QUALIFICATIONS IN THE SECTORAL PROFESSIONS


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Introduction

Directive 2005/36/EC, adopted on September 7 2005 (Germany and Greece voted against), consolidates the rules regulating the recognition of professional qualifications. It applies to all Member State nationals wishing to practise in a MS other than that in which they qualified.


The seven sectoral professions falling within the scope of the Directive are:

I. Medical doctor
II. General care nurse
III. Midwife
IV. Dental practitioner
V. Veterinary surgeon
VI. Pharmacist
VII. Architect

DG MARKT, which drafted the initial proposal for the Directive in 2002 [COM(2002)119], had two principal purposes in mind: to streamline the existing legislation, which was particularly complex, and to facilitate the passage of the closely related Directive on Services in the Internal Market. It refrained from taking on board the ongoing developments in the Bologna Process and associated initiatives emanating from DG Education & Culture. When the European Parliament, in its first reading of the Directive, recommended that its requirements should be set into the context of the emergent qualifications frameworks and supported by current thinking on the European Credit Transfer System [ECTS], the Commission demurred. The convergence of national training systems was under discussion in other arenas, it said (Commission’s amended proposal [COM(2004)317], p.42).

There is therefore considerable scope for discussion of the alignment of the Directive and the qualifications framework under construction in the Bologna Process, as well as of both these with the Commission’s own proposal for a European Qualifications Framework [COM(2006)479]. Not only scope, but urgency – in the interests of transparency, of mobility of professionals, students and enterprises, and of legal certainty. While the Bologna
Process is inter-governmental and not legally binding, most EU Member States have nevertheless chosen to enshrine it in national legislation. Many bodies – academic, professional, regulatory, student – are concerned at the lack of congruence of the emerging structures and by the challenges posed by the prospect of alignment. These challenges are legal, regulatory, strategic, political, academic, pedagogic, financial.

The degree of flux and complexity, not to say confusion, as well as the range of priorities adopted by different stakeholders, was illustrated by Kachur & Krajic in their examination of convergence and integration in health professions education [HPE]:

‘Professionals’ international mobility has been an important force in reshaping HPE in Europe. Qualifications must be acceptable beyond national borders. However, the Bologna Process, which seeks to facilitate collaboration in higher education, is creating mixed effects as it is focusing on neither quality improvement in HPE nor health care. Instead, it tries to solve problems of legal harmonization, clarification of equivalence and other managerial concerns. In contrast, the WHO-sponsored World Federation for Medical Education (WFME) is attempting to influence medical training institutions by establishing specific quality standards, setting out guidelines for basic, postgraduate and continuing education in 2003.’ See www.euro.who.int/document/e87923_6.pdf p.82.

Parallel appreciations can be found in the pronouncements of other sectoral professions. At the same time, initiatives such as the Tuning Project have endeavoured to create Europe-wide consensus in a range of HE disciplines (including nursing), regarding the learning outcomes and competences appropriate to the various levels of the Bologna and EQF frameworks. It is reasonable to suppose that such work might eventually inform changes in the Directive. However, the prospect of extending academic consensus to embrace professional and regulatory bodies is a daunting one – and unlikely to be achieved before the scheduled completion of the European Higher Education Area [EHEA] in 2010.

This document is a preliminary attempt to map this complex field – in respect of the 7 sectoral professions. For each, it covers:

2. Professional bodies operating at EU level
3. Academic associations operating at EU level
4. Student associations operating at EU level
5. Competent regulatory authorities at EU level
6. Trends and positions discernible in the pronouncements of these bodies

It concludes by detailing the provisions for amending the Directive (p.30).
I. MEDICAL DOCTOR


Section 2 Doctors of medicine

Article 24
Basic medical training

1. Admission to basic medical training shall be contingent upon possession of a diploma or certificate providing access, for the studies in question, to universities.

2. **Basic medical training** shall comprise **a total of at least six years of study or 5500 hours of theoretical and practical training** provided by, or under the supervision of, a university. […]

3. Basic medical training shall provide an assurance that the person in question has acquired the **following knowledge and skills:**

(a) adequate knowledge of the sciences on which medicine is based and a good understanding of the scientific methods including the principles of measuring biological functions, the evaluation of scientifically established facts and the analysis of data;
(b) sufficient understanding of the structure, functions and behaviour of healthy and sick persons, as well as relations between the state of health and physical and social surroundings of the human being;
(c) adequate knowledge of clinical disciplines and practices, providing him with a coherent picture of mental and physical diseases, of medicine from the points of view of prophylaxis, diagnosis and therapy and of human reproduction;
(d) suitable clinical experience in hospitals under appropriate supervision.

Article 25
Specialist medical training

1. Admission to **specialist medical training shall be contingent upon completion and validation of six years of study** as part of a training programme referred to in Article 24 in the course of which the trainee has acquired the relevant knowledge of basic medicine.

