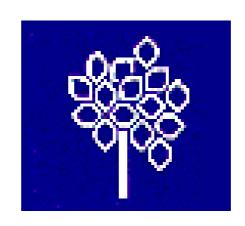
FÉDÉRATION MONDIALE DES ORGANISATIONS D'INGÉNIEURS

RAPPORT BIENNAL 2001 - 2003



WORLD FEDERATION

OF

ENGINEERING ORGANIZATIONS

BIENNIAL REPORT2001 – 2003

Officers and Executive Council Members

Membres du Bureau et du Conseil Exécutif

President President-Elect Treasurer	J. Medem Lee Y.C. S. Ioakimidis	(Spain) (Malaysia) (Greece)	
Vice-Presidents	I. AkintundeK. AyadiS. DoumitJ. Gasca Neri	(Nigeria) (Tunisia) (Lebanon) (Mexico)	Chair CIC
	J. Ginsztler B. Grear Y. Gulyaev	(Hungary) (Australia) (Russia)	Chair CET
	G.P. Lal J. Michel Qian Y. M. Rashid Khan	(India) (France) (China)	Chair CEE
	D. Roberts	(Pakistan) (USA)	Chair ComTech
National Members	J.C. Badoux C. Ballester A. Chehna W. Fuchs A. Gava L. Graef P. Guitart L. Lerner M. Mihaita S. Ohgaki H. Shihabi Zhong Y.X.	(Switzerland) (Argentina) (Syria) (Germany) (Italy) (USA) (Spain) (Brazil) (Roumania) (Japan) (Bahrein) (China)	
International Members	K. Alexopoulos O. Awoyinfa C. Dall'Acqua A.A. Laidin G. Radhwan A. Ridley I.H. Siddiqui V. Sitsev J. Toth	(FEANI) (FAOE) (UPADI) (FEISEAP) (FAE) (CEC) (FEISCA) (USEA) (RCC)	

BIENNIAL REPORT 2001-2003

WFEO, FROM MOSCOW TO TUNIS GENERAL ASSEMBLIES

by President José MEDEM SANJUAN

Index

	Page.
1. Internal functioning of WFEO	1.
2. Relations with Intergovernmental organizations (UNESCO and United Nations)	3.
3. Relations with International organizations	8.
4. International Engineering events	9.
5. Support of the Standing Technical Committees (STCs)	11.
6. Contacts with WFEO members and associates	12.
7. Acknowledgement	12.
8. The new President	12.
Annex: President's contact with National and International Members and Associates	13.

1. Internal functioning of WFEO

1.1. General Assembly of Moscow

The General Assembly of the World Federation of Engineering Organizations, organised by the Union of Scientific and Engineering Associations (USEA), met in Moscow on September 13 and 14, 2001, as the conclusion of a week dedicated to engineering and engineers.

This meeting was prepared by several previous events, which took place during the first days of the week:

- the four Standing Committees reviewed their activities during the current year and prepared new programmes to be launched in 2002;
- the Finance and Administration Committee prepared the programmes and budgets for the coming biennium;
- the Executive Council received their reports and prepared the recommendations for the General Assembly.

Simultaneously, the USEA had organized a very attractive Scientific Conference "Town-Forming Technologies of the 21st Century", as well as technical visits to several sites, demonstrating the vitality of Russian engineering.

The General Assembly meeting was formally opened, in coincidence with the final session of the USEA Conference, by Yuri Gulyaev, President of USEA.

In conformity with a Decree from President Poutine, a minute of silence was observed at noon in memory of the victims of the terrorist attacks against New York and Washington D.C. on September 11.

The General Assembly in particular took the following decisions:

- to accept the membership of the Institution of Civil Engineers as National Member representing the United Kingdom;
- to approve the membership of the engineering associations of Azerbaijan, Georgia, Moldova, Slovenia and Ukraine as National Members, and to restore the engineering associations of Algeria, Morocco, Sudan, Tanzania and Yemen as full Members;
- to approve the status of Associate of Consolidated Construction Company (CCC), sponsor of the Hassib Sabbagh Award, and of Messrs. Sturm and Prasad;
- to award the WFEO Medal of Engineering Excellence to A.V. Chichinadze (Russia) and the Medal of Excellence in Engineering Education to Prof. Zhang Wei (China);
- to award WFEO Medals for Outstanding Services to retiring Past President Conrado Bauer, Vice-president Jim Poirot, Past Treasurer John Mckenzie and Hans Hugi;

The General Assembly elected Dato Lee Yee Cheong (Malaysia) for President Elect and Mrs. Quian Yi (China), S. Doumit (Lebanon), B. Grear (Australia), R. Khan (Pakistan) for Vice-presidents, and C. Ballester (Argentina), J Lerner (Brazil) J.C. Badoux (Switzerland), A. Gava (Italy), M. Mihaita (Romania), A. Shehna (Syria) and L. Graef (USA) for National Members of the Executive Council;

It accepted with thanks the invitation of Tunisia to hold the next meeting in Tunis in 2003.

The activities and projects of the Federation were debated at length, and especially:

- the Code of Ethics, for which a consensus was reached on the responsibility of National Members to publish their own Code, inspired by WFEO's Model Code, and enforce it in conformity with local laws;
- the preparation of a survey on international engineering education and quality assurance, with a new questionnaire for accreditation to be prepared by VDI and the assistance of the UNESCO Institute of Statistics;
- the Virtual Engineering Library for Sustainable Development (VELSD), launched earlier in 2001, which has been developed with the collaboration of B. Rourke (Australia) and D. Thom (New Zealand) and the support of the University of Queensland and;
- the second World Engineers' Convention to be held in 2004 in Shanghai; a motion was passed to hold the WFEO Executive Council in Shanghai on this occasion.

1.2. Executive Council

During this period 2001-2003 the Executive Council met three times.

In Moscow (12 and 14.09.01), a message of support and condolences, proposed by Vice-president M. Abdelhamid (Palestine), was sent to President Bush, expressing the solidarity of the global community of engineers with American citizens.

D. Roberts took over as ComTech chairman, while the outstanding performance of J. Poirot as chairman of ComTech and as Vice-president of WFEO was acknowledged.

Vice Presidents J. Michel and Qian Yi were nominated as members of the Executive Board.

The third meeting took place in Acapulco (01/02.10.02), organized by Vice-president Gasca Neri. A motion was carried to amend the Rules of Procedure in order to better define the conditions for proxies and the notion of "members in good standing".

The proposal of Puerto Rico to take over ComTech upon termination of the US mandate was approved in principle.

The candidature of Mr. Kamel Ayadi (Tunisia) as the next President-Elect was accepted unanimously by the Executive Council, and it will be proposed to the General Assembly.

1.3. Executive Board

During the period 2001-2003 two Executive Board meetings were held in Paris on the 14.02.02 and 13.02.03.

After each of these meetings an ICET Executive Council was held with UATI.

2. Relations with Intergovernmental Organisations

2.1. WFEO / UNESCO co-operation

The co-operation of WFEO with UNESCO has been so far fruitful as demonstrated by the following:

- Prof. Walter Erdelen, ADG Science Sector, delivered the opening address at the WFEO/ICSU Science Engineering & Technology Forum, in the WSSD;
- UNESCO is involved in the preparation of WEC 2004;
- Two seminars on Accreditation (March 2002) and on Poverty Reduction (May 2002), were organised in Paris by WFEO under contracts with UNESCO;
- WFEO was invited to participate in the UNESCO/Daimler-Chrysler partnership MONDIALOGO International Dialogue for Engineering Applications;
- A proposal "Engineering for a Better World Engineering and Technology for International Development", has been prepared by WFEO and the American engineering community in conjunction and co-operation with the Basic and Engineering Sciences Division of UNESCO. It aims at promoting capacity building in developing countries for poverty eradication, secure and sustainable social and economic development. We have urged our National Members to support this proposal, which aims at convincing UNESCO to foster Engineering in the same way as it does for other Natural Sciences. An important factor in this approach is the return to UNESCO of the US with a programme for the reinforcement of Engineering and Technology;
- Under the UNESCO initiative TAPE (Technology and Poverty Eradication), UNESCO and WFEO have been proposing to hold an international conference on engineering and technology for poverty alleviation, involving engineering organizations and charities like RedR (Registered Engineers for Disaster Relief), EAP (Engineers Against Poverty), Engineers Without Borders, and IYPF (the International Young Professionals Foundation) etc. One of the objectives of the international conference will be for them to exchange experiences and for UNESCO and WFEO to help spread these worthy organizations around the world. These organizations are playing a vital role in mobilizing the engineering and technology professionals and practitioners, especially the young, in

sustainable development initiatives and projects on the ground. Efforts are being made to hold the international conference in USA soon after October 2003 to celebrate the US rejoining UNESCO.

2.2. WFEO / United Nations co-operation

2.2.1 UN Commission on Sustainable Development (CSD)

WFEO has been actively involved in the CSD process when the international Science Engineering and Technology (SET) community was first invited by UNCSD as a civil society Major Group for CSD-9 in January 2001. The co-partners of SET then were ICSU and ICUN. WFEO was approached by ICSU, as the CSD-9 thematic topics, energy and transportation, needed engineering input. WFEO representation, Dato Lee, Martin Thomas and Tony Ridley, performed so creditably that WFEO was subsequently invited by UNCSD as ICSU's co-partner in SET for the World Summit on Sustainable Development (WSSD) Johannesburg, 2002, anchoring the T in SET.

The 11th Session of the UN Commission on Sustainable Development took place in the UN from 28 April to 9 May 2003. Dato Lee attended the Ministerial Dialogue Session on 30 April and the Multi-Stakeholder Dialogue on 1-2 May 2003.

CSD-11 was a great step forward for civil society Major Groups. They were seated in the main conference auditorium together with official government delegations throughout instead of being observers in official sessions as in CSD-9 and WSSD

Major Groups will participate in all the sessions of future CSD annual meetings lasting two weeks each, starting with CSD-12 in April 2004.

The priority topics for 2004-2005 will be water, sanitation and human settlement, with energy for sustainable development and industrial development in 2006-2007. The active participation of engineers and technologists will be essential if SET is to make meaningful contributions to CSD deliberations in 2004-2007.

