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I. FEANI – Organization and Objectives

II. FEANI – Achievements and Activities to foster recognition of qualifications and mobility, in particular the project ENGCARD

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Created September 1951 in Luxembourg by Professional Engineer Organizations from 7 European countries:

Austria, Belgium, Switzerland, Germany, France, Italy, Luxembourg

**Today:**

- 1 FEANI Headquarter/Secretariat General in Brussels
  - linked to

- 1 FEANI National Member in 29 EU countries + Russia
  - linked to

- FEANI Network of
  - > 350 National Professional Engineer and Scientific Organisations
  - representing
  - > 3.5 million European Professional Engineers
Purpose:

• Through its National Members, help the Engineers to improve their career development

• To affirm the professional identity of the Engineers of Europe by
  - ensuring the professional qualifications of Engineers of member countries are acknowledged in Europe and worldwide
  - asserting status, role, and responsibility of Engineers in society
  - safeguarding and promoting the professional interests of Engineers
  - facilitating their free movement within Europe and worldwide

• To strive for a single voice for the engineering profession of Europe, whilst acknowledging its diversity in
  - developing a working cooperation with other international organizations concerned with engineering matters
  - representing the Engineers of Europe in international organizations and other decision making bodies
In this framework, every three years, the Executive Board defines new Strategic Objectives/Strategic Projects.

For the period 2006-2009 the priority areas are:

- EUR-ACE (Accreditation of European Engineering Programmes)
- Improve-consolidate International Role of FEANI
- Implement Professional Card for European Engineers
- Prepare Position Papers on key societal issues

... in addition to the on-going work of the FEANI Committees (EMC, CPDC) and the on-going activities in view of EU relations, finances, communication.
1. The FEANI INDEX

FEANI maintains an INDEX, listing the institutions of engineering higher education in the countries it represents and their engineering programmes, which are recognized by FEANI as fulfilling the mandatory requirements for the EUR ING title.

For a programme to be included in the INDEX, apart from a minimum duration of 3 years (180 ECTS), it has to provide a suitable balance of basic sciences, engineering sciences, and non-technical subjects.

A description of the teaching staff qualifications, in terms of academic degrees and professional experience, and of laboratory facilities used by the programme is also studied as part of the acceptance process.
FEANI: Achievements

- An authoritative source of information about National engineering education systems and institutions in the European countries.

- Contains a list of +/- 1,000 HE institutes with +/- 10,000 engineering programmes accredited by FEANI
2. FEANI EUR ING Title

- A recognition by FEANI of the professional qualification of an Engineer, based on a minimum of 7 years of formation after the secondary education defined by $3U = 2(U/T/E) + 2E$.

  U – a full year HE engineering education *
  T – a full year of training programme
  E – a full year of validated professional engineering experience

* A programme listed in the INDEX
FEANI: Achievements

2. The FEANI EUR ING title

FEANI contribution for promoting Mobility and Recognition: the EUR ING title, designed as a guaranty of competence for professional Engineers

• Establish a framework of mutual recognition of qualifications and facilitate the movement of practicing Engineers within and outside the geographical area represented by FEANI’s member countries

• Provide information about the various formation systems of individual Engineers for the benefit of prospective employers

• Encourage the continuous improvement of the quality of Engineers by setting, monitoring, and reviewing standards
FEANI’s ‘private’ title **EUR ING** criteria:

- **Formation Framework for all Professional Engineers**
- **Sufficient flexibility to meet the individual requirements of its different National Members**

- **7 years of Formation:**
  - Education: **U*** between 3 and 5 years
  - Training: **T**
  - Experience: **E** minimum 2 years

\[
B + 3U = 2U/T/E + 2E
\]

- **The FEANI professional formation framework:**

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* In the INDEX
3.1 EUR-ACE

What is the purpose of the EUR-ACE project?

In order to overcome the difficulties in the mutual recognition of academic and professional qualifications, and facilitate the mobility and trans-national acceptance of engineers

EUR-ACE will “propose a framework for setting up a [single] European system for accreditation of engineering education at the First Cycle and Second Cycle level (as defined within the Bologna process)”

and will thus contribute to establishing the European Higher Education Area ....
FEANI: Achievements

07/2004
Project EUR-ACE 1
Legal Representative: FEANI
Partners: SEFI; CESAER; EUROCADRES; ENQHEEI; ASIIN; CTI; IEI; CoPI; UNIFI; OE; UAICR; RAEE; EC UK

09/2006
New Project EUR-ACE 2
Legal Representative: UNIFI
Partners: ENAEE; FEANI; SEFI; EUROCADRES; EUA; IDA; ASIIN; AUA; CTI; IEI; CoPI; CRUI; NVAO; OE; EC UK; UAICR; MÜDEK
Implementation of EUR-ACE Framework Standards in Europe; Accreditation to be made by accreditation institutes (existing ones and new ones to be set up)