2. **Specialist medical training shall comprise theoretical and practical training at a university or medical teaching hospital** or, where appropriate, a medical care establishment approved for that purpose by the competent authorities or bodies. [Minimum duration is specified in Annex V, point 5.1.3 […]]
3. Training shall be given on a full-time basis at specific establishments which are recognised by the competent authorities. It shall entail participation in the full range of medical activities of the department where the training is given, including duty on call, in such a way that the trainee specialist devotes all his professional activity to his practical and theoretical training throughout the entire working week and throughout the year, in accordance with the procedures laid down by the competent authorities. Accordingly, these posts shall be the subject of appropriate remuneration.

[...]

Article 28
Specific training in general medical practice

1. Admission to specific training in general medical practice shall be contingent on the completion and validation of six years of study as part of a training programme referred to in Article 24.

2. The specific training in general medical practice leading to the award of evidence of formal qualifications issued before 1 January 2006 shall be of a duration of at least two years on a full-time basis. In the case of evidence of formal qualifications issued after that date, the training shall be of a duration of at least three years on a full-time basis. [...]

3. The specific training in general medical practice shall be carried out on a full-time basis, under the supervision of the competent authorities or bodies. It shall be more practical than theoretical. The practical training shall be given, on the one hand, for at least six months in an approved hospital possessing appropriate equipment and services and, on the other hand, for at least six months as part of an approved general medical practice or an approved centre at which doctors provide primary health care. The practical training shall take place in conjunction with other health establishments or structures concerned with general medicine. [...]
3. **Academic associations operating at EU level**

- Association of Medical Schools in Europe [AMSE], [http://www.amse-med.eu/](http://www.amse-med.eu/)
  AMSE acts as a forum for medical faculties throughout Europe. Its recent Lisbon Declaration (2007) commits it to work with WFME and with MEDINE (below) to enhance the quality of interaction between medical education and healthcare systems.

- Medical Education in Europe [MEDINE], ERASMUS thematic network (phase 1 completed), [http://www.bris.ac.uk/medine/](http://www.bris.ac.uk/medine/)
  MEDINE has now joined the Tuning Project. See [tuning.unideusto.org/tuningeu/index.php?option=content&task=view&id=28&Itemid=51](http://tuning.unideusto.org/tuningeu/index.php?option=content&task=view&id=28&Itemid=51) and the remarks on Nursing below.

  AMEE is the European arm of the World Federation for Medical Education [WFME] – both are based in Denmark.

4. **Student associations operating at EU level**

- European Medical Students’ Association [EMSA], [http://www.emsa-europe.org/](http://www.emsa-europe.org/)
  EMSA has produced regular position papers on the Bologna Process.

- International Federation of Medical Students’ Associations [IFMSA], [http://www.ifmsa.org/](http://www.ifmsa.org/)
  IFMSA represents 105 national medical students organisations worldwide.

5. There is no **regulatory body** operating at EU level. The Commission’s Advisory Committee on Medical Training [ACMT] no longer meets.

6. **Trends and pronouncements**

At its November 2004 board meeting, CPME welcomed the Bologna Process in principle, and its promotion of transparency, mobility and quality assurance in particular. It also welcomed the development of ECTS. However, it strongly opposed the implementation of a two-cycle structure in medical education. The reasons for this were various: effective recognition procedures were already enshrined in EU legislation; medical education was not an academic, but a professional, concern; much innovative curricular work was already in progress, notably to remove the sequential distinction between pre-clinical and clinical training; the ACMT had come out against a two-cycle format in 1993; a first cycle Bologna qualification would have no utility in the medical labour market and could lend itself to abuse and to the compromising of public safety. In 2005 a joint statement by AMEE and WFME effectively endorsed the position taken by CPME.
In 2006, MEDINE conducted a survey of 22 countries. It found that seven (Austria, Belgium, Denmark, France, Italy, Netherlands, Spain) have a two-cycle structure, while 15 neither have such a structure nor intend to implement one. The fifteen are: Czech R, Finland, Germany, Greece, Hungary, Ireland, Latvia, Lithuania, Norway, Poland, Portugal, Slovenia, Sweden, Turkey, UK.

Like CPME, EMSA supports the Bologna Process in principle, but insists that medical education must be an exception to the two-cycle rule. It regards the elaboration of a core curriculum as the best way of guaranteeing competence-based training and quality enhancement, as well as of integrating theoretical and clinical knowledge. A core curriculum, it believes, is also the absolute prerequisite of any future professional licensing system operating at EU level. In 2006 EMSA organised a Bologna Follow-up conference which agreed the detail of a core curriculum based on 76 specified learning outcomes distributed among nine different fields (e.g. clinical skills, communication, critical thinking etc). AMEE policy on outcomes-based learning is acknowledged as an important source; there is no reference to Tuning. The conference statement was endorsed by CPME in 2007.

Medical doctors constitute one of the four professions chosen by DG MARKT (with accountants, pharmacists and physiotherapists) to pilot the Information in the Internal Market Information [IMI] project commencing in 2007. IMI seeks to identify and implements ways of improving communication and information exchange between national authorities.
II. GENERAL CARE NURSE


Section 3 Nurses responsible for general care

Article 31
Training of nurses responsible for general care

1. Admission to training for nurses responsible for general care shall be contingent upon completion of general education of 10 years, as attested by a diploma, certificate or other evidence issued by the competent authorities or bodies in a Member State or by a certificate attesting success in an examination, of an equivalent level, for admission to a school of nursing.

