



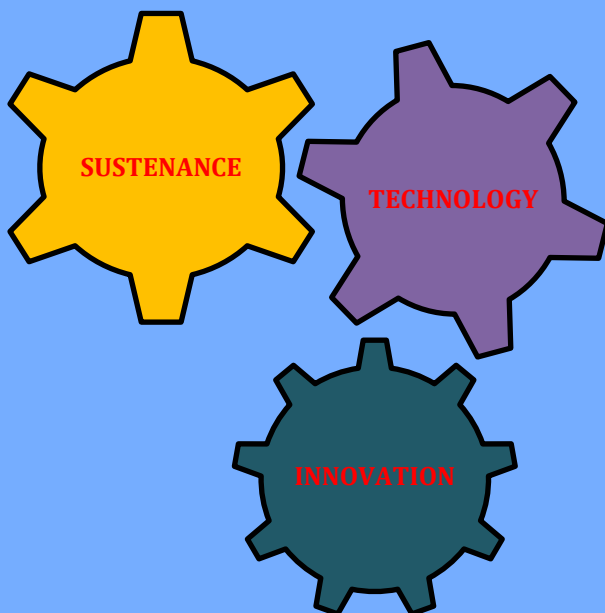
**WFEO**

Issue 3, August 2014

## **WFEO-EIT / IMC-WFEO e-Newsletter**



**IEI**



**The Institution of Engineers (India)**

# WFEO signs Memorandum of Understanding with International Engineering Alliance (IEA)



Today's engineer often study and work on projects around the globe.

Mutual recognition of engineering qualifications and competence assessments is increasingly important for the public good. Moreover, lack of such recognition is a barrier to development for engineers and nations.

In April 2014, World Federation of Engineering Organizations and the International Engineering Alliance signed a Memorandum of Understanding to :

- ❖ Raise awareness of the importance of accreditation.
- ❖ Build commitment for the development of national bodies.
- ❖ Build capacity of national bodies to prepare for IEA mentoring.
- ❖ Support national bodies to join the IEA accords and agreements.



**Mr Marwan Abdelhamid**

Mr Marwan Abdelhamid, President of WFEO, has praised this initiative saying that :

“This is an exciting development for the global engineering profession that brings together the WFEO's vital role in networking and capacity building and the IEA's expertise in accreditation and competence assessment. We are working now to deliver our joint actions after this very positive first step.”

WFEO and the IEA will be launching joint information an advocacy campaign and will raise funds together for joint capacity building work.

The full Memorandum of Understanding is as follows :

## **World Federation of Engineering Organisations & International Engineering Alliance Memorandum of Understanding**

**Date:** April 2014

### **Background:**

At the 2011 World Engineering Convention in Geneva the Chair of the International Engineering Alliance Governing Group, Basil Wakelin, called for discussions between IEA and WFEO on 'processes and mechanisms for effective and efficient collaboration to better accomplish mutual goals'. In late 2013, WFEO began reviewing its marketing, communications and external relations; this review has already shown that, as the world body for the engineering profession, there are strong drivers for deeper involvement in the issue of mobility. WFEO is now developing a new strategy and priority areas will include new partnerships and investing in the support it offers to its members.

### **IEA Profile:**

The International Engineering Alliance is a group of self-regulating educational accords and professional competence recognition agreements which have a substantially equivalent view of what constitutes an acceptable professional engineering education and professional competence. The educational accords and the exemplar standards apply to qualifications to enter practice.

The accords comprise the Washington Accord for professional engineering education, the Sydney accord for engineering technologist education, and the Dublin accord for engineering technician education. The signatories to each accord agree to recognise the equivalence of each other's qualification standards and accreditation procedures.

The competence agreements set exemplar competency standards for professional engineering (the International Professional Engineers Agreement and the APEC Engineer Agreement), engineering technologist (the International Engineering Technologist Agreement) and engineering technicians.

Both accords and agreements have arrangements for mentoring those who wish to become members and those provisional members who wish to develop and upgrade their systems to enable full membership.

In short, IEA has a vital role in accreditation and competence assessment standard setting but is more limited in the assistance it can provide to those in the early stages of these activities.

