and confirm the position of WFEO regarding the new social challenges of partnership and leadership of professional women engineers in a sustainable way ii) to offer support to increase a concrete comprehension for institutions to integrate the gender dimension in their bodies and in the engineering profession, iii) to help in improving the representativity of women engineers within WFEO-FMOI organizations and bodies, iv) to help organizations attract young women interested in becoming engineering professionals worldwide.

MEETINGS

The committee held face to face meetings prior to the WFEO-FMOI General Assembly in Kuwait City and again in November 2010 on the occasion of the WFEO Executive Council meeting in Buenos Aires. The next face to face meeting is planned for September 2011 in Geneva on the occasion of the WFEO



General Assembly.

The Committee will contribute and support to ICWES 15 – an INWES event to be held in July 2011 as organized by the Australian Women in Engineering Committee of Engineers Australia and to the WEC2011 prestigious congress organized by the Swiss WFEO member and EPFL in Geneva in September 2011.

ACTIVITIES

With reference to our mission, five task groups develop and facilitate thematic, results-oriented action plans.

Theme 1: Communication

The objective is to promote WiE within our bodies and in various meetings in which our members participate and have contributions. Flyers were prepared and support has been provided to leaders of WFEO-FMOI national members to found their local WiE group, for example in Argentina.

Theme 2: She figures

The objective is to collect figures on women engineers in our different countries and to benchmark them. Thanks to the local associations and/or personal engagement of our members, we have a pretty



good comprehensive idea of the situation of women engineers in Australia, Canada, France, India, Malaysia, United Kingdom. The She figures were presented in Kuwait in 2009 and work is progressing.

Theme 3: Don't stay in the shadow, get out of it!

The objective is to promote those women who contribute to or are actors in engineering in different countries and regions. A first edition of a book, with portraits, will be presented in the WEC2011 in Geneva.

In parallel, WIE promotes the call for papers for the WEC2011 and other conferences.

Theme 4: Workshops on the engineering profession and equal opportunity

The objective is to shed light on the factors that attract and retain women in engineering activities and professions. The first workshop in Kuwait City resulted in interesting discussions with our peers (men and women) and increased awareness of the gender dimension in engineering. Two other meetings, focusing more on the equality policies in enterprises and organizations are scheduled in July 2011 in Adelaide and in the WEC2011 meeting in Geneva.

Theme 5: Tools to accelerate equal opportunities within the engineering profession and bodies

The objective is to provide our engineering bodies with basic tools that will allow them to focus their attention on managing their organizations and taking their decisions in equal opportunities for both men and women; two flyers have been produced in three languages: French, English and Spanish:

- 1 "Women workforce diversity in engineering Towards organization competitiveness and project success"
- 2 "Capacity building tool to create equal opportunities within the engineering profession" which consists of a checklist for decision makers in engineering organizations or companies to measure awareness of the need for women in engineering and how female friendly practices can support women in organizations, how many women participate in engineering projects but are

not recognized.

OTHER ACTIVITIES

WiE was the leader in the international program "Shadowing Day", held by the Committee chair. This initiative aimed at promoting engineering opportunities in ICT amongst women in high school in 10 countries, in collaboration with Orange (the French ICT service provider) and the European Commission. While several representatives of WFEO national members have expressed an interest, few countries have responded to the call for action.

I have extensively provided answers to the UNESCO questionnaire for the preparation of the draft program and budget for 2012-2013. The UNESCO document included the gender mainstreaming dimension of the engineering and scientific project. I introduced the need to consider the gender dimension in the scientific and engineering projects for figures, evaluation and funds, as the gender dimension, this social construction of female and male identities, varies according to time and place, and between cultures.

MEETINGS WITH UNITED NATIONS DIVISION FOR ADVANCEMENT OF WOMEN (DAW)

I was requested by DAW, (now part of UN Women) and previously CSW in ECOSOC to contribute as Observer to the expert group meeting (EGM) on 'Gender, Science and Technology' held at UNESCO in Paris from 28th of September to 1st of October 2010.

MEMORANDUM OF UNDERSTANDING

A MOU has been signed with the International Network of Women in Engineering and Sciences (INWES). It would allow signing protocols when relevant, reinforcing communication and collaboration in events and sharing research/communication results of common interest in the engineering representation of women in engineering.

In the same perspective, a MOU was signed with the International Institution for Women in Engineering IIWES in October 2009. IIWE organizes every yearly three week campus in France that includes visits to engineering sites and industrial enterprises and a conference for girls and boys coming from different parts of the world.





COMMITTEE ON ENGINEERING AND THE ENVIRONMENT

Chairman Darrel DANYLUK (Canada)

At the WFEO General Assembly in New Delhi, India in November 2007, Engineers Canada assumed the Chair of the Standing Technical Committee on Engineering and the Environment. Chair Darrel Danyluk, P.Eng. and the committee are supported by a small secretariat that is provided by Engineers Canada.

MEETINGS

The committee held three, one day face-to-face meetings with committee members, their representatives/substitutes and observers. These meetings were organized in conjunction with the General Assembly Meetings in November 2009 and September 2011, and the Executive Council meeting in October 2010.

In addition, mid-year teleconferences/webinars were held in July 2010 and June 2011 to review the progress in the six theme areas of the strategic plan as well as to receive the Chair's report on WFEO and United Nations meetings

2007-2011 STRATEGIC PLAN PROGRESS

The CEE Strategic Plan was amended following the 2009 General Assembly to reflect that Disaster Risk Management had become its own standing committee. The revised mission is tailored to fully support WFEO's vision and mission as it relates to environment and sustainability.

Theme 1: Environmental Impacts of Major Sporting Events (Greece)

The objective is to document the environmental impact and sustainability issues around recent large scale Olympic sporting events and communicate these to future Olympic organizing committees.

The final report was accepted for publication in October 2010 and issued in September 2011.

Theme 2: Engineering and Climate Change Adaptation (Canada)

The objective is to assess the engineering vulnerability and risks of climate change impacts on infrastructure to develop strategies and engineering practices that will improve the resilience of existing and planned infrastructures to climate change.

Engineers Canada has a multi-year project underway to do a national assessment of engineering vulnerability of infrastructure using an infrastructure climate risk protocol (PIEVC).

This assessment work has been expanded internationally by applying the protocol to infrastructures in other WFEO countries. A pilot project with Costa Rica Colegio was undertaken between August 2010 and April 2011 to assess one of the country's sewage treatment systems. An Executive Summary in English and Spanish will be available at the General Assembly. Technology transfer and capacity building sessions were held in Costa Rica, Honduras, Guatemala, Panama and Brazil.

A session on climate change is being organized by the CEE for the WEC 2011. International speakers on mitigation and adaptation have been confirmed and the program is organized in an interactive format.