2. Training of nurses responsible for general care shall be given on a full-time basis and shall include at least the programme described in Annex V, point 5.2.1 [see p.9 below]. […]

3. The training of nurses responsible for general care shall comprise at least three years of study or 4600 hours of theoretical and clinical training, the duration of the theoretical training representing at least one third and the duration of the clinical training at least one half of the minimum duration of the training. […]

4. Theoretical training is that part of nurse training from which trainee nurses acquire the professional knowledge, insights and skills necessary for organising, dispensing and evaluating overall health care. The training shall be given by teachers of nursing care and by other competent persons, in nursing schools and other training establishments selected by the training institution.

5. Clinical training is that part of nurse training in which trainee nurses learn, as part of a team and in direct contact with a healthy or sick individual and/or community, to organise, dispense and evaluate the required comprehensive nursing care, on the basis of the knowledge and skills which they have acquired. The trainee nurse shall learn not only how to work in a team, but also how to lead a team and organise overall nursing care, including health education for individuals and small groups, within the health institute or in the community. This training shall take place in hospitals and other health institutions and in the community, under the responsibility of nursing teachers, in cooperation with and assisted by other qualified nurses. […]

6. Training for nurses responsible for general care shall provide an assurance that the person in question has acquired the following knowledge and skills:
(a) adequate knowledge of the sciences on which general nursing is based, including sufficient understanding of the structure, physiological functions and behaviour of healthy and sick persons, and of the relationship between the state of health and the physical and social environment of the human being;
(b) sufficient knowledge of the nature and ethics of the profession and of the general principles of health and nursing;
(c) adequate clinical experience; such experience, which should be selected for its training value, should be gained under the supervision of qualified nursing staff and in places where the number of qualified staff and equipment are appropriate for the nursing care of the patient;
(d) the ability to participate in the practical training of health personnel and experience of working with such personnel;
(e) experience of working with members of other professions in the health sector.

Annex V.2. NURSE RESPONSIBLE FOR GENERAL CARE

5.2.1. Training programme for nurses responsible for general care

The training leading to the award of a formal qualification of nurses responsible for general care shall consist of the following two parts.

A. Theoretical instruction
   a. Nursing:
      — Nature and ethics of the profession
      — General principles of health and nursing
      — Nursing principles in relation to: general and specialist medicine; general and specialist surgery; child care and paediatrics; maternity care; mental health and psychiatry; care of the old and geriatrics
   b. Basic sciences:
      — Anatomy and physiology
      — Pathology
      — Bacteriology, virology and parasitology
      — Biophysics, biochemistry and radiology
      — Dietetics
      — Hygiene:
      — preventive medicine
      — health education
— Pharmacology

B. Clinical instruction
— Nursing in relation to: general and specialist medicine; general and specialist surgery; child care and paediatrics; maternity care; mental health and psychiatry; care of the old and geriatrics; home nursing

One or more of these subjects may be taught in the context of the other disciplines or in conjunction therewith. The theoretical instruction must be weighted and coordinated with the clinical instruction in such a way that the knowledge and skills referred to in this Annex can be acquired in an adequate fashion.

2. Professional bodies operating at EU level

  EFN full members are drawn from the national nurses associations of all EU/EEA states. EFN has a secretariat in Brussels. It is active in the Bologna Process and in the Tuning Project.

3. Academic associations operating at EU level

  The network consists of 33 HEI departments in 16 countries. It has no members in Austria, Bulgaria, Cyprus, Estonia, France, Hungary, Ireland, Lithuania, Luxembourg, Malta, Poland, Romania, Slovakia, Iceland, Liechtenstein, Switzerland. It aims, among other things, to
  * compare curricula and improve quality of Nursing and Midwifery education
  * participate in the realisation of the Bologna agreements in Europe
  * get accreditation for Nursing and Midwifery education in Europe

- The EU-funded Tuning Project http://tuning.unideusto.org/tuningeu/index.php?option=content&task=view&id=29&Itemid=52
  Tuning is a long-standing project now in its fourth phase. In a range of subject areas, in which nursing is the only ‘professional’ discipline, it has built consensus on the generic and specific competences deemed to characterise student attainment at Bachelor, Master and Doctorate levels. Its focus is on student-centred and outcomes-based pedagogy. It plays a prominent role in the current discussions aimed at upgrading ECTS from a simple credit transfer system into an accumulation system more adequate to the needs of the lifelong learning agenda. As far as nursing is concerned, it is keen to update and upgrade the requirements set down in Annex 5 of the Directive.

- European Federation of Nurse Educators http://www.fine-europe.eu/index.htm

5. Regulatory bodies

FEPI is the umbrella body for national nursing regulators in all EU/EEA countries except Bulgaria, Cyprus, Czech R, France, Slovakia, Iceland and Liechtenstein. It is committed, inter alia, to ‘the promotion of continuous nursing education and training in line with European Life Long Learning policies’. Its recent conference (September 2007) heard presentations on the implementation of the Directive (An Baeyens, DG MARKT) and on the Tuning Project (Dr Mary Gobbi). FEPI’s Education, Training and Competences [ETC] Working Group is particularly interested in the interaction of the Directive, the Bologna Process and DG EAC’s new Lifelong Learning Programme [LLP].