## World Federation of Engineering Organisations & International Engineering Alliance Memorandum of Understanding

### **WFEO Profile:**

The World Federation of Engineering Organisations is an international non-governmental organisation representing the engineering profession worldwide. Founded in 1968 by a group of regional engineering groups, under the auspices of UNESCO, WFEO brings together national engineering institutions from over 90 nations and represents some 20 million engineers. WFEO operates ten Standing Technical Committees on global engineering issues. Mobility of professional engineers is part of WFEO's mission, and WFEO has a policy and several key papers on the issue.

In short, WFEO has a vital role in networking and capacity building but not in accreditation or competence assessment.

### **Introduction:**

Mutual recognition of engineering qualifications and competence is increasingly important for the public good as global trade grows. WFEO and IEA are seeking to collaborate and combine their respective roles, to promote accreditation and competence assessment and to build the capacity of national bodies around the world to the point where they can join global accords.

There is a particular area that could benefit from such collaboration. IEA currently mentors engineering accrediting and competence assessment bodies in different countries to develop their accreditation and assessment systems to a point where they can join an IEA accord or agreement. However, the IEA is often approached by bodies that are not yet ready for mentoring – usually because they have only recently been established or lack sufficient resources or capacity to absorb mentoring. So there is an opportunity here for WFEO to provide capacity building support with a specific focus on preparing for mentoring by the IEA.

### **Aims:**

1. To raise awareness of the importance of accreditation of engineering qualifications and competence assessment to global standards.
2. To build political and financial commitment for the development of national engineering accreditation and competence assessment bodies.
3. To build the capacity of national accreditation and competence assessment bodies to the point where they can be mentored by the IEA.
4. To build the capacity of national accreditation and competence assessment bodies to the point where they can join the IEA accords and agreements as provisional and eventually full members.
5. To seek resources that will enable the achievement of the above aims.

### **Audience:**

- Engineering accreditation and competence assessment bodies, particularly those of WFEO member states that are not part of the IEA.
- WFEO national members, particularly those of states that do not have engineering accreditation or competence assessment bodies.
- National governments, particularly those of states that do not have engineering accreditation or competence assessment bodies.
- Donors and United Nations bodies, including multilateral and bilateral aid donors, foundations and corporates.
- General audiences, such website visitors interested in examples of need cases for accreditation or competence assessment systems.



## World Federation of Engineering Organisations & International Engineering Alliance Memorandum of Understanding

### Approach:

1. Preparation of and agreement on this Memorandum of Understanding on the development of a Memorandum of Agreement on co-operation in the accreditation and competence assessment sectors.
2. Development and approval of a Memorandum of Agreement or formal partnership agreement between WFEO and IEA. This would include definition of roles for WFEO and IEA.
3. A joint information and advocacy campaign – mainly through WFEO communications, volunteers and events.
4. Joint fundraising activities for capacity building costs such as for travel, stipends, workshops and meetings etc.
5. If fundraising is successful, the launch of a joint project on capacity building.

### Possible Metrics:

1. Inclusion of the partnership in WFEO and IEA strategic plans.
2. Number of joint WFEO and IEA meetings held each year.
3. Number of interactions between IEA and WFEO volunteers with the key audiences.
4. Number of joint fundraising bids submitted.
5. Metrics relating to the funded joint project if fundraising is successful e.g.: number of prospective members or enquiries about IEA membership or national developments commenced.

### Timeline:

By April 2014: Agreement on the Memorandum of Understanding for development co-operation by IEA and WFEO.

In April 2014: WFEO approval for a formal partnership that builds on the WFEO mobility policy of September 2009 and reflects current WFEO priorities, the forthcoming WFEO Abuja Declaration and the WFEO strategy review.

By June 2014: Development of formal Memorandum of Agreement or partnership agreement for draft to be tabled for the IEA Meetings.

By November 2014: Joint development of campaign materials.

By November 2014: Target for securing funds for a joint project on capacity building.

In November 2014: Review of progress of Memorandum of Agreement activities and of fundraising.

In November 2014: Possible campaign launch and joint project launch at the World Engineering Conference on Sustainable Infrastructure conference in Abuja to go alongside the launch of the WFEO Abuja Declaration.

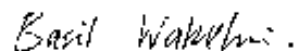
### Signatories:



Date: 8<sup>th</sup> April 2014

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Date: 4<sup>th</sup> April 2014

Basil Wakelin, Chair of Governing Group, IEA. Email: [secretariat@ieagrements.org](mailto:secretariat@ieagrements.org).

