

Engineering Deans' Conference – Berlin 2008

EUR-ACE Session

25 February

ENAAEE: a no-profit European Association
EUR-ACE: a pan-European “labelling”
system for accredited Engineering
programmes



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Accreditation of an Engineering Education Programme

(according to EUR-ACE and ENAEE)

- **Result of a process to ensure suitability of programme as entry route to the [*engineering*] profession**
- Periodic assessment against accepted standards
- Peer review of written and oral information by trained and independent panels including academics and professionals
- **Accreditation of programme, not of Department or University**
- Accreditation of education, not of whole formation



**Quality of accredited degrees
guaranteed at all “levels”**

Accreditation of engineering educational programmes as entry route to the engineering profession has been proved to be a powerful tool to improve at the same time academic quality and relevance for the job market.

At present, accreditation of engineering programmes is widespread throughout the world, but historically Europe has been in the forefront.

In France since 1934 the Commission des Titres d'Ingénieur (CTI) is established by law: academia, employers and social stakeholders are represented on a parity basis.

In the UK a similar role has been played since the 19th Century by the Professional Institutions of the different engineering disciplines (branches): hence, accreditation was (and is) distinguished by discipline. In 1981 the overarching Engineering Council (EC-UK) was established.

In Germany formal accreditation has been prescribed for the “Bachelor” and “Master” programmes, introduced in the 1990s and gradually replacing the old programmes: a great number of programmes have been already accredited, especially in engineering.

In Portugal, the “Order of Engineers” established its accreditation procedure in 1994, before the establishment of an overall QA system of Higher Education.

I might go on with examples to show that:
accreditation of Engineering Education is in force in an increasing number of European countries, but its significance and procedures vary greatly from one country to the other.

This creates difficulties in trans-national recognition and mobility.

Europe lacks an accreditation system of engineering education accepted on the continental scale.

The lack of an European accreditation system, notwithstanding the prestige of many National systems and of some Academic titles, in a global job market puts the European engineer in a objectively weak position, when confronted with the several existing international recognition agreements.

This was the basic motivation behind the



EUR-ACE project
(EUROpean ACcredited Engineer)



and the establishment of

ENAEE

European Network for Accreditation of EE
www.enaee.eu



The **EUR-ACE** project

elaborated a synthesis of existing national Standards:

EUR-ACE Framework Standards for the Accreditation of Engineering Programmes

and a proposal for the Organization and Management of the **EUR-ACE Accreditation System**

The Standards will be presented by Ian Freeston;
I shall instead deal with the EUR-ACE system, now
being implemented, and a true novelty on the global
scale.

As a first step for implementation of the EUR-ACE system, the former “European Standing Observatory for Engineering Profession and Education” (ESOEPE) was transformed into a registered international not-for-profit Association: the **European Network for Accreditation of Engineering Education ENAEE**



European Network for Accreditation of
Engineering Education



Official birth date: 8 February 2006
First General Assembly: 30 March 2006

European Network for Accreditation of
Engineering Education

Founding members:

FEANI (<i>acting Secretariat</i>)	RAEE (RU)
SEFI	CoPI (IT)
UNIFI/TREE	IEI-EngineersIreland
EUROCADRES	OE (Ordem...) (PT)
EC (UK)	UAICR (RO)
CTI (FR)	IDA (DK)
ASIIN (DE)	FOTEP/BBT (CH)



First General Assembly: 30 March 2006

Second “ “ : 17 November 2006

Third “ “ : 14 November 2007

European Network for Accreditation of
Engineering Education

New members

Admitted at the Second General Assembly (17/11/2006)

CLAIU

MÜDEK (TR)

Admitted at the Third General Assembly (14/11/2007)

IGIP



ENAAEE has registered the EUR-ACE trademark and is implementing the EUR-ACE system, also thanks to two EC-supported projects:

(in the EU) **Under the “Socrates” programme:**
EUR-ACE IMPLEMENTATION

(started September 2006; to be concluded October 2008)

(in Russia) **Under the “Tempus-Tacis” programme:**
PRO-EAST: PROmotion and implementation of the EUR-ACE Standards

(started October 2006; concluded November 2007)

ENAAEE is involved also in a project under the “Tempus-Meda” programme:

LEPAC: Creation of a Lebanese Engineering Programs Accreditation Commission (2006/08)



EUR-ACE system

KEY POINTS:

- NOT an European Directive
- NOT an European Accreditation Board
- A bottom-up agreement towards a decentralized accreditation system in which:
- **Accreditation is awarded by (present and future) National (or Regional) Agencies** that satisfy the EUR-ACE Framework Standards.
- **The EUR-ACE label is “added” to the “national” accreditation, thus giving it an international value**
- The label distinguishes between FIRST CYCLE and SECOND CYCLE DEGREES, in accord with the EQF.

