



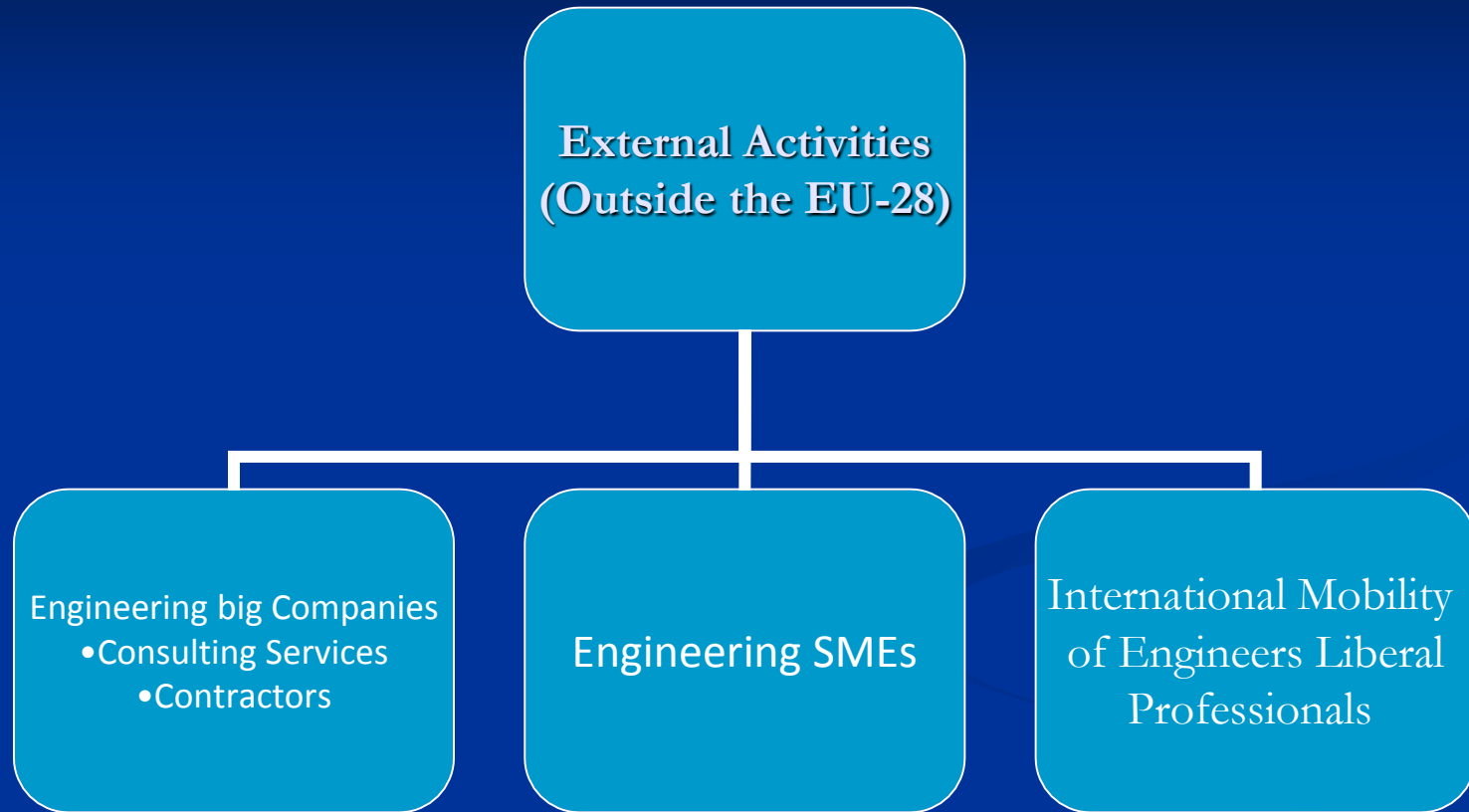
2nd European Engineers' Day

Internationalization of Engineering Activities

by Civ Eng NTUA Vassilis P. Economopoulos
ECCE Former President

Brussels, 20th November 2014

Internationalization of Engineering Activities



EU AS A GLOBAL PLAYER

THE ROLE OF ENGINEERING ORGANISATIONS

EU as a Responsible GLOBAL PLAYER

- Committed to achieving the Millenium Development Goals (MDG)
- Promoting and Supporting Democracy, Peace, Solidarity, Stability, Poverty Reduction and Prosperity
- Priority at EU immediate neighborhood, East and South
- Supporting Poverty Alleviation in the world, by concentrating support on fewer countries (like Sub-Saharan Africa) and fewer sectors like sustainable and inclusive growth and good governance

MULTIANNUAL FINANCIAL FRAMEWORK (EU-28) 2014-2020

(EUR million)

COMMITMENT APPROPRIATIONS	2014 (2011 prices)	2015	2016	2017	2018	2019	2020	Total 2014-2020 (2011 prices)	Total 2014-2020 (current prices)
1. Smart and Inclusive Growth	60,283	61,725	62,771	64,238	65,528	67,214	69,004	450,763	508,921
