

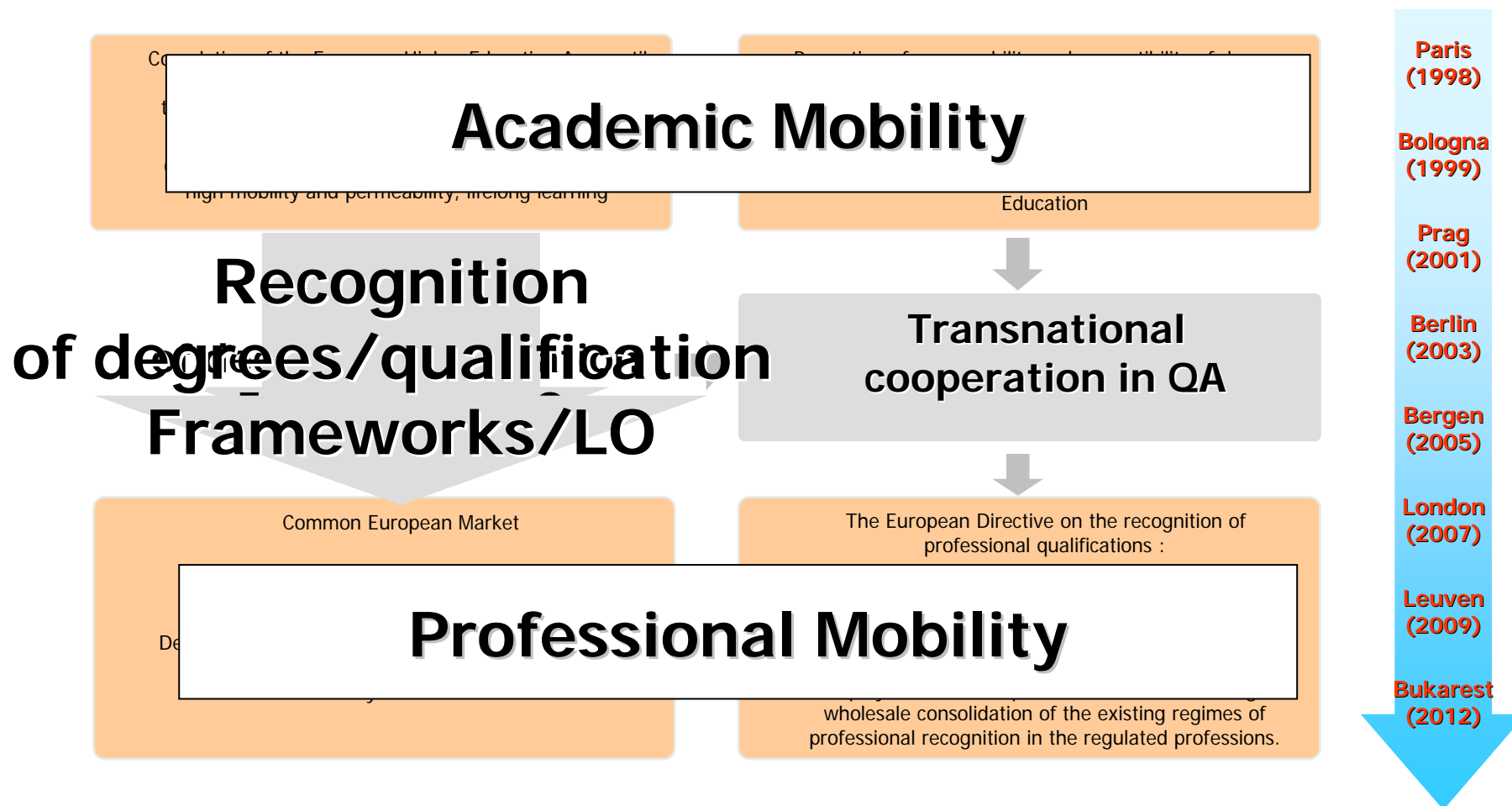
ASEM Expert Seminar on Regional Quality Assurance , Bonn Germany 5-6 July 2011

**Regional Approaches to Learning Outcomes and their
relevance for academic and professional mobility in
Europe**

Dr. Iring Wasser

ASIIN[®] e.V.