Projects funded by the EU

03/2006
Founding of ENAEE aisbl
Partners: FEANI; EC UK; CTI; BBT; ASIIN; OE; CoPI; UAICR; SEFI; IEI; RAEE; UNIFI; EUROCADRES; IDA;
Project infrastructure and competence to implement EUR-ACE Trademark; Maintain Standards;
Income should come from EU funding, accreditations, partners
Financial Plan:
Staff: 1 Project Manager;
publications, marketing, PR, seminars

03/2006
Two Projects derived from ENAEE with FEANI participation:

PROEAST
Implementation of EUR-ACE Standards in Russia

LEPAC
Implementation in Lebanon
4. ENAEE

(European Network for Accreditation of Engineering Education)

- An association founded on 30 March 2006 together with 12 other Members to build confidence in accreditation of engineering programmes and to promote the implementation of the EUR-ACE Standards and Procedures
5. FEANI Surveys

- An accurate and up-to-date-report on the level of training of Engineers and on the regulations of the engineering profession in Europe, published in the FEANI News Special 10/2005
Results of a FEANI Survey 2005

a)… on Education and Academic Title

- Very difficult to compare title and content of Education between two EU countries

- By today, implementation of the Bologna Declaration has not solved the problem

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Survey on LEVEL OF FORMATION of PROFESSIONAL ENGINEERS
ENGINEERING EDUCATION/FORMATION STRUCTURE and associated PROTECTED TITLES (Academic and Professional)
Results of a FEANI Survey 2005

b)… on Regulating the Access to the Profession

### Survey on Regulations of the Engineer Professions

#### Regulatory Status of the Profession

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<th>Country</th>
<th>Not Regulated</th>
<th>Only Protected Professional Title without any Civil Service taboo</th>
<th>Protected Professional Title with some Tasks reserved for the enrolled disciplines</th>
<th>Educational Engineer or Survey Engineer</th>
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Note: This table shows the regulatory status of engineer professions in various countries, indicating whether protected titles are used, and the presence of reserved tasks.
FEANI: Achievements

Tentative Visualization of the Level of Regulations for the Professions of Engineer in Europe

Legend on Level of Regulations
- Low
- Medium
- High

0 1-2 3-4 5-6 7-8 9-10
6. ENGCARD

- A EU financed project for the development of a European Professional Card for Engineers aimed at promoting the qualification of the European Engineers and at facilitating their mobility - Project in implementation with EUROCADRES
The Project ‘Professional Card’

• Project introduced in the framework of the EU ‘Year of Mobility 2006’ - by FEANI and EUROCADRES

• Step 1: Investigate the feasibility and added value for deploying a Professional Card for Engineers and set up a concept

• Step 2: Implement the concept of a Professional Card – if results of step 1 are positive
FEANI: Achievements

ENGCARD: Goal

MOBILITY Context
- Geographical
- Occupational
- Virtual (teleworking)
- Permanent (installation)
- Temporary (cross borders)
- Free Movement of Workers
- Free Movement of Services

Engineers’ needs
To have their lifelong professional qualifications easily and rapidly recognized at their fair worth and merit all over EU and worldwide

Employers’ / Contractors’ needs
To ease the recruitment/contracting process of qualified engineers and to assure the right profile in an enlarged non harmonized labour market

Nat. Adm. in charge of Recognition needs
To have a trusted instrument to facilitate processing of the recognition procedure and to help to secure quality, security, health and consumer protection

Find a unique and flexible instrument to facilitate those multidimensional MOBILITY issues and to answer to the different STAKEHOLDERS’ NEEDS
FEANI: Achievements

ENGCARD: Concept

Integrated in the EUROPASS framework

NEW

EUROPASS – ENGCARD
SPECIFIC engineering-related information
(Qualifications, Experience, Expertises, Competences, Professional Titles, Licenses, Code of Conduct, Penalties . . . )
(third party certified)

The chipcard contains the Certified Presentation of the Qualifications of the Cardholder in an unambiguous, transparent, condensed and standardized way.

Optionally, it contains an Electronic Professional Signature and also gives access to other mobility services.
7. European Engineers’ Forum

- A one-day yearly event dedicated to presentations and discussions on matters concerning Engineers – organized in the framework of the Hanover Fair

European Engineers’ Forum
16 April 2007
Europe is facing a major deficit in professional engineers:
What measures can be taken to attract young people to Science and Technology?

Europe’s aim is to be more effective in converting the results of research and development into profitable commercial products. Immediate action in all European countries is a prerequisite to achieve the objectives of the ‘Lisbon Agenda’ of jobs and economic growth and to compete with USA, Asia, and Japan. The availability of sufficiently well educated / trained professional engineers in multidisciplinary areas is the key to the achievement of these objectives.

However, in all EU Member States, young people today are refraining from selecting an education in science and technology — this will lead to a dramatic lack of professional engineers in the near future. What are the different stakeholders, including the governments of the EU Member States, doing to motivate and encourage young people to get involved in technological careers? What could and should be done at European level?

Prominent speakers from the European Member States, the EU institutions, industry, and academia will debate and present solutions in order to come up with a framework of actions to be taken at the European level.