6. Trends and pronouncements
EFN has recently called explicitly for the Directive to be updated and standardised according to the Bologna template. In its view, nursing should become a graduate profession, with a competence-based initial professional qualification of not less than 3 full-time academic years. It believes that ‘the European Credit Transfer System may be a major vehicle through which some of the current historical anomalies resulting from interpretation of the Directives can be addressed’. EFN is eager to take the lead and, with the International Council of Nurses [ICN], has expressed strong support for the results achieved by the Tuning Project. It considers that further work is needed on clarifying the status and credit-weighting of practice-based education and on access routes into nursing from VET. It is concerned that the extra workload of converting provision to the Bologna model should be adequately funded and that local impact assessments should be undertaken. Wider stakeholder involvement is crucial.
III. MIDWIFE


Section 6, Midwives

Article 40
The training of midwives

1. The training of midwives shall comprise a total of at least:

(a) specific full-time training as a midwife comprising at least three years of theoretical and practical study (route I) comprising at least the programme described in Annex V, point 5.5.1, or
(b) specific full-time training as a midwife of 18 months’ duration (route II), comprising at least the study programme described in Annex V, point 5.5.1, which was not the subject of equivalent training of nurses responsible for general care.

The Member States shall ensure that institutions providing midwife training are responsible for coordinating theory and practice throughout the programme of study. [...] [22]

2. Access to training as a midwife shall be contingent upon one of the following conditions:

(a) completion of at least the first 10 years of general school education for route I, or
(b) possession of evidence of formal qualifications as a nurse responsible for general care referred to in Annex V, point 5.2.2 for route II.

3. Training as a midwife shall provide an assurance that the person in question has acquired the following knowledge and skills:

(a) adequate knowledge of the sciences on which the activities of midwives are based, particularly obstetrics and gynaecology;
(b) adequate knowledge of the ethics of the profession and the professional legislation;
(c) detailed knowledge of biological functions, anatomy and physiology in the field of obstetrics and of the newly born, and also a knowledge of the relationship between the state of health and the physical and social environment of the human being, and of his behaviour;
(d) adequate clinical experience gained in approved institutions under the supervision of staff qualified in midwifery and obstetrics;
(e) adequate understanding of the training of health personnel and experience of working with such.
Article 41
Procedures for the recognition of evidence of formal qualifications as a midwife

1. The evidence of formal qualifications as a midwife referred to in Annex V, point 5.5.2 shall be subject to automatic recognition pursuant to Article 21 in so far as they satisfy one of the following criteria:

(a) full-time training of at least three years as a midwife:
   (i) either made contingent upon possession of a diploma, certificate or other evidence of qualification giving access to universities or higher education institutes, or otherwise guaranteeing an equivalent level of knowledge; or
   (ii) followed by two years of professional practice for which a certificate has been issued in accordance with paragraph 2;
(b) full-time training as a midwife of at least two years or 3 600 hours, contingent upon possession of evidence of formal qualifications as a nurse responsible for general care referred to in Annex V, point 5.2.2;
(c) full-time training as a midwife of at least 18 months or 3 000 hours, contingent upon possession of evidence of formal qualifications as a nurse responsible for general care referred to in Annex V, point 5.2.2 and followed by one year's professional practice for which a certificate has been issued in accordance with paragraph 2.

2. The certificate referred to in paragraph 1 shall be issued by the competent authorities in the home Member State. It shall certify that the holder, after obtaining evidence of formal qualifications as a midwife, has satisfactorily pursued all the activities of a midwife for a corresponding period in a hospital or a health care establishment approved for that purpose.

Article 42
Pursuit of the professional activities of a midwife

1. The provisions of this section shall apply to the activities of midwives as defined by each Member State, without prejudice to paragraph 2, and pursued under the professional titles set out in Annex V, point 5.5.2.

2. The Member States shall ensure that midwives are able to gain access to and pursue at least the following activities:

(a) provision of sound family planning information and advice;
(b) diagnosis of pregnancies and monitoring normal pregnancies; carrying out the examinations necessary for the monitoring of the development of normal pregnancies;
(c) prescribing or advising on the examinations necessary for the earliest possible diagnosis of pregnancies at risk;
(d) provision of programmes of parenthood preparation and complete preparation for childbirth including advice on hygiene and nutrition;
(e) caring for and assisting the mother during labour and monitoring the condition of the foetus in utero by the appropriate clinical and technical means;
(f) conducting spontaneous deliveries including where required episiotomies and in urgent cases breech deliveries;
(g) recognising the warning signs of abnormality in the mother or infant which necessitate referral to a doctor and assisting the latter where appropriate;
taking the necessary emergency measures in the doctor's absence, in particular the manual removal of the placenta, possibly followed by manual examination of the uterus;
(h) examining and caring for the new-born infant; taking all initiatives which are necessary in case of need and carrying out where necessary immediate resuscitation;
(i) caring for and monitoring the progress of the mother in the postnatal period and giving all necessary advice to the mother on infant care to enable her to ensure the optimum progress of the new-born infant;
(j) carrying out treatment prescribed by doctors;
(k) drawing up the necessary written reports.

