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**NEW "MARKETS" FOR EUR-ACE:
 a Central Asia project and a
 proposal for the Mediterranean
 Basin**


presented by **Giuliano Augusti**, QUACING President

Co-authors: **Claudio Borri, Michele Betti, Elisa Guberti, UNIFI**



The **EUR-ACE accreditation system** of engineering programmes as entry route to the profession (pre-professional accreditation) was envisaged by the EU-supported EUR-ACE project (2004-06) to make up for the lack of a European accreditation system of engineering education accepted on the continental scale.

The EUR-ACE system, started in 2007, is run by the **European Network for Accreditation of Engineering Education (ENAAE)** www.enaee.eu, founded in February 2006 by 14 concerned Associations. The ENAAE secretariat is permanently hosted by FEANI



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Two main outcomes of the EUR-ACE project:

a) a synthesis of existing national Standards:
EUR-ACE Framework Standards for the Accreditation of Engineering Programmes

b) a proposal for the Organization and Management of the **EUR-ACE Accreditation System** now implemented by ENAAE.

EUR-ACE Standards and all other relevant documents are available on the ENAAE site
www.enaee.eu or www.eur-ace.eu

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ENAAE, proprietor of the EUR-ACE® trademark, authorizes National Agencies to award the EUR-ACE® label (Engineering Bachelor [FC] and/or Master [SC]).

Today (September 2013) 11 "Agencies", based in 11 EHEA countries are authorized to award the label (EUR-ACE-authorized):

ASIIN (Accr. Ag. Programs in Engrg., Informatics, Nat.Sciences & Maths.), **Germany**
CTI (Commission des Titres d' Ingénieur), **France**
Engineers Ireland
AEER (Russian Association for Engineering Education), **Russia**
Engineering Council, **United Kingdom**
Ordem dos Engenheiros, **Portugal**
MÜDEK (Assoc. for Evaluation and Accreditation of Engineering Programs), **Turkey**
ARACIS (Romanian Agency for Quality Assurance in Higher Education), **Romania**
QUACING (Ag. Certif. Qualità e Accred. EUR-ACE dei Corsi in Ingegneria), **Italy**
KAUT (Komisja Akredytacyjna Uczelni Technicznych), **Poland**
OAQ (Organ Akkreditierung & Qualitäts. der Schweiz. Hochschulen), **Switzerland**

More than 1000 labels have been awarded

Applications for EUR-ACE-authorization have been submitted by agencies in **Spain** and **Finland**; several other contacts are in progress. Also, **CTI** will award EUR-ACE labels to programmes in the French-speaking **Belgian** HEIs.

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In the future, ENAAE will continue to focus mainly on EHEA countries, but will not neglect the possibilities of world-wide openings.

n Indeed, the interest on EUR-ACE is increasing on the global scene.



n An example: the invited presentation in Taiwan in 2010:

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Institute of Engineering Education Taiwan
 General Assembly, 14 May 2010

EUR-ACE®:
the European Accreditation System of Engineering Degree Programmes

Giuliano Augusti
 "La Sapienza" Università di Roma;
 Coordinator, EUR-ACE SPREAD project;
 President, European Network for Accreditation of Engineering Education (ENAAE)

This paper presents two initiatives

- n The QUEECA (Quality of Engineering Education in Central Asia) project, running since October 2012 in the framework of the TEMPUS programme.
- n The analogous QUEENA (Quality of Engineering Education in North Africa) proposal for a further TEMPUS project.

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- n Indeed, the need for **international recognition of engineering degrees** is increasingly felt in Central Asia, as in other parts of the world: several universities are stipulating accreditation agreements with agencies in Europe and the USA. This can be very positive, but a more systematic approach is essential for further developments.
- n Hence, the QUEECA project aims at setting up in Central Asia (CA) a system for pre-professional accreditation of engineering education through a network of **National QA/Accreditation Agencies** able to accredit engineering programmes and to be authorized by ENAEE to award the **EUR-ACE® quality label**.

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TEMPUS project QUEECA Quality of Engineering Education in Central Asia

530326-TEMPUS-1-2012-1-IT-TEMPUS-SMGR

Eligibility period: **15.10.2012 -14.10.2015**
GA n. 2012 – 2994 / 001 – 001

www.queeca.eu



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QUEECA involves partners from **Kazakhstan, Kyrgyzstan, Uzbekistan, and Tajikistan** (4 out of 5 TEMPUS countries in Central Asia [CA])

and European partners from **Italy, Germany, Belgium, Portugal, United Kingdom**.

It is coordinated by the University of Firenze, Dept. of Civil & Env/I Engineering, under the leadership of Prof. Claudio Borri.

