WFEO
INFORMATION AND COMMUNICATION
COMMITTEE STRATEGY PLAN
(2016-2019)

INTRODUCTION

The WFEO Committee on Engineering for Information & Communication" (WFEO-CIC), presently hosted by The Institutions of Engineers India (India) – Indian National Member of WFEO – has set its objectives in the area of technological evolutions, in order to identify suitable technologies for sustainable development, especially in the context of the UN Millennium Development Goals and the Bali Action Plan. The CIC is hosted by the IEI (Institute of Engineers (India)) for the present term of 4 years, which will end in November 2019.

WFEO-CIC, a Standing Technical Committee of WFEO grossly dedicated to the field of "Information and Communication", has the responsibility to push forward "ICT for Development" as its guiding line. The main duty of WFEO-CIC to help lead forward Information and Communication Technology (ICT) in order for it to be applied globally, and focuses on developing countries where narrowing the gap has become essential. The CIC has the responsibility for fulfilling the tasks allocated by WFEO in accordance with the WSIS/WSSD Solutions and the United Nation's Millennium Development Goals.

The Committee aims at facilitating Information & Communication technology to be used in important issues raised in the 2012 WSIS Forum and other relevant issues, the following will be given special emphasis:

CIC has formulated a strategic action plan and defines its objectives based on the following themes:

- ✓ **ICT for Sustainable Development:** ICT (Information & Communication Technology) plays a pivotal role to deliver sustainable development objectives of governments across the globe. Role of ICT has been acknowledged towards bringing about the required level of efficacy within the delivery systems to achieve developmental objectives so far.
- ✓ **ICT Innovation in Emerging Economies:** Innovation has long been proven as a key driver to economic prosperity of nations; it has proven to be a tool to alleviate economic levels within society and enable ability to find and sustain newer economic opportunities. However, innovation needs to be planted on a foundation of equitability, accessibility, availability and affordability. Furthermore, it needs to be accompanied by proper dissemination processes to put such innovation to good use and enable use by one and all.
- ✓ **Information Technologies for Smart Cities:** Implementation of smart technologies & processes will enable urban cities to cope up with the tremendous burden of urban influx and will help make growth sustainable. Smart cities use ICT to improve the services that support urban environments – security, healthcare, and transport and governance. Some of the common ICT applications which ensure smart city objectives are achieved are

  - Deployment of Sustainable and Highly Available Communication Networks
  - Use of Smart Devices and Agents

- Developing Smart ICT based Urban Spaces
- Developing e-Services
- Open Government Data
- Mobility to serve citizens at their doorstep

- ✓ **ICT in Quality of Engineering Education:** Engineering education is witnessing a major change over the past few years because of the changing business and industrial environment in the developing economies due to rapid globalization and substantial increase in the demand for high-quality education, which has led to the adoption of ICT to extend the outreach and elevation of training standards in engineering education. Engineering education today needs to address global quality requirements and hence the standards of delivery can be elevated by introduction of ICT based tool to ensure global teaching talent and aids are made available to ecosystem to match the delivery requirements

- ✓ **Big Data Analytics:** Big data is a general term referring to the massive amount of digital data being collected from diverse set of sources (Structured & unstructured) for analysis purposes. Big Data could provide transformative ability aligning with government's vision to knowledgeable growth environment. Big Data can help by enabling better decision making ability for social workers to better manage and deliver intervention outcomes. Health, personalising public services, fraud management could deliver a game changing opportunity to enable governments to better manage and utilize funds to ensure wider coverage of beneficiaries.

VISION FOR WFEO-CIC

As a Standing Technical Committee of WFEO grossly dedicated to the field of "Information and Communication", WFEO-CIC has the responsibility to push forward "ICT for Development" as its guiding line.

The resolutions of WSSD (World Summit on Sustainable Development) and WSIS (World Summit on Information Society) have been the major embodiment of Millennium Development Goals (MDGs) that are also the major goals for the Non-Governmental Organizations (NGOs) in the early decades of 21st Century.

"ICT for Development" has been commonly accepted as an important theme for implementing both the WSSD and WSIS resolutions and an organization named Global Alliance for ICT and Development (GAID) has been set up by the United Nations.

MISSION FOR WFEO-CIC

In accordance with MDGs, as set up by United Nations; the mission, as set up by GAID, and the tasks, as assigned by WFEO – the umbrella organization –WFEO-CIC in India shall focus most of its attention on, and also play its major role in, the worldwide promotion and implementation of the guiding line "ICT for Development".

WFEO-CIC would endeavor to help in tackling the following SDG's;

- ➢ End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- ➢ Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

- ➢ Take urgent action to combat climate change and its impacts
- ➢ Protect restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- ➢ Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- ➢ Strengthen the means of implementation and revitalize the global partnership for sustainable development.

WFEO-CIC MANDATE

The WFEO–CEIT shall support the WFEO and the engineering profession worldwide especially in developing countries by:

(A) PROPAGATION

Society needs awareness of the technological advancement and new findings that come into existence in various sectors for adoption and effective usage. The Committee will take up propagating the aspects of the technologies by reaching out to the people especially in developing countries by conferences or workshops, training courses, video presentations, webinars, distribution of hand bills and bulletins.

