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Draft

"Bologna process 2010"
Final Report

By the Core Group Engineering Education

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The Bologna process was initiated by the Bologna Declaration and signed in the Italian city of Bologna on 19 June 1999 by Ministers of higher education from 29 European countries. Today, the Bologna declaration has been adopted by 46 countries with the goal of an European Higher Education Area. By signing the Bologna Declaration either in 1999 or later, European governments have engaged their countries in a process of deep structural changes in their national Higher Education in order to create the European Higher Education Area (EHEA) by 2010.

The Core Group Engineering Education started their activities on the Bologna process already in 2006 in order to look at the impact the process had on the former engineer's degrees in European countries. The Group aimed at finding out the effects of the conflation of the two types of degrees.

The report contains information on the Bologna Process itself. Furthermore, it gives account of workshops organised by Euro-CASE on the subject, the results of two questionnaires conducted by the Core Group and of the visit of the Bologna Secretariat in Brussels. It finally suggests links for more information on the Bologna process. The member Academies then have the possibility to carry out projects on the national level targeting the national governments.

1. The Bologna process

The Bologna process is a reform with the goal of creating an European Higher Education Area. The European higher education system after the Bologna process was supposed to give responses to issues such as the public responsibility for higher education and research, higher education governance, the social dimension of higher education and research. Moreover, the Bologna process includes questions about roles and values of higher education and research in globalised and increasingly complex societies with demanding qualification needs.

With the Bologna process implementation, higher education systems in European countries are to be organised to promote greater mobility within the European Higher Education Area. Furthermore, the attractiveness of European higher education is supposed to be increased. Finally, the European Higher Education Area aims at an improved qualification of academics and at a cutting-edge European Research Area.

Decision-making in the Bologna process is carried out through an 'intergovernmental' process at biennial summits where education Ministers from each signatory country meet. They assess progress of the Bologna process and plot the course for the near future. It is not administered by the European Commission as the competence for education lies with European Union member states. Decisions are reached by the consensus of the 40 signatory countries involved.

To help signatory countries to follow up on the recommendations made at the ministerial summits the Bologna Follow-Up Group (BFUG) was founded. The Group consists of representatives from all 40 Bologna signatory countries and is chaired by the current EU Presidency. The Vice-Chair is taken by the host country of the next ministerial summit. The Group produces an official work programme of seminars on priority issues between ministerial summits.

2. International Workshops

Sponsored by the Hungarian-Korean Technical Cooperation Center Foundation, the Euro-CASE Core Group Engineering Education organised the workshop "Engineering Educational Systems in Europe and in Korea" on the 6 and 7 October 2008 in Budapest organised by the

Hungarian Academy of Engineering. The topic was similarities and differences of the engineering educational systems in Europe and in Korea. The participants aimed at finding possibilities of synergic effects.

The second international workshop „The Role of Engineering Education in the Knowledge Society" took place in Prague from the 14 until the 15 October 2008 organised by Engineering Academy of the Czech Republic. The workshop was organised under the auspices of EuroCASE. Besides invited lectures the workshop emphasised the importance of "round table discussions" which aimed at conclusions applicable both in the EU and in the Czech reforms.

3. First Questionnaire "Implementation of the Bologna Process in Engineering Education"

At the mid-point of the Bologna process, the Core Group decided to start a first review to locate the shifts and gaps between ideal and reality. The initiators of the questionnaire on the implementation of the Bologna process, Reiner Kopp and Claude Maury, had a particular interest to get a better understanding of the effects on engineering education. The meaning of the questionnaire aimed at gathering national views on some few crucial points like the mobility of students and the consequences on the education system in the different countries

The answers on the questions of the questionnaire show that the Bologna process is implemented at different pace and in different ways in each country. Solely concerning the questions about mobility, the academies agree on not being worried or just slightly worried about a decrease of mobility. Especially the questions on mobility after the Bologna process raise even more questions than answers. The paper "The Bologna process: priorities beyond 2010" by the Council of Association of Long Cycle Engineers of a University or higher School of Engineering of the European Union (CLAIU-EU) and the report "Bologna Beyond 2010" by the Bologna Follow-Up Group confirm that there are still serious problems with the student mobility after the reforms of the Bologna process.

The Core Group wrote a summary of the questionnaire. On the basis of the results, it was decided to follow-up the question of student mobility in a second questionnaire.