1a: Competitiveness for growth and jobs	15,605	16,321	16,726	17,693	18,490	19,700	21,079	125,614	142,130
1b: Economic, social and territorial cohesion	44,678	45,404	46,045	46,545	47,038	47,514	47,925	325,149	366,791
2. Sustainable Growth: Natural Resources	55,883	55,060	54,261	53,448	52,466	51,503	50,558	373,179	420,034
of which: Market related expenditure and direct payments	41,585	40,989	40,421	39,837	39,079	38,335	37,605	277,851	312,735
3. Security and citizenship	2,053	2,075	2,154	2,232	2,312	2,391	2,469	15,686	17,725
4. Global Europe	7,854	8,083	8,281	8,375	8,553	8,764	8,794	58,704	66,262
5. Administration	8,218	8,385	8,589	8,807	9,007	9,206	9,417	61,629	69,584
of which: Administrative expenditure of the institutions	6,649	6,791	6,955	7,110	7,278	7,425	7,590	49,798	56,224
6. Compensations	27	0	0	0	0	0	0	27	29
TOTAL COMMITMENT APPROPRIATIONS	134,318	135,328	136,056	137,100	137,866	139,078	140,242	959,988	1,082,555
as a percentage of GNI	1.03%	1.02%	1.00%	1.00%	0.99%	0.98%	0.98%	1.00%	1.00%