However, being represented in CSD annual meeting in UN New York for two weeks at a stretch will severely tax WFEO resources unless a WFEO expert group is available in New York. We have been actively exploring with our USA National Member AAES and the US engineering community to form such a group to service UNCSD and other UN activities in New York

Reference website http://www.un.org/esa/sustdev/

2.2.2. World Summit on Sustainable Development (WSSD)

(Johannesburg -South Africa- August-September 2002)

WFEO and ICSU have been officially invited by the U.N. to serve as the Co-organising Partners to represent the international SET community during the WSSD in Johannesburg, assessing and reviewing the progress made in relation to the goals set at the Rio Summit (1992) and also preparing and assessing sustainable development goals for the future. Together with TWAS (Third World Academy of Sciences), IAP (Inter Academy Panel), and ISSC (International Social Science Council) an important Statement on behalf of this community has been presented at the summit, with focus on commitments and specific suggestions from this community.

WFEO participated actively in WSSD Preparatory Committee (Prep-Comm II), January 2002, New York. This involved an intensive drafting effort for the SET Submission with a working session in ICSU Head Office, Paris in late November 2001. WFEO President, President Elect, Executive Director Pierre de Boigne and Mike Sanio participated. At WSSD Prep-Comm II, WFEO was represented by Dato Lee, Tony Ridley, Kamel Ayadi, Maria Prieto Laffargue and James Moody. SET then participated

in WSSD Prep-Comm IV, May-June 2002, Bali, Indonesia with Dato Lee, Pierre de Boigne and James Moody representing WFEO.

WSSD, Johannesburg, September-October 2002, was the very first time that SET was regarded as a Major Group in a UN Summit, the other older Major Groups being Women, Youth, Indigenous Peoples, Farmers, Local Authorities, Trade Unions, NGOs and Business and Industry. SET participated in the Multi-Stakeholders Segment of the WSSD proper. Leaders of SET addressed the Plenary Sessions and participated in Roundtables with Heads of State/Government. WFEO was officially represented in SET by its President and President-Elect. The highlight for WFEO in WSSD was WFEO President Jose Medem addressing the Summit in official session.

Insert photo

2.2.3. WFEO Seminar in WSSD

During the WSSD, the South African Government organized a parallel Forum on Science, Technology and Innovation (STI) for Sustainable Development. ICSU, in cooperation with TWAS and WFEO coordinated STI Forum at Ubuntu Village, Johannesburg.

Within STI, WFEO and the Engineering Council of South Africa (ECSA) organized the Seminar entitled "Engineering and Technology for Sustainable Development".

The WFEO Seminar was opened by WFEO President Jose Medem with Tony Ridley and Dato Lee as Co-Chairs. Speakers included His Excellency Dr. Lidia Brito, Minister of Science, Technology and Higher Education of Mozambique, Dr. Walter Erdelen, UNESCO Assistant Director General for Natural Sciences, Professor Calestous Juma of Harvard University, Bob Pullen, President Engineering Council of South Africa, Dr. Judin Karim, Secretary of Board of Engineers Malaysia, Professor Maria Prieto Laffargue, President, Spanish Institute of Engineers, Dr. Gisbert Glasser, former UNESCO Assistant Director General representing the International Council of Engineering and Technology (ICET).

Due to the tremendous efforts of ECSA, over 150 participants attended the WFEO Seminar that was one of the most successful events of the STI Forum. It undoubtedly demonstrated WFEO's contention that engineering provides a highly necessary, though not sufficient, input for sustainable development.

Dato Lee participated in the Ubuntu Declaration meeting convened by the United Nations University at WSSD. As signatory of the UNU Ubuntu Declaration, WFEO is actively involved in ongoing work promoting education for sustainable development.

Besides the collaboration with ICSU, WFEO through our standing committee ComTech has prepared the concepts and outline of the Rio+10 report, highlighting engineers accomplishments over the last ten years and describing the future tasks and goals engineers have in order to become more effective in meeting the challenges of Agenda 21.

Finally there was a Side Event regarding "Knowledge and Technology Transfer for S.D", sponsored by UNEP, GEF, SANet, WFEO and FIDIC to analyse technology transfer and investments in sustainable technologies by providing better access to necessary know-how, planning tools, experts, and by offering co-financing incentives for incremental feasibility work to establish the viability of specific investment,

management or policy solutions. The key area where engineers have a unique and complimentary contribution to SD is knowledge and technology transfer.

2.2.4. UN Millennium Project

At the Millennium Summit in September 2000 world leaders passed the Millennium Declaration, which formally established the Millenium Development Goals (MDG). Since then these goals have become the international reference standard for measuring and tracking improvements in the human condition in developing countries. They have the advantage of a political mandate agreed by the leaders of all UN member states, offering a comprehensive and multi-dimensional development framework, and setting clear quantifiable targets to be achieved in all countries by 2015.

As a result of Professor Calestous Juma's participation in WSSD WFEO Seminar, our President-Elect Dato Lee was invited to join him as his co-coordinator in Task Force No. 10 "Science, Technology and Innovation" of the UN Millennium Project. The Millennium Project, July 2002-June 2005, is proceeding under the overall guidance of Secretary General Kofi Annan. The Millennium Project will propose strategies for meeting the MDG. The Project's ultimate objective is to help ensure that all developing countries meet the MDG. The work is being performed by 10 Task Forces, addressing specific MDG and Targets. Each Task Force is comprised of scholars, policy makers, and practitioners, with broad representation from both developed and developing countries and high-level participation of the United Nations agencies.

Task Force 10 addresses MDG Goal No.8 "Building Global Alliances for Development" and Target 18. "In cooperation with the private sector, make available the benefits of new technologies, especially information and communications". Current focus is ICT and Biotechnology. Biomass and hydrogen energy is also being considered. TF 10 is working closely with UN ICT Task Force.

Dato Lee nominated Kamel Ayadi, Hu Qiheng, Tony Ridley and James Moody into TF 10. Several other TF 10 members are also engineers. The UN Agencies represented in TF 10 are UNDP, UNIDO and UNCTAD and most recently UNESCO, represented by Tony Marjoram.

Our contribution to the initial deliberations of TF 10 is along the following premise: "For least developed countries to lift themselves out of poverty and achieve MDGs, they need:

- Basic infrastructure i.e. rural roads, schools, water, sanitation, irrigation clinics, telecommunications, energy etc.
- Basic industries, namely SMEs for supply of goods and services to agricultural and natural resources exploitation industries. This requires a pool of local engineers and technicians. Without this engineering and technology base, indigenous industries cannot upscale and economy cannot uplift.
- The science and technology advice systems in developing countries need reorientation, with much more government support for national academies of engineering and technology, national institutions of engineers and technologists. This is important for technology foresight and capacity building for wealth creation.

Reference website www.unmillenniumproject.org

2.2.5. World Summit on the Information Society

Another important event regarding engineers world wide is the World Summit on the Information Society (WSIS), which will take place, for its first phase, in Geneva from 10 to 12 December 2003, and, for its second phase, in 2005 in Tunis, organised by the International Telecommunication Union (ITU). This Summit will seek to define an agenda covering the objectives to be achieved and resources to be mobilised. Again our Federation through its Committee on Information and Communication (CIC, chaired by Kamel Ayadi) is taking the leadership of the International Scientific and Technological community.

WFEO through CIC is contributing to this Summit in the preparatory process, by organising a "World Congress on Digital Divide" to be held in Tunis in 2003, simultaneously with our General Assembly. This event is also considered as a prelude to the WSIS, and it aims at developing the point of view of the engineering community on the key issues of the digital divide, highlighting specific successful achievements made by engineers to favour universal access to ICTs to help bridge the digital divide.

2.2.6. WTO and World Mobility of Engineers

Successful global sustainable development depends on an adequate supply of professional engineers and technologists. However, the enrollment in engineering courses in universities is currently declining and this worldwide trend is disturbing.

The solution to obtain adequate supply would be to employ professional engineers from fellow developing countries, especially those where large population and large geographical spread or both require the production of large number of professional engineers to satisfy their own development needs.

Building on the successful work of WFEO International and National Members like the Washington Accord, FEANI EurIng, the Engineer Mobility Forum and the APEC Engineers Register, WFEO has been in communication with WTO on mobility of professional engineers. World mobility of engineers would require international government agreement under WTO's proposed Agreement on Trade in Engineering Services. Apart from FIDIC, WFEO is the only other international engineering organization consulted by WTO. Discussions with Dr. Supachai, current WTO Director General, in 2002 were based on the successes of the APEC Engineers Register. WFEO has already been working with UNESCO on international benchmarking of engineering courses. A successful UNESCO/WFEO international workshop on engineering accreditation was held in UNESCO Paris, May 2002.

WFEO is virtually unknown to the engineers that constitute some 10 million of the membership of all the WFEO national members. We believe that achieving for each and every one of them world mobility in the globalized knowledge economy would be the greatest service WFEO can perform for them.

2.2.7. Relations with other UN Agencies

Contacts and collaborations with different Agencies of the UN system have been maintained during the period 2001-2003, especially with UNDP (United Nations Development Programme), UNIDO (United Nations Industrial Development Organisation), UNEP (United Nations Environment Programme), and ILO (International Labour Organisation) etc.

3 Relations with International Organisations

We kept trying to reinforce our links with other similar or complementary international Organizations in order to better coordinate our activities and to get a synergetic effect around the world. Our effort was directed mainly towards the following organizations:

3.1. FIDIC

As explained in point 3.7, there is a close collaboration between WFEO and FIDIC in the launching, organisation and managing of the Sustainable Alternative Network (SANet) in co-operation with UNIDO and the Development Gateway (World Bank)

The General Assembly of FIDIC and our Executive Council Meeting coincided purposely in Acapulco (01/04.10.02) in order to share the many common challenges.

3.2. ICSU and ISSC

As we have presented in point 2.2.2. of this report, WFEO and the International Council for Science (ICSU) have collaborated very strongly in the WSSD of Johannesburg, representing the International Science, Engineering and Technology community, together with TWAS, IAP, and ISSC, and the same is happening in the preparation of the WSIS.

Dato Lee attended the ICSU General Assembly, September 2002 in Rio and was given the opportunity to speak on WFEO.

In December 2002, he also attended the 50th anniversary conference of the International Social Science Council (ISSC) in Vienna and chaired a panel session on collaboration between social sciences, natural sciences and engineering. Like WFEO, both ICSU and ISSC are closely associated with UNESCO.

3.3. UATI and ICET

Both UATI and WFEO aim at gathering all engineers around the world, UATI by professional branch and WFEO by nation. Since 1998, they are united under an umbrella organisation, the International Council for Engineering and Technology (ICET). Both organizations are not quite similar but in a sense complementary. There are certain peculiarities which so far prevented a merger of both organisations into one only body, but we might be able to achieve this in the near future.

A new Framework Agreement between UNESCO and ICET was signed in Paris on 14 February 2003, defining the issues of common interest.