Sample EUR-ACE Label Certificate: the relevant programme is designated as a **FIRST [or SECOND] CYCLE EUROPEAN ACCREDITED ENGINEERING programme**



This is to certify that the _____ programme

**Official name of the education programme in original
language and (in English)**

provided by

**Name of Educational Institution, and Faculty or Department,
(if applicable)**

accredited by

(Accrediting Agency)

on (dd month yyyy) until (dd month yyyy)

satisfies the outcomes of First Cycle programmes specified in the EUR-ACE Framework Standards for the Accreditation of Engineering Programmes, and therefore for the above period of accreditation is designated as a **FIRST CYCLE EUROPEAN ACCREDITED ENGINEERING programme**.



For the European Network for
Accreditation of Engineering
Education (ENAE)
The President
Prof. Ing. Giuliano Augusti, Sc.D.

For xxx

The xxx
xxx
x

Brussels, xx Month 200x

xxx, xx Month 200x

Six Agencies form the initial “core” of the EUR-ACE system:

ASIIN (DE)

EC (UK)

IEI-EngineersIreland

CTI (FR)

OE (Engineers Portugal)

RAEE (RU)

The representatives of these Agencies sit in the



EUR-ACE Label Committee

tasked with facilitating the development
and monitoring the progress of the system

Of the six Agencies in the initial “core” of the EUR-ACE system,

ASIIN (DE)

IEI-EngineersIreland

RAEE (RU)

have already awarded EUR-ACE Labels in 2007;

EC (UK)

CTI (FR)

OE (Engineers Portugal)

will start in 2008.



Iring Wasser, Chair of the EUR-ACE Label Committee, will report on these first achievements.



The initial core of the EUR-ACE system includes six countries (France, Germany, Ireland, Portugal, Russia, UK) with very different educational and professional systems, such to constitute a very significant sample of the EHEA countries, both within and outside the EU.

The EUR-ACE system will rapidly spread: at a very early stage it should include also Netherlands & Flanders and Turkey.

Dutch-Flemish NVAO and Turkish MÜDEK are partners of the EUR-ACE Implementation project.

Erbil Payzin, Chair of MÜDEK (the Engineering Program Accreditation Agency of Turkey) will report on the MÜDEK experience and perspectives



For facilitating this spread, we are preparing the application for a new project to be supported by the EC under the LLP programme

EUR-ACE SPREAD

ENAAEE will be the coordinating partner;
the consortium will include “national” partners from countries whereto the EUR-ACE system should be spread:

TURKEY

NETHERLANDS/FLANDERS

ITALY

LITHUANIA

POLAND

ROMANIA

...???

SWITZERLAND (“silent” partner)

MÜDEK

NVAO (*)

CoPI

SKVC

KAUT

ARACIS

(*)

(*) not confirmed



At the same time, to help a further development of the EUR-ACE system in Russia and possibly spreading it to neighbouring countries, the project

EUR-ACE RUSSIA

is being prepared: an application will be presented for support by the Tempus programme.

Indeed, the initial (and successful) implementation of the EUR-ACE system in Russia has been possible thanks to the PRO-EAST project, supported by the Tempus-Tacis programme.

Alexander Chuchalin will report on it.

Summing up,
ENAAEE is creating a two-tier
system of accredited engineering programmes.



Variants to accommodate specific national needs and/or additional qualifications (e.g. for specialized degrees) are not excluded.

Indeed, it should not be forgotten that the EUR-ACE label is an “addition” to a national accreditation, and can be regarded as a quality guarantee of a common basis to programmes providing an entry route to the engineering profession at some level.

The experience of old-established national accreditation bodies is being fully exploited.

This approach and the essential distinction into FCD and SCD make the EUR-ACE system at the same time flexible and simple.

Third Cycle (Doctoral) degrees are not (yet) considered.

As already hinted, this introduction will be followed by four presentations:

Ian Freeston, EC-UK:

The EUR-ACE Framework Standards for First and Second Cycle Degrees

Iring Wasser, ASIIN, Chair of EUR-ACE Label Committee:

Implementation of the EUR-ACE system: first achievements and difficulties

Alexander Chuchalin, RAEE:

PRO-EAST: PROmotion and implementation of the Eur-Ace Standards in Russia

Erbil Payzin, MÜDEK:

MÜDEK: Engineering Program Accreditation Agency of Turkey and EUR-ACE



*For up-to-date information on
the EUR-ACE system,
ENAAEE
and related documents & events
visit*

www.enaee.eu



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