(B) PROMOTION

The Committee, in order to promote innovative technology and its engineering, will provide consultants and mentorship support to the engineering community, young engineers and engineering students carrying out R & D projects with innovative technologies. This is to improve the quality of technical education as well as to support young entrepreneurs with collaborations among multi-stakeholders.

ACTION PLAN FOR THE WHOLE TERM (2016-2019)

1. Holding at-least **four International Seminars** annually, which would include at-least two Biennial International Seminar / Congress to be held in a country other than the Host Country. It is proposed to hold one such Seminar in the Asian Continent and one in the African Continent during the four-year term.
2. To ensure a large captive audience and to co-ordinate these events with annual events of various engineering bodies like FEAIP, FEISCA and Annual Meetings / Congresses of WFEO National Member organizations, especially those in the African continent.
3. To bring out at-least **four Monographs** on relevant topics in the first year and four more every subsequent year and to ensure wide distributions particularly to Student Chapters.
4. To integrate activities and disseminate information with WFEO Fora like Young Engineers, Women Engineers, etc. Promote and mentor younger engineers and foster the work-life- balance and leadership potential of women engineers.
5. Attend workshops and training in UNDP programmes on Information and communication with the co-operation with the UNDP.
6. Collaboration with UN bodies (e.g. UNESCO) and international organization to extend and contribute to committee activities.

7.   Participate in at least two international Capacity Building events related to Information and Communication.

8.   Members of the CIC will conduct a number of training / workshops in a number of countries. The beneficiaries will be the civil society member's and engineers working in public and private sectors. The committee will also try engaging in collective actions through the establishment of alliances with the number of IT partners.

9.   To try and involve multi-lateral agencies like World Bank, Asian Development Bank, European Union, Universitas, Ford Foundation, Bloomberg, etc with the WFEO-CIC.

10.   Trying to make contributions to the Internet governance led by IGF, a global platform set up by the United Nations in 2006, so that the Internet can be more trustable, more securable, more peaceful, and more constructive to human beings.

11.   To involve educational Institutes and prominent universities and education organizations in preparation of various reports and papers.

12.   The committee will host workshops for sharing ideas on but not limited to:

- ICT for Sustainable Development

- ICT Skills and Careers

- ICT Innovation in Emerging Economies

- Information Technologies for Smart Cities

- ICTs for Inclusive Growth

- Women and Girls in ICTs

- ICT in Quality of Engineering Education

- e-Governance for Engineering Organizations

- Cyber Security and Mitigation System

- Big Data Analytics

13.   Analyzing worldwide accomplishments in using research data and ICTs and in developing open knowledge environments to reduce the digital research divide;

14.   Assessing future objectives and strategies of possible partnering agencies having common interests in the field, with special attention to post-2015 Sustainable Development Goals (SDGs) of the United Nations and the ICSU's Future Earth Research Programme in the developing countries;

15.   Developing detailed mechanism for implementation of the Principles of Preservation of and Open Access to Research Data in Developing Counties;

16.   Support to the activities of International Center of South-South Cooperation on Science, Technology and Innovation (ISTIC), UNESCO;

17.   Active collaboration and support to the ICT-related activities of Agreement societies of IEI;

18.   The implementation of a sustainable, global-wide Information Society and minimization of the digital gap between developed and developing countries;

MEETINGS

- The WFEO-CIC holds one face-to-face meeting each year, normally between September and December. This meeting will be held in conjunction with the bi-yearly WFEO General Assembly, and with the WFEO Executive Council fall meeting in the alternate years.
- The Chair and Secretariat will prepare the agenda and meeting materials for distribution to all CIC members at least 10 days before the date of the meeting. The Secretariat will prepare a detailed meeting summary that includes action items and decisions made at these meetings.

REPORTING

- The Chair and Secretariat will prepare and submit annual and bi-annual written reports on the work of the CIC to the WFEO. As well, the Chair will attend meetings of the WFEO Executive Council in his capacity as a Vice-President of WFEO as well as representing the CIC as Chair. He will present verbal progress reports on the CIC's work.

ANNUAL BUDGET OF THE WFEO-CIC IN INDIA

The WFEO-CIC in India expects to spend, on an yearly basis, around 77,000 Euros (with an inflation of five 5 per cent every year on average) for travel and stay of the Chair in connection with WFEO Executive Board, Executive Council and General Assembly Meetings; Bilateral and multi-lateral events; Cost of Infrastructure, Staff and related expenses at the Secretariat; Sponsorships for Seminars, Conferences and Workshops; and also the Publications, which shall come from a combination of Funding from IEI and WFEO and other sources.

If successful in involving WB, ADB and other organizations, the funds received from these organizations towards Seminars, Conferences and Workshops along with the publications shall be over and above what has been indicated above.

OTHER SOURCES OF FUNDING

- The Secretariat and Chair will support efforts towards securing funding from external sources e.g. International Financial Institutions, United Nations, big ITC industries and other international agencies to support individual events, activities or projects for the themes. These will be pursued on a case-by-case basis and limited to supporting the theme areas and by request by the theme leader or on an opportunity basis.
- The lead country for each theme will be responsible to secure its own funding and volunteers for its activities. The Chair and Secretariat will provide assistance as time and resources permit.