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## **WFEO Policy on Accreditation of Courses and Mobility of Engineering Professionals**

The World Federation of Engineering Organizations (WFEO) works to share and support the work of its member organizations on the accreditation and mobility of engineers. It provides advice and experience. Though WFEO does not set standards or conduct assessments, it works with organizations that do so and also facilitates engagements with these organizations.

### **Introduction**

WFEO believes in an engineering profession of well-qualified, up-to-date engineers, working ethically and responding to the needs of their clients who may have little or no engineering knowledge.

Over a long period of time major national institutions and learned societies have established and operated systems for accrediting engineering courses and for assessing the suitability of engineers for independent professional practice. Since the 1980s many of these organisations have come together formally to extend their systems internationally.

The most widely known examples of this cooperation include the Washington Accord, FEANI, the Engineers Mobility Forum and the APEC Engineer Monitoring Committee. A number of other groups have emerged to join what is now a global international framework working on standards for engineering degrees and professional engineering practice.

WFEO in its pre-eminent position in the engineering profession has a key role to play in the formation and assessment of engineers around the world. Representing its members to major international agencies, it is ideally placed to facilitate exchanges between :

- ❖ Organisations that set the standards for engineering education and the assessment of professional competence
- ❖ Employers of engineers and users of engineering products and services and
- ❖ Other organisations affected by the quality and number of professional engineers.

Acting as a central information source and facilitator between international organisations, such as the United Nations, World Trade Organisation, the World Bank and Transparency International, WFEO would be a major contributor to accreditation and mobility and take a significant step towards achieving its goals.



## **WFEO Policy on Accreditation of Courses and Mobility of Engineering Professionals**

### **Need for this Policy**

Engineers operating international accreditation and mobility systems think that, numerically, migration mobility may have overtaken traditional regulated mobility. Mobile engineers may do regulated or non-regulated engineering work.

WFEO has an interest in all aspects of engineering mobility but migration mobility is particularly important to WFEO members and its stakeholder agencies.

WFEO has to have a role in fostering and helping this important global activity. WFEO must set out its role so other organisations understand what we intend to do and what we will not involve ourselves in.

Member organisations need WFEO help to achieve appropriate standards for their countries' needs.

WFEO can facilitate the recognition of graduate attributes and competencies for professional engineers by the United Nations, Governments and other international agencies involved in the provision of engineering goods and services.

WFEO should be a source of information for all stakeholders in the competent ethical practice of engineering.

### **THE POLICY**

“WFEO believes in generic attributes for graduate and competent engineers practicing ethically and maintaining their up-to-date engineering knowledge. WFEO recognises the role of the world’s accreditation and mobility organisations and pledges to support their activities to maintain international and regional qualifications and professional standards and registers for engineering and computer engineering professionals.”

“WFEO will encourage the recognition of graduate attributes and professional competencies for engineers by the United Nations, governments and other international agencies involved in the provision of engineering goods and services.”

“WFEO will provide a source of information for all stakeholders in the competent ethical practice of engineering and facilitate exchanges between people and organisations involved in engineering activity.”



## **WFEO Standing Committee on 'Engineering for Innovative Technologies (EIT)'**

**Hosted by : The Institution of Engineers (India)**



The WFEO Committee on 'Engineering for Innovative Technologies (WFEO-EIT)' has been very active since it was transferred to India from Puerto Rico at the WFEO General Assembly held in New Delhi in November 2007. The Committee is currently hosted by The Institution of Engineers (India), the Indian National Member of WFEO.

Prior to hosting WFEO Committee on Engineering for Innovative Technologies, IEI hosted WFEO Committee on Engineering and Environment (WFEO-CEE) in India for two consecutive terms. Since then, IEI has been working towards fulfilling the objectives of the Committee and those of the WFEO too.

The Committee was renamed in October 2010 as the Committee on Engineering for Innovative Technologies (EIT). Under Vision and Objective, EIT has formulated strategic action plan which includes the creation of a 'Nodal Centre for Innovative Technologies' to focus on Technology Transfer, in the spirit of the UN Framework Convention on Climate Change (UNFCCC). The Committee on Engineering for Innovative Technologies has set its objectives in the area of technological advancements to identify suitable technologies for sustainable development, especially in the context of the United Nations Millennium Development Goals (MDGs) and Bali Action Plan.