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The QUEECA Consortium



European Partners:
P1 Università di Firenze - Facoltà di Ingegneria - Firenze, Italy
P2 ASIN e v. - Duesseldorf, Germany
P3 European Network for Accreditation of Engineering Education ENAEE - Bruxelles, Belgium
P4 Instituto Superior de Engenharia de Lisboa, ISEL Lisboa, Portugal
P5 Middlesex University - London, United Kingdom
P6 Agenzia QUACING - Rome, Italy
P7 Ruhr University Bochum - Bochum, Germany
P8 Société Européenne pour la formation des Ingénieurs SEFI, Bruxelles, Belgium
P9 Sapienza Università di Roma - Roma, Italy
P10 Università degli Studi di Genova - Genoa, Italy

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The Consortium



CA Partners:
P11 Aktobe State University after K. Zhubanov ASU - Aktobe - Kazakhstan
P12 "D.Serikbayev" East Kazakhstan State Technical University - EKSTU-Ust Kammenogorsk - Kazakhstan
P13 Al Farabi Kazakh National University - KaZNU - Almaty - Kazakhstan
P14 Kazakhstan Society for Engineering Education - KazSEE - Ust-Kamenogorsk - Kazakhstan
P15 Karaganda State Technical University -KSTU KZ - Karaganda - Kazakhstan
P16 Ministry of education and science of Kazakhstan Republic MESKR KZ - Astana - Kazakhstan
P17 M. Auezov South Kazakhstan State University - M-Auezov SKSU - Shymkent City - Kazakhstan
P18 Education Network - EdNet - Bishkek City Kyrgyzstan
P19 Kyrgyz State Technical University - KSTU KG - Bishkek - Kyrgyzstan
P20 Kyrgyz State University of Construction, Transport and Architecture named after I. Isanov - KSUCTA Bishkek, Kyrgyzstan
P21 Ministry of Education and Science of Kyrgyz Republic - MESKR KG - Bishkek, Kyrgyzstan
P22 State Inspection on Licensing and Attestation of Educational Institutions of Ministry of Education and Science of Kyrgyz Republic - SILAEIMESKR- Bishkek, Kyrgyzstan
P23 Ministry of Education of Republic of Tajikistan - ME of the RT - Dushanbe , Tajikistan
P24 Mining Metallurgical Institute of Tajikistan - MMIT - Chikolovsk, Tajikistan
P25 Tajik Technical University named after academician M.S. Osimi - TTU - Dushanbe , Tajikistan
P26 Ministry of Higher Education Republic of Uzbekistan - MHSE - Tashkent , Uzbekistan
P27 Tashkent State Technical University named after Abu Raikhon Beruni - TSTU - Tashkent, Uzbekistan
P28 Tashkent University of Information Technologies - TUIT - Tashkent , Uzbekistan

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The External Experts

2 external experts with specific and proven competences in the field of quality assurance and assessment in Engineering Education have been appointed as external experts to the project:

Stephanie Farrell, Rowan University, USA



Andrzej Rucinski, University of New Hampshire, USA



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Project Overall Budget

QUEECA
Project Nr. 530926-TEMPUS-I-2011-1-IT-TEMPUS-SM08
Eligibility Period 15/10/2012 - 14/10/2015

	Proposed Budget	Approved Budget	Reductions
Staff Costs	437,280.00	437,280.00	
Travel Costs, Costs of Stay	151,000.00	428,000.00	11,000.00 6.30%
Equipment	150,000.00	155,000.00	15,000.00 10.00%
Printing and Publishing	21,000.00	21,000.00	
Other Costs	30,000.00	66,000.00	30,000.00 10.75%
Eligible Direct Costs	1,209,280.00	1,144,280.00	
Indirect Costs	81,666.67	80,879.67	786.00 0.96%
Total Eligible Costs	1,294,012.20	1,220,059.60	
Tempus Grant Contribution	1,164,613.68	1,105,793.64	
Co-financing	129,401.52	114,265.96	15,135.56 5.09%
Total Project Finance	1,294,012.20	1,220,059.60	

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Specific Objectives of QUEECA

- 1. Set up and start implementing a system of **quality assurance (QA)** of engineering education in Central Asia (CA) countries, finalized to the **pre-professional accreditation of engineering programmes** (i.e. accreditation of educational programmes as **entry route to the engineering profession**).
- 2. The accredited programmes must satisfy the same conditions required for the award of the **EUR-ACE® quality label**, i.e. the EUR-ACE Framework Standards, the European Standards and Guidelines for Quality Assurance in Higher Education (ESG), and all related quality requirements and procedures.
- 3. The project will take advantage of the experience in the European Higher Education Area (through ENAEE) and current efforts in Central Asia countries (e.g. KazSEE).

