IMPLEMENTATION OF BOLOGNA DECLARATION IN ESTONIA IN 1999-2003

For implementing in Estonia the Bologna Declaration signed in 1999 by European Ministers of Education a working group under the guidance of the Minister of Education, including representatives of academic circles, employers and students was formed. The necessary amendments were included in the higher education reform plan adopted by the Government of the Republic in the summer of 2001. In the years 2001-2003, amendments followed to all substantial legislation governing higher education such as the Universities Act, the Institutions of Applied Higher Education Act and the framework document the Standard of Higher Education which establishes general requirements for studies, curricula and academic staff and is approved on the level of the Government of the Republic.

The changes which have taken place in Estonia in the course of the Bologna process have primarily been directed to the system of qualifications and towards supporting mobility. The introduction of the accreditation process and accumulation of credit points have taken place during earlier years.

System of stages and qualifications of higher education

1.1. Reform of stages of higher education

The Estonian system of higher education has two branches – academic and applied higher education. Higher education is provided by universities and institutions of applied higher education and some vocational educational institutions.

In 1999, extensive reform with regard to curricula and transition to a new system of stages of studies commenced in universities, which was first applied in the academic year 2002/2003, i.e. after the amendments to the Universities Act and related acts were passed by the *Riigikogu* (Parliament) in June 2002. The transition to new curricula has taken place in the majority of major Estonian universities and 62% of those admitted in the academic year 2002/03 study in accordance with new curricula. The academic branch of the new system of higher education has two stages, following the Anglo-Saxon bachelor-master model. Bachelor's studies form the first stage and master's studies form the second stage. In some specialties bachelor's and master's stages are integrated.

The purpose of bachelor's studies of the new two-stage system of higher education is to increase students' level of general education, their acquired basic knowledge and skills in the specialty necessary for master's studies and for commencing work. The nominal length of studies is predominantly three years and the capacity of studies 120 credit points (180 ECTS credits). In exceptional cases, the nominal length of bachelor's studies extends to four years (240 ECTS credits).

This is a qualification which the former Estonian system of higher education did not have in the academic branch. The former system lacked a qualification that provides professional basic training. Completion of bachelor's studies in the former system provided the competence necessary for working as a specialist and the right to work in a post that requires high qualification (teachers, lawyers, engineers, etc.). In the former system bachelor's studies were predominantly with a nominal length of 4 years and along with teachers' training up to 5 years. In the 90's, the bachelor's degree was awarded to a majority of students who had completed curricula for training specialists with a nominal length of five years.

Master's studies are the studies of the second stage of higher education in the course of which, based on the new system in force, the knowledge and skills in the specialty are increased and the knowledge and skills for independent work and doctoral studies are acquired. The main purpose of master's studies is to educate a specialist with profound professional knowledge. Master's studies in universities are continued studies after bachelor's studies and the bachelor's degree will be a prerequisite for admission. The persons who hold an applied higher education diploma can also commence master's studies in a university under the conditions and pursuant to the procedure established by the university.

The nominal length of master's studies is 1-2 years and the capacity of studies is 40-80 credit points (60 - 120 ECTS credits) but along with bachelor's studies not less than five years (200 credit points / 300 ECTS credits).

From 2004 onwards, master's studies may be also provided by institutions of applied higher education but in cooperation with universities and taking into consideration regional needs. An institution of applied higher education may independently provide master's studies on the basis of curricula of theology and military studies.

In the system which existed before the higher education reform master's studies were possible only in universities because master's studies included extensive research work forming up to 50% of the volume of curricula and in most cases a master's degree was a research degree.

In addition to the two-stage general model, the curricula of doctoral, dentistry, pharmaceutical, veterinarian, architectural and civil engineering training are one-stage studies with a nominal length of 5 - 6 years and with a capacity of 200 - 240 credit points (300 - 360 ECTS credits). Such one-stage studies are called bachelor's and master's studies based on integrated curricula, which contain both basic studies and profound specialisation. The completion of studies will provide a qualification corresponding to a master's degree.

