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Mediterranean Engineering Schools'  
Network (RMEI)

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## **MEDITERRANEAN ENGINEERING SCHOOLS' NETWORK (RMEI)**

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**The Mediterranean region is in a unique position making it the ideal interface between Europe, Africa and the Orient. It is situated at a multicultural crossroads, which is a source of creativity. There is to be found here, around the Mediterranean Sea, a real Mediterranean identity, which is both historical and multicultural. This famous sea, the cradle of glorious civilizations and great change, is a vector of exchange and economic activity.**

**For many decades the Mediterranean basin has known an economic, social and environmental situation, which is worsening rapidly (a gap in economic growth, demographic imbalance, even unemployment among the highly educated, exclusion to an extent that there is an outburst of both political and religious extremism and growing pollution of the Mediterranean Sea). Globalization, which is now being realized by directing the profits emerging from the opening up of frontiers towards the countries which are the most competitive, risks making matters worse and causing even more disruption.**

**Very conscious of the stake, the engineering schools and the universities of technology have decided to join forces to contribute to the solving of these economic, social and environmental problems which are becoming much too serious for the Mediterranean area. PACA region (Provence, Alps, and the Riviera Coast), the Bouches du Rhone General Council, The Town of Marseille, The Chamber of Commerce and Industry of Marseille-Provence and the European Economic Community sharing wholly in the analysis of this project and which are all carrying out strong political drives as far as these problems are concerned, have decided to participate in this alliance.**

**The idea of setting up a network originated from this specific point in time and so this Mediterranean Engineering Schools' Network (RMEI) was founded.**

**The RMEI is an Engineering Schools and Universities of Technologies' network situated around the Mediterranean sea which was created on the 28<sup>th</sup> of June 1997, by the ESIM Group of Schools, Chamber of Commerce and Industry of Marseille-Provence, France.**

**From the outset, the RMEI was designed to remain completely open to new memberships coming from institutions very involved in the sustainable development of the Mediterranean Basin. Since its creation, many other engineering schools, universities of technology and similar institutions have been integrated into the network by co-option. It already has 36 active members, all engineering schools, and universities of technology situated around the Mediterranean area, as well as 13 “associated members” which help to set up its actions.**

**By means of the RMEI constitution, its founder members expressed their will to contribute together to reply to the major stakes for the Mediterranean Basin:**

- **A demographic and economic imbalance north/south imposing a strong economic and balanced growth, notable based up on the dynamism of companies and new activities**
- **Worldwide economic competition which imposes on companies and all those in the field of technology recourse to the most adapted methods as well as to the corresponding human competence and skills**
- **A necessary - sustainable development - approach so as to take into account significantly environmental problems which particularly concern the Mediterranean Basin (i.e. protection of the sea and the coast, quality of the continental waters, quality of the air in ‘hot’ towns**

**In playing the trump cards specific to the Mediterranean region:**

- **A multicultural place propitious for all kinds of exchange and above all that of international economic activity**
- **A present crossroads of cultures, which can but be a source of creativity;**
- **situated in a unique position making it the interface between Europe, Africa, and the East**

**And counting on increased efficacy by the setting up of the network of engineering schools and universities to:**

- **speed up the exchange of ideas, experience, people, students, and resources;**
- **design and bring into operation partnership actions, for example as concerns answering European and International tenders.**

**With this aim in mind, the fundamental objectives of the RMEI fixed by its constitutive convention are:**

- **Contribute, through partnerships, to the quantitative and qualitative development of higher education training and technological research within the Mediterranean Basin;**
- **Accompany the sustainable economic development of the Mediterranean regions, in making it easier for their territory and companies to have access to the most adapted technologies through transnational actions in technological higher education training, applied research, technology transfer and support in the creation of new activities;**
- **Put the competence and resources of the engineering schools and universities of technology, members of the network and their partners, at the service of finding solutions to the thorny social, environmental problems of the Mediterranean Basin, such as those concerning the protection of the sea and the coastline, the quality of the continental water, the quality of the air and the treatment of waste in the great urban centers;**
- **Reinforce the link-ups between the international networks of establishments of higher education and that of establishments, members of the RMEI, to increase their pedagogical, scientific, and technological relations;**
- **Encourage the ‘actors’ within the network to reflect and work in unison to find solutions that will help towards a glorious renaissance of the Mediterranean region.**