4. Second Questionnaire "The Bologna Process beyond 2010 – Mobility of Students"

A preliminary survey was conducted at four European universities (RWTH Aachen, Imperial College London, CTU in Prague, TU in Graz). The following data was gathered at the international offices of the universities:

- How many students leave / visit the university in one year? (Split by country, by university / institute and by subject)
- How long do the students stay abroad? How long do they stay at the foreign host university?
- Which support programmes exist (e.g. Erasmus, agreement with university or institute)?
- Can obstacles be defined for students going abroad?

The Core Group draw preliminary results out of the data collected at the universities: It is possible to collect the information without severe difficulties. Beyond that, surprising similarities could be found concerning the obstacles to mobility. One of the main obstacles to mobility at all universities was the fear of losing credit points and thereby time by going

abroad. The Bologna process seems not to have had a positive effect on the credit transfer, especially concerning engineering subjects.

The Core Group decided on the basis of the conducted survey to visit the Bologna Secretariat. The Core Group wanted to find out whether there are ways of cooperation. Thereby it was supposed to find out whether there is a need for an extension of the survey on a broader level with more universities in all European countries.

5. Visit of the Bologna Secretariat

The country hosting the forthcoming Bologna ministerial summit provides a Secretariat for the Bologna Process. The Secretariat has administrative and operational responsibility for the next ministerial conference. It carries out secretarial functions for the Bologna Follow-Up Group and Board.

The last conference of European Ministers responsible for Higher Education took place in Leuven and Louvain-la-Neuve in April 2009. The next Ministerial Conference is hosted by Austria and Hungary in 2010. The conference will take place on 11 March 2010 in the House of Parliament in Budapest and on 12 March 2010 at the Vienna Imperial Palace Congress Centre.

The visit to the Bologna Secretariat brought the following results:

- The Bologna Secretariat has no resources to give assignments for projects. The data to evaluate the Bologna process is provided by the joint quality initiative. The initiative is an informal network for quality assurance and accreditation of bachelor and master programmes in Europe. It stems from the Bologna declaration (1999) and from the follow-up Prague communiqué (2001). Actions are aimed at transparency in bachelor and master programmes by writing descriptors for the programmes.
- The Bologna Secretariat does not see a special interest in looking at individual subjects, such as engineering subjects. It does not see a need to distinguish between subjects for the Bologna process.
- The Core Group saw no useful ways of cooperation with the Bologna Secretariat.

6. Final remark

The Core Group remains sceptical towards the Bologna Process. The Europe-wide standardisation of national higher educational systems is not necessarily a value in itself. The establishment of comparable degrees across Europe seems to make sense only vis-à-vis an economic view. The improved flexibility and transparency is furthermore put into question.

Still, the process cannot be shaped on an European level, but must be influenced on a national level. In order to get involved in the process, the academies should contact the responsible persons for the Bologna process at their national government. Also concerning the improvement of mobility, the obstacles need to be overcome nationally or even from university to university, for example through bilateral arrangements between universities and exchange programmes, such as ERASMUS, International Student Exchange Program (ISEP), Central European Exchange Program For University Studies (CEEPUS), Double Degree Programmes with other universities, Summer Programmes or National Exchange Programmes or scholarships.

7. Links

For more information on the Bologna process:

Bologna process Secretariat 2005-2007

<http://www.ond.vlaanderen.be/hogeronderwijs/bologna/>

CLAIU-EU homepage:

<http://claiu.fabi.be/index.php>

Euro-Student homepage

<http://www.eurostudent.eu/>

European Association for International Education

<http://www.eaie.org/>

Hochschul Informations System:

<http://www.his.de/>

Joint quality initiative:

<http://www.jointquality.nl/>

Leuven-Communiqué:

http://www.ond.vlaanderen.be/hogeronderwijs/bologna/conference/documents/Leuven_Louvain-la-Neuve_Communicu%C3%A9_April_2009.pdf

Stifterverband für die Deutsche Wissenschaft

<http://www.stifterverband.de/>
<http://www.laendercheck-wissenschaft.de/>

The National Union of Students in Europe (ESIB)

<http://www.esib.org/>

TU 9

<http://www.tu9.de/>

TUNING Educational Structures in Europe

<http://tuning.unideusto.org/tuningeu/>

World Education News & Reviews (The Bologna Process)

<http://www.wes.org/ewenr/bolognaprocess.htm>

For more information on exchange programmes:

The Erasmus Programme

http://ec.europa.eu/education/lifelong-learning-programme/doc80_en.htm

International Student Exchange Program (ISEP)

<http://www.isep.org/>

Central European Exchange Program For University Studies (CEEPUS)

<http://www.ceepus.info/>