After our Executive Council meeting in Paris (15.02.02) the presidency of ICET was taken over by Mr. Rousset, President of UATI, for the next three years.

3.4.1 **Others**

We maintain relations with the InterAcademy Panel (IAP), InterAcademy Council (IAC) and International Council of Academies of Engineering and Technological Sciences (CAETS).

Dato Lee attended CAETS 2001 Convocation in Helsinki and 2003 Convocation in Hollywood and participated in S&T capacity-building workshops of IAP in Trieste, May 2002 and IAC in Beijing, April 2002. On every occasion, he extended the WFEO hand of friendship.

We have continued to collaborate with other International Organisations like COSTED (Committee on Science and Technology in Developing Countries) IPCC (Intergovernmental Panel on Climate Change), NRC (US National Research Council) WBCSD (World Business Council for Sustainable Development), TWAS (Third World Academy of Sciences), World Bank, GEF (Global Environment Facility), etc.

4. <u>International Engineering events</u>

Our World Federation has sponsored and attended many international engineering events during this period of 2001-2003. The most important are:

4.1. 30th International Symposium "Engineering Education 2001"

(Klagenfurt, September 2001)

The organiser of this jubilee Symposium was the Internationale Gesellschaft für Ingenieurpädagogik (IGIP), concentrating on current developments in the theories of engineering pedagogy as well as practical experiences with teaching technical subjects.

4.2. <u>Expert Group Meeting on "Innovation and Communication Technologies: the role of the Regulatory Authorities"</u>

(Tunis, November 2001)

This international event was organized by the International Centre for Science and High Technology (ICS-UNIDO) and the National Authority for Telecommunication in Tunisia with the support of WFEO (CIC).

The setting up of the National Regulatory Agencies is a consequence of the introduction of liberalization and competition in telecommunication, having shown a positive driving effect on the adoption of new technologies, on the market development and more in general on the entire countries economy.

4.3. <u>First International Congress on Engineering and Environment</u>

(Santo Domingo, January 2002)

This event was organised by the Colegio Dominicano de Ingenieros y Agrimensores (CODIA) of the Dominican Republic.

The President of WFEO made two addresses, one regarding the coming WSSD and a second with the issue of Engineering and Globalisation.

4.4. International congress "Energy 2002"

(Athens, June 2002)

The Hellenic Association of Mechanical and Electrical Engineers (HAMEE) organised this International Congress, with the target to point out the importance of the energy factor in the development of the entire humankind, with its political and social dimension.

4.5. 3rd International Seminar on "The Engineer in Sustainable Social and Economic Development"

(Colombo, Sri Lanka, October 2002)

The Institution of Engineers, Sri Lanka (IESL) and the Federation of Engineering Institutions of South and Central, Asia (FEISCA) organised this event. The theme for

this Seminar was the achievements of FEISCA countries in the past ten years in dealing with the programme areas of Agenda 21 relevant to their natural scenario, including their plans for the future five or ten year period.

4.6. SANet Board of external advisors

(Paris, December 2002)

WFEO's President was invited, as an expert in the areas of technology transfer, to join SANet's board of external advisors.

The UNEP-GEF Technology Transfer Networks (SANet) aims at improving management of knowledge arising out of pioneering technology transfer projects and at facilitating replication of success cases that help address the objectives of Multilateral Environmental Agreements (MEA).

The UNEP, Development Gateway, FIDIC and WFEO are interested in facilitating increased exchange and utilization of expert know-how and technologies necessary to implement sustainable solutions, and they want to work together in the creation of a "Sustainable Development in Action" topic area, which will be integrated into SANet platform, in the transfer of technology and knowledge for dissemination of knowledge, exchange of successful know-how, and in the facilitation of market development networks.

A Memorandum of Understanding (MoU) between them has been prepared and hopefully will be signed soon.

4.7. <u>47th Convention "Engineering Management for National Development"</u> (Chittagong, Bangladesh, January 2003)

The Institution of Engineers, Bangladesh (IEB) has organised this Convention, including a National Seminar on "Globalisation and the Challenges of the Developing Countries: Bangladesh Perspective".

4.8. HELECO **03**

(Athens, February 2003)

The Technical Chamber of Greece organised HELECO 03, together with the 4th International Exhibition and Conference on Environmental Technology.

HELECO is an established institution on an international reputation having a two-fold nature, a major international commercial exhibition and a comprehensive global scientific conference, bringing together producers, consumers and scientists in order to achieve the best possible association that forms the basic precondition to dealing with environmental problems.

4.9. 6th WFEO World Congress on Engineering Education and 2nd ASEE International Colloquium

(Nashville, USA, June 2003)

This World Congress was organised by the CET of WFEO with the collaboration of the American Society for Engineering Education (ASEE). The main themes were the international recognition of qualifications, the continuing education and the developments in teaching and learning.

4.10. 2nd World Engineers' Convention, WEC

(Shanghai November 2004)

During the period 2001-2003 WFEO participated actively in the preparation of the second World Engineers' Convention (WEC 2004) to be held in Shanghai in November 2004, organised by the Chinese Association for Science and Technology (CAST), the Chinese Academy of Engineering and the Municipality of Shanghai with the support of several Ministries of China. The first WEC 2000 took place in Hanover.

The theme of the second Convention will be "Engineers Shape the Sustainable Future" with the following technical conferences:

- a. Network Engineering and Information Society
- b. Biological Engineering & Health-Care
- c. Transportation and Sustainable Mega-cities
- d. Environment Protection and Disaster Control
- e. Agricultural Engineering and Food Security
- f. Resources and Energy
- g. Ecological Material and Green Manufacturing

There will be also an international Engineering and Technology Exhibition linked to the prestigious Shanghai International Industrial Fair 2004.

Other major features will include:

- . Virtual Forums on the Web
- . Young Engineers/Professional Conference
- . Awards for Young or Future Engineers: Innovative Solutions for World Sustainability
- . World Engineers' Festival
- . Visits to Major Engineering Projects in Shanghai and China

An International Advisory Board (IAB), chaired by President Medem is collaborating with the Steering Committee of WEC in the preparation and organisation of this extraordinary event, which will reflect worldwide the important role engineers are playing in the society we serve. This IAB met in Acapulco, October 2002 and the Steering Committee had two meetings in Shanghai, the first beginning of August of 2002, and the second end of August of 2003.

4.11. World Congress on Natural Disaster Mitigation

(New Delhi, India, February 2004)

The Institution of Engineers (India) is organising, under the aegis of WFEO, the World Congress on Natural Disaster Mitigation, to be held in New Delhi, India, February 2004.

The object is to provide a multidisciplinary forum for engineers, architects, planners, technocrats, scientists, disaster managers, international and voluntary agencies and others working in the field of natural disaster mitigation and management to meet and share ideas, achievements and experiences.

An International Advisory Board, chaired by the President of WFEO, is collaborating with the Steering Committee of this Congress in the preparation and organisation of this event.

5. Support of the Standing Technical Committees (STCs)

Most of the technical activities of our Federation are carried out successfully by our four STCs. Their detailed activity reports are to be found below. The President showed his support by endeavouring to participate in their seminars.

5.1. CIC (Tunisia)

The Committee on Information and Communication, chaired by K. Ayadi, has organised very efficiently several international Seminars in which I participated.

In the period of 2001-2003 CIC was very involved in the organisation of the World Congress on Digital Divide and in the preparatory work of the WSIS.

From the beginning CIC has had my full support, visiting in two occasions the Tunisian Ministers involved in this Congress, in order to assure their support.

5.2. CET (Hungary)

The Committee on Education and Training, chaired by J. Ginsztler, participated in a very efficient way in the mentioned "6th WFEO World Congress on Engineering Education" held in Nashville (19/23.06.03).

I also attended the CET meeting held in Bahrein (12/17.04.02).

5.3. CEE (**India**)

The Committee on Engineering and Environment, chaired by G.P. Lal, is organising the World Congress on Natural Disaster Mitigation to be held in New Delhi, February 2004.

5.4. ComTech (USA)

The Committee on Technology, chaired by D. Roberts, has made an outstanding effort for the preparation of the concepts and outline of the Rio+10 report.

I had the opportunity to meet with ComTech staff twice in Washington DC, on January and November 2002.

6. Contacts with WFEO Members and Associates

Following the policy of reinforcing the relations between the Presidency and the Members in order to facilitate the mutual understanding and to stimulate their active collaboration with our Federation, President Medem accepted almost all the invitations to attend their meetings, congresses and conventions.

His personal contacts with the National and International Members, as well as with our Associates, are detailed in Annex to this report.

7. Acknowledgement

What WFEO has achieved during my presidency is due to the effort and collaboration of many people involved in our Federation. I want to express my warmest congratulation and my deepest gratitude to all the persons who have contributed so much to the successful performance of WFEO, especially to President Elect Dato Lee Yee-Cheong, Past President C. Bauer, Treasurer S. Ioakimidis, Vice Presidents and Members of the Executive Council and Executive Board, Chairmen and Members of the STCs and Task Forces, Members of the Senior Advisory Board, to all our National and International Members, to our Associates and last but not least to our Staff in Paris and in other cities around the world.

For me it was a real privilege and at the same time a great pleasure to work with all of them in such a friendly and positive atmosphere. I will never forget in my life this unique and wonderful experience.

I will always remain available for WFEO as I have demonstrated during my Presidency.

8. The new President

I want to congratulate and heartily welcome Dato Lee Yee-Cheong as our new President. He has had an outstanding performance as President Elect and has been deeply involved to reaching out to world organizations principally United Nations and UN Agencies. I am convinced that, thanks to his important background and personality, he will be an excellent leader of WFEO for the next two years.

He deserves all our support for his challenging future tasks and I wish him all the best for his Presidency.

ANNEX

President's contacts with National and International members, and with associates

1. CONTACTS WITH NATIONAL MEMBERS

1.1. <u>BANGLADESH</u>

The Institution of Engineers, Bangladesh (IEB), on the occasion of the 47th Convention "Engineering Management for National Development", Chittagong, January 2004.

1.2. BOLIVIA

Sociedad de Ingenieros de Bolivia (SIB), on the occasion of the UPADI 27th Convention in Santa Cruz de la Sierra (17.10.01).

1.3. <u>CHINA</u>

China Association for Science and Technology (CAST) on the occasion of the IAB meeting in Acapulco (01.10.02) and of the Steering Board meetings in Shanghai (August 2002 and 2003).

1.4. FRANCE

Conseil National des Ingénieurs et Scientifiques de France (CNISF) Paris (13.12.02) with President Karcher and (02.06.03) with G. Baron, responsible for foreign affairs.