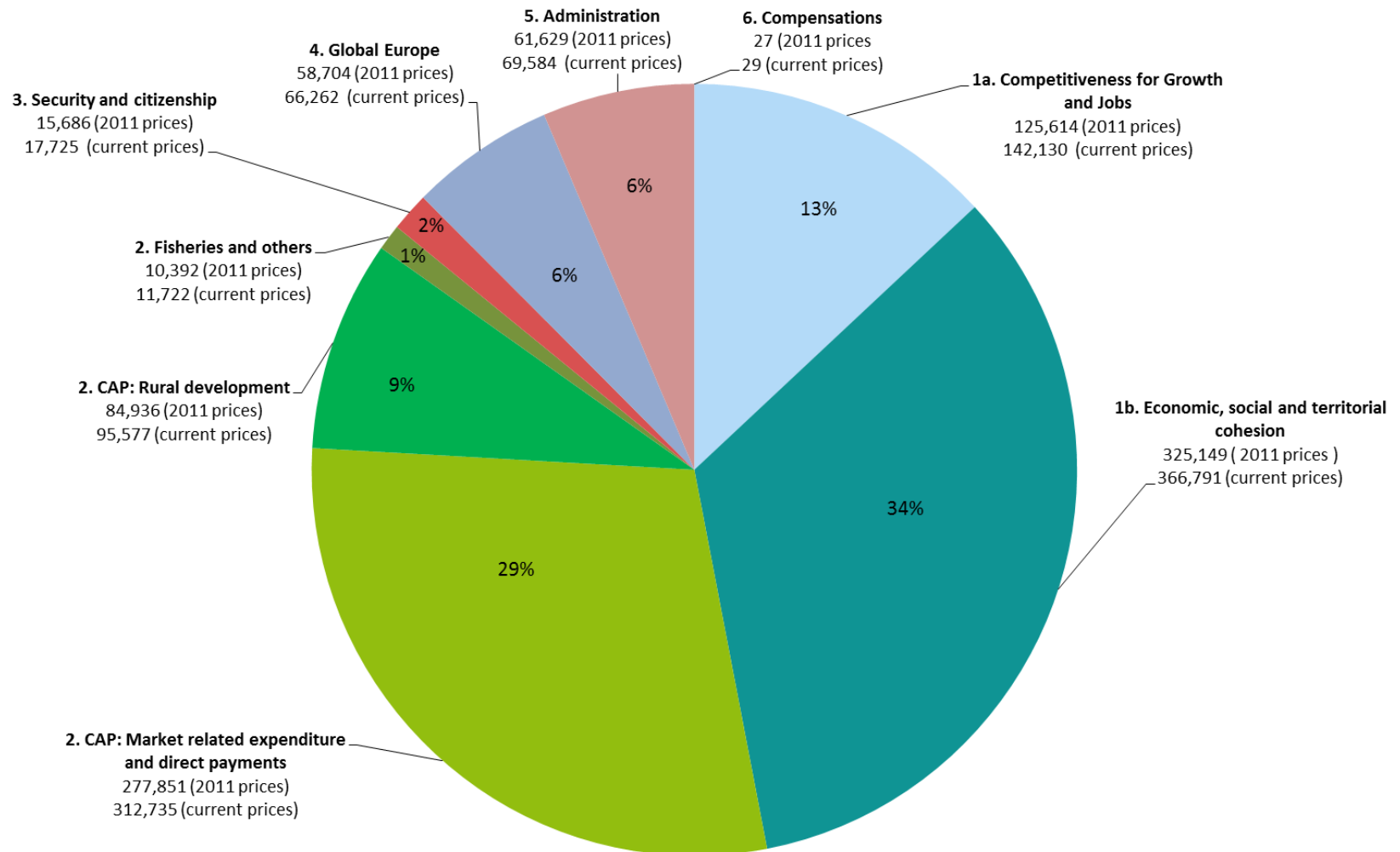
TOTAL PAYMENT APPROPRIATIONS	128,030	131,095	131,046	126,777	129,778	130,893	130,781	908,400	1,023,954
as a percentage of GNI	0.98%	0.98%	0.97%	0.92%	0.93%	0.93%	0.91%	0.95%	0.95%
Margin available	0.25%	0.25%	0.26%	0.31%	0.30%	0.30%	0.32%	0.28%	0.28%
Own Resources Ceiling as a percentage of GNI	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%

OUTSIDE THE MFF	2014	2015	2016	2017	2018	2019	2020	Total 2014-2020 (2011 prices)	Total 2014-2020 (current prices)
Emergency Aid Reserve	280	280	280	280	280	280	280	1,960	2,209
European Globalisation Fund	150	150	150	150	150	150	150	1,050	1,183
Solidarity Fund	500	500	500	500	500	500	500	3,500	3,945
Flexibility instrument	471	471	471	471	471	471	471	3,297	3,716
EDF*	2,951	3,868	3,911	3,963	4,024	4,093	4,174	26,984	30,506

* For information purposes only. The EDF is not funded by the EU budget.

MFF 2014-2020

Commitment appropriations - EUR million



The EU combines different types of support to countries in need. It provides funding in the form of grants to support projects and organisations furthering its development objectives. It also offers public contracts and provides budget and sector support.

Grants and contracts

Grants are direct financial contributions provided to organisations, or to projects carried out by them. Most of the time, the Commission attributes them through calls for proposals.