Political Context of QA in Europe



European Quality Assurance is based on

- ✓ The European Qualification Framework (Bologna/Dublin Descriptors + Kopenhagen process are integrated), ECTS, Diploma Supplement, BA/Master degree structures
- ✓ European Standards and Guidelines, Code of Good Practice
- ✓ European Register of QA/Accreditation Agencies, M.R.A.'s
- ✓ **European Learning Outcomes/Competence Profiles on the Disciplinary Level**

The growing importance of the Learning Outcome Concept



Neither in the Bologna Declaration (1999) nor in the Prague Communiqué (2001) was there a reference of LO at all. They have however figured prominently in their discourse ever since, e.g. in the London Communiqué 2007:

“We underline the importance of curricula reform leading to qualifications better suited both to the needs of the labor market and to further study. Efforts should concentrate in future on removing barriers to access and progression between cycles and on proper implementation of ECTS, based on **learning outcomes** and student workload.”

“QF are important instruments in achieving comparability and transparency within the EHEA and facilitating the movement of learners within, as well as between higher education systems. They should also help HEIs to develop modules and study programs based on **learning outcomes** and credits and improve the recognition of qualifications as well as all forms of prior learning.”

The growing importance of the Learning Outcome Concept



The Leuven Communiqué in 2009:

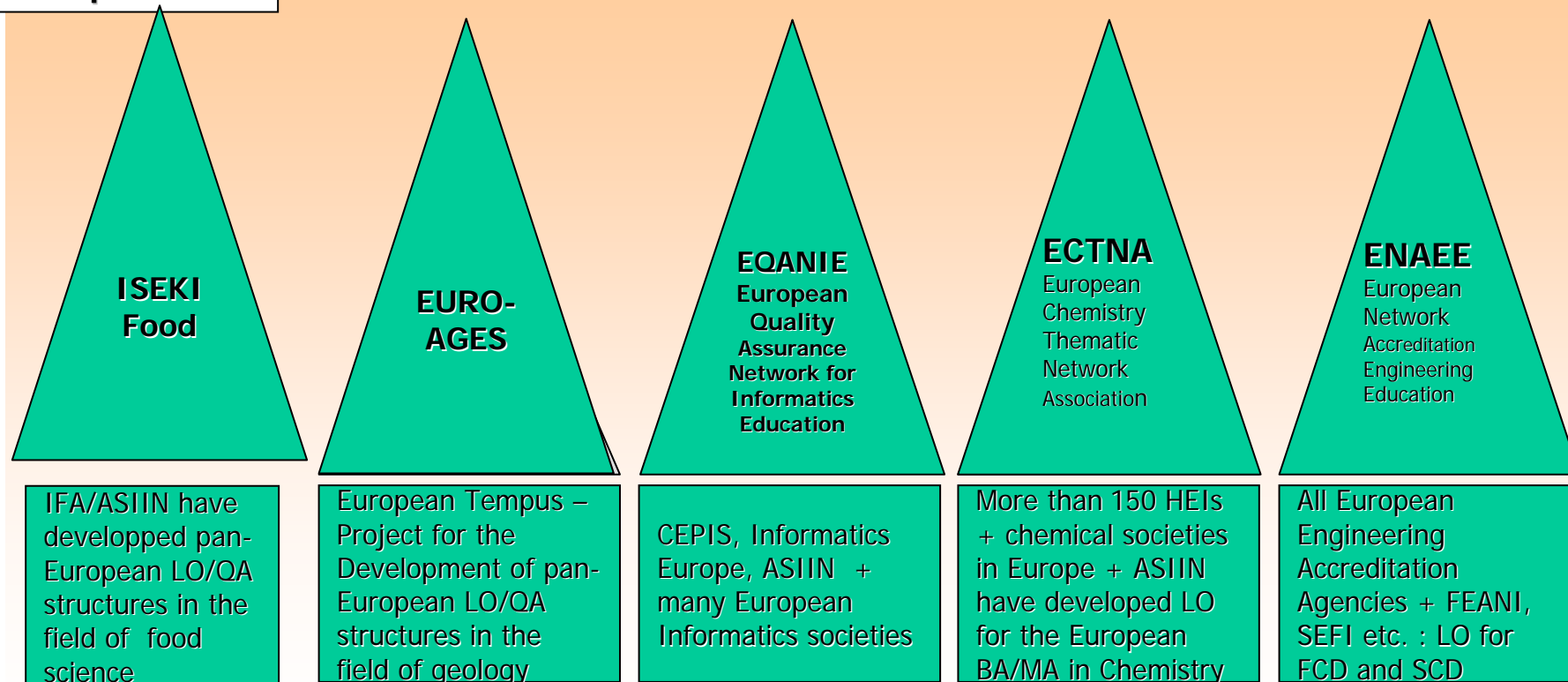
"We reassert the importance of the teaching mission of higher education institutions and the necessity for ongoing curricular reform geared toward the development of learning outcomes... Academics in close cooperation with student and employer representatives, will continue **to develop learning outcomes and international reference points for a growing number of subject areas...**"