1.5. GERMANY

Verein Deutscher Ingenieure (VDI), on the occasion of the Ingenieur-Tag, Münster (12/15.05.03).

1.6. HONDURAS

Colegio de Ingenieros Civiles de Honduras, on the occasion of the UPADI 28th Convention in Tegucigalpa (19.07.02).

1.7. INDIA

The Institution of Engineers India (IEI) on the occasion of the meeting (20.10.02) of the International Advisory Board of the World Congress on Natural Disaster Mitigation.

1.8. MALAYSIA

The Institution of Engineers, Malaysia (IEM) on the occasion of the President's visit to Kuala Lumpur (09.0103).

1.9. Mozambique

In Mozambique, a new Institution of Engineers (ORDEMO) is being established. During the Johannesburg Summit, the president of the Spanish Institute of Engineers personally offered the support of her organization to Dr. Lidia Brito, Minister of Higher Education, Science and Technology, Mozambique. WFEO has also pledged full support for BEAM (Building Engineering Ability in Mozambique) program.

1.10. PORTUGAL

Ordem dos Engenheiros (ODE) on the occasion of the Spanish-Portuguese meeting in Madrid (21.02.03).

1.11. PUERTO RICO

Colegio de Ingenieros y Agrimensores de Puerto Rico (IAPR), on the occasion of the President's visit to San Juan (13.01.02).

1.12. <u>SANTO DOMINGO</u>

Colegio Dominicano de Ingenieros y Agrimensores (CODIA), on the occasion of the 1st International Congress on Engineering and Environment, Santo Domingo (13.01.02).

1.13. SINGAPORE

The Institution of Engineers, Singapore (IES), on the occasion of the President's visit to Singapore (11.01.03).

1.14. South Africa

Fruitful contacts were established in Johannesburg with the South Africa Institution of Civil Engineering (SAICE), which has been instrumental in setting up the Africa Engineers Forum (AEF). Its protocol contains the philosophy that sustainable development can only be achieved if there are viable indigenous engineering professions with appropriate internationally accepted technical expertise and skills in Africa. WFEO has suggested that AEF should also address NEPAD (New Partnership for African Development). WFEO Tunisian National Member will be convening an African Engineers Day during WFEO General Assembly in Tunis October 2003 to discuss engineering input into NEPAD. WFEO French National Member and U.K National Member are considering interesting their governments, the Commonwealth and Francophone in this initiative that is being assisted by WFEO National members and engineering associations from Tunisia, Senegal, Tanzania, Mali, Zimbabwe, South Africa and Mozambique.

1.15. **SPAIN**

Instituto de la Ingeniería de España (IIE), during the whole period 2001-2003.

1.16. SRI LANKA

The Institution of Engineers, Sri Lanka (IESL), on the occasion of the Annual Session and International Seminar (October 2002).

1.16. SWITZERLAND

Schweizerischer Ingenieur-und Architektenverband (SIA) with Prof. Badoux and Hugi in Geneva (05.03.02) to discuss the modification of the Rules of Procedure.

1.17. TUNISIA

Conseil de l'Ordre des Ingénieurs (COI) on the occasion of several President's visits to Tunis (08.03.03 and 28.07.03).

1.18. <u>USA</u>

Meetings with the American Association of Engineering Societies (AAES), on the occasion of the President's and Executive Director's visits to Washington D.C (28.01.02 and 05.11.02).

2. CONTACTS WITH INTERNATIONAL MEMBERS

I have continued the contacts with our International Members, as umbrella institutions of national engineering bodies organised on a geographical or other regional basis, in order to get a better coordination between them and to involve them more in our activities.

To strengthen the relations with the Presidency I have attended some of their assemblies and meetings.

2.1. <u>FEANI</u>

The European Federation of National Engineering Associations Annual Business Meetings were held in Luxembourg (24/28.09.01) and in Larnaca, Cyprus (23/28.09.02). President Medem had the opportunity to address the audience during the opening ceremonies.

2.2. FEISCA

The Federation of Engineering Institutions of South and Central Asia with the collaboration of the Institution of Engineers, Sri Lanka (IESL) organised in Colombo (October 2002) the International Seminar on "The Engineer in Sustainable Social and Economic Development-Regional Contribution Towards Agenda 21, with participation of the President in the opening ceremony.

2.3. FEISEAP

The President on the occasion of his trip to Malaysia visited the headquarters of the Federation of Engineering Institutions of Southeast Asia and Pacific.

2.4. <u>UPADI</u>

The Pan American Federation of Engineering Association celebrated its 27th Convention in Santa Cruz de la Sierra, Bolivia (15/20.10.01), the 28th Convention in Tegucigalpa, Honduras (16/21.07.02) and the 29th Convention in Montevideo, Uruguay (08/10.10.03).

The Pan American Academy of Engineers (API) met at the same time and places as UPADI. In the last meeting the President gave a conference on accreditation and mobility.

3. RELATIONS WITH ASSOCIATES

We try to increase the number of our Associates, strengthening the existing good relations with them for the mutual benefit of both parts. My activities in this field have been the following.

3.1. ECCE

The European Council of Civil Engineers organised their meetings in Helsinki Finland (06/09.06.02), Athens, Greece (12/15.09.02), Madrid, Spain (04/06.04.03) and Munich, Germany (18/21.09.03) with the active participation of President Medem.

3.2. **IGIP**

The Internationale Gesellschaft für Ingenieur-Pädagogik organised the 30th International Symposium "Engineering Education" in Klagenfurt, Austria (17/20.09.01), with the participation of the President at the opening ceremony.

3.3. SEFI

The European Society for Engineering Education has organised the Annual Conference "Global Engineer: Education and Training for Mobility" in Porto, Portugal (07.10.09.03), with the participation of the President as keynote-speaker.

Message from WFEO President Elect

Dato' Ir. Lee Yee-Cheong

The most pressing issues facing the developing world today are poverty, hunger, disease, illiteracy and civil strife. These problems are aggravated by the lack of access to employment, energy, food, healthcare, sanitation, shelter and water. Engineering and technology are crucial to their solution.

For developing countries to lift themselves out of poverty, they would need first of all to develop:

- Basic infrastructure i.e. roads, schools, water and sanitation, irrigation, hospitals and clinics, telecommunications, energy, ports and airports etc.
- Small and medium enterprises (SMEs) in order to supply goods and services to agricultural and natural resource exploitation industries.

Without the basic infrastructure and SMEs, there will not be technology diffusion. Indigenous industries cannot upscale and economy cannot uplift. The experience of high-income developing countries has shown that engineering and technology have largely been responsible for wealth creation.

Yet there exists an almost universal misconception that the necessary path to economic development in developing countries is through more emphasis and investment in science and scientific research. All too often, successful economic development has been wrongly attributed to science.

It is therefore most important for WFEO and our national/international members to inform policy makers and society at large, especially in developing countries, of the respective roles of science, engineering and technology (S.E.T) in wealth creation. We can start with the following definition of S.E.T, agreed by the international Science & Technology Major Group (STC) in their submission to the 9th annual meeting of the United Nations Commission for Sustainable Development (CSD-9) in 2001:

"Science comprises a multi-disciplinary body of knowledge about nature and society gained through observation and experimentation. **Engineering** involves the practical applications of this knowledge and of empirical experiences to create structures, facilities, processes, and products. Those processes and products that have become established by acceptance of society and its marketplace are commonly classified as **Technology**."

It bears repeating again and again that it is engineering and technology that underpin economic development, especially in developing countries. I would urge you all to promote vigorously the use of S.E.T in place of S&T.

WFEO must live up to her raison d'etre to represent the engineering profession at the top global policy making levels. In recent years, WFEO has achieved some progress with the United Nations and its Agencies like UNCSD, UNDP, ITU, UNU, GEF, UNEF and WTO. WFEO is actively engaged in the Millennium Project, an initiative of UN Secretary General, Kofi Annan, to assist developing countries to achieve the Millennium Development Goals or MDGs by 2015. WFEO has been the active co-

partner of ICSU in STC since CSD-9 and will continue to be proactive in the annual meetings of CSD in UN New York. WFEO had a high profile in the World Summit on Sustainable Development (WSSD) in Johannesburg 2002 and is assuming a leadership role in STC in the World Summit on Information Society (WSIS), Geneva, December 2003 and Tunis, 2005.

In interaction with UN and UN Agencies, I will engage the WFEO national member, in whose country the head office of the UN or the particular Agency is located, to be the first line of contact. This will boost the standing of the WFEO national member with the UN Agency, their government and community. Hopefully, their engineers will be more appreciative of WFEO.

I realize that WFEO remains virtually unknown to the engineers that constitute some 15 million of the membership of all the WFEO national members. I fervently believe the greatest service WFEO can perform will be to achieve for them world mobility in the globalized knowledge economy of the 21st Century. World mobility of engineers will require international government agreement under WTO's proposed Agreement on Trade in Engineering Services. Apart from FIDIC, WFEO is the only other NGO international engineering organization consulted by WTO.

Engineers work mostly in their indigenous environment. For them to be interested in WFEO, WFEO leaders must demonstrate reciprocal interest. In 2001-2003, I met with WFEO national members and prospective members in Beijing, Brunei, Hong Kong, Johannesburg, London, Mexico City, New York, Paris, Singapore and Washington DC. I have also made efforts to try to revitalize interest in WFEO in ASEAN countries. I will persevere in this most important endeavor in 2003-2005.

Of pivotal importance is the relationship with UNESCO. The next two years will provide a great window of opportunity for WFEO with the USA rejoining UNESCO in October 2003. The United States has urged UNESCO to devote more resources to engineering and technology. WFEO will continue to work with UNESCO on international benchmarking and accreditation of engineering courses. Under the UNESCO/WFEO TAPE initiative (Technology and Poverty Eradication), an international conference will soon be held, involving engineering organizations and charities like RedR (Registered Engineers for Disaster Relief), EAP (Engineers Against Poverty), EWB (Engineers Without Borders), and IYPF (the International Young Professionals Foundation) and the like. One of the objectives will be for UNESCO and WFEO to help spread these worthy organizations around the world. They are playing a vital role in mobilizing the engineering and technology professionals and practitioners, especially the young, in sustainable development initiatives and projects on the ground in developing countries. WFEO will also work closely with UNESCO on other initiatives related to MDGs.

With this wonderful General Assembly in Tunis heralding the start of my presidency and the 2nd World Engineers Convention in Shanghai November 2004 as the magnificent backdrop for the 2004 Executive Council meeting, I will work hard with Puerto Rico to ensure that the 2005 General Assembly will be an equally splendid end to my presidency.