The bachelor's and master's studies of the general system of stages of higher education which took effect from admission for the academic year 2002/2003 conform to the Anglo-Saxon bachelor-master system and the principle of two-stage higher education in the European higher education area. The bachelor's and master's studies of the former system did not fulfil these purposes and did not coincide with the general bachelor-master model. Pursuant to the Universities Act the holders of former qualifications will be granted the opportunity to continue studies in the new system whereas the university may regard bachelor's studies of the former system as a part of master's studies of the new system.

In parallel to the academic branch, higher education studies with an applied approach were introduced in the first half of the 90's and they have existed under the name of applied higher education studies since the academic year 2002/2003. The mentioned studies are provided by institutions of applied higher education, selected vocational educational institutions and divisions of universities. Applied higher education studies are the studies of the first stage of higher education the purpose of which is to acquire the competence necessary for working in the relevant profession or for continuing studies in master's studies. The nominal length of studies is 3 - 4.5 years, the capacity of studies 120 - 180 credit points (180 - 240 ECTS credits). The applied higher education studies have been developed from higher vocational education studies and diploma studies that were valid until admission for academic year 2002/2003.

The valid legislation governs that the master's degree or equivalent qualification is a prerequisite for commencing doctoral studies. The nominal length of doctoral studies has been altered: the length of doctoral studies is 3-4 years instead of 4 years fixed formerly.

1.2. Qualifications

In the post-reform system of studies the degree names of the former system, bachelor's degree and master's degree, are used as general names. Differences from academic degrees of the former system will be regulated by a regulation of the Government of the Republic in 2003. The persons who have completed the study based on integrated curricula will receive a diploma certifying the completion of the curriculum of the corresponding specialty. A university may also award master's degrees to the persons who have completed studies in the mentioned professions or specialties.

The persons who have completed applied higher education studies will be awarded a diploma regarding completion of the corresponding curriculum. A diploma of applied higher education is equivalent to a bachelor's degree for the purposes of general academic levels.

Since 1991, four systems of stages of higher education and qualifications have been in force. In order to ensure equal opportunities and rights, work has been started to determine the equivalence of earlier qualifications in the new system. The equivalence of the qualifications used in former systems with the qualifications of the new system will be governed by a regulation of the Government of the Republic in 2003.

1.3. Provision of information on higher education

The introduction of the system of Estonian higher education and provision of required information became regular in 1998.

For the purpose of providing general information books describing the system of higher education have been published (1998; 2000), international databases are updated regularly

and official information is released by the Ministry of Education and Research and the Centre of ENIC/NARIC in Estonia.

In order to facilitate the recognition of diplomas and the qualifications certified thereby, in 1999 some universities commenced issuing an English appendix to the diploma – Diploma Supplement. By a regulation of the Government of the Republic *the Statute and Form of Diploma and Academic Report* adopted by the Government of the Republic in March 2003 the obligation of all institutions of higher education to issue the English Diploma Supplement from 1 January 2004 onwards was established. The Diploma Supplement is automatically issued to each graduate along with the diploma, except for those persons who graduate with a bachelor's degree and continue in master's studies in the same university the same year. The persons who complete the curricula of applied higher education studies receive an English Diploma Supplement from the spring of 2003. With regard to the regulation pertaining to both the Estonian and English document the format of the Diploma Supplement elaborated by the European Commission, European Council and UNESCO/CEPES has been complied with.

1.4. Comparison of foreign qualifications and making recognition simple

It is essential to ensure a well-functioning system of recognition for the operation of the European Higher Education Area (the Bologna process) and ensuring free movement of people. Estonia has developed the principles of assessment and recognition of foreign qualifications arising out of *the Convention on the Recognition of Qualifications Concerning Higher Education in the European Region* (the Lisbon convention), ratified by the Estonian parliament, *the Riigikogu*, on 1 April 1998, and is guided by the document on cooperation networks of ENIC and NARIC *Recognition Issues in the Bologna Process*.

