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Recognition of Engineering Qualification in Europe

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Due to the differences in educational and professional systems in Europe the mobility of university graduates from one European country to another is rather low. In order to achieve a non-restrictive labour market for engineers throughout Europe a system for mutual recognition of university diplomas must be established. The present paper gives a survey of corresponding action at the official EC level and of initiatives at the level of professional engineering associations.

CURRENT SITUATION

THE educational system can be seen as an expression of the cultural identity of each individual country. Despite many common roots, this has led to pronounced structural differences in Europe. These are viewed politically as intrinsic values, worthy of retention. Today, there is no indication of a tendency towards conformity in the educational systems within the European Community.

In a similar way, within each single country the individual professions and the system of access to some professions are the result of historical developments and of increasing legal regulations. Again, there are quite considerable differences from one country to another and comformity in this respect is not to be expected within the European Community.

Varying educational and employment systems are also an impediment for university graduates wanting to migrate in Europe. The often restrictive national regulations frequently inhibit them from taking up residence or employment in a different country. Hence, it is no surprise that the willingness of university graduates to migrate from one European country to another is not particularly great, especially when it also involves crossing a border to another language and culture.

It has long been a political demand within the European framework that students and graduates be more mobile. This goal is derived from the 'Single European Act' of 1 July 1987, which stipulates the realization of the Common Market and the guarantee of freedom of movement for goods, capital, persons and services by the end of 1992.

Freedom of movement for *persons and services* means

- freedom to work and
- freedom of residence

for nationals of one member state of the European Community in any country of the EC.

European integration, i.e. increasingly interwoven markets, the step-by-step realization of a 'Europe of its citizens' and, finally, the growth of the European states into a European Community makes a mutual recognition of educational and academic degrees, together with the removal of obstacles to studying in national universities and the possibility of working in a different country even more of a necessity. This is especially true of the engineering professions.

RECOGNITION OF FOREIGN ACADEMIC QUALIFICATIONS

A number of bilateral and multilateral agreements among governments have already been signed. They are committed to overcoming differences in the national educational and occupational systems and also include the corresponding equivalence of regulations. The agreements have different goals, e.g.:

- Recognition of foreign secondary school certificates as valid for admittance to university study.
- Recognition of study periods abroad, of achievements and certificates with the possibility of further studies at home, including acceptance in a doctorate course (recognition of the so-called *status academicus*).
- Recognition of foreign academic titles with the purpose of granting permission to use these.
- Recognition of academic qualifications from foreign universities with the purpose of access to professions and to pursue these (recognition of the so-called *effectus civilis*).
- Recognition of degrees from foreign universities so that these may be used to designate a profession (e.g. Ingenieur).

Endeavours towards harmonization in the educational and professional areas are made more

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difficult by the fact that different authorities are responsible for the different areas. Thus, government authorities (education authorities) and the universities are responsible for the recognition of the *status academicus*, whereas the Department of Trade and Industry, the Chambers of Commerce or Professional Associations are responsible for the *effectus civilis*. The situation is further aggravated by the fact that, according to the Treaty of Rome of 1967, the EC has no responsibility for the educational sector but is responsible for the employment sector.

AGREEMENTS ON EQUIVALENCY IN THE SECTOR OF STATUS ACADEMICUS

These agreements deal with the recognition of school leaving certificates and university final examinations which can lead to further education (e.g. advanced study or doctorate). As the EC has no responsibility for cultural or educational policies, one must have recourse to bilateral and multilateral agreements on the equal value of the duration of studies at university or on the *academic* recognition of academic degrees and diplomas.

The sector of *status academicus* is not affected by the present discussion about an EC recognition of university degrees involving the unimpeded right to pursue a profession.

EC DIRECTIVES IN THE SECTOR OF *EFFECTUS CIVILIS*

The directives of the European community contain regulations on the recognition of professional qualifications obtained in other countries as a presupposition for certain professional activities. The EC responsibility is derived from the competence for directives with regard to the right to domicile and freedom of movement for persons and services.

The system of directives is based primarily on the stipulation of qualitative lowest standards. After many years of negotiations, directives have now been passed for as many as 10 professions, including doctors, lawyers, and architects. From the German point of view, the directive dealing with architects is of special interest as the German Fachhochschule was here taken into consideration for the first time. All other directives deal with courses of instruction not offered by a Fachhochschule.

Directive for architects of 16 June 1985

This directive determines the suppositions under which member states, who have regulated the right to domicile and the right to freely pursue a profession, must regulate the admittance of graduates who have qualified in another EC member state. A 4-year course of studies was laid down as the criterion for recognition. Above and beyond that, graduates who have completed a 3-year course of studies at a German Fachhochschule are also recognized when they can provide evidence that they have had 4 years' professional experience in their home country following their studies.

A course of study at a German Fachhochschule is treated here for the first time in the EC as equivalent to a university course of studies. The training period in industry of two practical semesters, which is an integral part of the course, is recognized as 'full-time study'.