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC)

In 2008 WFEO was granted observer status as a Non-Government Organization (NGO) for all UNFCCC



meetings, with the Chair of WFEO-CEE as the Designated Contact Person. This status enables WFEO to observe all meetings of the UNFCCC and its subsidiary bodies and hold side events. The WFEO-CEE participated at:

- UNFCCC Conference of the Parties Meeting No. 15 Copenhagen, Denmark – December 2009
- UNFCCC Bonn Climate Talks 2010 – Bonn, Germany – June 2010
- UNFCCC Conference of the Parties Meeting No. 16 – Cancun, Mexico – December 2010
- UNFCCC Bonn Climate Talks 2011 – Bonn Germany – June 2011

Participation included the delivery of side events at the meetings listed above, numerous side events, and meetings of the Nairobi Work Program that focuses on adaptation to climate change. Progress on the WFEO-CEE action pledge was reported.

Theme 3: Engineering and Agriculture (Argentina)

A task group has been formed in 2010 and its strategic plan will be completed by September 2011 for incorporation into the 2011-2015 CEE plan.

Theme 4: Sustainable Development Evaluation Framework (United Kingdom)

This theme is developing an environment and sustainability evaluation framework that can be applied to engineering projects, policy initiatives. The framework is in the testing and evaluation stage through application to WFEO and WFEO-CEE activities.

UNITED NATIONS COMMISSION ON SUSTAINABLE DEVELOPMENT (UN-CSD)

The CEE Chair participates in a WFEO Task Force consisting of the Chairs of Energy, Capacity-Building and Engineering and the Environment that participated in 2010 and 2011 exploratory and full meetings of the commission, intervening with the engineering perspective on various subject areas as well as holding side events to raise the profile of engineering at the United Nations.



Theme 5: Environmental and Sustainable Engineering Practices for Engineers (Canada)

This theme is developing a guide for individual engineers to be adopted as an international guide by the WFEO. It focuses on professional and ethical principles for environmental stewardship and sustainable development.

Theme 6: Infrastructure in Developing Countries (India)

This initiative is implementing selected recommendations from the November 2007 international conference held with the 2007 WFEO General Assembly in New Delhi. A theme paper identified broad areas to help ensure proper infrastructural development in developing countries with a plan focusing on the delivery of workshop and seminars.

WFEO-CEE NEWSLETTER

The committee published four newsletters in the past two years: April 2010, September 2010, April 2011 and September 2011. Each newsletter was dedicated to one of the six theme areas in the strategic plan.

2011-2015 STRATEGIC PLAN

Engineers Canada has offered to host the committee for a second term. The Chair and Secretary are working with committee members to identify themes and develop work plans for the next plan which will be tabled for approval at the meeting of CEE in September 2011.





COMMITTEE ON DISASTER RISK MANAGEMENT

Chairman Yumio ISHII, Dr, P.E.

The activities of the WFEO Committee on Disaster Risk Management (CDRM) started with the establishment of a task group on disaster risk management as approved by the WFEO General Assembly held in November 2007 in New Delhi. The task group was established within the Committee on Engineering and Environment with the purpose of addressing the issues of both water related disasters and earthquake disasters, although it was originally proposed to be a task group for water-related disaster management. In line with the expansion of its activities, the General Assembly held in December 2009 in Kuwait further approved to transform the task group to a Standing Technical Committee consisting of a Sub-Task Group on Water-related Disaster Risk Management (WDRM) and a Sub-Task Group on Earthquake Disaster Risk Management (EDRM). Since then, the Committee led constructive discussions and exchanges of information and opinions on disaster investigation, disaster response, and disaster reduction, through which recommendations for disaster risk management were formulated and eventually publicized.

MEMBERSHIP

The Committee has 35 members from 14 countries.

VISION AND MISSION

To introducing or recommend an important philosophy and basic concepts, effective structural (hard) and non-structural (soft) measures, traditional and high technologies and good examples for risk management of water-related disasters and earthquake disasters to the engineers and policy-makers.

To promote the exchange of information and opinions on the above mentioned disaster risk management.

To bring together and introduce knowledge and experiences to avoid disasters and promote sustainable and sound development as inappropriate actions by man (residing, living, infrastructure development, etc.) may cause them.

ACTIVITIES

- Preparation of the 1st Version of TOR, recruitment of members (33 from 14 countries) and kick-off meeting, Sendai, Japan.
- International Joint Symposium on Disaster Risk Management (September, 2008) with the participation of WFEO President Barry Gear
- Seminar by Prof. Slobodan Simonovic, Tokyo and DRM's Meeting (September, 2008)
- Interim Report of "Draft Framework of GUIDELINE FOR WATER-RELATED DISASTER RISK MANAGEMENT (FLOODS, TSUNAMIS, STORM SURGES AND DROUGHTS)" (December, 2008)
- DRM Meeting, Brasilia Panel on DRM in WEC 2008 at Brasilia with co-operation of ASCE (December, 2008)
- Seminar on "Analysis of Natural Disaster Warning Systems with a case study of Tsunami Planning for Sri Lanka" by Prof. Chan Wirasinghe



(Canada), and a DRM's meeting with the other members in Tokyo to exchange information and opinions on DRM's activities. (April, 2009)

- Third WFEO-JFES-JSCE Joint International Symposium on Disaster Risk Management, Fukuoka, Japan. (September, 2009)
- Release of "Guideline for Water-related Disaster Risk Management (Part I: Fundamental, Part II: Floods, Part III: Tsunamis)" (December, 2009)