Annex V.5. MIDWIFE

5.5.1. Training programme for midwives (Training types I and II)

The training programme for obtaining evidence of formal qualifications in midwifery consists of the following two parts:

A. Theoretical and technical instruction

a. General subjects
   — Basic anatomy and physiology
   — Basic pathology
   — Basic bacteriology, virology and parasitology
   — Basic biophysics, biochemistry and radiology
   — Paediatrics, with particular reference to new-born infants
   — Hygiene, health education, preventive medicine, early diagnosis of diseases
   — Nutrition and dietetics, with particular reference to women, new-born and young babies
   — Basic sociology and socio-medical questions
   — Basic pharmacology
   — Psychology
   — Principles and methods of teaching
   — Health and social legislation and health organisation
   — Professional ethics and professional legislation
Sex education and family planning
Legal protection of mother and infant

b. Subjects specific to the activities of midwives
- Anatomy and physiology
- Embryology and development of the foetus
- Pregnancy, childbirth and puerperium
- Gynaecological and obstetrical pathology
- Preparation for childbirth and parenthood, including psychological aspects
- Preparation for delivery (including knowledge and use of technical equipment in obstetrics)
- Analgesia, anaesthesia and resuscitation
- Physiology and pathology of the new-born infant
- Care and supervision of the new-born infant
- Psychological and social factors

B. Practical and clinical training

This training is to be dispensed under appropriate supervision:
- Advising of pregnant women, involving at least 100 pre-natal examinations.
- Supervision and care of at least 40 pregnant women.
- Conduct by the student of at least 40 deliveries; where this number cannot be reached owing to the lack of available women in labour, it may be reduced to a minimum of 30, provided that the student assists with 20 further deliveries.
- Active participation with breech deliveries. Where this is not possible because of lack of breech deliveries, practice may be in a simulated situation.
- Performance of episiotomy and initiation into suturing. Initiation shall include theoretical instruction and clinical practice. The practice of suturing includes suturing of the wound following an episiotomy and a simple perineal laceration. This may be in a simulated situation if absolutely necessary.
- Supervision and care of 40 women at risk in pregnancy, or labour or post-natal period.
- Supervision and care (including examination) of at least 100 post-natal women and healthy new-born infants.
- Observation and care of the new-born requiring special care, including those born pre-term, post-term, underweight or ill.
- Care of women with pathological conditions in the fields of gynaecology and obstetrics.
- Initiation into care in the field of medicine and surgery. Initiation shall include theoretical instruction and clinical practice.

The theoretical and technical training (Part A of the training programme) shall be balanced and coordinated with the clinical training (Part B of the same programme) in such a way that the knowledge and experience listed in this Annex may be acquired in an adequate manner. Clinical instruction shall take the form of supervised in-service training in hospital departments or other health services approved by the competent authorities or bodies. As part of this training, student midwives shall participate in the activities of the departments concerned in so far as those activities contribute to their training. They shall be taught the responsibilities involved in the activities of midwives.
2. Professional bodies operating at EU level

- European Midwives Association [EMA], www.europeanmidwives.org/uk/
  EMA has members in all EU/EEA countries except Bulgaria, Hungary, Poland, Iceland and Liechtenstein; it has contacts in some of these and is actively trying to establish links. It has thus far made no statement on Bologna, but will discuss both Bologna and the Directive at a Europe-wide education conference to be held in Berlin in December 2007, jointly organised with the German Midwives Association.

- European Forum of National Nursing and Midwifery Associations [EFNNMA], jointly run with WHO/Europe, www.euro.who.int/efnnma
  EFNNMA has members in all EU/EEA countries except Czech R, Estonia, France, Latvia, Luxembourg, Slovenia, Liechtenstein.

3. Academic associations operating at EU level

  The network consists of 33 HEI departments in 16 countries. It has no members in Austria, Bulgaria, Cyprus, Estonia, France, Hungary, Ireland, Lithuania, Luxembourg, Malta, Poland, Romania, Slovakia, Iceland, Liechtenstein, Switzerland. It aims, among other things, to
  * compare curricula and improve quality of Nursing and Midwifery education
  * participate in the realisation of the Bologna agreements in Europe
  * get accreditation for Nursing and Midwifery education in Europe

4. EUA is not aware of any midwifery student associations operating at EU level.

5. There is no dedicated regulatory body operating at EU level; EMA is convinced of the added value of having one. The national nursing regulators in FEPI (see above p.11) in some instances cover the midwifery profession.