Contracts are awarded through tendering procedures to purchase services, supplies or works.

Both contracts and grants are awarded for activities contributing to specific development goals.

Budget support

Budget support is an important tool to finance partner countries' development strategies. It consists of financial transfers to the national treasuries, and also involves policy dialogue and measures to assess the use made of these funds.

Budget support helps to deliver aid adapted to the needs identified by the countries themselves.

To benefit from budget support, a beneficiary country must demonstrate commitment to the fundamental values of human rights, democracy and the rule of law.

Sector support

A large part of the development funding made available by the EU targets specific sectors in partner countries. This so called 'sector approach' increases the effectiveness of aid by supporting government-owned strategies.

Sector support gives a boost to sector programmes run by partner governments. The funding can take on the form of sector budget support, grant and contract funding, or 'common basket funding' pooling resources from different donors.

Euro-African Partnership for infrastructure



- Total population of Africa with no access to drinking water: 42 %
- Total population with no access to basic sanitation: 60 %
- Total population with no access to electricity: more than 80%
- Total potential hydroelectric capacity converted into electricity: 7 %

(data by EU African Partnership for Infrastructure, 31.10.2007)

Euro-African Partnership for infrastructure

A partnership for meeting challenges

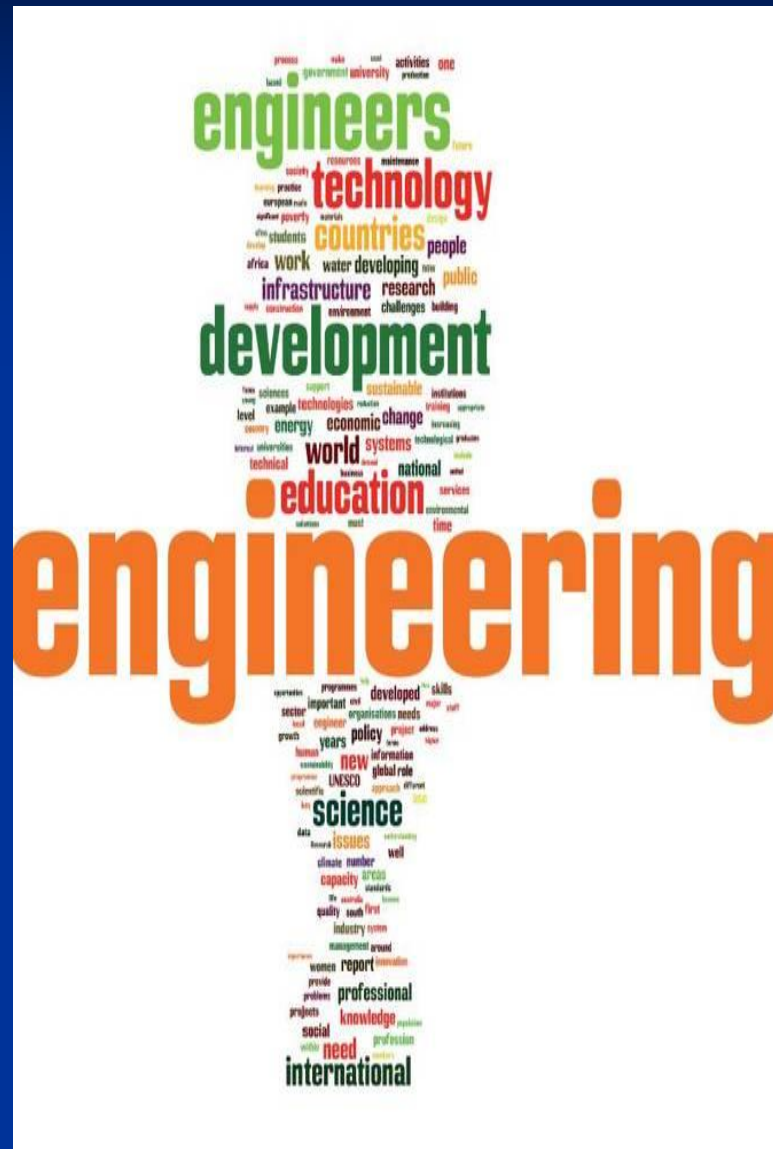
Faced with these challenges, the EU is launching a partnership with Africa for the development of large infrastructure networks in the continent. The partnership is based on the EU strategy for Africa and on the objectives defined by the short-term action plan in the field of infrastructure (i-STAP) of the African Union (AU) and NEPAD (New Partnership for Africa's Development).