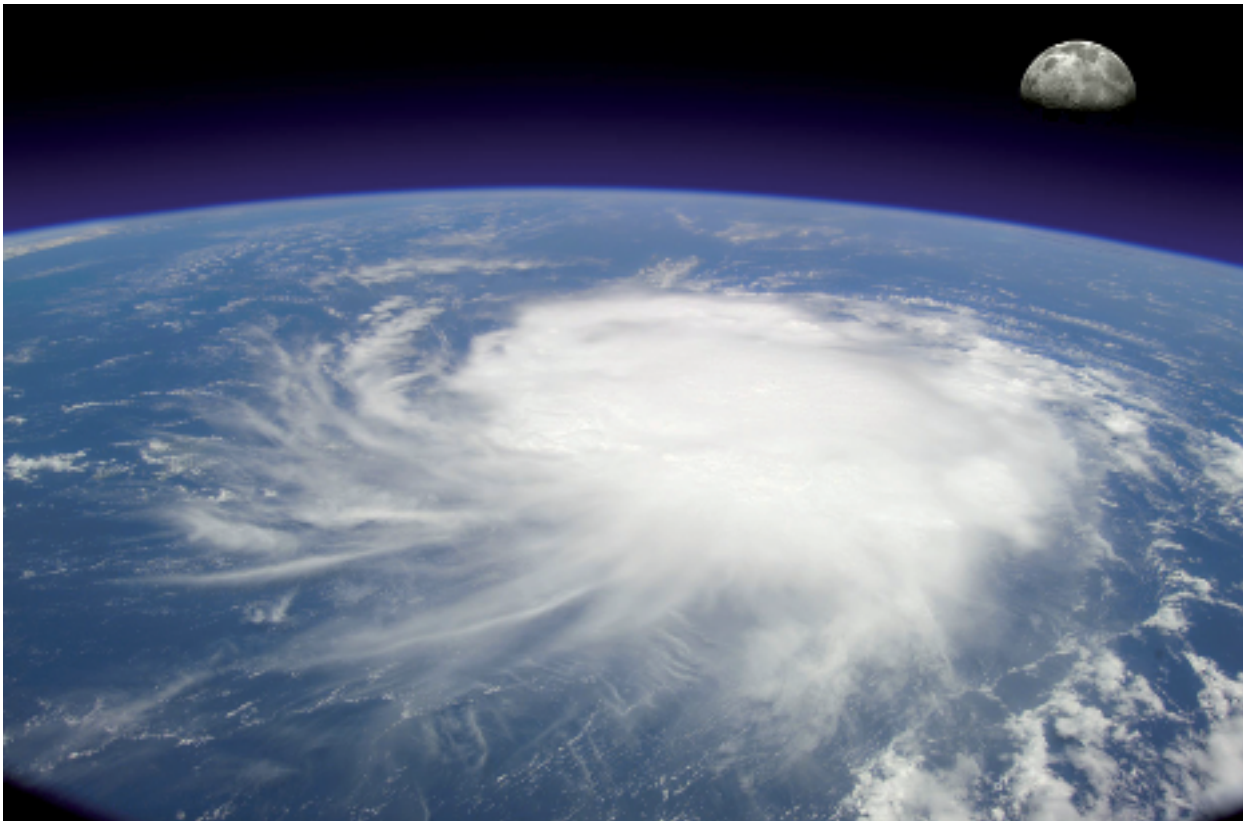
COMMUNICATION

Distribution of Newsletters since September 2008. Furthermore, a collection of papers for the WFEO-JFES-JSCE Joint International Symposium on Disas-

ter Risk Management was published in PDF format (<http://www.jfes.or.jp/activitie/iac.html>).

It is planned to publish the Guideline for Water-related Disaster Risk Management (Part I: Fundamental, Part II: Floods, Part III: Tsunamis) in the near future.

Disaster investigations are to be conducted to learn the status of the 2010 Chile Earthquake, the 2011 New Zealand Earthquake, and the 2011 East Japan Great Earthquake. The results of these investigations will be utilized to develop a guideline for earthquake disaster management, which has been in progress from 2010 to 2011.

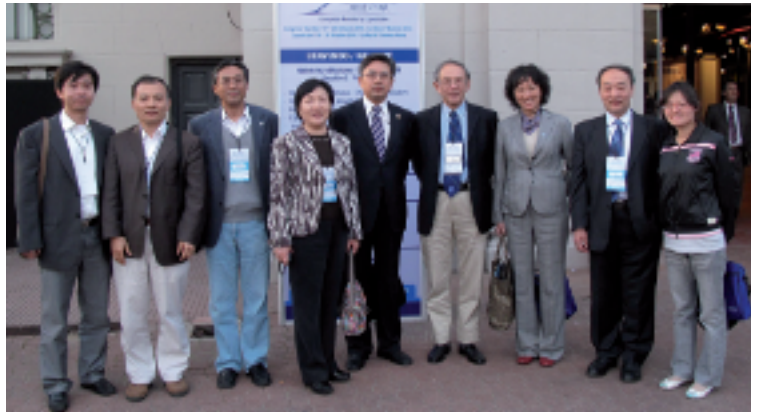




COMMITTEE ON INFORMATION AND COMMUNICATION

Chairman Gong KE (China)

The Chinese Association for Science and Technology (CAST) accepted the offer from Executive Council of WFEO to host the Standing Committee on Information and Communication of WFEO (CIC) at the end of February, 2008. In order to implement the vision of WFEO, the newly re-actuated Committee has taken a great number of practical actions since CAST took over the hosting.



ORGANIZATION OF THE WORLD CONGRESS ON ICT FOR DEVELOPMENT (WCID'09)

The Committee organized the 2009 (WCID'09) on 10-11 September 2009 in Beijing. Over 320 engineers and experts from around the world attended the congress. Prestigious keynote speakers like Barry Gear (President of WFEO), Houlin Zhao (Deputy Secretary-General of the International Telecommunication Union), Mustafa El-Tayeb (Director, Science Policy, UNESCO) and others made valuable inputs.

CIC WEBSITE

The Committee secretariat has built the website (www.wcid-cic.org) in 2009 that was linked to the WFEO website (note, as www.wfeo-cic.org has been registered by others, the URS of www.wcid-cic.org is used for it). The secretariat has also continued to improve its function and appearance by rebuilding and redesigning it.

SUPPORT TO THE WORLD ENGINEERS' CONVENTION (WEC)

CIC made various contributions to the WEC by soliciting papers in ICT fields, calling on members of CIC to participate in the convention, and inviting keynote speakers for the plenary meetings.

ESTABLISHMENT & MAINTENANCE OF STABLE LINK BETWEEN CIC AND UN-GAID

GAID stands for Global Alliance for ICT and Development which is an organization under United Nations dedicated to the promotion of the applications of ICT worldwide, particularly in developing countries/regions, to narrow the gap between developing and developed countries. Therefore, UN-GAID is regarded as a major partner in the future for CIC. CIC has established and maintained stable links with UN-GAID by organizing delegations to participate in its annual meetings since 2008.

ATTENDANCE IN WFEO MEETINGS

CIC Chairman has participated in every WFEO Executive Meeting and gave reports on the committee progress on these occasions.

REORGANIZATION OF THE COMMITTEE

CIC secretariat called for members through the WFEO community and other channels. Some of them gave confirmative response. It has been decided that all previous members can continue to take positions, that all newly nominated persons can be members, but one country has only one vote.

The Committee secretariat will continue to recruit members from the different regions of the world and will contact professional organizations such as IFIP, IEEE, IET, ACM and others.



COMMITTEE ON EDUCATION IN ENGINEERING

Chairman Abdul Menhem ALAMEDDINE (Lebanon)

The committee on education in engineering is mainly focusing on the issue of accreditation and mobility of engineers. The WFEO policy is to facilitate the sharing of information between accreditation and mobility agencies and international organizations. The work of many of these organizations is inevitably linked to the mobility and quality of engineers. Mobility of professional engineers is itself linked to other WFEO activities involving ethical behavior, anti-corruption and capacity building particularly of engineering learned societies and educational establishments.