"It is arguably that the main end product of the Bologna reforms is better qualifications based on learning outcomes and certainly not just new educational structures. For this sort of bottom-up reform it is recognised that there is a need for fundamental changes at the institutional level where academics are responsible for creating and maintaining qualifications". (Stephan Adam, UK Bologna Promoter)

European Disciplinary Accreditation Networks: Pan European Definition of Learning Outcomes as Entry Route to the Profession



European Scale



Joint Statement of the European Label Associations to the European Ministers in London

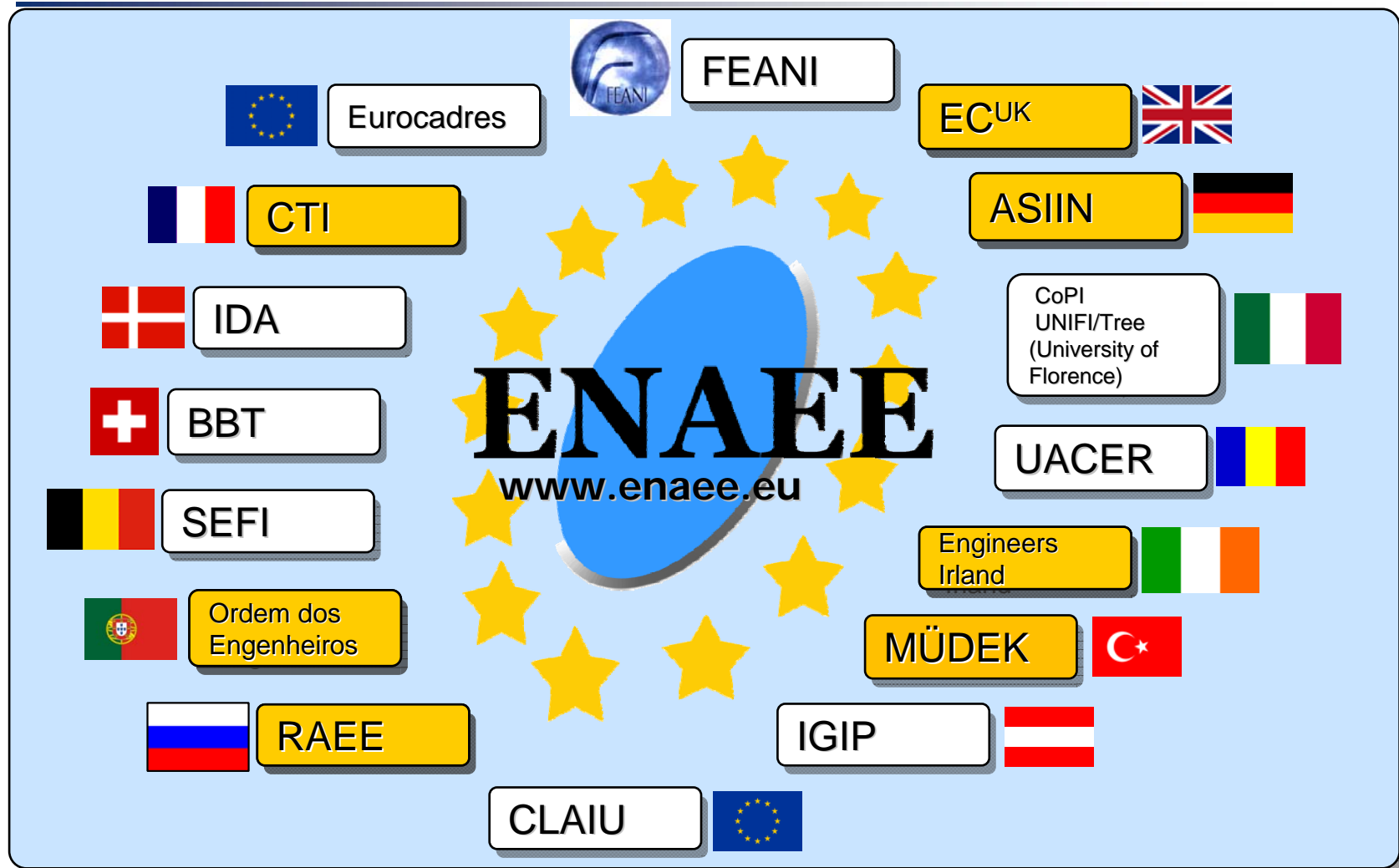
The European Label Associations undersigning this statement represent accreditation bodies, higher education institutions, professional and scientific associations and other relevant stakeholders in higher education in the respective discipline.