The partnership is based mainly on infrastructure allowing interconnection at continental and regional level in Africa, namely:

- **Transport** (road and railway networks, ports, maritime and river routes, air transport), in order to reduce costs and improve the quality of services;
- **Water and sanitation networks**, in order to improve the management of water resources at local, national and cross-border basin level, and also access to drinking water and adequate sanitation facilities;
- **Energy** in order to allow network connection, distribution in rural areas and improvement of cross – border connections
- **Information and Communication Technologies (ICT)** to ensure adequate access to affordable technologies by supporting regulatory reform, capacity building and broadband infrastructure development

The partnership supports physical infrastructure investment, institutional development measures and capacity building, as well as support measures for the political and regulatory framework at national level.

UNESCO ENGINEERING ACTIVITY (UEI)



- **UEI is working with Member States, international partners and program experts to strengthen engineering education through curricula development and capacity building. It is also incorporating sustainability topics into engineering education by highlighting the need for green technology in engineering applications. In line with UNESCO's global priorities on Africa and Gender Equality, UEI focuses on women and the African region in their activities and programmes.**
- **UEI brings together the engineering capacity from existing organizational units in an innovative, pragmatic and cost-effective manner. Through these partnerships, UEI assists Member States in tackling contemporary challenges, such as the need to develop clean technologies, to reduce industrial pollution, to manage safe drinking water supplies, and to create affordable technologies for other social needs. UEI seeks to increase the public's understanding of engineering, and its effective contribution to the socio-economic development of societies.**

“Small Business, Big World a new partnership to help SMEs seize global opportunities”

The objectives of EU strategy are:

- To provide SMEs with easily accessible and adequate information on how to expand their business outside the EU.
- To improve the coherence of support activities.
- To improve the cost-effectiveness of support activities.
- To fill existing gaps in support services.
- To establish a level playing field and provide equal access for SMEs from all EU Member States.
- The Commission will play a crucial role in the coordination and governance of this process, also through setting up a periodic ‘SME Internationalisation Forum’ and with a specific focus on this topic at the regular meetings of Member States’ SME Envoys. In all these activities the representatives of the private sector will be involved.

This EU strategy sets out six fields of action:

- 1. Strengthening and mapping the existing supply of support services
- 2. Creating a single virtual gateway to information for SMEs
- 3. Making support schemes at EU level more consistent
- 4. Promoting clusters and networks for SME internationalisation
- 5. Rationalising new activities in priority markets
- 6. Leveraging existing EU external policies

Euro-Mediterranean Cooperation

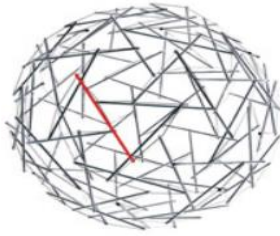
The Union for the Mediterranean is a multilateral partnership aiming at increasing the potential for regional integration and cohesion among Euro-Mediterranean countries.