We look forward to cooperation with the international accreditation agencies such as EUR ACE and the Washington accord to ensure the quality and on-going education of engineers. We are also cooperating with assessment and regulatory agencies like FEANI, the Engineers Mobility Forum and the APEC Engineer Coordinating Committee. Each region is interested in allowing engineers to work and adapt to regional needs. In this aspect we will communicate with regional and national engineering organizations to discuss commonality in the university engineering curriculum

The committee aims at increasing cooperation with key regional and international accreditation agencies to be able to inform WFEO members of what is available from these agencies and assist them in improving the quality of their engineering education and institutions. Regardless of the level of education and its field and substance, the process of engineering education is influenced by some instrumental elements like facilities, methods of approach and ethics and values. These elements vary from one country to another, and they have undergone tremendous dynamic changes over the past two centuries. Though education is considered to be a human right, the reality remains that the quality of education exhibits a very wide spectrum of inconsistency. The issue becomes a bit entangled with the wide diversity that dominates our globe, and we should address it in the Committee of Engineering in Education and its plans.

The improvement of the quality of engineering education at university level is another theme that is addressed by the Committee through communication with international organizations and the WFEO members.

The Committee will hold a congress next year in Lebanon under the theme “Impact of Globalization on Engineering Education” and will continue the publication of the magazine “IDEAS” The last issue of this magazine was published under the title Education for the Future. It included among other articles on “Energy, Atmosphere, Carbon Dioxide and Climate – an Example for Interdisciplinary Thinking”, on the “Internationalization of Engineering Education” and “Philosophical Perspective on Engineering and Politics.”

Many new organizations requested to join our committee and we are glad to have them because they will be an asset to the Committee and WFEO. The committee would like to carry out joint programs with UNESCO and other International or Regional bodies of the United Nations and to maintain permanent ties with educational institutes around the world benefiting from their expertise.

The committee will act as a co-organizer of the World Congress of Engineering Education and Training that will be held under the sponsorship of WFEO, and will be an active member in the Congress since this will get the National members and member Organizations to work jointly to serve our theme for accreditation and mobility. Do you know anything about this congress

The Committee will promote seminars or symposiums on themes related with engineering education anywhere in the World and will be present to establish agreements, materialize programs and propose actions aimed at creating an international agreement on engineering programs.

We will strengthen the links with other Standing Technical Committees in WFEO, especially in the field of information technology and sustainable development.

Finally we will look at the impact of globalization on the engineering education and engineering practice.





COMMITTEE ON ENGINEERING FOR INNOVATIVE TECHNOLOGIES

Chairman Er. R. P. GUPTA (India)

The WFEO Committee on Engineering for Innovative Technologies has been very active since the General Assembly in Delhi, India in November 2007. As the Chair of this Committee, I am also a Vice President of the WFEO and a member of the WFEO Executive Council. The committee initially named Comtech has been renamed as “Committee on Engineering for Innovative Technologies” from October 2010.

A set of well-defined objectives, as described below, has been developed to achieve the Committee’s vision through various approaches in the area of technological advancements:

- To identify technologies suitable for sustainable development, especially in the context of Millennium Development Goals and the Bali Action Plan.
- To disseminate information on such technologies and create capacities for transfer, adaptation and development of new technologies.
- To develop strategies for building technical capability in developing countries to engage effectively in the global economy and international trade.
- To facilitate international and regional conferences, seminars, training program and other awareness programs to promote engineering practices worldwide.
- To recognize outstanding contribution of engineers.
- To establish linkages with various international, regional and national institutions involved in the promotion of engineering practices.
- Innovation through Institutional integration: Bringing all stake holders i.e.R&D, Academia and Industry together to think, develop and implement complex engineering solutions by capitalizing their innovative capabilities
- To offer solutions to current engineering and technology challenges on the global scale for engineering team building.
- Thrust Areas for Innovative Technologies:
 - Clean Technologies
 - Micro System
 - Nanotechnology

- Smart Materials (devices)
- Sensor Networks
- Virtual Reality
- Bioengineering
- Information and Communication Technologies

GOVERNANCE

The Committee consists of a Chairman and six regional Vice-Chairmen representing Americas, Far-East, Europe, Africa and Asia and members representing from countries namely, Australia, Brazil, Canada, China, Hong Kong, India, Korea, Kuwait, Malaysia, Nigeria, South Africa, Sri Lanka, UK and USA.

MEETINGS

The Committee has met in conjunction with meetings of the WFEO Executive Council and General Assembly. It met in Brasilia, Brazil on 30 November 2008, Kuwait on 2nd November, 2009 and Buenos Aires, Argentina on 15th October, 2010.

WFEO WEBSITE

The Committee is running its own website “www.wfeo-tech.org” exhibiting details of work done. The site is also linked with www.wfeo.net

ACTIVITIES

The Committee has been actively engaged in the organization of a number of activities during the period under report. The following are some of the activities with national level participation:

ACTIVITIES FROM JUNE 2009 TO MARCH 2011

1. National Seminar on Special economic zone and rural management June 14-15 2009 at Jaipur.



2. National Seminar on 'Industrial Automation, Mobile Robots and Autonomous Systems', 11-12 July 2009, Jaipur, India.
3. National Workshop on 'Robotics Assembly and Programming', 13-14 October 2009, Kadapa, India.
4. IEI Delegation in Doha, Qatar on 21st October, 2010: The office-bearers of the Qatar Overseas Chapter of IEI in Doha, Qatar, had a meeting with Mr Madan Lal, President, IEI; Mr R P Gupta, Past President, IEI and presently the Vice President, World Federation of Engineering Organizations (WFEO); and Cdr Arvind K Poothia, Director General, Engineering Staff College of India (ESCI) - an autonomous organ of IEI, on October 21, 2010.
5. International Conference on "Future Challenges – Wireless Communication, Optical Communication and Networks", 27-29 November, 2010 at Chandigarh (India). The conference was sponsored by "Committee on Engineering for Innovative Technologies".
6. International Conference on "Green Power Generation: Vision 2020" 10-12 December, 2010 at Anpara (India). The conference was sponsored by "Committee on Engineering for Innovative Technologies".
7. The Delhi State Centre of the Institution under the aegis of the Safety and Quality Forum (SQF) - a peripheral body of the Institution, organized National Safety Convention on the topic 'Safety in Urban Habitat Development', during December 28-30, 2010. The Session on 'Industrial Safety' was chaired by Mr R P Gupta, Past President.
8. Committee on Engineering for Innovative Technologies participated & attended Executive Committee meeting of Federation of Engineering Institutions of South and Central Asia (FEISCA) held concurrently with FEISCA Seminar held at Dhaka, Bangladesh on 12-14 January 2011.
9. The 25th National Convention of Computer Engineers was organized by the Udaipur local Centre of the Institution under the aegis of The Computer Engineering Division IEI, Committee on Engineering for Innovative Technologies in association with The Computer Society of India, Department of Computer Science & Engineering, and CTAE and Techno India NJR Institute of Technology organized a National Seminar on the theme 'Networked Home Systems and Services' during February 4-6, 2011 at Udaipur.