Aiming at:

- Providing an appropriate "European Label" to the graduates of accredited higher education programmes;
- Securing and improving the quality of higher education;
- Facilitating trans-national recognition of academic qualifications through a recognised label;
- Facilitating recognition of academic qualifications by the competent authorities;
- Protecting consumers against false information and low-quality university degrees and other qualifications;
- and
- Considering the "European Quality Assurance Standards" and the "Framework of Qualifications for the European Higher Education Area" adopted by the European Ministers Responsible for Higher Education,

the members represented by the European Label Associations have undertaken the development of criteria and procedural guidelines based on which the European Quality Label in the respective discipline may be awarded.

The European Network for the Accreditation of Engineering Education



Members of ENAEE



Engineering (Education) Societies	Engineering Accreditation Agencies	Others
FEANI	ASIIN	CoPI
SEFI	CTI	Unifi
Eurocadres	Engineering Council	BBT
Danish Society of Engineers	Engineers Ireland	ARACIS
Instituto de la Ingenieria de Espana	MÜDEK	
CLAIU	Ordem dos Engenheiros	
IGIP	RAEE	
Finish Association of Graduate Engineers		

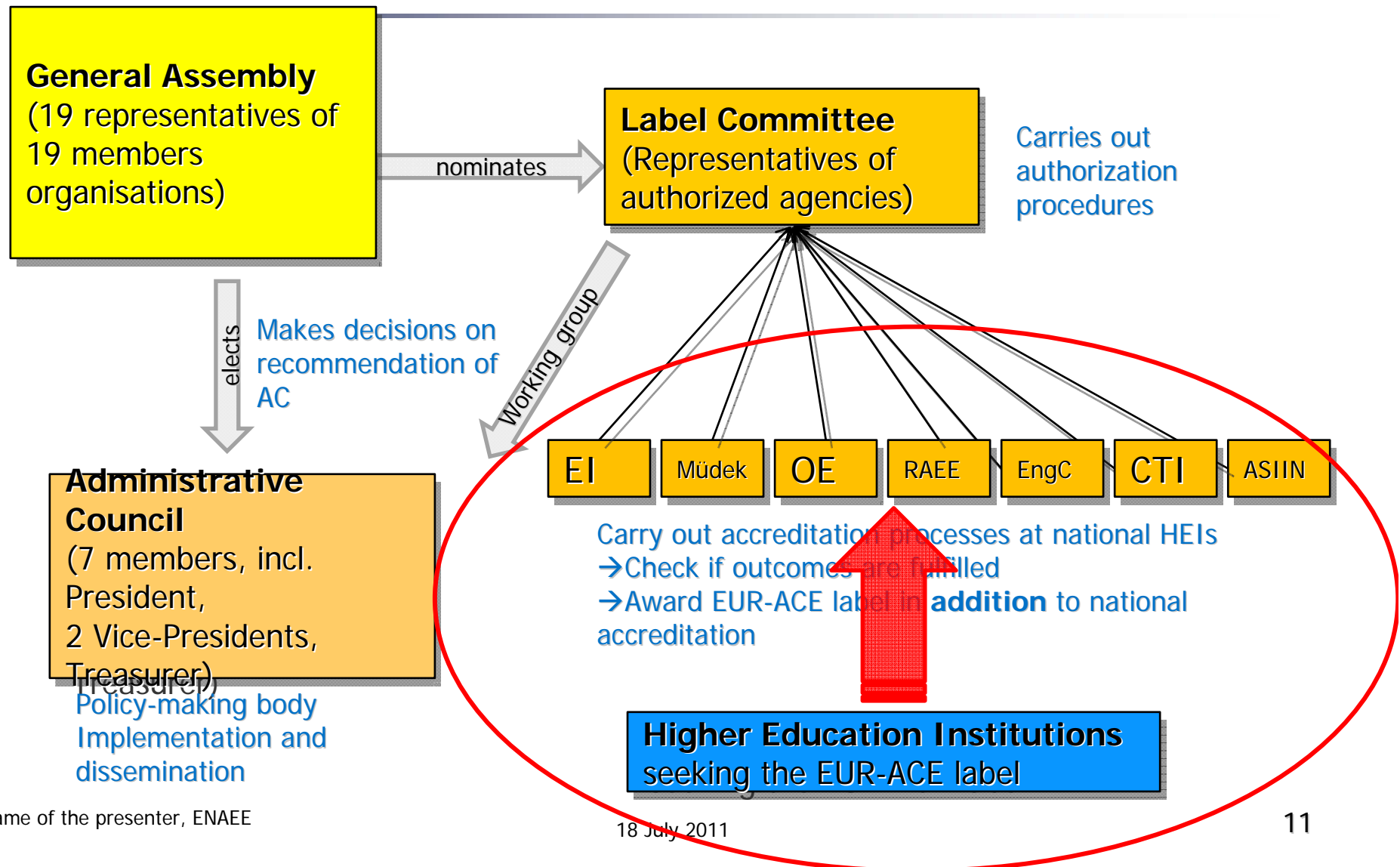
EUR-ACE Framework Standards (1)