The UfM focused on six priority areas:

- De-pollution of the Mediterranean
- Maritime and land highways
- Civil protection
- Alternative energies: Mediterranean solar plan
- Higher education and research, Euro-Mediterranean University
- The Mediterranean Business Initiative

Euro-Mediterranean Industrial Cooperation Program

- Improving the business climate, promoting entrepreneurship, innovation and SMEs
- Implementation of the Euro-Mediterranean Enterprise Charter and adaptation to the Small Business Act for Europe
- Encourage SMEs to innovate, export and become international
- Establishment of a large pan-Euro-Mediterranean market for industrial products
- Agreements on the conformity assessment and acceptance of industrial products (ACAAs)
- Technical obstacles to trade and notification of the technical rules to the WTO
- Standardisation
- Regional agreement on the pan-Euro-Mediterranean rules of preferential origin (PEM agreement)
- Sectoral activities Creative industries
- Steering, Monitoring and Adaptation of the Work Programme, Dissemination of Results



1ST CONFERENCE
OF THE MEDITERRANEAN ENGINEERS
COOPERATION RESEARCH DEVELOPMENT

I



CONSIGLIO NAZIONALE INGEGNERI

8-10 May 2014



INTENT STATEMENT OF COOPERATION

CONSEIL NATIONAL
MAROC

Union Nationale des Ingénieurs Marocains
Union Nationale des Ingénieurs Marocains

Engineering Association of
Mediterranean Countries

Co-operation between the
Engineering Associations of Mediterranean Countries (EAMC)
under the auspices of World Federation of Engineering Organizations (WFEO)

STATEMENT OF INTENT

1
MOTIVATION

People living around the Mediterranean basin are now facing great political and economic challenges.
An important key for social and economic development of this region depends largely on close co-operation
among the Mediterranean Area countries.
Engineers and their Professional Associations must play an important role in sharing and transferring knowledge and
technologies in increasingly technologically advanced and engineering societies.

2
OBJECTIVES

We, the undersigned Engineering Associations of the Mediterranean Countries (EAMC), wish and commit ourselves to
establish general bases for continuous co-operation to develop the Mediterranean societies and to collaborate on initiatives,
studies, activities and events aiming at the achievement of this goal.
EAMC consider this statement as the general framework on the basis of which
the mutual understanding and co-operation can be extended.
The strategic co-operation lines, which could be further developed, are set out in the attached Annex.

Signed in Lecc on 8 may 2014

CONSEIL NATIONAL
MAROC

Union Nationale des Ingénieurs Marocains
Union Nationale des Ingénieurs Marocains

Engineering Association of
Mediterranean Countries

Co-operation between
the Engineering Associations of Mediterranean Countries (EAMC)

**ANNEX
STRATEGIC COOPERATION LINES**

CNI, under the patronage of WFEO, intends to develop partnerships
between Engineering Professional Associations
of countries surrounding the Mediterranean.

Focus will be on the following programs:

Establishment of a network to facilitate the free movement of engineers in the Mediterranean area;

Exchange of information on national engineering education and professional systems; contributions to international
surveys and reports including the UNESCO Global Engineering Assessment project;

Establishment of Technical Committees on thematic topics of interest to the Mediterranean Area in collaboration
with the FAE and WFEO Standing Committees of relevance: promotion of sustainable and renewable energies, energy
efficient lighting, and eco-friendly designs;

Sharing and transferring innovative technologies in particular those related to safe water and sanitation, water recycling
systems and waste treatment;

Safeguard of the cultural and social heritage; promotion, restoration and renovation of the built environment.
Climate change adaptation of infrastructure.

CONSEIL NATIONAL
MAROC

Union Nationale des Ingénieurs Marocains
Union Nationale des Ingénieurs Marocains

Engineering Association of
Mediterranean Countries

SIGNATORIES

World Federation of Engineering Associations (WFEO)
Eng. Marwan Abdelhadi (President)

Arabian Association of Consulting Engineers
Eng. Syed Kabe (President)

Union Nationale des Sciences et Technologies Algériennes
Son Abdelhak (Président Général)

Technical Committee of Engineers
Eng. Youcef Z. Khoumrouk (Président) Eng. Sofien Achiche

Technical Committee of Engineers
Prof. Abd. Alshab (Adjoint au Président) Eng. Yousif (Président)

Technical Committee of Engineers
Eng. Youcef Z. Khoumrouk (Président) Eng. Chaitou Spetli