**To reach these founding objectives, the RMEI proposes:**

- **To increase cooperation, to have common think-tanks, to share experiences and methods between members of the network and other outside institutions involved in the fields of:**
  - **Common core and continuing education training for engineers and other fields in high technology;**
  - **In technological research concerning this type of training;**
  - **Close technological support for companies and company creators;**
  - **Support through the technology of sustainable economic and social development within their territories.**
- **Encourage the exchange of people, teachers, researchers, students (double diplomas, academic exchange periods, internships, end-of-studies projects, teaching modules, co-tutelage of thesis or co-support, summer schools, study trips, scientific, technical and pedagogical events) and of administrative and technical staff. These staff exchanges will take into account the rules and laws in force in the country of origin and those of the host country. They could be the object of special conventions, drawn up between the concerned establishments, and in which the terms and conditions are laid down precisely.**
- **To design and set up common action projects which could above all include multi-partner actions as concerns co-delivered training, in the preparing together of new training, in sharing systems of multi-media or other tele-learning activity, cooperative technological research, creation and putting online support structure of the innovation**

within which will be defined, above all, who is the leader and administrator for each of them.

- To make exchanges easier and/or the putting at disposal between members, and should the occasion arise of institutions outside the network, of information, documents, publications as well as means concerning material and software. Such exchanges and/or the putting at disposal will be stipulated in special conventions, between members and, if necessary, other outside institutions involved.

8 action groups have been created since 1997, they are very dynamic and designed to set up partnerships that achieve concrete accomplishment of their projects. They operate on the basis of an exchange of ideas, experiences, people, students, and resources.

The 5 first groups show some examples of actions that have been accomplished. The 3 following groups are just starting their activities.

#### **Group No 1**

**Animator: Istanbul Technical University (Turkey)**

**Creation of new training and steps towards a pedagogy of quality.**

- Exchanges about a pedagogical approach adapted to the globalization of the society and to the economic, social and environmental challenges which are the entrepreneurial capacity, taking into account a sustainable development approach, ethics and humanism...);
- Designing of new channels of training, appropriate programs, and appropriate pedagogical methods which have been put to test and proved in certain schools and universities;
- Establishing a reference of management through a quality approach which applies to engineering schools, drawn from ABET (an American reference) and from EFQM (a European reference).

#### **Group No 2**

**Animator: Excuela Tecnica Superior de Ingenieros Industriales de Madrid (University Polytechnique- Spain)**

**ICT and Engineering training.**

**Experimental actions in the Mediterranean area of pedagogical tools used in ICT: multimedia data banks, multimedia pedagogical tools, tele-training, self-education by computer...**

- Action RM-edu answering the tender EUMEDIS within the framework of the action AVICENNE: preparation of a professional common core and continuing education multimedia tender in methods for the engineer and management, in conjunction with existing or in the process of being created networks and using a multimedia data bank. 3 fields have been chosen:
  - Training in advanced technology;
  - Training in company management;

- **Training in innovation management.**

### **Group No 3**

**Animator: Ecole Mohammadia d'Ingenieurs. Rabat, Morocco.**

**Innovating actions for the exchange of students and staff.**

- **Setting up new exchange conventions concerning students accomplishing an academic period, double diplomas (example ESIM and Technion institute of Technology) or 'sandwich' years.**

### **Group No 4**

**Animator: Ecole Nationale des Ingenieurs de Sfax, Tunisia with the support of Marseille Innovation**

**Incubators and company start-ups:**

- **Help with the creation of and the development of such structures, with setting up of a network of exchange of methods, experiences, opportunities of partnerships between company creators, companies and laboratories, training of operators... Creation of the first start-up in the Ecole Nationale Supérieure de Sfax in Tunisia.**
- **Participation in TEEE.**

**The Euro-Mediterranean company student-trophy has been created to enhance the entrepreneurial flair and the capacity to innovate of the students in Engineering schools and Universities. Open to students in higher education or at a level Bac +3 (PAXA region and RMEI). It awards 4 prizes to the best activity creations, in the fields of economy, Euro-Mediterranean, social and/or humanitarian, culture and /or sport and/or entertainment. In 2001, one of the prize-winners came from the Ecole Nationale des Ingenieurs de Sfax in Tunisia and it was a question of a system adapted to existing circuits of production in small and medium-sized companies, and which makes the automatic working of control procedures possible, while keeping in mind the eternal questions of standardization and product quality.**

### **Group No 5**

**Animator: Escola Tecnica Superior d'Enginyers industrials de Barcelona, Spain.**

**The environment and sustainable development:**

- **Creation of a network of reflection, of action, of promotion, and information about the sustainable development approach (in partnership with APDD);**
- **Project for the creation of a Euro-Mediterranean masters in technologies and environmental and sustainable development management.**