COMMITTEE ON ENGINEERING CAPACITY BUILDING

Chairman Daniel D. Clinton, JR., P.E. (USA)

Since the General Assembly in Kuwait, the Committee has written and published the “Guidebook for Capacity Building in the Engineering Environment”. The Committee presented the Guidebook at the Executive Council Meeting and at the WEW Session in Buenos Aires. Copies of the Guidebook were presented to Committee Members and 75 Executive Council Members. The Committee also developed an Action Plan related to the Guidebook in Buenos Aires.

In cooperation with the UPADI Education Committee a session was sponsored on the Future of Engineering Education. However, though the time was cut short by previous speakers, we felt that we were able to get the salient points across.

The Committee on Engineering Capacity Building has had an active period since the meeting in Buenos Aires in October, 2010, and met during the Executive Board Meeting in Paris in April, 2011, to discuss marketing and other related issues concerning the Guidebook, including:

- Kuwait Society of Engineers will distribute at least 5 copies each of the remaining 800 copies of the Guidebook free of charge to all WFEO national and international members.
- It is felt that the Guidebook has value and can be marketed at \$50 per copy. The original cost to produce the Guidebook was approximately \$11 per copy and \$2 for shipping.
- SAICE will incorporate revisions as requested by two of the authors into an electronic Version 2 for release by the time that the Geneva General Assembly of the WFEO takes place in September, 2011.
- The China Institute of Electrical Engineers has agreed to translate the Guidebook into Chinese. Translations in Spanish and French are also desirable.
- CECB will put the Guidebook on line with the WFEO website together with a facility to order hard copies.
- The South African Institution of Civil Engineers (SAICE) has the capability to publish the Guidebook in the future. They will develop the cost to print and mail 5-10-25 copies, and develop a strategic marketing plan, including a revenue sharing agreement between WFEO, CECB and SAICE. The marketing plan should include a section on how to publicize the Guidebook, and a business plan for selling the Guidebook.
- The drafting of a letter that will be distributed to recipients of the book, including recommendations on local redistribution. Develop a data base on who should receive copies of the first edition, and confirm mailing addresses prior to shipping.
- Development of a data base on who should receive copies of the first edition, and confirm mailing addresses prior to shipping.
- Development of an online database – compendium of case studies, programs and initiatives related to capacity building in engineering at the Geneva meeting.
- Development of a program for Geneva 2011:
 - Presentation and Marketing of guidebook
 - Session similar to Buenos Aires but focused on “Capacity Building” in the Energy Environment.

The Committee is working towards a transition from the United States as the host country to a new host country with the objective of providing a continuation of the existing programs and goals.



The Committee participated in CSD-19, “Sustainable Consumption and Production, Transport, Chemicals, Waste Management, and Mining”, at the United Nations in New York City the first two weeks in May as part of the Science and Technology Major Group. Kate Johnson, ASCE, also represented the YE/FL in the Youth Major Group discussions. The Executive Board needs to reaffirm the WFEO Task Group to continue its participation within UNCSD and ECO-SOC.

The WFEO Committee on Engineering Capacity Building has actively supported the engagement of young engineers through a new task force. The WFEO Young Engineers/Future Leaders (YE/FL) Task Group, chaired by Eng. Zainab Lari, and hosted by the Kuwait Society of Engineers, was created in Kuwait and held its first meeting in Buenos Aires. Members have been named from 11 national members with 9 in attendance along with 15 other YE/FL Members.

The YE/FL Task Group Members are stealthily infiltrating and listening in on other committees, but they may not be inconspicuous in their yellow tee shirts.

The YE/FL Task Group developed a charter which includes mission, vision and values (passion, professionalism, leadership, ethics, and innovation). They also developed an Action Plan for 2011, which includes:

- 1) Developing a website
- 2) Recruiting more National Members
- 3) The goal to be accepted as a STC
- 4) Developing YE/FL Forums in Geneva and Japan

They also conducted a successful YE/FL Forum and hosted a YE/FL dinner in Buenos Aires.

The YE/FL Task Group is providing a lot of enthusiasm and emphasis to the Engineering Capacity Building Program of WFEO. They are to be commended for their activities and support.





COMMITTEE ON ENERGY

Chairman Jorge SPITALNIK (Brazil)



STRUCTURE

The Committee consists of a Chairman and six regional Vice-Chairmen representing: North America, Asia/Pacific, Latin America, Europe/Russia, Mid-East/S. Central Asia, and Africa. Currently, Committee Officers appointed by their respective National Member organizations are:

a) Vice-Chairs

- Africa – Prof. Abubakar S Sambo, Nigeria
- Asia/Pacific – Dr. Peter Greenwood, Australia
- Europe/Russia – Dr. Daniel Favrat, Switzerland
- Latin America – Mr. Mario Wieggers, Argentina
- Middle East, South and Central Asia
Mr. Pradeep Chaturvedi, India
- North America – Mr. Kenneth Kok, USA

b) Advisory Council

Energy experts from different countries acting as an advisory body on reports issued by the Committee Task Groups constitute the Advisory Council. The Advisory Council members provide consultancy on priority activities in their respective areas of interest, for inclusion in the Committee working programs. Currently, the composition of this Council is made

up by Konstantinos Alexopoulos, Greece; Remy Carle, France; Jose Gasca Neri, Mexico; Yogi Goswami, USA; Ivan Nicolau, Puerto Rico; H.Holger Rognner, Germany; Michael Sanio, USA; Reginald Vachon, USA, and Altino Ventura Filho, Brazil.

c) Members

WFEO National Members appointed individuals as members of the Committee. They come from Argentina, Australia, Bolivia, China, France, Ghana, Ivory Coast, Japan, Kuwait, Lebanon, Mauritius, Morocco, Nigeria, Pakistan, Palestine, Peru, Romania, Turkey, UK, USA and Zimbabwe.

Including Task Groups and the International Advisory Panel, the total number of members involved in the Energy Committee activities is now 86 from 34 different countries.

MISSION AND VISION

The following Mission and Vision statements represent the Energy Committee purpose and objectives:
Mission: To provide the engineer with updated, unbiased and reliable information on the feasibility of the different energy technologies based on scientific principles, engineering criteria and demonstrated technological development.

Vision: To become the engineering reference for assessing the feasibility of current and cutting edge energy technologies for sustainable development.

MEETINGS

The Committee has met in conjunction with WFEO annual meetings. During this period, the Committee held its seventh and eighth meetings in Kuwait City, Kuwait, and Buenos Aires, Argentina on 1st November 2009 and 16th October 2010 respectively.

ACTIVITIES

During this period, the following activities were performed by the Committee.



a) Feasibility Reports

Two Task Groups were engaged in the preparation of Reports on the feasibility conditions of different energy technologies currently being considered for implementation around the world. A summary of their activities follows.