In 1997, for the purpose of making true and fair recognition decisions of foreign qualifications, the Estonian National Academic Recognition Information Centre as a division of the Archimedes Foundation, which is also operating as the Estonian ENIC/NARIC Centre, was founded. The centre assesses foreign qualifications, compares them with Estonian qualifications and makes proposals to institutions of higher education and employers for making a true and fair recognition decision. Institutions of higher education in compliance with national legislation and international agreements. In order to make the assessment and recognition easier a guide under the title *Principles of Assessment and Recognition of Qualifications of Foreign Higher Education and Comparison with Estonian Qualifications* has been published.

The regulation of the Government of the Republic *Procedure for Assessment and Academic Recognition of Qualifications Certifying Education and Providing Access to Higher Education*, which will govern the assessment and recognition, is being prepared. The mentioned procedure will be an implementing provision of the Lisbon Convention and will lay down criteria for assessment, principles of recognition, use of foreign academic degrees internally and the system of providing information relating to higher education, which will ensure an objective and transparent system of recognition.

2. Establishment of system of credits

The national system of credit points in use is a cumulative calculation of credit points based on the workload of a student. One credit point corresponds to 40 hours or one study week (5 x 8 = 40 h) of studies performed by a student. A credit point is not related to the lecturing or any other workload of a member of the academic staff. The volume of one academic year (01 September – 30 June, including 40 weeks of studies) will be 40 credit points.

In the ECTS system of credits the volume of one academic year is 60 ECTS credits. The valid Universities Act enables parallel usage of both systems – the national system and the ECTS credits. Full transfer to the European system of credits will be completed by 1 September 2006.

The evaluation scale used in institutions of higher education has been approved by a regulation of the Minister of Education according to which:

- a 6-point scale of grades (with grades A, B, C, D and E an examination is considered passed, with grade F an examination is not considered passed) has been established, which is based on the percentage of acquired knowledge;
- the grades with which an examination is considered passed begin from 51% of the acquired volume of the subject;
- a distribution of grades between the students who pass the examination is not determined.

A transition to the evaluation scale of the ECTS requires an amendment to the relevant regulation of the Minister of Education presently in force.

General requirements for curricula are defined in a regulation of the Government of the Republic that establishes the requirements with regard to curricula and the qualifications of academic staff. The council of an institution of higher education shall specify detailed requirements for the curricula of a particular institution of higher education – the conditions and procedure for the preparation, opening, maintenance and closing of a curriculum. In the course of the higher education reform major Estonian institutions of higher education changed to module-based curricula in the framework of the so-called 3+2 system. This step improves the opportunities of students to move both inside a university and between universities. In national credit points the volume of one module normally ranges from 4-16 CP (6-24 ECTS credits).

One of the principles of the ECTS are tripartite learning agreements, i.e. before commencing his/her studies abroad a tripartite learning agreement should be entered into between the student, his/her home institution of higher education and the receiving institution of higher education. A tripartite learning agreement is mainly entered into in case a student goes to study abroad through the Erasmus/Socrates programme. In the academic year 2001/2002, 284 students (0.5% of all students) from 14 (25% of all institutions of higher education) institutions of higher education were involved.

All universities (covering approx. 65% of all students) have a catalogue of study courses both on paper and on the web. The catalogues of study courses are predominantly in the official language and only basic and essential information is provided in English. Since 2003/2004, pursuant to the Universities Act, it is possible to add in the catalogue the volume of subjects in ECTS credits and leading universities have used the opportunity. As to institutions of applied higher education printed catalogues of study courses are available in case of one quarter of the schools and one half of them have the web version of the catalogue.

3. Quality assurance of higher education in Estonia

The system of assessment of quality of Estonian higher education constitutes a continuous process consisting of four parts – self-analysis of universities (faculties or departments), a foreign expert appraisal, an autonomous body called the Higher Education Quality Assessment Council that makes decisions regarding curricula and the institutional accreditation of educational institutions, and self-improvement of universities.

In the institutional structure of higher education assessment the leading role is performed by the Higher Education Quality Assessment Council (HEQAC) with its final decisionmaking powers and the Higher Education Accreditation Centre that organises accreditation procedures. The Higher Education Quality Assessment Council was founded by the Government of the Republic in 1995. The main activities of the HEQAC include the accreditation of universities and other educational institutions that provide higher education, accreditation of their curricula, disclosure of accreditation decisions, elaboration of standards of higher education which meet international requirements and issuing recommendations on the basis of accreditation decisions.