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QUEECA Main Actions

1. Create a National EE Society where it does not exist (in Kazakhstan, strengthen the existing KazSEE) and a CA Federation of EE Societies, partnered with SEFI and IFEES.
2. Adapt the EAFS (EUR-ACE Framework Standards) and formulate analogous CA Standards (CAEAS) in Russian and English.
3. Create "Accreditation Centres" in each CA country (with a Regional coordination); train the relevant "accreditors".
4. Run a series of Trial Accreditations with international teams to test the draft CAEAS and the local accreditors.
5. Taking into account the results of the Trial Accreditations, formulate the final version of CAEAS.
6. Conduct a first run of pilot accreditations of engineering programmes and award the first EUR-ACE® labels in CA.
7. Formulate a self-supporting financial plan for carrying out accreditation after the project closure.

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General TEMPUS Programme Objectives

- 1. To promote the reform and modernisation of higher education in the partner countries
- 2. To enhance the quality and relevance of higher education in the partner countries
- 3. To build up the capacity of higher education institutions in the partner countries and the EU, in particular for international cooperation and for a permanent modernisation process, and to assist them in opening themselves up to society at large
- 4. To foster the reciprocal development of human resources
- 5. To enhance mutual understanding between peoples and cultures of the EU and of the partner countries.

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Tempus Regional and National Priorities addressed by QUEECA

- 1. Main priority: **Governance reform: introduction of quality assurance** (Regional priority for Central Asia; National Priority for Kazakhstan, Tajikistan and Uzbekistan)
QUEECA will focus on Quality assurance strategies / indicators and benchmarking
- 2. Secondary priority: **Development of international relations** (Regional priority for Central Asia)

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First QUEECA activities

- n Kick-off: **27-28 November 2012; Villa Vigoni, Menaggio, IT**
- n First General Meeting and “Forum”: **3-4 April 2013; KAZNU, Almaty, KZ**
- n Second General Meeting (Project Board & Management Board Meetings): **14-15 October 2013; TSTU, Tashkent, UZ**

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From the RESOLUTION approved at the First QUEECA Forum (*al-Farabi KazNU, Almaty; 3 and 4 April 2013*)

The QUEECA Management Board considers it necessary to:

- 1) Promote the further implementation of Tempus QUEECA “Quality of Engineering Education in Central Asia” project, which serves as an important mechanism of improving and evaluating engineering education quality ;
- 2) continue to study the accreditation and quality assurance related experiences of the world engineering communities (such as KazSEE, FEANI, SEFI, ENAEE, AEER, IFEEES, QUACING) for their further application in the countries of Central Asia;
- 3) promote the setting up of Central Asian engineering education societies for developing a framework for a unified system of accreditation of Engineering programmes, improving their quality in Central Asian region, taking advantage of the KazSEE experience,
- 4) promote the practice of transnational recognition of engineering qualifications and facilitate engineering graduates mobility, taking into account the Central Asian regional economy and integration also in the global educational space.

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What besides/after QUEECA?

- n Given the already encouraging results and reactions to QUEECA, we have drafted a similar project to introduce the EUR-ACE system in the countries of North Africa.
- n The North African countries of the Mediterranean are very similar from the point of view of education to the European (and in particular the French) model.
- n The geographical and cultural proximity of the North African countries to Europe appears favourable to the introduction of the EUR-ACE model.

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Hence, a new TEMPUS project proposal:

QUEENA - Quality of Engineering Education in North Africa

First application in 2013;
will be revised and re-submitted in 2014.

In analogy to QUEECA, QUEENA will aim at the implementation of a system of quality assurance of engineering education in North Africa, finalized to the pre-professional accreditation of engineering programmes (i.e. accreditation of education programmes as entry route to the engineering profession) and the consequent award of the EUR-ACE® quality label.

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QUEENA Consortium

proposed in the first application, and essentially the same in the second application:

13 EU partners from Italy, France, Belgium, Greece and Portugal: **HEIs and Associations**, including:

UNIFI (IT; leading partner), ENAEE, SEFI, EUCEET, RMEI, QUACING (IT), UNIROMA1 (IT), UNI-GENOA (IT), ISEL (PT), ENIM (FR), UNI-ORLEANS (FR), UPV (ES), AUTH (GR)

13 North-Africa partners from Morocco, Algeria, Tunisia and Libya: **HEIs and Ministries**, as prescribed by TEMPUS rules.

(Egyptian partners will hopefully join later)

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Thank you for your attention.

For further information, visit

www.queeca.eu

or contact the International Relations Office of Florence University – Engineering

intreling@unifi.it

To contact me:

Prof. Giuliano Augusti

giuliano.augusti@gmail.com

Tel. (+39)06.854.9875

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