Regulations for engineers

A special directive for the engineering professions has been under consideration in EC committees for over two decades. Agreement could not be reached, due to special employment policy difficulties. At the same time, a 'directive on a general system for the recognition of higher-education diplomas awarded on completion of professional education and training of at least three years' duration' (General Directive) in all professions which were not considered by special directives, was under consideration. This applies to the engineering professions also.

The Ministers for Economy of the EC countries, responsible for questions of common market, accepted on 22 June 1988 the recommendation of the Commission about a General Directive. Having passed the European Parliament the directive was finally passed by the Council on 21 December 1988. Its adaptation in national legislation should have been completed by the end of 1990.

General Directive of 21 December 1988

The regulations of the General Directive follow the subsidiary principle. It is taken for granted that any university graduate is basically capable of pursuing his profession in any member state if he has completed a 3-year university course.

Further compensatory measures, to be laid down by the host country, may be required for his recognition if there are basic differences in the duration of study and/or course contents between the respective courses of studies in the home and host country.

The following possibilities for compensatory measures have been conceded to the EC member states:

- Professional experience in the home country of a maximum of twice the shortfall in the course of instruction for the respective qualification between the home and host country (maximum however of 4 years) can be required.
- Authority to carry out an adaptation period (maximum of 3 years) or aptitude tests if there are essentially different course contents or fields of activity in both countries.

It is the responsibility of each member state to determine the type and extent of compensatory measures for a single profession and these are not a subject of the General Directive. A coordination

committee monitors the uniform application of the directive in all member states.

It has not yet been decided in detail in which form the engineering professions should be considered in the General Directive and which compensatory measures apply. The individual member states had up to the end of 1990 to determine concrete measures for graduates from varying types of universities in the other respective countries. As already mentioned, no agreement at EC level has yet been reached about a special directive for the engineering professions. For this reason, free access to the engineering professions will be regulated on the basis of the *General Directive*, i.e. on the basis of a minimum of a 3-year course of studies and possible compensatory measures.

The EC commission is still interested in presenting a special directive for engineers and has requested the European associations to submit a practical suggestion. In the meantime, an Expert Committee, whose members are representatives of different European associations and which is under the centralized control of FEANI, has produced a number of suggestions. Their deliberations are still in progress and will presumably not have come to an end before the General Directive becomes effective. The results of their deliberations could then be of importance if the realization of the General Directive relating to the engineering professions is not satisfactory.

FEANI Register and the title of Europa Ingenieur (EUR ING)

Since 1965 the European Association of National Engineering Associations, FEANI (Fédération Européenne d'Associations Nationales d'Ingénieurs), keeps a 'European Register of higher technical professions'. Because of reforms in the educational system in member states, this register was restructured and a new edition published in 1987. The suppositions for inclusion in the register as 'Ingenieur' (Group 1) or 'Technician' (Group 2) are intended to make the professional qualifications distinctly transparent and also to lay down minimum standards valid for the whole of Europe. FEANI hopes to achieve an alleviation for migrant engineers and technicians in Europe.

To be included in Group 1 of the Register, a minimum of a 4-year course of engineering studies, including a maximum of a 1-year training, supervised by the university, was initially required. The application of this regulation caused unsurmountable problems in some educational systems, e.g. in Germany. According to this regulation, the 4-year course of studies at a Fachhochschule including a training period of two practical semesters, was recognized as a fully adequate engineering education while the 3-year courses at a German Fachhochschule, considered in Germany to be equivalent to the 4-year courses, could not be included in Group 1 of the register.

FEANI has recognized this problem, and has adapted the requirements for an engineering education to the standard of the EC General Directive. As of 1991, inclusion in the FEANI Register, Group 1, depends on having completed at least a 3-year engineering course at a university recognized by the FEANI, as the minimum for the necessary engineering education.

With the redrafting of the FEANI Register in 1987, the unofficial title of *Europa Ingenieur* (*Eur ING*) was also created. This title can be acquired by engineers if:

- They fulfil the requirements for inclusion in Group 1 of the FEANI Register.
- In addition they can show pertinent professional experience (at least 2 years) so that a total of at least 7 years for education, training, and professional experience has been accumulated.

With the conferment of the title Europa Ingenieur, FEANI wishes to express its conviction that with the different European educational and employment systems and with the respective training and working-in periods, which are here taken to amount to a total of 7 years, with consideration of the respective minimum periods, a comparably good and competent engineer has been educated.

FUTURE DEVELOPMENT

The EC General Directive, which is valid for approximately 80 different courses of study leading to a diploma, forms the framework for the concrete elaboration of specific regulations for the individuals, nationally regulated activities in the EC member states. The definition of the respective compensatory measures were supposed to be terminated by the beginning of 1991. Only then was it intended to judge whether the application of the General Directive with regard to the engineering professions was satisfactory and whether the goal of the highest possible degree of mobility for engineers within the EC had been achieved.

In the interest of being able to pursue a profession anywhere in Europe, all engineers with a sense of responsibility are called on to ensure that, in a spirit of trust and in fair comparison and without discrimination, a mutual recognition of the achievements of the national educational and employment systems be reached by means of their active participation in associations, university bodies, and also in the political sphere, on a national and EC level.

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