WFEO can only succeed if every WFEO national/international member plays her rightful part. I humbly ask for your support.

22 July 2003, Kuala

Lumpur FINANCE REPORT

By Stefanos I. Ioakeimidis, Treasurer

"Engineers play a crucial role in improving living standards throughout the world. As a result, engineers can have a significant impact on progress towards sustainable development"

The financial problem of a world organization, WFEO, which believes it has, and really may have, considerable impact on progress, on sustainable development and on peace, is a crucial matter, considering the whole structure and the development worldwide of the Federation. But at the same time it is a matter of moral order and reliability, if the members of the Federation seriously believe what they declare they believe. Especially when they put targets, as we do, saying among others, in our future goals and objectives: "Engineers believe that many problems facing developing nations can be solved by using existing knowledge, technology and experience. In the next ten years engineers can be even greater assistance in achieving the goals of Agenda 21 by:

- Creating comprehensive program to identify and provide information that engineers in developing countries require to meet energy, water, food, health and other basic human needs
- Generating global education programs on sustainable development for students and practicing engineers, and encouraging engineers to become environmental generalists."

"Athenians, we need money and without money nothing can be done" shouted the ancient orator.

Our Federation had always the financial problem, in the center of its attention. John McKenzie tried hard for years to improve our financial situation. The opinion of a Task Group, formed in 1999, and supported by the Executive Council, was that the most favorable sources of increased finance were:

- Obtaining more Associates by each National Member acting as the recruiter in the country concerned and thereby obtaining some National advantage;
- Every Standing Committee pursuing self-help with vigor as far as it can;
- Associating WFEO meetings with exhibitions and persuading the exhibition Organizers to contribute to WFEO as the result of sponsorship;
- To try to obtain royalties through sponsorship of congress, seminars and exhibitions.

In the longer term all Members and especially International Members should try to introduce new members to WFEO and to act as the advocates of WFEO."

The profit of our work in the fields as above was not very important, mainly because the majority of International Members and National Members had not WFEO among their priorities.

The real total cost of our Federation is much higher than this shown in our balance, because our Members spend money to send representatives to our General Assemblies and other meetings, to host our Standing Committees, to print our Bulletins. But even this total cost is not very important, especially in comparison with the high and noble goals of our Federation.

In the beginning of the last two-year period (2001-2003), our financial situation was stable, without special problems. Then the parity between Euro and USD started to change continuously. Today the rate is 1Eur=1,1493USD. An event we could not anticipate, which is an additional burden for our balance because the contributions of our Members are in USD and our expenses, in Paris, are in Euros. My personal view is that our financial policy must be conservative. In any case (even if this means reducing or stopping some activities), we must have at any moment, the possibility and the monetary reserves to finance the administrative cost of WFEO for one year ahead.

I propose a small increase, 5%, in the contributions of our Members in the OECD countries, (the richest ones), in order to assist in the participation, in our General Assemblies and other meetings, of our Members from the poorest African Countries. We need to hear their voices and views on our common problems. At the same time, we will continue our efforts, as proposed by the 1999 Task Group.

I believe truly, we will fulfill with success our goals, in the next two-year period, 2003-2005.

Stefanos I. Ioakeimidis Treasurer of WFEO

Report of the Executive Director by Pierre-Edouard de Boigne

Staff

The staff of the Secretariat benefits since late 2002 with the much needed addition of Leszek Bialy who, after demonstrating his abilities in assisting ICSU in the preparation of the WSSD, took in charge the Communication function and prepared an adequate website for WFEO.

This also allowed to bring assistance to the Tunisian Order of Engineers in the preparation of the Tunis Congress, General Assembly and of the Geneva Summit on the Information Society (WSIS).

Regrettably, this increase of the permanent staff came at a time when the exchange rate of the Euro (in which most expenses are made) to the US Dollar (in which subscriptions are called) significantly deteriorated, thus increasing the risk of overspending the 2003 budget.

Accommodation

The continuing pressure from UNESCO to reduce the office space put at the disposal of NGOs resulted in squeezing them all at the end of 2002 in one common building, where common facilities (meeting rooms, photocopiers etc.) hardly compensate for the reduction in the standing, number and surface of our office rooms.

Financial situation

The financial reserves of the Federation have now returned to an acceptable level, and "end-of-month" problems are no longer the Executive Director's nightmare! However constant pressure to encourage the members to settle their subscriptions in time is still needed and efforts are to be maintained to obtain a better commitment of the members as well as their implication in the recruitment of more members or Associates.

The budgets for 2004 and 2005 were difficult to balance as a consequence of the above elements, and in addition to a general adjustment (5%) of the subscription for 2005 it will be necessary to ask the most affluent members to voluntarily increase their subscriptions in 2004 and 2005, thus acknowledging the benefit they get from the low US \$.

Contacts with the members

The Federation's Web site is now fully operational, and this makes relations with the members much easier. It also allows answering the many inquiries on the Federation received from external persons or potential members. The Executive Director had to

limit his travels abroad to reduce the expenses, but endeavours to meet the representatives of member organisations whenever they visit Paris.

The task of the Secretariat has been greatly facilitated by the confidence of the President, President-Elect, Executive Council members and member organisations. The whole Paris staff joins me in assuring them all of our gratitude for their constructive and indulgent assistance, and of our dedication to the Federation and to the whole engineering community.

Rapport du Délégué Général par Pierre-Edouard de BOIGNE

Personnel

Le personnel du Secrétariat bénéficie depuis la fin de 2002 de l'arrivée, très attendue, de Leszek Bialy qui, après avoir démontré ses capacités en assistant l'ICSU pour la préparation du Sommet Mondial de Johannesbourg, a pris en charge la fonction Communication et a mis en place le site web dont la FMOI avait tant besoin. Sa présence a aussi permis d'apporter une assistance à l'Ordre des Ingénieurs Tunisiens pour la préparation du Congrès de Tunis, de l'Assemblée Générale et du Sommet de Genève sur la Société de l'Information (WSIS).

Malheureusement, cette augmentation du personnel permanent est survenue au moment où le taux de change du Dollar américain (qui sert à appeler les cotisations) par rapport à l'Euro (monnaie dans laquelle la plupart des dépenses sont faites) s'est significativement détérioré, augmentant ainsi le risque de dépasser le budget 2003.

Installations

La pression continue de l'UNESCO pour réduire les espaces mis à la disposition des ONGs a abouti à les concentrer toutes à la fin de 2002 dans un bâtiment unique, où les équipements mis en commun (salles de réunions, photocopieurs etc.) compensent difficilement la réduction du standing, du nombre et de la surface de nos bureaux.

Situation financière

Les réserves financières de la Fédération ont maintenant retrouvé un niveau "acceptable", et les problèmes de fin de mois ne hantent plus les nuits du Délégué Général! Il faut quand même maintenir une pression constante pour encourager les membres à régler leurs cotisations à temps, et s'efforcer d'en obtenir un plus grand engagement et une forte implication dans le recrutement de nouveaux membres comme d'Associés.

Les budgets pour 2004 et 2005 ont été difficiles à équilibrer pour les raisons rappelées ci-dessus et, outre un ajustement général (5%) des cotisations pour 2005 il sera nécessaire de demander aux membres les plus aisés d'augmenter volontairement leurs cotisations en 2004 et 2005, en reconnaissance du bénéfice qu'ils tirent du faible niveau du dollar américain.

Contacts avec les membres

Le site web de la Fédération est maintenant pleinement opérationnel, et ceci facilite considérablement les relations avec les membres. Cela permet aussi de répondre aux nombreuses demandes sur la Fédération reçues de personnes extérieures ou de membres potentiels. Le Délégué Général a du limiter ses déplacements à l'étranger pour réduire les dépenses, mais il s'efforce de recevoir les représentants des organisations membres chaque fois qu'ils passent à Paris.

La tâche du Secrétariat a été grandement facilitée par la confiance du Président, du Président-Elu, des membres du Conseil Exécutif et des organisations membres. Toute l'équipe de Paris se joint à moi pour les assurer tous de notre gratitude pour leur aide

constructive et indulgente, et de notre dévouement à la Fédération et à toute la communauté des ingénieurs.

COMMITTEE ON EDUCATION AND TRAINING (CET) 2002-03

János Ginsztler, Chairman

The Committee met in Moscow (September 2001), in Bahrain (April 2002) and in Nashville, TN (June 2003).

The members of the Committee on Education and Training (CET) accomplished a significant amount of work in pursuit of their goals: to improve engineering education and training at all levels, to ensure the quality of graduates all over the world.

They participated and lectured at different national and international conferences all over the world and prepared professional reports for their Engineering Federations and for their governments.

Issue number 8 of "IDEAS" was published in November 2001 on "Internationalisation of Engineering Education". Issue number 9 of "IDEAS" was published in November 2002 on "Quality of Engineering Education". Significant professional articles of outstanding authors from Greece, Switzerland, Turkey, United Kingdom, United States of America, Argentina, Australia, Germany, Italy, Czech Republic and Hungary are to be found in these issues. The 10 th. issue is under preparation, the main theme of it will be "Future Directions of Engineering Education and Continuing Engineering Education". Further contributions to the 10 th issue are welcome till 20th October, 2003.

Our Committee actively participated in the preparation and organisation of the 6th World Congress on Engineering Education (Nashville, TN, USA, June 2003), - supporting the work of the ASEE- which was opened by Professor Lyle Feisel and by Professor Jose Medem, who underlined -among others- the importance of international expertise for engineers and mutual recognition across borders. The Congress proceeded with keynote presentations and breakout sessions on three tracks: Continuing Education and Its Delivery, International Recognition of Qualifications, and Developments in Teaching and Learning. It concluded with summaries of papers that had been submitted to an electronic conference held prior to the Congress, and a briefing for international participants on the Current Status and Future Directions of Engineering Education in the United States.

(See: http://www.asee.org/conferences/interanational2003/)

We have played active role in different international events, organised by UNESCO, UPADI, FEISEAP, FEANI, FEBRAE, ABET, SEFI, UATI, ICSU and others, dealing with the new challenges of engineering education. Tasks -following from the Bologna agreement- were widely discussed. Links with other WFEO Standing Technical Committees were strengthened.

Our CET representative participated at the UNESCO WFEO Expert Workshop on "Technology for Poverty Eradication and Development" (Paris, 23 May 2002) and reported about the role and possibilities of the WFEO CET in the above-mentioned theme.

We are planning -among others- to deal with mutual recognition of qualifications, including the bilateral recognition; and to deal with accreditation of

courses including postgraduate courses and protection of the title of engineer. We plan our contribution to the fulfilment of tasks following from the Ubuntu declaration.