Six Categories of learning outcomes

- Knowledge and understanding
- Engineering analysis
- Engineering design
- Investigations
- Engineering practice
- Transferable skills

For each category, outcome criteria for First and Second Cycle programmes' graduates have been established.

Organisational Structure of ENAEE



Authorized agencies



Authorized in November 2007

Ordem dos
Engenheiros

RAEE

ASIIN

CTI

Engineering
Council

Engineers
Ireland

Authorized in January 2009

MÜDEK

Expansion of the system



- Inclusion of additional agencies

- Interest from

NVAO The Netherlands

ARACIS Romania

SKVC Lithuania

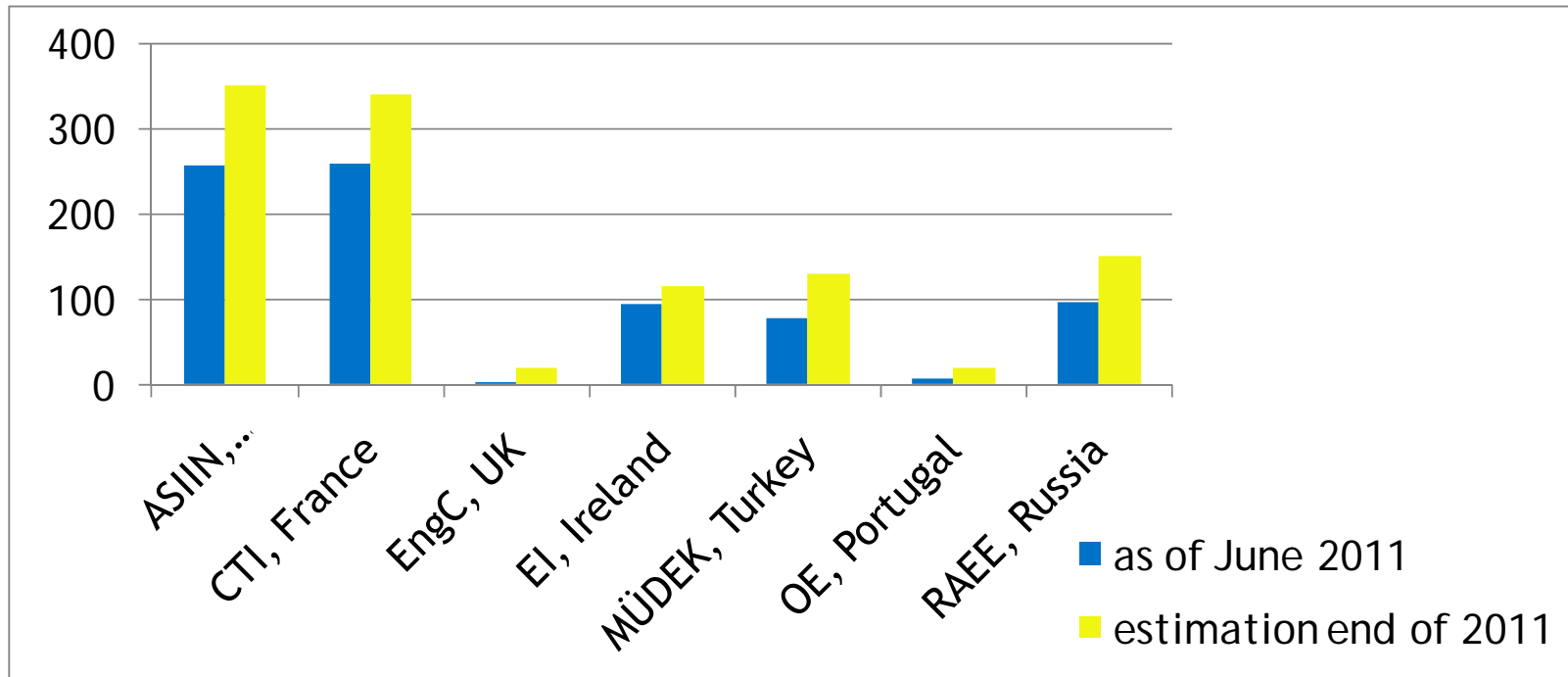
OAQ Switzerland

KAUT Poland

AQA Austria

- Non-engineering specific agencies
- Efforts towards mutual recognition

Number of EUR-ACE[®] Labels



The EUR-ACE® Certificate



This is to certify that the Bachelor programme
**Energie- und Prozesstechnik
(Power and Process Engineering)**

provided by

**Technische Universität Berlin
Fakultät Prozesswissenschaften**

accredited by

ASIIN e.V.

on **07 December 2007** until **20 December 2008**

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.

Brussels, 17 December 2007



For ASIIN

The Managing Director
Dr. Iring Wasser

Düsseldorf, 17 December 2007



Benefits for HEIs



- Additional certificate of quality of education
- Means of promotion: programme meets academic *and* professional standards
- Assurance that programme meets quality standards set by the engineering profession
- Benchmarked against other European programmes
- Reliable information on quality of FC programme for admission for SC
- Incentives for students to choose EUR-ACE labelled programme

Benefits for students



- Assurance that EUR-ACE[®] labelled programme meets high European and international standards
- Facilitate application to EUR-ACE[®] Masters programmes in other HEIs
- Additional quality label recognized by employers in Europe
- International recognition of degree as meeting professional standards
- Regulatory bodies accept EUR-ACE[®] labelled programmes as meeting requirements for becoming chartered engineer

Benefits for employers



Successful completion of EUR-ACE labelled programme assures:

- Competences of graduates:

Candidate's knowledge, understanding and practical capabilities meet international standards

- Reliable information on quality of degree programme of candidate without knowing its details

- Not only academic standard of programme checked but also relevance for profession

- Complement to Diploma Supplement (giving academic point of view)

Benefits for accreditation agencies



-
- Offering additional quality label to customers (HEIs)
 - Certification of quality of accreditation agency according to ESG *and* employers' requirements
 - Integration into European network of engineering professionals
 - Possibility to accredit in other European and worldwide countries with no authorized agency

Benefits for professional engineers organizations



- Guarantee that graduates meet educational requirements for entering into their registers (if organisation has set its educational standard at EUR-ACE level)
- FEANI automatically includes the EUR-ACE® accredited programmes in its Index of European recognized engineering programmes

engineerING card: Front



- 1 Given Name
- 2 Surname
- 3 Date and Place of Birth
- 4a Date of Issue
- 4b Date of Expiry
- 5 Member of Association/
Organisation
- 6 ID Number
- 7 Signature
- 8 Key for qualifications



engineer ING card: Back



01. Name/Titel Surname/Title	08.		
02. Vorname Given Name		Studium Academic studies	Datum Date
03. Geburtsdatum und -ort Date and Place of Birth	A1	Bachelor/Diplom [FH]	30.07.2003
04a. Ausstellungsdatum Date of Issue	A2	Master/Diplom [TU/TH]	27.11.2005
04b. Gültig bis Date of expiry	A3	Dr.-Ing.	
05. Verbandszugehörigkeit Member of Association/ Organisation		Berufserfahrung Professional Experience	
06. Ausweisnummer ID Number	B1	Unternehmen Free Economy	X
07. Unterschrift Signature	B2	öffentl. Dienst Civil Service	
08. Schlüssel für Qualifikationen Key for Qualifications	B3	selbstständig Self-employed	
007		Weiterbildung Further Education	Anzahl Number
	C1	Seminar mit Teilnahmebescheinigung Tutorial with Certificate of Attendance	1
	C2	Seminar mit Abschlussprüfung Tutorial with Final Exam	
	C3	Fortbildung mit Zeugnis Advanced Education with Certificate	