6. Trends and pronouncements

Signatory countries of the Munich Declaration (2000) undertook, inter alia, to develop ‘improved initial and continuing education, and access to higher nursing and midwifery education’. An investigation into its implementation by Büscher & Wagner [WHO, 2005] found that ‘except in the case of Slovenia, all countries reply positively to the [question of the] existence of the full range of professional education. However, […] it is not always clear whether nursing and midwifery education really fits into the national educational system. […] The answers are mostly related to initial and continuing education, and it may be assumed that the full range of academic degrees is not available. This is especially true for the master’s degree and the PhD. For midwives the situation seems worse than for nurses, as midwifery degrees are a real exception. […] Despite the fact that many steps in the area of education have been taken (adoption of curricula, raising qualification level for teachers of nursing, more opportunities for continuing education), most countries report only limited impact of the Declaration on these processes. Particularly the EU accession countries had to different [sic] reforms that do not contradict the Declaration, but rather are initiated by EU requirements and aimed at harmonization with existing EU regulation. In the area of education the Bologna Process and its requirements also had a significant impact.’ Büscher & Wagner do not say what this impact has been.
IV. DENTIST


Section 4 Dental Practitioners

Article 34
Basic dental training

1. Admission to basic dental training presupposes possession of a diploma or certificate giving access, for the studies in question, to universities or higher institutes of a level recognised as equivalent, in a Member State.

2. Basic dental training shall comprise a total of at least five years of full-time theoretical and practical study, comprising at least the programme described in Annex V, point 5.3.1 and given in a university, in a higher institute providing training recognised as being of an equivalent level or under the supervision of a university. […]

3. Basic dental training shall provide an assurance that the person in question has acquired the following knowledge and skills:

(a) adequate knowledge of the sciences on which dentistry is based and a good understanding of scientific methods, including the principles of measuring biological functions, the evaluation of scientifically established facts and the analysis of data;
(b) adequate knowledge of the constitution, physiology and behaviour of healthy and sick persons as well as the influence of the natural and social environment on the state of health of the human being, in so far as these factors affect dentistry;
(c) adequate knowledge of the structure and function of the teeth, mouth, jaws and associated tissues, both healthy and diseased, and their relationship to the general state of health and to the physical and social well-being of the patient;
(d) adequate knowledge of clinical disciplines and methods, providing the dentist with a coherent picture of anomalies, lesions and diseases of the teeth, mouth, jaws and associated tissues and of preventive, diagnostic and therapeutic dentistry;
(e) suitable clinical experience under appropriate supervision.

This training shall provide him with the skills necessary for carrying out all activities involving the prevention, diagnosis and treatment of anomalies and diseases of the teeth, mouth, jaws and associated tissues.
Article 35
Specialist dental training

1. Admission to specialist dental training shall entail the completion and validation of five years of theoretical and practical instruction within the framework of the training referred to in Article 34, or possession of the documents referred to in Articles 23 and 37.

2. Specialist dental training shall comprise theoretical and practical instruction in a university centre, in a treatment teaching and research centre or, where appropriate, in a health establishment approved for that purpose by the competent authorities or bodies. Full-time specialist dental courses shall be of a minimum of three years’ duration supervised by the competent authorities or bodies. It shall involve the personal participation of the dental practitioner training to be a specialist in the activity and in the responsibilities of the establishment concerned. […]

ANNEX V.3. DENTAL PRACTITIONER

5.3.1 Study programme for dental practitioners

The programme of studies leading to evidence of formal qualifications in dentistry shall include at least the following subjects. One or more of these subjects may be taught in the context of the other disciplines or in conjunction therewith.

A. Basic subjects
   — Chemistry
   — Physics
   — Biology

B. Medico-biological subjects and general medical subjects
   — Anatomy
   — Embryology
   — Histology, including cytology
   — Physiology
   — Biochemistry (or physiological chemistry)
   — Pathological anatomy
   — General pathology
   — Pharmacology
C. Subjects directly related to dentistry
--- Prosthodontics
--- Dental materials and equipment
--- Conservative dentistry
--- Preventive dentistry
--- Anaesthetics and sedation
--- Special surgery
--- Special pathology
--- Clinical practice
--- Paedodontics
--- Orthodontics
--- Periodontics
--- Dental radiology
--- Dental occlusion and function of the jaw
--- Professional organisation, ethics and legislation
--- Social aspects of dental practice

2. **Professional bodies operating at EU level**

- Council of European Dentists [CED], formerly the EU Dental Liaison Committee, [http://www.eudental.eu/](http://www.eudental.eu/)

CED is the umbrella group of national dental organisations from all EU27 except Latvia. EEA countries have observer status.
3. **Academic associations operating at EU level**

   - Association for Dental Education in Europe [ADEE], [http://adee.dental.tcd.ie/](http://adee.dental.tcd.ie/)
     ADEE has a broad-based membership across Europe comprised of dental schools, specialist societies and national associations concerned with dental education. Membership numbers some 170 bodies. ADEE runs a school of dentistry evaluation programme based on peer review.

     DentEd's third funded phase is nearing completion. In its final phase – in conjunction with ADEE and working in parallel and in contact with Tuning Project – it has developed a model of the profile and competences of the European dentist. This document is to be reviewed in 2007, following comments from governments and other bodies.

4. **Student associations operating at EU level**

   - European Dental Students Association [EDSA], [http://www.edsa.globaldent.com/Home.html](http://www.edsa.globaldent.com/Home.html)
     EDSA covers virtually all European countries, by membership, observer status and formal contact.

5. **Regulatory bodies operating at EU level**

   Set up in 2004, CODE thus far covers France, Ireland, Italy, Luxembourg, Monaco, Spain and UK.