- **Solar Energy:** A first draft of the Report was produced in March 2011. Carsten Ahrens (Germany) is the Chair of the Group. Adnan A. Al-Homoud (Kuwait), AbuBakr S. Bahaj (UK), Alberto Calafiore (Argentina), Yogi Goswami (USA), Bim Gupta (USA), Stephen Kaneff (Australia), Emad Fahmi Khader (Palestine), Kosuke Kurokawa (Japan), Martin Manuhwa (Zimbabwe), Hemmat H. Safwat (Greece), H.R.P. Yadav (India) and Zhao Zhengming (China) are members of this Group.
- **Bio-energy:** Several chapters of the Report have already been prepared. The current composition of the Group has Dermot Roddy (UK) as Chair. Group members are: Suzelle Barrington (Canada), Essel Ben Hagan (Ghana), Kristina Bogner (Germany), Vicente Correa Neto (Brazil), Jorge Antonio Hilbert (Argentina), Luiz Augusto Horta Nogueira (Brazil), Daniel Salazar Aranda (Chile), Li Zifu (China) and Yibin Zhang, (China).



b) Meetings on Engineering for Sustainable Energy

One of the main activities of the Committee is to implement WFEO programs dealing with the Millennium Development Goals (MDGs), particularly with those linked to the global debate on sustainable energy.

Together with the Kuwait Society of Engineers, the Committee drafted the Kuwait Declaration of the Congress on “Alternative Energy Applications: Option or Necessity?” (November 5, 2009). At that Congress, the Energy Committee Chair delivered a keynote presentation on “Sustainable Energy Engineering”.

The Committee actively cooperated with UADI, the Argentine Union of Engineers on the organization of the Congress on “Energy and Climate Change” held during the World Engineering Week (Buenos Aires, October 2010). Particularly, the Committee set up a Panel Meeting on “Prospects for development and grid integration of renewable and non-conventional energy sources”. Members of the Energy Committee were engaged in conducting meetings in the area of Energy and Climate Change as follows: Mario Wiegers, Chair of the Panel Meeting on “Conventional Energies”; Jorge Spitalnik, Chair of the Panel Meeting on “Renewable Energies”. Together with UADI, the Committee contributed to the preparation of the final version on energy matters of the Buenos Aires Declaration.

Invited by the Bolivian Engineering Society, the Committee Chair delivered two speeches on “Sustainability Aspects of Energy Options” and “Social Power Tariffs in Brazil” on 12 and 13 August 2010, at their IV Energy International Forum (La Paz and Santa Cruz de la Sierra, Bolivia).

Invited by the UPADI Environment and Human Development Technical Committee, the chair of the WFEO Energy Committee delivered a speech on “Sustainable Energy” at the Pan-American Congress on Environment and Human Development 2011 (Florianopolis, Brazil, 22-24 May 2011).

The Committee, a party of the International Advisory Committee for the 4th World Engineers’ Convention under the theme of “Engineers Power the World: Facing the Global Energy Challenge” (Geneva, September 2011), has contributed to the setting up of the technical program of the Convention and to the preparation of the Geneva Declaration that deals mainly with energy issues. Vice-Chairs of the Energy Committee will take part of Round Table meetings with guest speakers specially invited by the Swiss Organizing Committee.





c) Webpage and Communication.

The Section related to the Energy Committee on the WFEO webpage was completely refurbished and updated. The sections referring to ECOSOC and UNCSD on the homepage were also revamped. The Committee delivered a couple of articles on WFEO activities on energy and on WFEO views on sustainable consumption and production that were published in the May 2010 issue of *Civil Engineers Australia*.

d) World Energy Council.

The MOU between WFEO and WEC on cooperation in energy matters was signed in 2007 and expired in April 2010. Considering the MOU allows making periodical protocols with new projects for cooperation, particularly in a project of common interest on village energizing programs and sustainable supply of energy, the Committee took steps to renew the validity of the MOU. The renewed MOU was signed in April 2011.

e) United Nations Commission on Sustainable Development (UNCSD)

Acting as WFEO Liaison to ECOSOC and UNCSD, the Energy Committee interfaced with the UN Division for Sustainable Development (UNSD) to coordinate WFEO participation in events organized by both UN organizations. More details related to the activities herewith described are posted at the WFEO website on the Energy Committee page.

The Committee represented WFEO at the 18th Session of UNCSD (CSD-18), the Intergovernmental Preparatory Meeting (IPM), and the 19th Sessions of the UNCSD (CSD-19) that were held in New York respectively from 3 to 14 May 2010, from 28 February to 5 March 2011, and from 2 to 13 May 2011. These meetings focused on issues related to sustainable consumption and production, transport, chemicals, waste management, and mining.

Please remove names and keep countries only

The Committee was active in assuring the participation of WFEO delegates at the following UN CSD-18 RIMs (Regional Implementation Meetings): ECA, 26 to 30 October 2009 in Addis-Ababa – Prof Abubakar S Sambo (Nigeria); ECE, 1 to 2 December 2009 in Geneva – Prof. Jean-Claude Badoux (Switzerland) and

Ms. Yvette Ramos Aivazian (France); ESCAP, 30 November to 1 December 2009 in Bangkok – Engr. Pradeep Chaturvedi (India); ESCWA, 4 to 6 October 2009 in Cairo – Dr. Waleed Al-Bazzaz, and Ms. Shaima Al-Bisher; ECLAC, 17 to 18 November 2009 in Guatemala City – Engr. Mario Telichevsky (Argentina).

In addition, the Committee proposed and ensured the participation of WFEO delegates at the following meetings organized by ECOSOC, UNSCD and ICSU: UN/DESA/ECOSOC Open Consultations on “Enhanced Cooperation on International Public Policy Issues Pertaining to the Internet”, 14 December 2010, UN Headquarters, New York; Intersessional Meeting on UNCSD Process Rio+20, 10-11 January 2011, UN Headquarters, New York; Asia Pacific STC (Scientific and Technological Communities) Rio+20 Workshop, 16-18 April 2011, Kuala Lumpur, Malaysia; STC Rio+20 Workshop, Pretoria, South Africa, 30 May–1 June 2011; High Level CSD Intersessional Meeting on 10 Year Framework of Programme on Sustainable Consumption and Production, 13-14 January 2011, Panama City, Panama; Intergovernmental Preparatory Meeting for CSD-19, 28 February to 4 March 2011, UN Headquarters, New York.

A Discussion Paper prepared by WFEO and ICSU stating the positions of the Scientific and Technological Community on the issues of the agenda of CSD-18 was prepared and presented to the UN Secretariat. Many WFEO National Organizations contributed to the preparation of the document. Concerning CSD-19, the Committee contributed to the joint WFEO-ICSU document on Priorities for Action submitted to the UN Secretariat by the Scientific and Technological Community.