Academic Studies

Professional Experience

Continuing Education

Legend of classification of the
front of the card

The Register Data Sheet Features Important Details



Auszug aus dem Deutschen Ingenieurregister

Extract from the German Engineer Register

Name | Surname: Mustermann
 Vorname | Given Name: Max
 Geburtsdatum | Date of Birth: 30.07.1961
 Geburtsort | Place of Birth: Musterstadt

Ausstellungsdatum | Date of Issue: 01.12.2009
 Verbandszugehörigkeit | Member of Association/Organisation: VDI
 Ausweisnummer | ID Number: 007

Angaben zur Person | Personal Data

Adresse | Address: Musterstraße 10, 55555 Musterstadt
 Land | Country: Deutschland
 Telefon | Phone: xxx
 Telefax | Fax: xxx
 E-Mail | E-mail: xxx

Staatsangehörigkeit | Nationality: deutsch

Geschäftsstelle Deutsches Ingenieurregister | c/o ASIIN Consult GmbH | Robert-Stolz-Straße 5 | 40470 Düsseldorf
 Telefon: +49 (0) 211 90 09 77-0 | Telefax: +49 (0) 211 90 09 77-99 | E-Mail: ingenieurregister@asin.de | www.ingenieurregister.com

Personal Details

Studium Academic studies	
1. Abschluss 1st Graduation Degree	
Akademischer Titel Academic Title	Bachelor of Science (BSc)
Datum Date	30.07.2003
Studiengang Course of Studies	Mechatronik
Hochschule University	Ruhruniversität Bochum
2. Abschluss 2nd Graduation Degree	
Akademischer Titel Academic Title	Master of Science (MSc)
Datum Date	27.11.2005
Studiengang Course of Studies	Mechatronik
Hochschule University	Ruhruniversität Bochum
Berufserfahrung Professional Experience	
Zeitraum Period	01. Mai 2007 bis heute
Arbeitgeber Employer	Mustermann AG, Köln
Funktion Function	Leiter Konstruktion
Tätigkeiten Field of work	* xxx * xxx
Zeitraum Period	01. Januar 2006 bis 30. April 2007
Arbeitgeber Employer	Mustermann AG, Köln
Funktion Function	Konstruktionsingenieur
Tätigkeiten Field of work	* xxx * xxx
Weiterbildung Further Education	
Zeitraum Period	01. Juli bis 10. Juli 2001
Titel Title	Der Ingenieur als Führungskraft
Art Form	Seminar
Anbieter Offerer	VDI Wissensforum GmbH
Zeitraum Period	
Titel Title	
Art Form	
Anbieter Offerer	

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Academic Studies

Professional Experience

Continuing Education

Outlook EUR-ACE and AHELO



- Project: Assessment of Higher Education Learning Outcomes (AHELO)
- Funding: by OECD
- Result (200): AHELO-Tuning - Conceptual Framework of Expected/Desired Learning Outcomes in Engineering
merging of the EUR-ACE Programme Outcomes for First Cycle Degrees and the ABET Criteria for accrediting engineering programs (compatible with other relevant Standards)

The Way Forward



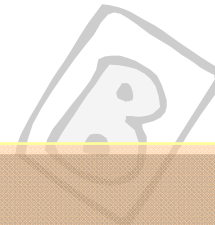
- Founding a “Network of Networks” of field specific/disciplinary accreditation agencies in Europe
- Founding of a international group of specialized accreditors on a global scale under the umbrella of INQAAHE, a process which started at the beginning of April 2011
- Renewing the joint Bologna declaration of those field specific networks as input to the upcoming Bologna conference of the 47 ministers of education in Bukarest in 2012
- INQAAHE/ENQA Conference on field specific accreditation on the 1st and 2. of December in Brussels (Majorie Penn Memorial Conference)
- Working toward Mutual Recognition Agreements based truly on Learning Outcomes

Contact



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The End



**Thank you for your attention and
participation in this leadership
colloquium!**