An active assessment of curricula began after foundation of the Accreditation Centre (AC) in 1997. The AC forms expert groups and agrees with universities and experts on time schedules for expert visits. Moreover, the AC keeps contact with other accreditation centres. The AC is a member of the network of the agencies of quality assurance of Europe (ENQA) and the entire world (INQA). In the assessment procedure the AC is responsible for the smooth functioning of the organising aspect. Additionally, the AC makes public the accreditation decisions through the Internet.

Pursuant to the laws of Estonia accreditation is not compulsory; however, it is the only possibility for an institution of higher education to acquire the right to issue officially recognised documents certifying higher education. Exceptions include only such diplomas of public universities that are issued for completion of curricula registered before the beginning of the reform of curricula. As an exception, in case of substantial deficiencies or problems in an institution of higher education, the Higher Education Quality Assessment Council or the Ministry of Education and Research may also initiate accreditation. The Standard of Higher Education, which specifies general requirements for different stages of higher education in Estonia and on the basis of which decisions regarding the issuance of education licences and accreditation are made, has an essential role in the legislation relating to quality.

A critical self-analysis prepared by an educational institution forms a cornerstone of the system of quality assurance. The self-analysis, depending on its purpose, includes either an analysis of the functioning of the institution as a whole or only a concrete teaching and studying process (curricula, tuition, students, etc.). The experts evaluate both the correctness of the completed self-analysis and the object of the particular analysis. At the end of the assessment visit, they present their comments and recommendations, which along with the results of the self-analysis will form a basis for improving the educational institution as a whole (institutional assessment) or a concrete teaching process (assessment of curricula). They also forward their recommendation to the HEQAC regarding either full or conditional accreditation of the curriculum or for not granting the accreditation. The HEQAC shall make a final decision which determines whether on the basis of the curriculum the educational institution will or will not be entitled to issue officially recognised diplomas. A positive accreditation decision, full or conditional accreditation, shall be in force for 7 or 3 years, respectively.

In 2002, the first round of accreditation was completed. In the years 1997-2002, altogether 500 curricula were accredited, of which 385 were granted full accreditation, 100 were conditional and 15 negative. In addition to that one institutional accreditation was performed.

On the example of Estonia we may confirm that the introduction of the system of accreditation has been an effective impetus for developing intra-institution quality assurance systems and a number of recommendations by foreign experts were applied upon implementation of the reform of curricula in the years 2001-2002.

5. Mobility

In the course of the higher education reform the state has considered it necessary to contribute to the provision of supplementary support opportunities for the studies of Estonian students abroad. Since 1998, Estonia has participated in the Erasmus cooperation programme of the European Union. The students who study in foreign institutions of higher education in the framework of the programme will be paid a supplementary state benefit in addition to the EU grant. The aim of the supplementary state benefit is to increase the grants of students and thanks to the state benefit the scholarship payable in the framework of the programme has increased by more than one third (from 150 euros to 220 euros monthly).

Under state commissioned education the state allocates education allowances for students admitted for doctorate studies of foreign universities in specialties that are strategic for the country and who are obliged to return later to Estonian universities to become members of the academic staff. Under state commissioned education approximately 6% of the total number of students admitted to doctoral studies in Estonian universities are sent to foreign universities. In order to promote self-development of the academic staff and support the mobility of students in post-graduate training a number of state schemes for financing short-term mobility of students/members of the academic staff have been launched which

support business trips abroad with an aim of improving one's education (studies, visiting libraries, using laboratories, attending conferences and seminars, etc.).

The mobility of researchers which often includes tuition is rather common in Estonian universities. A systematic exchange of lecturers began in connection with the Tempus Phare assistance programme of the EU and later due to the implementation of the Erasmus cooperation programme of the EU. It is most common in institutions of higher education to "import" top specialists for a short and highly intensive period of studies (1-2 weeks), members of the academic staff are also recruited from abroad for certain narrow specialities (e.g. language teachers).

Estonian students studying abroad

In a small and open society the experience gained by studying abroad has a significant added value in the labour market and thus Estonian students in general are highly motivated to study abroad for some time at least. The main obstacles here have been the limited material resources of students.