6. **Trends and pronouncements**

   CED passed a resolution on Bologna in November 2005. While welcoming Bologna in principle, it strongly opposed the two-cycle structure, which it considered wholly inappropriate for dental training and likely to jeopardise the guarantees of quality and mobility enshrined in the Directive. A Bachelor qualification would have no value in the labour market and could be used in such a way as to compromise patient safety. It would create a cadre of dental para-professionals which the CED would be unable to control.

   DentEd/ADEE’s Profile of the European Dentist (2004) identifies seven domains in which it specifies major competences (professionalism, communication and interpersonal skills, etc); these are then broken down into sets of supporting competences. It calls on all European schools of dentistry to build their teaching programmes accordingly. This was followed in 2005 by a paper on Curriculum Structure and ECTS, which recommends a 5-year training programme, split into Bachelor and Master, with the Bachelor being purely academic.

   EDSA’s general assembly in Athens 2005 supported the principles of mobility, lifelong learning and common HE reference points, and urged that the integrity of the 5-year training cycle be maintained.
V. VETERINARY SURGEON


Section 5, Veterinary surgeons

Article 38
The training of veterinary surgeons

1. The training of veterinary surgeons shall comprise a total of at least five years of full-time theoretical and practical study at a university or at a higher institute providing training recognised as being of an equivalent level, or under the supervision of a university, covering at least the study programme referred to in Annex V, point 5.4.1.[…]

3. Training as a veterinary surgeon shall provide an assurance that the person in question has acquired the following knowledge and skills:
(a) adequate knowledge of the sciences on which the activities of the veterinary surgeon are based;
(b) adequate knowledge of the structure and functions of healthy animals, of their husbandry, reproduction and hygiene in general, as well as their feeding, including the technology involved in the manufacture and preservation of foods corresponding to their needs;
(c) adequate knowledge of the behaviour and protection of animals;
(d) adequate knowledge of the causes, nature, course, effects, diagnosis and treatment of the diseases of animals, whether considered individually or in groups, including a special knowledge of the diseases which may be transmitted to humans;
(e) adequate knowledge of preventive medicine;
(f) adequate knowledge of the hygiene and technology involved in the production, manufacture and putting into circulation of animal foodstuffs or foodstuffs of animal origin intended for human consumption;
(g) adequate knowledge of the laws, regulations and administrative provisions relating to the subjects listed above;
(h) adequate clinical and other practical experience under appropriate supervision.

Annex V.4. VETERINARY SURGEON

5.4.1. Study programme for veterinary surgeons
The programme of studies leading to the evidence of formal qualifications in veterinary medicine shall include at least the subjects listed below. Instruction in one or more of these subjects may be given as part of, or in association with, other courses.

A. Basic subjects
   — Physics
   — Chemistry
   — Animal biology
   — Plant biology
   — Biomathematics

B. Specific subjects
   a. Basic sciences:
      — Anatomy (including histology and embryology)
      — Physiology
      — Biochemistry
      — Genetics
      — Pharmacology
      — Pharmacy
      — Toxicology
      — Microbiology
      — Immunology
      — Epidemiology
      — Professional ethics
   b. Clinical sciences:
      — Obstetrics
      — Pathology (including pathological anatomy)
      — Parasitology
      — Clinical medicine and surgery (including anaesthetics)
      — Clinical lectures on the various domestic animals, poultry and other animal species
      — Preventive medicine
      — Radiology
      — Reproduction and reproductive disorders
      — Veterinary state medicine and public health
      — Veterinary legislation and forensic medicine
      — Therapeutics
— Propaedeutics
  c. Animal production
  — Animal production
  — Animal nutrition
  — Agronomy
  — Rural economics
  — Animal husbandry
  — Veterinary hygiene
  — Animal ethology and protection
d. Food hygiene
  — Inspection and control of animal foodstuffs or foodstuffs of animal origin
  — Food hygiene and technology
  — Practical work (including practical work in places where slaughtering and processing of foodstuffs takes place)

Practical training may be in the form of a training period, provided that such training is full-time and under the direct control of the competent authority, and does not exceed six months within the aggregate training period of five years study.

The distribution of the theoretical and practical training among the various groups of subjects shall be balanced and coordinated in such a way that the knowledge and experience may be acquired in a manner which will enable veterinary surgeons to perform all their duties.

2. Professional bodies operating at EU level
   - Federation of Veterinarians of Europe [FVE], http://www.fve.org/index.html
     FVE membership covers all EU/EEA countries and has a secretariat in Brussels.

3. Academic associations operating at EU level
   - European Association of Establishments for Veterinary Education [EAEVE], http://www.eaeve.org/
     EAEVE covers all EU/EEA countries, with the exception of Cyprus, Luxembourg, Malta, Iceland, Liechtenstein.

4. Student associations operating at EU level
   - International Veterinary Students Association [IVSA], http://info@ivsa.org
     IVSA is an international organisation; there is no affiliated body working only at EU level.
5. Regulatory bodies

- FVE and EAEVE share a de facto regulatory function, by virtue of the falling into abeyance of the Commission’s Advisory Committee for Veterinary Training [ACVT]

- EBVS (see below) has a regulatory function at postgraduate level.