Ordre des Ingénieurs et Architectes du Liban
Eng. Khalid Elshab (Président)

Union Syndicale des Ingénieurs
Prof. Abd. Alshab (Adjoint au Président) Eng. Daniel Mohamed Aljoudi

Chambre de Commerce de Malte
Eng. Youcef Z. Khoumrouk (Président) Eng. Marwan Abdelhadi

Union Nationale des Ingénieurs Marocains
Eng. Badr Alami (Président)

General Union of Technical Engineers
Eng. Marwan Abdelhadi (Président Général)

Syrian Association of Engineers
Eng. Ghassan Alami (Président)

Syrian Engineers Syndicate
Prof. Abd. Alshab (Adjoint au Président) Eng. Haidi Goud

Ordre des Ingénieurs Tunisiens
Eng. Ismail Elili (Adjoint au Président) Eng. Alireza Elili

L'Association des Ingénieurs de Tunisie
Eng. Alireza Elili (Président) Eng. Alireza Elili



World Engineering Forum (WEngF)

The **World Engineering Forum** WEngF will be an independent International Organisation committed to promoting the Engineering Knowledge and Practices for Sustainable Development worldwide. WEngF will serve the Public Interest and the Needs of People Everywhere.

"Committed to promoting Engineering worldwide for the Sustainable Development" is our message.

The concept and the initiative for the establishment of WEngF is the World Federation Engineering Organization (WFEO) **President Mr. Marwan Abdelhamid.**

The WEngF will be the vehicle for facilitating cooperation and enhancing collaboration between policy makers, and the private and public sectors to implement Sustainable Development of the Urban Environment and Infrastructure. Primary products of the WEngF will be global policy forums and a recognition and rewards programs.

The WORLD ENGINEERING FOUNDATION ORGANIZATION

The WORLD FEDERATION OF ENGINEERING ORGANIZATIONS agreed to establish the WORLD ENGINEERING FORUM WEngF much like the World Economic Forum/WEF Davos but devoted to Engineering Global Challenges such as:

- ✓ Make energy accessible and affordable
- ✓ Provide access sanitation and to safe water
- ✓ Establish and improve transportation infrastructure
- ✓ Provide access to the internet and health informatics
- ✓ Advance personalized learning
- ✓ Deliver tools for scientific discovery

PURPOSE

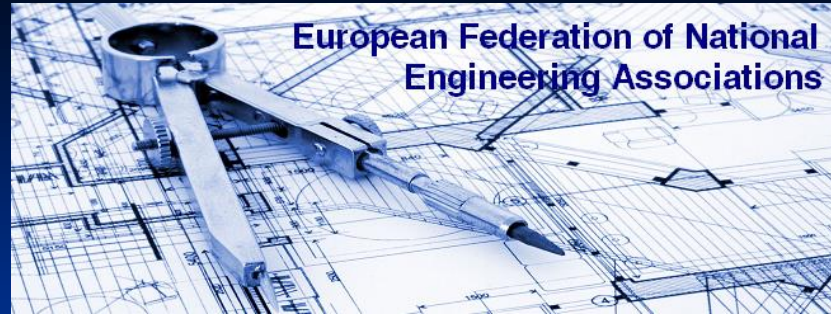
The purpose of the forums is to advance the state of knowledge and application of engineering practice to benefit humanity by promoting global and regional cooperation by providing a single independent voice for engineering. The forums would engage engineering, science, academic, political, financial leaders and stakeholders. The forums would be developed by experienced engineers, innovators and entrepreneurs.

The WORLD ENGINEERING FOUNDATION ORGANIZATION

The Membership –The Stakeholders of WEngF will be consisted of:

- Engineering Contractors and Consulting Companies
- World Bank, Regional and Bilateral Development Banks
- UN Agencies (UNDP, UNESCO, UNIDO etc)
- International and National Engineering Organisations
- Industry Partners
- Engineering and Technical Universities
- Non Governmental Organisations

The WEngF will actively engage all stakeholders committed to advancing Sustainable Development. It will initiate a broad programme of annual activities globally to build Economic Prosperity for the Future.