As in the past, the core of the WFEO delegations at CSD-18 and -19 was made up of the WFEO President and the Chairs of the Committees on Energy, Engineering and Environment, Capacity Building and Engineering for Innovative Technologies. Observers nominated by their WFEO National Member Organizations attended the meetings as WFEO participants. The WFEO delegation to CSD-18 was made up by Daniel Clinton (CCB Chair), Darrel Danyluk (CEE Chair), Rajeshwar Prasad Gupta (CEIT Chair) and



Jorge Spitalnik (CE Chair and WFEO Liaison with ECOSOC and UNCSD), David Lapp (Engineers Canada), and Brid M. Moudgil, William O'Neill, Mike Sanio, Christopher Scarpino, Deborah Shield and Alan Taub (AAES) attended CSD-18 as members of the WFEO delegation. The WFEO delegation to CSD-19 was composed by Maria J.P. Laffargue (WFEO President), Adel Al Kharafi (WFEO President-Elect), Daniel Clinton, Darrel Danyluk, Jorge Spitalnik and Reginald Vachon (WFEO Vice-President). David Lapp and G. Keith Watson (Engineers Canada), Jose Tadeu da Silva (FEBRAE), and Michael Karmis, Mike Sanio, Jessica Kogel, Christopher Scarpino and Deborah Shield (AAES) attended CSD-19 as members of the WFEO delegation.

On the occasion of CSD-18, on 4 May 2010, WFEO held a side event at the UN Headquarters entitled Capacity Building: Words into Action 2010 on "Transport Efficiency and Waste Avoidance – Input for Policy-Makers". Also at CSD-19, on 6 May 2011, another side event entitled "State-of-the-art, Innovative and Sustainable Technologies in Waste Management, Mining, Transport and Chemicals" was held. Both events were organized by the WFEO Standing Committees on Engineering and Environment (CEE), Capacity Building (CCB) and Energy (CE) that took care of all related costs. Invited by WFEO, ICSU contributed with lecturers to both these events.

Arrangements to associate WFEO Young Engineers to the UNCSD Children and Youth Major Group were made with leaders of this Major Group. This action, put forward by the Energy Committee, was approved by the members of the WFEO delegation to UNCSD-18 and supported by Eng. Zainab S. Lari, the Chair of WFEO Young Engineers/Future Leaders (YE/FL) task group in the Engineering Capacity Building Committee.

The main objective of this association is to provide the young engineers with the opportunity to share their experience with other civil society members of their generation and to put forward the scientific and engineering viewpoints when the Children and Youth Major Group takes position on different issues of sustainable development.

In order to allow this Group to have independent positioning of the younger generations upon issues under discussion, the young engineers attended CSD meetings as part of the Children and Youth Major Group. Kathryn Johnson (US Delegate YE/FL) was appointed to coordinate actions related to the young engineers' attendance to CSD-19. Other young engineers attending CSD-19 as members of that Major Group were Vinicius Marchese Marinelli and Leandro Matsuda from Brazil.





COMMITTEE ON ANTI-CORRUPTION

Chairman Kamel AYADI (Tunisia)

The “Train-The-Trainers” programme that was launched in the spring of 2009 by the Committee on Anti-Corruption in cooperation with its partners, namely the ACET Project and the GIACC and the support of the WJP was a huge success. Four years ago when the committee was formed in India at the WFEO General Assembly, nobody could expect that engineering societies would engage with such an enthusiasm in the fight against corruption. Engineers are much more receptive to the corruption issue than one thought they would be.

The purpose of these TTT workshops was to provide detailed training in how to identify and prevent corruption on construction projects, and promote individual integrity with a view to the person trained being able to provide equivalent training to others in the future in his/her home country. Materials were provided to the participants to assist them in providing the training. Engineering societies which have appointed participants committed themselves to organize in their own countries a number of workshops moderated by the trained trainers to support the distribution of these materials and disseminate the training content.

FOLLOW-UP ACTIONS

The Committee was successful in organizing five Train-The-Trainers workshops with significant participation of engineers from Africa, Asia, Latin America and Europe.

Members of the committee who have attended the train-the-trainers workshops have successfully organized in their own countries a number of training in line with the training programme promoted by the Committee. The most significant impact of the TTT programme was in Africa where a number of follow up actions took place. African members hold trainings in Nigeria, Ghana and Zimbabwe. The Nigerian Society of Engineers hosted over seven workshops in different zones, some of which witnessed large participation of over one thousand engineers. A number of other training sessions were

also conducted in Asia and Latin America and were moderated by CAC members.

The committee also organised in Tunis, from 15 to 18 December 2010 an international forum for young engineers on « Leadership and Integrity to empower young engineers to address global issues”. This event gathered together more than one hundred young leaders from 20 countries. Young professionals who have attended this event were involved in a three day training on ethics, corruption, integrity and leadership. More than 20 experts from different countries have provided the training.

The CAC has also undertaken a comprehensive review of the code of ethics. Consistent with the decision that was made in Buenos Aires a sub committee led by CAC member and Commissioner for Ethics and Discipline, Rolfe G Hartley from Engineers Australia was created and the group has produced a first document with initial thoughts.

The CAC adopted and presented for endorsement by the WFEO Executive Council that met in Buenos Aires an Action Statement. This Action Statement contains provisions and actions by engineering societies, governments and companies and serves as guide document to promote anti-corruption measures by all stakeholders. The Action Statement was also translated to Spanish. Members of the WFEO were encouraged to give maximum exposure to it. The document was also put on the WFEO web site and sent out to WFEO members.



The Committee has also extensively cooperated with the World Justice Project. A number of members of the committee, including the chair, have participated in the main conferences organized by the WJP in Austria (Vienna), Morocco and Spain (Barcelona).

PLAN OF ACTION FOR THE FUTURE

The ACC will pursue its efforts in the three major fields of:

- Education and Training,
- Communication and raising Awareness and
- Building strategic partnerships and alliances

The Committee has succeeded in developing awareness among engineering societies on Anti-Corruption. The number of national members which have adopted a zero tolerance policy has increased. The next step for the committee will be to help members acquire expertise on how to implement appropriate mechanisms to address corruption on project, corporate and government levels. The committee be-

lieves that corruption is a management issue. It should be treated in the same way as safety and quality control management.

The Committee will seek to consolidate its partnership with the following partners and look for new ones:

- The World Justice Project: The committee will reinforce its involvement in this initiative. The committee will contribute to the WJP initiative to advance the Rule of Law, particularly the implementation of the Rule of Law Index.
- The ACET and the ASCE: The chair of the ACC is a member of the ASCE, committee on Global Principles for Professional Conducts. The membership of the ASCE will offer to the ACC the opportunity to develop joint initiatives.
- FIDIC: The committee will explore new ways of cooperation with the FIDIC committee on Integrity chaired by FIDIC Past President Jorge Díaz Padilla.