The legislation provides equal terms for students who study in Estonia and abroad. An Estonian student who studies in a foreign institution of higher education is entitled to be granted a low-percentage study loan secured by the state on equal terms with a student who studies in an Estonian educational institution. A student who studies in a foreign country is entitled to receive a study loan for the period of studies (nominal length of studies) of the corresponding Estonian curriculum or the closest field of study.

We lack complete statistical data about Estonian students who study abroad because the recording of studies abroad is not compulsory. The only information source about Estonian students who study abroad is the official statistical information on study loans but this does not include those students who have not applied for the study loan.

The greatest number of the students who have taken a study loan study in Russia (over 30%) and the majority of those students are the ethnic Russians who live in Estonia. Russia is followed by such destination countries as Finland (18%), Germany (15%) and Latvia (7%). Quite a number of Estonians study in the United States and in Great Britain but it is most often these students who use other sources of financing (grants, sports scholarships, parents' aid, etc.).

In general, taking into consideration both the students who study in foreign universities on their own and under different financing schemes we can draw the conclusion that while the number of students who go to study in our neighbouring countries (Russia, Finland, Sweden, Germany) has been relatively permanent throughout the years, a clear growing trend can be noticed as to the number of students who choose untraditional partner countries.

Foreign students studying in Estonia

Today, foreign students still come to a few number of Estonian universities that provide studies in English either in the form of a whole curriculum or complete modules.

The majority of foreign students come to Estonia not as exchange students but with an aim of completing the whole bachelor's or master' studies here. Several Estonian universities have set the target of increasing the number of foreign students in the next years and thus, at present, the development of courses in English has become one of the important goals of universities.

The majority of foreign students in Estonian institutions of higher education come from Latvia (28% of all foreign students), Finland (24%), Lithuania (20%), Russia (12%) and China (8%). The reason for the above distribution is the active recruitment policy of Estonian universities in the mentioned countries. The greatest number of foreign students study in major private universities with curricula in English. The foreign students who come to study in public universities are usually provided with one-year intensive training in the Estonian language before commencing their studies. This group includes mostly Finns who are interested in certain specialties (medicine). In the framework of the programme of kindred peoples (Assistance and Cooperation Programme for Supporting the Languages and Cultures of the Ural National Minorities and for Development of Cooperation in the Field of Culture, Education and Science) lots of young people of Russian citizenship who are representatives of the kindred peoples study in Estonian institutions of higher education.

6. Lifelong learning and higher education

The underlying and constant purpose of lifelong learning is to create opportunities for adults and increase their participation in higher education both in the form of formal education and in-service training. The mentioned objective as aspiration is fixed in the development plans of most institutions of higher education. In order to implement the principle of lifelong learning a number of institutions of higher education have formed structures of open universities in which the persons not having studies as their main activities can pass both formal education and in-service training programs. The organisation of studies in the open structures is flexible, the speed of study is not limited and this makes studies possible alongside family life and work duties.

The registration of earlier studies and work experience supports the flexibility of lifelong learning. Estonia lacks a uniform system of registering previous studies and work experience but the matter has become topical and essential on both the levels of legislation and the activities of institutions of higher education. The amendments made to the Universities Act in 2003 bind universities to develop by 1 September 2004 a system of registering previous studies and work experience. In case of representatives of some selected specialties, such as teachers, universities already have this obligation for the academic year 2003/04. One should point out the best practice and note that lots of institutions which provide continuous and in-service training take into consideration previous studies and work experience. The issue has become topical in international networks as well – in 2003, Estonia participated in the TRANSFINE project in the course of which the organisation of recording previous learning and work experience was charted.

The opportunities for virtual learning that Estonian institutions of higher education have created under the state programme *Tiigriülikool* (Tiger University) support the expansion and diversification of lifelong learning, its flexibility and systematic approach and improve

access to higher education in different regions of the country. The legislation beneficial to persons who study facilitates the implementation of principles of lifelong learning: a person shall have the right to a study leave along with retention of his/her average salary for a certain period of time both for formal education and in-service training.