FEANI provided services for Engineers' International Mobility

- FEANI Index
- EUR ING title
- Engineering Card

First ECCE leaflet 1985-1987



Membership

Membership is open to organisations from the EU and EFTA countries. A President & Vice Presidents are selected from the members. The Secretary General is located at the Institution of Civil Engineers, London.

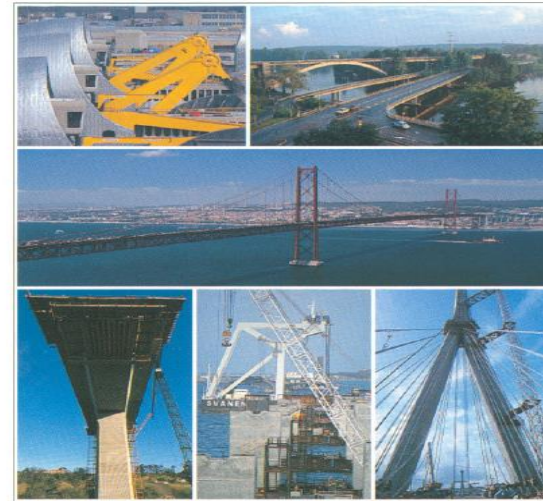
The current membership is made up of members from DENMARK, FINLAND, FRANCE, GERMANY, GREECE, IRELAND, PORTUGAL, SPAIN and UNITED KINGDOM. A number of other countries send observers. Subscriptions are paid according to a scale based on population and G.D.P.

For more information contact

The Secretary General ECCE - 1-7 Great George Street, London, SW1P 3AA
Telephone: 0171-839 9944 or 0171-976 7007 Fax: 0171-233 3114.

Photography: Grant Smith / New Civil Engineer / Atlanta, Inside Poly

European Council of Civil Engineers



Transport Systems

Ethics/Standards

The Environment

Liability

New Technology

Offering
A focal point for Civil Engineering
Impartial Advice
Development of the professional Civil Engineer

Providing a Civilised Life

ECCE ASSOCIATE MEMBERSHIP

European Council of Civil Engineers (ECCE): Civil Engineers at the Heart of Society
Building Life Quality and a Sustainable Environment

COMMON GROUND COLLABORATION BETWEEN PROFESSIONAL ORGANIZATIONS AND INTERNATIONAL BUSINESS

Business Development – Human Resources Critical Factor

- WIN-WIN STRATEGIES (LOCAL AND INTERNATIONAL COMPANIES, PEOPLE AND COMPANIES)
- MOVING PROFESSIONALS, NOT ONLY CAPITALS (THERE ISN'T ENOUGH IN DEVELOPING COUNTRIES)
- TRANSFER KNOW-HOW AND EXPERTISE (NOT TO FACE IN THE SAME STONE)
- PROFITABILITY AND EFFICIENCY. BEST AVAILABLE TECHNOLOGIES
- USING LOCAL ABILITIES. TRAINING AND CAPACITY BUILDING
- PROMOTING A REAL HUMAN AND SOCIAL PROGRESS
- FIGHTING AGAINST CORRUPTION

Conclusions

- EU should strengthen the policies and the relevant legislative, administrative and financial measures & framework concerning the support of the international external activities of the Engineering SMEs. It is an indispensable pillar for the sustainable competitiveness of the Engineering construction sector and its enterprises.
- International European and National Engineering Organizations are main stakeholders for the facilitation of the international activities and the international mobility of individual Engineers & Companies and they should undertake permanent initiatives as well as for the bolstering Engineering Business.

“The company understands who the core people are that hold the intellectual property. Their positions will be defended, as without them there is no business on the other side of the downturn.”

KPMG's 2009 global survey, Respondent, New Zealand

Thank You for your Attention!

Vassilis P. Economopoulos

ECCE Former President

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