### **Group No 6.**

**Animator: Ecole Nationale de l'Hydraulique-Bilda and the Ecole Polytechnique d'Algers, Algeria.**

**Technologies and water management:**

**Group No 7.**

**Animator: Facolta di Ingegneria de Genoa, Genoa-Italy.**

**Innovation technology and technology transfer towards the small and medium-sized companies:**

**Group No 8.**

**Animator: Universite de Patras, Greece.**

**Marine sciences and technology:**

**List of active Members**

- **Algeria**
  - **Ecole Nationale Supérieure de l'Hydraulique (Bilda)/ENSH**
  - **Ecole Nationale Polytechnique (Alger)/ENP**
  
- **France**
  - **Ecole Nationale Supérieure des Mines de Paris**
  - **Ecole Nationale Supérieure des Techniques Industrielles et des Mines d'Ales/EMA**
  - **Ecole Nationale Supérieure d'Arts et Métiers (Aix-en-Provence)/ENSAM**
  - **Ecole Nationale de Synthèses, de Procédés et d'Ingénierie Chimiques d'Aix-en-Provence/ENSSPICAM**
  - **Ecole Supérieure d'Ingénieurs de Luminy (Marseille)/ESIL**
  - **Ecole Supérieure d'Ingénieurs de Marseille/ESIM**
  - **Ecole Supérieure d'Ingénieurs de Nice Sophia-Antipolis/ESINSA**
  - **Ecole Supérieure de Mécanique de Marseille/ESM2**
  - **Ecole Supérieure en Sciences Informatiques (Sophia-Antipolis)/ESSI**
  - **Institut Supérieur d'Electoniques de la Méditerranée (Toulon)/ISEM**
  - **Institut Universitaire des Sciences pour l'Ingénieur de Marseille/IUSPIM**
  - **Institut Universitaire des Systèmes Thermiques Industriels/IUSTI**
  - **Institut des Sciences de l'Ingénieur de Toulon/ISITV**
  
- **Greece**
  - **Université de Patras**
  
- **Spain**
  - **Escola Tecnica Superior d'Enginyers Industrials de Barcelona/ETSEI**
  - **Escuela Tecnica Superior de Ingenieros Industriales de Madrid/ETSII**
  - **Escuela Tecnica Superior de Ingenieros Industriales de Valencia/ETSII**
  
- **Israël**
  - **Technion Institute of Technology (Haïfa)**
  - **Université hébraïque de Jérusalem**
  
- **Italy**
  - **Ecole d'Ingénieurs de la Sapienza (Rome)**
  - **Ecole Polytechnique de Milan**
  - **Faculté d'Ingénieurs – Université de Gênes**

- **Morocco**
  - **Ecole Hassania des Travaux Publics (Casablanca)**
  - **Ecole Mohamadia d'Ingénieurs (Rabat)**
  - **Ecole de l'Industrie Minérale (Rabat)**
  - **Institut National des Postes et Télécommunications (Rabat)/INPT**
  
- **Tunisia**
  - **Ecole Nationale d'Ingénieurs de Sfax/ENIS**
  - **Ecole Nationale d'Ingénieurs de Tunis/ENIT**
  - **Ecole Nationale d'Ingénieurs de Monastir/ENIM**
  - **Ecole Nationale des Sciences de l'Informatique (Manouba)/ENSI**
  - **Ecole Polytechnique de Tunisie (La Marsa)/EPT**
  - **Institut National des Sciences Appliquées et de Technologie (Tunis)/INSAT**
  
- **Turkey**
  - **Istanbul Technical University/ITU**

#### List of Associate Members

- **Armenia**
  - **State Engineering University of Erevan/SEUA**
  
- **France**
  - **Centre d'Océanographie de l'Université de la Méditerranée – CNRS (Marseille)**
  - **Centre d'Enseignement et de Recherche Appliqués au Management (Sophia-Antipolis)/CERAM**
  - **Institut International de Gestion des Projets et Programmes – IGP (Toulon)**
  - **Marseille-Innovation**
  - **Association des Pratiques pour le Développement Durable (Saint-Etienne)/APPD**
  - **Pôle de l'Eau – EA (Aix-en-Provence)**
  - **Ecole de Journalisme et de Communication de Marseille/EJCM**
  - **Fondation Sophia Antipolis**
  - **Ecole de l'Internet (Marseille)**
  
- **Italie**
  - **Communauté des Universités de la Méditerranée (Bari)/CUM**
  
- **Morocco**
  - **Ecole Supérieure de Management de la Qualité (Casablanca)/ESIMAQ**
  
- **All Mediterranean countries**
  - **ASCAME (Association of Mediterranean Chambers of Commerce)**
  - **CUM (Community of Mediterranean Universities)**

**The RMEI has been designed so as to be open to new active or associated members and to new objectives and propositions of actions through permanently requesting ideas. In 2001**

**the RMEI became part of the CUM an official part of UNESCO (United Nations educational, scientific, and cultural organization.)**