The activity of our CET was continuously supported by the leaders of the Hungarian Engineering Federation (MTESZ: Prof.Pál Michelberger, Prof.Tamás Zettner), by the State Secretariat of Research and Development of the Hungarian Ministry of Education (Prof.Gábor Náray-Szabó, Prof.Gábor Szabó, Dr. András Siegler) and of WFEO.

CIC Achievements during the current term (September 2001- October 2003)

Over the last two years, the CIC has been working towards putting into practice the plan of activities which was agreed upon at the last WFEO GA held in Moscow in September 2001.

- 1. Expert Group Meeting 1: Tunis, 13-15 November, 2001
- 2. Expert Group Meeting 2: Tunis, 19-22 June, 2002
- 3. Cooperation between WFEO (CIC) and ISC-UNIDO
- 4. Preliminary workshop for the World Engineering Congress on the Digital Divide: Tunis, 12-13 April, 2001
- 5. Participation in the World Summit on the Information Society
- 6. World Engineering Congress preparation.
- 7. Website and publications

1) Expert Group Meetings

The CIC, jointly with the International Centre for Science and Technology (ICS/UNIDO) and the Tunisian National Authority has organised two expert Group Meetings in Tunis. The first one was held in November 2001 under the theme of "Innovation and Competition in Information and Communication and Regulatory Issues". The second was held from the 19th to the 22nd of June, and addressed the theme of "Wireless Web Applications in Mediterranean Countries Technologies and Regulatory Issues".

These meetings were attended by representatives of several regulatory authorities from North African and European countries.

2) Cooperation between WFEO / CIC and UNIDO/ICS

The past CIC term was marked by the setting up of a long term cooperation with the Trieste based International Council for Science and Technology. Two agreements were signed, as part of which the CIC was committed to organizing the EGM mentioned above, and the UNIDO committed to providing the CIC with funds to finance these meetings.

3) World Summit on the Information Society (WSIS)

During the past two years the CIC has been playing an active role within the WSIS preparatory process. In this regard, the CIC took part in the preparatory meetings 1-2-3 held successively in Geneva, July 2002, February 2003 and September 2003.

In the Prepcom 2, the CIC was chosen as a member of the WSIS Civil Society Bureau representing the Science and Technology family. The CIC also participated in the WSIS intersessional meeting held in Paris in July 2003. On that occasion, the CIC Chairman Kamel Ayadi delivered a statement at the plenary session on behalf of the Scientific and Engineering Community.

4) World Engineering Congress on the Digital Divide

The CIC activities were mainly dedicated to preparing the World Congress on the Digital Divide which will be held in Tunis 14-16 October, simultaneously with the WFEO General Assembly.

This Congress was recognised by the ITU as one of the preparatory events for the WSIS. The Congress main objective is to elaborate the engineers' viewpoint on the Digital Divide, which will be presented to the WSIS.

5) Publications and Website undate

Over the last two years, the CIC has published the following documents:

- 2nd and 3rd issue of "Infogineer".
- The two EGM proceedings in electronic and hard format.
- The Congress brochure and first announcement
- The Congress poster (in two versions)

Some of these documents were circulated widely among WFEO national members.

• The CIC has also continuously updated its website.

COMMITTEE ON ENGINEERING & ENVIRONMENT (CEE) 2002-2003

Ganesh P. Lal, Chaiman

1. ROLE OF THE COMMITTEE

The role of the Committee on Engineering and the Environment is to develop through appropriate activities and education, a world-wide understanding and commitment to sustainable development and encourage pursuit of those programmes. Technology has to develop to increase efficiency in the use of resources so that gap between natural resources and the increasing demand may match. This requires clear understanding, commitment and education for practicing "Sustainable Development".

2. REPORT

This is the second report of the present Committee on Engineering and Environment (CEE). The earlier report was presented at the Moscow General Assembly. During the period under report, only one meeting of the Committee was convened at Acapulco on 30 September – 1st October 2002. However, the Chairman could not travel to Mexico due to visa problem.

2.1 **Publication Of CEE Newsletter**

The publication of CEE quarterly Newsletter was regularly printed in English, French & Spanish and widely circulated. The Committee seeks the co-operation from all concerned to send News items and ideas to make it more interesting and meaningful.

2.2 **CEE Website**

The Committee's Website (http://www.wfeo-cee.org) already launched earlier is being regularly updated. The site gives some basic informations, Newsletter extracts, forthcoming events etc. to cater to the needs of the professionals in the cause of Sustainable Development.

2.3 **Publication of Monograph**

As a part of the Committee's efforts in pursuing the principles of Sustainable Development it has published a Monograph titled "Towards Sustainable Development: Country Papers 2002" containing articles from China, New Zealand, Sri Lanka, UK, USA and India. This Monograph has been sent by post to all concerned in WFEO. The Committee's efforts have been acknowledged and appreciated by all concerned. The Committee would wish to publish 2nd Volume of this with country reports of other countries.

2.4 World Congress on Natural Disaster Mitigation on 19 – 21 February 2004, India

This Congress is being organized by The Institution of Engineers (India) under the aegis of the World Federation of Engineering Organizations (WFEO). This has been co-sponsored by many International and National Organizations, Govt. of India, Corporate Bodies, NGOs etc. The Committee is giving guidance to this Congress.

Prof Jose Medem, President, WFEO heads the International Advisory Committee which met on 23rd October 2002 at New Delhi under his Chairmanship and reviewed the progress of the organizational work. The Organising Committee is steered by Prof G P Lal. Other functioning Committee have also been constituted and all are working in tandem to make this event a great success

The Congress programme has been formatted for three days with an exhibition taking place concurrently on "Disaster Mitigation and Management" where delegates will have adequate opportunity to visit the exhibition. 1st Information brochure and 2nd Information Brochure

containing Call for Papers and Registration Form have been sent to all concerned across the world eliciting quality papers on the sub-themes from prospective authors/delegates from each country. Proposals for distinguished keynote addresses on any sub-theme are also most welcome. An essay programme has been desiged to encourage young professionals below 30 years of age, to focus their attention on Disaster Management. Best papers will be given suitable awards besides waiving of registration fees. We have been receiving good response form all over the world. Members are requested to give wide publicity of this important world event for larger participation from their respective countries.

2.4 World Engineering Convention (WEC) 2004

The Committee has taken appropriate action to propagate about the World Engineering Convention 2004 to be held at Shanghai through its Newsletter and separate communications. The Indian Member Committee of WFEO has announced a token cash price of Rs. 25,000/- to the author for Selected article from India by this Convention to encourage presentation of quality paper.

2.6 **Publication of CEE-WFEO Compendium**

The Committee is now working to bring out a Compendium on the activities of the CEE for last decade. Materials which are important, relevant and of interest to Committee's work has been collected and collated for publication. A message of good-will has already been received from President Dr. Jose Medem Snajuan. Message are awaited from Engr. William J Carroll and Engr. Conrado Bauer, Past Presidents, Dato Lee Cheong, President-elect, WFEO and Engr. David Thom, Past President, CEE-WFEO for inclusion in this important publication. The compendium will be formally presented at the General Assembly at Tunis.

3. PRESIDENT CEE / WFEO VISITATIONS AND PARTICIPATIONS

On behalf of WFEO, the Chairman, CEE associated / participated in the following :-

- 26 28 Oct 2001: Presented a paper at International Seminar on "Engineering Management for Accelerated Development in South & Central Aisa" jointly organized by The Institution of Engineers (Srilanka) and FEISCA. Also participated in 95th Annual Sessions of IESL and also the Executive Committee meetings of FEISCA at Colombo on 26 28 October 2001 and also presented papers on "Natural Disasters".
- 28 30 Nov 2001 : International Conference on "Infrastructure Development in India" sponsored by DFID, organized jointly by the IE(I), the Institution of Civil Engineers, UK and Consulting Engineering Services (India) Pvt Ltd at Kolkata on.
- 13 February 2002 : Attended the Execution Board meetings of WFEO at Paris.
- Sept Oct 2002: Made visits and met head of the organizations of the Institution of Engineers (HKIE), Japan, Society of Civil of Engineers (JSCE), American Society of Civil Engineers (ASCE), Institution of Electrical and Electronics Engineers (IEEE), USA, Institution of Mechanical Engineers (IME), USA, Institution of Electrical Engineers (IEE), London and met the heads of those organizations, conveying the goodwill message of WFEO and requesting for greater involvement in WFEO activity in their respective countries, Prof Lal discussed matters of common interest of these professional institutions.
- 23 October 2002: President, WFEO, Prof Jose Medem Sanjuan addressed the meeting of the International Advisory Committee of World Congress on Natural Disaster Mitigation held on 23 October 2002 at New Delhi under his Chairmanship.
- 26 28 Oct 2002: Prof Jose Medem Sanjuan, President WFEO participated in the Executive Committee Meeting of Federation of Engineering Institutions of South & Central Asia (FEISCA) at Colombo on 26-28 October 2002.

- 5-7 January 2003: Attended the Annual Convention of IE, Bangladesh and informal meeting of the Executive Committee of FEISCA.
- 3 5 April 2003: Participated in the 8th Annual Convention of the Nepal Engineers Association (NEA) and FEISCA meet at Kathmandu. During the Convention, a competition was organized and awards to the young engineers for best paper presented on the "Role of Engineers in Poverty Alleviation" was made on behalf of the CEE, WFEO.
- 23 24 May 2003 : Participated in workshop on "Engineering & Technology for Poverty Eradication" organized by WFEO & UNESCO at Paris.

4. CEE MEETING AT TUNISIA

A meeting of the Committee has been scheduled on 13th October 2003 at Tunis. Tentative Agenda has been sent to all members.

5. <u>ACKNOWLEDGEMENT</u>

The Committee wishes to express its grateful thanks for the guidance, support and cooperation received from President, WFEO, Prof (Dr) Jose Medem Sanjuan, President-elect, Dato Lee Yee Cheong, Executive Director, P E Boigne, WFEO, Paris and members of the Committee throughout the period.

The Committee also wishes to express its appreciation to the Institution of Engineers (India) and the Secretariat for extending all the infrastructural facilities.

Committee on Technology (ComTech) 2002-2003

Don V. Roberts, Chaiman Leadership

Long-serving President, **James W. Poirot**, retired at the end of 2001. His replacement, **Don V. Roberts**, agreed to serve the remainder of his term.