The availability of education depends on the existence of sufficient information on the opportunities of acquiring education and studying. The increased role of the infrastructure of information technology in the organisation of studies in institutions of higher education and in dissemination of corresponding information cannot be underestimated. Although a complete database about the opportunities of lifelong learning in Estonia does not exist each institution of higher education has compiled guides or catalogues regarding provided studies and has created prerequisites for virtual distribution of relevant information.

The opportunities of lifelong learning increase thanks to cooperation of higher education institutions with various subjects of education and social partners. The majority of curricula regarding module studies, in-service training and retraining programmes prepared and implemented in most Estonian institutions of higher education are based on such cooperation.

7. European dimension in higher education

Estonian institutions of higher education actively participate in educational and research programmes of the EU. Although only a few institutions of higher education have developed a purposeful strategy supporting internationalisation, the majority of institutions of higher education consider it important to increase the number of foreign students.

Participation in numerous international professional networks in the framework of which conferences, development projects (development of curricula, application of principles of quality management, application of information and communication technology in studies, training courses in marketing and fund-raising), exchange of students, members of the academic staff and trainees is organised has been a significant development-stimulating power within the last ten years. Foreign relations are fostered both in traditional universities and institutions of higher education that provide applied higher education and have been founded later.

Of major international project we would like to point out the following initiatives:

- Tartu University and Tallinn Technical University participate in the European University Association. In 2002, Tartu University passed the institutional accreditation of the EUA. This oldest university of Estonia and the only classical university is also a member of the Coimbra group of the European research universities.
- The University Consortium in Science and Technology, "Balttech," which was started in 1997 by seven universities situated at the Baltic Sea. The network joins technical universities of Scandinavia and the Baltic countries with an aim of developing international cooperation in the field of industrial engineers and

management. As a result of cooperation projects joint curricula have been developed in the course of which students pass modules in different universities participating in networking.

- The CUMULUS network of European art, design and architecture universities in which the Estonian Academy of Art is represented. A sign of active participation therein was the successful international conference held in May 2003 in Tallinn under the title "Valid Value in Design. Disabling Disablement, Enabling Enablement."
- The Baltic University Programme is a network in which 80 universities of eleven countries of the Baltic Sea region (Estonia, Latvia, Lithuania, Finland, Russia, the Ukraine, Slovakia, Poland, Germany, Byelorussia, Sweden, Denmark, Norway) participate with an aim of cooperating in the field of environmental issues: sustainable development, environmental conservation, democratic development.

Estonian institutions of higher education also participate in the work of the following international networks: the Institutional Network of the Universities from the Capitals of Europe - UNICA, the European Association of Institutions in Higher Education - EURASHE, regional networks of conferences of rectors, thematic networks supported by the European Commission and other field specific associations or networks.

In the spring of 2003, a number of Estonian universities held negotiations with foreign universities for preparing joint curricula. The Estonian Business School is the only institution of higher education that has participated since 1998 in the International Consortium of Double Degrees (CIDD) that is oriented towards international business administration.

8. Institutions of higher education and students

Estonian public universities are remarkably autonomous. In addition to organising the academic life of the university the competence of universities extends to opening new curricula, establishing admission terms and conditions, approving the budget, deciding about the structure, approving the development plan, electing the rector and making restricted decisions in matters concerning assets.

Institutions of applied higher education are legally more restricted in their activities and the approval of the Ministry of Education and Research is required to open new curricula and establish terms and conditions for admission. Unlike universities, with whom the state enters into an agreement of state commissioned education, appropriations from state budget funds to institutions of applied higher education and vocational educational institutions are made under the directive of the Minister of Education.

The legislation provides the obligation of students' participation in the council of a university or institution of applied higher education and the representatives of students should make up not less than one fifth of the membership of the council.

This report has been prepared by a work group including the representatives of the Estonian Ministry of Education and Research, the Higher Education Quality Assessment Council, the Information Centre of Estonian Academic Recognition, the Erasmus Programme in Estonia, Tartu University and Tallinn Pedagogical University.

More information:

Heli Aru, Ministry of Education and Research, Division of Higher Education,

e-mail: <u>Heli.Aru@hm.ee</u>