NATIONAL AND AFFILIATED MEMBERS

Algeria	Union Nationale des Scientifiques et Technologues d'Algériens	Honduras	Colegio de Ingenieros Civiles de Honduras (CICH)
Argentina	Union Argentina de Asociaciones de Ingenieros (U.A.D.I.)	Hong Kong, China	The Hong Kong Institution of Engineers
Australia	Engineers Australia	Hungary	Fédération des Sociétés Scientifiques et Techniques (M.T.E.S.Z.)
Bahrain	The Bahrain Society of Engineers	India	The Institution of Engineers; India
Bangladzsh	Institution of Engineers; Bangladesh	Iraq	The Iraqi Engineers' Union
Belize	Association of Professional Engineers of Belize	Italy	Consiglio Nazionale Degli Ingegneri
Bolivia	Sociedad de Ingenieros de Bolivia	Ivory Coast	Fédération Nationale des Organisations d'Ingénieurs, Architectes Géomètres et Urbanistes de Côte d'Ivoire (FIACI)
Brazil	Federacao Brasileira de Associacoes de Engenheiros (FEBRAE)	Japan	Science Council of Japan
Bulgaria	Fédération des Unions Scientifiques et Techniques de Bulgarie	Jordan	Jordan Engineers' Association
Cameroon	Association Professionnelle des Ingénieurs Conseils et Sociétés d'Ingénierie du Cameroun (APICCAM)	Kuwait	Society of Engineers
Canada	Engineers Canada	Lebanon	Ordre des Ingénieurs et Architectes du Liban
Chile	Instituto de Ingenieros de Chile	Libya	Libyan Syndicate of Engineers
China	China Association for Science and Technology (C.A.S.T.)	Madagascar	Ordre des Ingénieurs de Madagascar
Colombia	Sociedad Colombiana de Ingenieros	Malawi	Malawi Institution of Engineers
Costa Rica	Colegio Federado de Ingenieros y de Arquitectos de Costa Rica (CFIA)	Malaysia	The Institution of Engineers; Malaysia
Cyprus	CYPRUS Professional Engineers' Association (CPEA)	Mauritius	The Institution of Engineers; Mauritius
Czech Republic	Cesky Svaz Vedecktotechnickych Spolecnosti (C.S.V.T.S.)	Moldavia	Engineering Association of Moldava
Dominican Republic	Collegio Dominicano de Ingenieros; Arquitectos y Agrimensores (CODIA)	Montenegro	Engineers Chamber of Montenegro
Ecuador	Sociedad de Ingenieros del Ecuador	Morocco	Union Nationale des Ingénieurs Marocains
Egypt	Egyptian Engineering Association	Nepal	Nepal Engineers' Association
France	Conseil National des Ingénieurs et des Scientifiques de France	New Zealand	The Institution of Professional Engineers
Germany	The DVT German Association of Technical and Scientific Organisations	Nigeria	The Nigerian Society of Engineers
Ghana	Ghana Institution of Engineers	Pakistan	Institute of Engineers, Pakistan
Greece	Technical Chamber of Greece	Palestine	General Union of Palestinian Engineers (GUPE)
		Peru	Colegio de Ingenieros del Peru
		Philippines	Philippines Technological Council
		Poland	Polish Federation of Engineering Associations - Naczelna Organizacja Techniczna



Puerto Rico	Colegio de Ingenieros y Agrimensores de Puerto Rico
Romania	The General Association of Engineers in Romania (A.G.I.R.)
Russia	Union of Scientific and Engineering Associations (U.S.E.A.)
Saudi Arabia	Saudi Council of Engineers
Senegal	Union Nationale des Ingénieurs du Sénégal (UNISEN)
Serbia	Serbian Chamber of Engineers
Sierra Leone	Sierra Leone Institution of Engineers
Singapore	The Institution of Engineers; Singapore
Slovakia	Association of Slovak Scientific & Technological Societies
Slovenia	Slovenian Chamber of Engineers
South Africa	Engineering Council of South Africa
Spain	Instituto de la Ingenieria de Espana
Sri Lanka	The Institution of Engineers, Sri Lanka
Sudan	Federation of Sudanese Engineers
Switzerland	SIA Swiss Society of Engineers and Architects - Comité National Suisse de la FMOI
Syria	Order of Syrian Engineers and Architects
Taiwan; China	The Chinese Institute of Engineers
Tanzania	The Institution of Engineers; Tanzania
Tunisia	Ordre des ingénieurs tunisiens
Turkey	The Union of Chambers of Turkish Engineers and Architects (TMMOB)
Uganda	Uganda Institution of Professional Engineers
United Arab Emirates	Society of Engineers
United Kingdom	The Institution of Civil Engineers
USA	American Association of Engineering Societies (A.A.E.S.)
Uruguay	Asociacion de Ingenieros del Uruguay
Yemen	Syndicate of Yemeni Engineers
Zambia	The Engineering Institution of Zambia
Zimbabwe	The Zimbabwe Institution of Engineers

INTERNATIONAL MEMBERS

- ASEAN Federation of Engineering Organisations (AFEO)
- Commonwealth Engineers Council (CEC) - Institution of Civil Engineers
- Federation of Engineering Institutions of South and Central Asia (FEISCA)
- Federation of Arab Engineers (FAE)
- Federation of African Organisations of Engineers (FAOE)
- European Federation of National Engineering Associations/Fédération Européenne d'Associations Nationales d'Ingénieurs (FEANI)
- Federation of Engineering Institutions of Asia and the Pacific (FEIAP)
- Union Panamericana de Asociaciones de Ingenieros (UPADI) Pan American Federation of Engineers Society
- Union of Scientific and Engineering Societies (USEA)
- World Council of Civil Engineers (WCCE)

ASSOCIATES

● DINSTINGUISHED ASSOCIATES

- Consolidated Contractors Company (C.C.C)

● NON PROFIT MAKING ASSOCIATES

- Asian Civil Engineering Coordinating Council (ACECC)
- Federal Council of Engineering, Architecture & Agronomics (CONFEA)
- Catalonia University (UPC)
- The Japan Federation of Engineering Societies (JFES)
- Africa Engineers Forum (AEF)
- Société Européenne pour la formation des Ingénieurs
- European Council of Civil Engineers





WFEO/FMOI

**WORLD FEDERATION OF ENGINEERING ORGANIZATIONS
FÉDÉRATION MONDIALE DES ORGANISATIONS D'INGÉNIEURS**

Secretariat WFEO/FMOI : Maison de l'UNESCO

1, rue Miollis • 75015 Paris

Tel. : +33(0) 1 45 68 48 46 – Fax : +33(0) 1 45 68 48 65

www.wfeo.net – E-mail : executivedirector@wfeo.net