Regional Vice Presidents are: Dr. Delon Hampton, North America; Dr. Jorge Spitalnik, Latin America; Eng. Barry Grear, Asia Pacific; Eng. Loukas Loukas, Europe/Russia; Eng. Yahya Adra, Mid-East/S. Central Asia; Eng. Mohamed Rafik Meghji, Africa. Other staff are: Eng. Michael Sanio, Deputy to the chairman; Jane Moran Alspach, Managing Director; Steve and Shaun Poirot, Web Team.

New Secretariat

Puerto Rico's proposal to host ComTech was approved in principle and will be voted on by the 2003 General Assembly. To ensure a smooth transition, ComTech's President and Managing Director met with members of the Puerto Rico leadership team to develop activities to bring about Puerto Rico's engagement and training. A March 2003 meeting was held between current ComTech leaders and the Puerto Rico delegation to discuss specifics of transitioning.

World Water Vision

Dr. Joseph Delfino, former Regional Vice President, North America, led ComTech's engagement in the World Water Vision by attending Stockholm Water Week and the Second World Water Forum. There, he helped bring engineers to the table on the international dialogue in this 25-year project. He was followed, in 2003, by **Emilio Colon**, who attended the Third World Water Forum in Kyoto.

Communication proposal

Chairman Don V. Roberts drafted a proposal to launch a 10-year project to improve communications among engineers, to facilitate incorporation of principles of sustainability into practice. It is hoped that some aspects of the proposal can be launched to support what is being accomplished by CIC.

United Nations Commission on Sustainable Development

Since 1997, ComTech has represented WFEO to the UN. Beginning in 1998, ComTech has organized engineering experts panels for the UNCSD annual meetings. Written reports of the case studies presented have been broadly disseminated. In 2002, ComTech participated in WSSD either through nominating speakers to panels, providing input to reports, and, most notably, publishing *Engineers and Sustainable Development*, a Rio +10 report published in brochure and CD. This publication has been well-received, accolades have come from university professors who are using the report as reference material in engineering curricula and from companies that are using the report as resource material for strategic planning or training programs. Efforts to update the CD continue.

Michael Sanio represented ComTech at the WSSD and is leading efforts to unite the American engineering societies in follow on activities that support sustainability. ComTech assisted in creating a joint partnership with the Sustainable Alternatives Network.

Energy Task Force

Led by ComTech's Regional VP for Latin America, **Jorge Spitalnik**, the Task Force has set up three groups to draft a state-of-the-art report on: wind, solar and hydrogen.

"Engineering for a Better World: Engineering and Technology for International Development"

To promote capacity building in engineering and technology for poverty eradication, secure and sustainable social and economic development

The World Federation of Engineering Organizations and the American engineering community jointly coordinated and presented this proposal to the United Nations Education, Scientific and Cultural Organization (UNESCO) on the occasion of its General Conference in October 2003.

This paper outlines a proposed program "Engineering for a Better World - Engineering and Technology for International Development" to promote capacity building in engineering and technology for poverty eradication, secure and sustainable social and economic development. The proposal presented by the World Federation of Engineering Organizations has been prepared in conjunction with the American Association of Engineering Societies and the National Academy of Engineering, in cooperation with the Basic and Engineering Sciences Division of UNESCO.

This proposal was developed following the announcement in September 2002 that the US will re-join UNESCO in October 2003. The commitment of the US engineering community, with the support of their government, offers the engineering community worldwide an opportunity to play a central role, with UNESCO, for capacity building in engineering, particularly in the developing countries. Engineering associations and member states are invited to support this proposal as an integral element of the program and budget of UNESCO.

The application of knowledge in engineering and technology underpins and drives sustainable social and economic development. Engineering and technology are vital in addressing basic human needs, poverty reduction and promotion of secure and sustainable development in developing countries, and to bridge the "knowledge divide" and promote intercultural dialogue

and cooperation. At the same time, however, there is increasing international concern regarding the number of young people going into engineering, the consequences for future capacity in engineering, particularly in developing countries and effects on social and economic development.

The overall focus of this proposed UNESCO Program in "Engineering for a Better World" is to strengthen human and institutional capacity in engineering and technology in developed and developing countries through international cooperation. The Program aims at enhancing the capacity of developing member states to address poverty eradication and promote sustainable social and economic development, and the capacity of UNESCO to facilitate this process.

Program activities will include advocacy and advisory services, information gathering and publication, curricula development and delivery, continuing education, distance and virtual learning and associated expert meetings, workshops, conferences and institutional cooperation in partnership with the public and private sectors, professional bodies and NGOs.

The proposed Program is for a period of 6 years, from 2004, with possible extension. The program will require at least three core professional and support staff, complemented by seconded professional staff, consultants, fellows and interns. The Program budget is estimated at \$2.5million per year - \$15million over 6 years. The Program would be part of the Basic and Engineering Sciences Program of the Natural Sciences Sector of UNESCO, and would seek to develop active linkages across the other sectors of UNESCO in education, social sciences, culture and communications.

The program would be results-based, with an Advisory Board drawn from the international engineering and development communities. The Program could be based at UNESCO headquarters in Paris or, following UNESCO policy for decentralization, located elsewhere to take advantage of proximity to international organizations, potential donor agencies and foundations, universities, professional organizations and NGOs.

« Les Ingénieurs pour un monde meilleur :

L'ingénierie et la technologie pour le développement international »

Favoriser le renforcement de capacité dans les sciences de l'ingénieur et la technologie pour éliminer la pauvreté, et obtenir un développement socioéconomique sûr et durable.

La Fédération Mondiale des Organisations d'Ingénieurs et la communauté américaine des ingénieurs ont conjointement préparé et présenté cette proposition à l'Organisation des Nations Unies pour la Science, l'Education et la Culture (UNESCO) à l'occasion de sa Conférence Générale en octobre 2003.

Ce document décrit une proposition de programme : « Les Ingénieurs pour un monde meilleur : l'ingénierie et la technologie pour le développement international » en vue de favoriser le renforcement de capacité dans l'ingénierie et la technologie pour l'élimination de la pauvreté et un développement socio-économique sûr et durable. La proposition présentée par la Fédération Mondiale des Organisations d'Ingénieurs a été préparée en liaison avec l'Association Américaine des Sociétés d'Ingénieurs et l'Académie Nationale des Technologies des Etats-Unis, en coopération avec la Division des sciences fondamentales et des sciences de l'ingénieur de l'UNESCO.

Cette proposition a été développée après l'annonce en septembre 2002 que les USA rejoindront l'UNESCO en octobre 2003. L'engagement de la communauté des ingénieurs des USA, avec l'appui de leur gouvernement, donne à la communauté des ingénieurs du monde entier l'occasion de jouer un rôle central, avec l'UNESCO, pour le renforcement de capacité dans l'ingénierie, en particulier dans les pays en voie de développement. Les associations d'ingénieurs et les Etats membres sont invités à appuyer cette proposition comme élément intégrant du programme et du budget de l'UNESCO.

L'application des connaissances dans l'ingénierie et la technologie soutient et conduit le développement socio-économique sûr et durable. L'ingénierie et la technologie sont essentielles pour répondre aux besoins de base de l'humanité, éliminer la pauvreté et promouvoir un développement sûr et durable dans les pays en voie de développement, et pour réduire la « fracture du savoir » et encourager le dialogue et la coopération interculturels. En même temps, cependant, il y a une inquiétude croissante dans le monde à propos du nombre de jeunes entrant dans les carrières d'ingénieur, des conséquences pour la future capacité technologique, en particulier dans les pays en voie de développement, et les effets sur le développement socio-économique.

Le but de ce programme proposé à l'UNESCO « Les Ingénieurs pour un monde meilleur » est de renforcer par la coopération internationale la capacité humaine et institutionnelle en ingénierie et en technologie dans les pays développés et en voie de développement. Le

programme vise à augmenter la capacité des Etats membres en développement pour arriver à éliminer la pauvreté et pour favoriser leur développement socio-économique durable, ainsi que la capacité de l'UNESCO à faciliter ce processus.

Les activités de programme incluront des recommandations et des services de conseil, le rassemblement et la diffusion d'information, le développement et la mise en œuvre de programmes d'études, la formation permanente, la formation à distance et les réunions d'experts qui y sont associées, les ateliers, les conférences et la coopération institutionnelle en partenariat avec les secteurs publics et privés, les organisations professionnelles et les O.N.G.

Le programme proposé s'étend sur une période de 6 ans, à partir de 2004, avec prolongation possible. Le programme exigera au moins un noyau de trois cadres et le personnel de soutien, complétés par du personnel détaché, des conseillers, des bénévoles et des stagiaires. Le budget du programme est estimé à \$2.5million par an - \$15million sur 6 ans. Le programme ferait partie de la division des sciences fondamentales et sciences de l'ingénieur du secteur des sciences exactes et naturelles de l'UNESCO, et chercherait à développer des liens trans- culture et les communications.

Le programme aurait des objectifs précis, avec un comité consultatif choisi parmi les communautés internationales de l'ingénierie et du développement. Le programme pourrait être basé au siège de l'UNESCO à Paris ou, suivant la politique de décentralisation de l'UNESCO, localisé ailleurs pour bénéficier de la proximité d'organismes internationaux, de sources de financement potentielles, d'universités, d'organismes professionnels et d'O.N.G.

AUDIT REPORTS

RapportS d'Audit

for the period from 1st January 2002 to 31 December 2002 pour la période du 1^{er} janvier 2002 au 31 décembre 2002

Rapport d'Audit interne des comptes de la Fédération Mondiale des Organisations d'Ingénieurs

J'ai vérifié à Paris, au siège de la FMOI, les comptes de la FMOI pour l'exercice 2002. J'ai noté que ces comptes, certifiés par le cabinet CMS Experts Associés, sont établis en accord avec les règles de la FMOI

J'ai aussi vérifié que les dépenses nécessaires ont été faites conformément aux décisions de l'Assemblée Générale et du Conseil Exécutif. Je considère notre situation financière comme bonne.

Je tiens à remercier notre Délégué Général Pierre de Boigne pour la qualité des comptes et sa parfaite disponibilité.

En conclusion je recommande que nos comptes et nos finances pour 2002 soient acceptés par le Conseil Exécutif.

Lausanne, le 10 juin 2003

Jean-Claude Badoux

Auditeur interne

Internal Audit Report of the accounts of the World Federation of Engineering Organisations

I have checked in Paris at the headquarters of WFEO the accounts of WFEO for the year 2002. I noted that these accounts certified by the Auditors CMS Experts Associés, are established in accordance with the rules of WFEO.

I have also verified that the necessary expenses have been made in conformity with the decisions of the General Assembly and the Executive Council. I consider our financial situation as good.