To ensure long-term and effective actions, the WFEO-EIT has developed its vision as follows : The WFEO Standing Committee on Engineering for Innovative Technologies (WFEO-EIT) undertakes to lead engineering profession all over

the world towards promotion and application of engineering for innovative technologies and sustainable development through interaction with global leaders and networking with various stakeholders such as governments, industry, academia, financing institutions along with civil society and also the Propagation and Promotion of Innovative Technologies and approaching WFEO member countries in different regions preferably through networking, e-mail and website. To facilitate technological adoption, mainly clean technologies, like Micro System Nanotechnology Smart Material, Sensor Networks, Virtual Reality, Bio-Engineering, Sustainable Product Development, Production Innovation in Industry, Innovation for Sustainable Development, innovation in Public Systems, etc.



The Committee is chaired by Mr S S Rathore, Vice President of WFEO and Immediate Past President of The Institution of Engineers (India). The Committee Secretariat is located at Kolkata (India) and is headed by Maj Gen (Retd) R K Sanan, VSM, Secretary and Director General, The Institution of Engineers (India).



Mr S S Rathore



Maj Gen (Retd) R K Sanan, VSM





## Indian Member Committee of World Federation of Engineering Organizations [IMC-WFEO]



**Hosted by : The Institution of Engineers (India)**

The Institution of Engineers (India), National Member of World Federation of Engineering Organizations (WFEO), is hosting the Indian Member Committee of WFEO.

The IMC-WFEO consists of one Chairman (as nominated by President of IEI), one Co-Chairman (President of IEI himself), Four Members of the Governing Council of IEI (as nominated by President of IEI), along with the Representatives of selected Ministries and other organizations of Government of India, Research Agencies and Public Sector Undertakings (as identified by the Committee), and the Member Secretary of IMC-WFEO, i.e., Secretary and Director General of IEI. The IMC-WFEO usually meets twice in a calendar year at New Delhi.

The Member Organizations of the IMC-WFEO include certain Ministries of Government of India; Bureau of Energy Efficiency (BEE); Council of Scientific and Industrial Research (CSIR); Planning Commission; Central Pollution Control Board (CPCB); Housing and Urban Development Corporation (HUDCO); School of Planning and Architecture (SPA); Central Public Works Department (CPWD); Central Electricity Authority (CEA); Delhi Technological University (DTU); Bharat Heavy Electricals Limited (BHEL), etc., with the following main objectives : a) To provide close



linkage between IEI and WFEO and its Regional Group FEISCA on all matters relating to policy, intellectual inputs and operations; b) To develop policies concerned with engineering and technology related to the society; c) To promote leadership in engineering profession to address issues of concern for public and profession; d) To liaise with organizations and institutions at the national and international levels which are under the umbrella of WFEO; and e) To plan and undertake activities to promote cause of WFEO.

# WECSI 2014

**World Engineering Conference on Sustainable Infrastructure 2014**  
**2-7 November | Abuja, Nigeria | [www.wecsi2014.org](http://www.wecsi2014.org)**

**WFEO Executive Council / Standing Committees' Meetings**

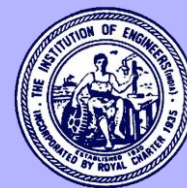




## FORTHCOMING IMPORTANT ENGINEERING EVENTS



# 29<sup>TH</sup> Indian Engineering Congress



Hyderabad (India), 18-21 Dec 2014

### THEME

**Technological Innovations and  
Economic Growth – India's Emerging Role**



## ENGINEERING WORKSHOP



jointly organized by

**World Federation of Engineering Organizations**

**Committee on Disaster Risk Management (WFEO-DRM)**

and

**The Institution of Engineers (India)**

**Guwahati (India), August 2014**



## Indian Technology Congress

### THEME

**Advanced Technology as Change Agent to make  
India an Economic Superpower**

**Bangalore (India), 21-22 August 2014**



# **WORLD FEDERATION OF ENGINEERING ORGANIZATIONS**



**COMMITTEE ON ENGINEERING FOR  
INNOVATIVE TECHNOLOGIES  
[WFEO-EIT]**



**INDIAN MEMBER COMMITTEE  
[IMC-WFEO]**

**WFEO-EIT / IMC-WFEO Chair**

**Mr S S Rathore**

Vice President, WFEO and  
Immediate Past President, The Institution of Engineers (India)

**WFEO-EIT / IMC-WFEO Secretariat**

**Maj Gen (Retd) R K Sanan, VSM**

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