I wish to thank our Executive Director Pierre de Boigne for the quality of the accounts and the perfect disponibility.

In conclusion I recommend our 2002 accounting and finances to be accepted by the Executive Council.

Lausanne, June 10, 2003

Jean-Claude Badoux Internal Auditor

Report of the Auditors/Rapport sur l'examen des comptes

for the period from 1st January 2002 to 31 December 2002 pour la période du 1^{er} janvier 2002 au 31 décembre 2002

We have audited the financial statements in accordance with Auditing Standards.

In our opinion, the financial statements give a true and fair view of the state of the Federation's affairs at 31 December 2002 and of its net profit for the year then ended.

Paris, 20 May 2003

Stéphane Sznajderman Auditor

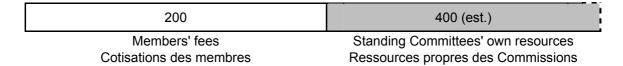
Nous avons examiné les comptes en effectuant les diligences prévues par les normes définies par l'Ordre des Experts Comptables.

A l'issue de nos travaux, nous n'avons pas relevé d'éléments remettant en cause la régularité et la sincérité des comptes arrêtés au 31 décembre 2002 de votre Fédération.

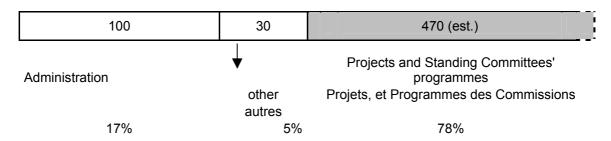
Paris, le 20 mai 2003

Stéphane Sznajderman Expert Comptable

Resources / Ressources



Expenditures / Dépenses



	2002 US \$	2002 €	2001 US \$
CURRENT ASSETS/ACTIF			
Deposits/ Dépôts	64	61	55
Debtors/Créances	30467	29016	1216
Investment/Titres	155948	148522	77430
Bank/ <i>Banque</i>	17295	16471	38560
Prepayments/Charges d'avance	83	79	838
TOTAL	203858	194150	118043
CURRENT LIABILITIES/PASSIF			
Creditors/Dettes	24514	23347	12353
Defered income/Produits d'avance	13379	12742	0
TOTAL	37893	36089	12353
Difference/Différence	165964	158061	105690
Financed by /Financée par :			0
Balance at January 1st/ Report à			
nouveau	130225	124024	72419
Profit of the year/Gain de l'exercice	35738	34036	33326

	2002 US \$	2002 €	2001 US \$
INCOME/RESSOURCES	·		<u> </u>
Subscriptions/Cotisations	198637	220708	191800
Associates/Associés	19148	21276	2436
IDNDR Recovery/Remboursements	1728	1920	1159
UNESCO Contracts/Contrats	25436	28262	0
Interests and misc./Intérêts et divers	10440	11600	14095
TOTAL	255389	283766	209490
EXPENSES/DEPENSES			
Administration	111112	115128	108728
Général activities/Activités générales	19504	21668	17072
Standing Committees/Comités permanents	63200	70222	55400
Promotion	779	866	2171
UNESCO Workshops/Séminaires	17357	19285	0
IDNDR	2497	2774	469
Bank charges and Exch. diff.	10306	19786	
Rounding up/Arrondis		1	
TOTAL	224755	249730	183840
Profit of the year/Gain de l'exercice Average exhange rate/Taux de change	30634	34036	25650
moyen	0.95		0.90

WFEO STRATEGIC PLAN 2001 – 2003 PLAN STRATEGIQUE 2001 – 2003

VISION

WFEO is the world wide leader of the engineering profession and cooperates with other national and international institutions in developing and applying engineering for the benefit of humanity.

MISSION

- Promote the advancement of the world engineering profession and expand the interaction and the mutual understanding and cooperation among engineers of different countries.
- Provide information and leadership to the engineering profession on issues of concern to the public or the profession.
- Serve society and be recognized by national and international, public and private sector organizations
 and the public at large, as a respected and valuable source of advice and guidance on the policies,
 interests and concerns that relate science, engineering and technology (S.E.T) to the human and
 natural environment.

- Make information on engineering available to the countries and peoples of the world.
- Facilitate relationships between government, business and people by contributing an engineering dimension to discussions on policies and investments.
- Foster peace, socio-economic security and sustainable development among all countries of the world, through the proper application of engineering knowledge.

LONG-TERM OBJECTIVES

- Develop through appropriate engineering activities and education, a world-wide understanding and commitment to sustainable development.
- Pursue those programs and activities within Agenda 21 of the UNCED World Summit that are applicable to engineering.
- Encourage the formation and strengthening of national and regional associations of engineers.
- Promote societal benefits through the dissemination of information and the communication and cooperation among engineering organizations around the world, and with institutions of science, industry, universities, and other organizations and agencies of the United Nations Organization.
- Foster the assessment, sharing and transfer of technology.
- Support programs to improve the quality of engineering education and training, and the formulation and harmonization of procedures for the accreditation of engineering courses.
- Contribute to facilitate freer trade in engineering services, and regional and international recognition
 of engineering qualifications.
- Enhance protection, security and health of the public by developing guidelines for the management
 of risk and the prevention, reduction and mitigation of damages due to technological and natural
 disasters.
- Provide equal opportunities for all to enter the engineering professio

National and Affiliated Members/ Membres Nationaux Affiliés

Afghanistan Islamic Association of Afghan Architects and Engineers

Argentina Union Argentina de Asociaciones de Ingenieros

AustraliaThe Institution of Engineers (Australia)AustriaÖsterr Ingenieur und Architekten-Verein

Bahrain Bahrain Society of Engineers

Bangladesh BoliviaThe Institution of Engineers, Bangladesh
Sociedad de Ingenieros de Bolivia

Brazil Federacao Brasileira de Associaoes de Engenheiros (FEBRAE)

Bulgaria Fédération des Unions Scientifiques et Techniques de Bulgarie (FNTS)

Chile Instituto de Ingenieros de Chile

China China Association for Science and Technology (CAST)

Colombia Sociedad Colombiana de Ingenieros

Cuba Union de Arquitectos y Ingenieros de la Construccion de Cuba

Cyprus Cyprus Professional Engineers' Association

Czechia Cesky Svaz Vedecktotechnickych Spolecnosti (CSVTS)

Ecuador Sociedad de Ingenieros del Ecuador Egypt Egyptian Engineering Association

El Salvador Asociacion Salvadorena de Ingenieros y Arquitectos

France Conseil National des Ingénieurs et Scientifiques de France (CNISF)

Germany Verein Deutscher Ingenieure (VDI)

Ghana Ghana Institution of Engineers
Greece Chambre Technique de Grèce
Hong Kong (China) The Hong Kong Institution of Engineers

Hungary Fédération des Sociétés Scientifiques et Techniques MTESZ)

IndiaThe Institution of Engineers, IndiaIndonesiaPeresatuan Insinyur IndonesiaIraqThe Iraqi Engineers' Union

Ireland The Institution of Engineers, Ireland

Israel Association of Engineers and Architects in Israel

Italy Consiglio Nazionale degli Ingegneri

JapanScience Council of JapanJordanJordan Engineers' Association

Kenya Institution of Engineers

Korea The Korean Federation of Science and Technology Societies (KOFST)

Kuwait Kuwait Society of Engineers

Lebanon Ordre des Ingénieurs et Architectes du Liban

LibyaLibyan Syndicate of EngineersMalaysiaThe Institution of Engineers, MalaysiaMauritiusThe Institution of Engineers, Mauritius

Mexico Union Mexicana de Associaciones de Ingenieros (UMAI)

Morocco Union Nationale des Ingénieurs Marocains

Nepal Nepal Engineers' Association

New Zealand The Institution of Professional Engineers
Nigeria The Nigerian Society of Engineers

PakistanInstitution of Engineers, PakistanPalestineGeneral Union of Palestinian Engineers

Peru Sociedad de Ingenieros del Peru Philippines Philippine Technological Council Poland Naczelna Organizacja Techniczna

Portugal Ordem dos Engeneiros

Puerto RicoColegio de Ingenieros y Agrimensores de Puerto RicoRomaniaGeneral Association of Engineers in Romania (AGIR)

Russia Union of Scientific and Engineering Associations, Russia (USEA)
Slovakia Association of Slovak Scientific and Technological Societies (ZSVTS)

South AfricaThe Society for Professional EngineersSpainInstituto de la Ingenieria de EspanaSri LankaThe Institution of Engineers, Sri LankaSwitzerlandComité National Suisse de FEANI/FMOISyriaOrder of Syrian Engineers and Architects

Taiwan (China) Chinese Institute of Engineers

Tanzania The Institution of Engineers, Tanzania **Tunisia** Conseil de l'Ordre des Ingénieurs de Tunisie

Turkey Union of chambers of Turkish Engineers and Architects

Uganda Uganda Institution of Professional Engineers

UAE Society of engineers

UK The Institution of Civil Engineers

USA American Association of Engineering Societies (AAES)

Uruguay Associacion de Ingenieros del Uruguay

Venezuela Colegio de Ingenieros

Yemen Syndicate of Yemeni Engineers

Yugoslavia Union of Engineers and Technicians of Yugoslavia

Zimbabwe The Zimbabwe Institution of Engineers

WFEO Regional Members

WFEO INTERNATIONAL MEMBERS

Commonwealth Engineers' Council (CEC)
European Federation of National Engineering Associations (FEANI)
Federation of African Organisations of Engineers (FAOE)
Federation of Arab Engineers (FAE)
Federation of Engineering Institutions of Southeast Asia and Pacific (FEISEAP)
Federation of Engineering Institutions of South and Central Asia (FEISCA)
Pan American Federation of Engineering Associations (UPADI)

Regional Council of Co-ordination (RCC)

Union of Scientific and Engineering Associations (USEA)

WFEO ASSOCIATES

DISTINGUISHED ASSOCIATE

Consolidated Contractors Group

ASSOCIATES

The Arab Contractors (Egypt)

NON-PROFIT MAKING ASSOCIATES

Institution of Civil Engineers (UK)

European Council of Civil Engineers (ECCE)

Société Européenne pour la Formation de l'Ingénieur (SEFI)

Latin American Engineering Association for Labour Security (ALAIST) Federal Council of Engineering, Architecture and Agronomics) (CONFEA) Internat. Gesellschaft für Ingenieurpädagogik (IGIP)

INDIVIDUAL ASSOCIATES

Mr. Hadi Majid (Irak) Eng. Sh. Yogendra Prasad (India)

Dipl. Eng. Hermann Sturm (Germany)