6. Trends and pronouncements

More than 70 HEIs provide education and training which at least meets the minimum standard required by the Directive. Quality is assured by an evaluation programme, which has been managed and implemented by EAEVE in conjunction with FVE for over twenty years. At the end of the second cycle of evaluation visits in 2010, the programme will publish a complete list of approved institutions. It is not known whether FVE/EAEVE will become an accreditation agency and make application to join the European Register.

Following the EAEVE symposium in Ghent in 2006, FVE and EAEVE agreed that the 3-year Bachelor qualification can only be an academic qualification; it has no significance in the labour market for veterinary surgeons, where the 2-year Master degree is essential.

A study conducted at the University of Ljublana in 2004 (see http://www.jvmeonline.org/cgi/content/abstract/31/3/255) investigated the workload of veterinary students, in the context of the implementation of ECTS. It concluded that ‘generally, the courses with more contact hours tend also to demand more independent work; the best predictor of both actual student workload and student success is the amount of contact time in which they participate.’ The study did not approach ECTS from the angle of learning outcomes.

In 1992 the ACVT set in train developments which led to the establishment of the European Board for Veterinary Specialisation [EBVS], the mission of which is to regulate the provision of postgraduate training. EBVS oversees the operation of 14 specialist veterinary colleges operating at EU level. See http://www.ebvs.be/index.php?Page=index.php
VI. PHARMACIST


Section 7 Pharmacist

Article 44
Training as a pharmacist

1. Admission to a course of training as a pharmacist shall be contingent upon possession of a diploma or certificate giving access, in a Member State, to the studies in question, at universities or higher institutes of a level recognised as equivalent.

2. Evidence of formal qualifications as a pharmacist shall attest to training of at least five years' duration, including at least:

(a) **four years of full-time theoretical and practical training** at a university or at a higher institute of a level recognised as equivalent, or under the supervision of a university;
(b) **six-month traineeship in a pharmacy** which is open to the public or in a hospital, under the supervision of that hospital's pharmaceutical department. That training cycle shall include at least the programme described in Annex V, point 5.6.1. […]

3. Training for pharmacists shall provide an assurance that the person concerned has acquired the following **knowledge and skills**:

(a) adequate knowledge of medicines and the substances used in the manufacture of medicines;
(b) adequate knowledge of pharmaceutical technology and the physical, chemical, biological and microbiological testing of medicinal products;
(c) adequate knowledge of the metabolism and the effects of medicinal products and of the action of toxic substances, and of the use of medicinal products;
(d) adequate knowledge to evaluate scientific data concerning medicines in order to be able to supply appropriate information on the basis of this knowledge;
(e) adequate knowledge of the legal and other requirements associated with the pursuit of pharmacy.

Article 45
Pursuit of the professional activities of a pharmacist

[…]

[…]

EUA • Rue d'Egmont 13, 1000 Brussels, Belgium • tel : +32-2 230 55 44 • fax : +32-2 230 57 51 • e-mail: info@eua.be • www.EUA.be
2. The Member States shall ensure that the holders of evidence of formal qualifications in pharmacy at university level or a level deemed to be equivalent, which satisfies the provisions of Article 44, are able to gain access to and pursue at least the following activities, subject to the requirement, where appropriate, of supplementary professional experience:

(a) preparation of the pharmaceutical form of medicinal products;
(b) manufacture and testing of medicinal products;
(c) testing of medicinal products in a laboratory for the testing of medicinal products;
(d) storage, preservation and distribution of medicinal products at the wholesale stage;
(e) preparation, testing, storage and supply of medicinal products in pharmacies open to the public;
(f) preparation, testing, storage and dispensing of medicinal products in hospitals;
(g) provision of information and advice on medicinal products.

[...]
2. Professional bodies operating at EU level
- Pharmaceutical Group of the European Union [PGEU], http://www.pgeu.org/
  Most EU/EEA states have full membership status, with the exception of Bulgaria, Norway, Romania, Switzerland, which are observers. Estonia, Lithuania, Iceland and Liechtenstein are not represented. PGEU was active in the discussions leading up to the drafting of the Directive and has a particular commitment to continuing professional development.

3. Academic associations operating at EU level
- European Association of Faculties of Pharmacy [EAFP], http://www.eafponline.org/
  The EAFP website displays no details of its coverage or membership.

4. Student associations operating at EU level
- EPSA – European Pharmaceutical Students' Association, http://www.epsa-online.org/content/
  EPSA represents over 120,000 pharmacy students in 33 European countries. It has a Working Committee on pharmacy education, which follows developments in the Bologna Process. There is no position paper available, but the EPSA 2006 student satisfaction survey is available on the EAFP website. EPSA awards a lifelong learning certificate to members who satisfy certain criteria.

5. There is no regulatory body operating at EU level. The Commission’s Advisory Committee on the Education and Training of Pharmacists [ACETP] has lapsed.

6. Trends and pronouncements

PGEU published a position paper at the end of 2004, which strongly endorsed the integrity of pharmacy training and qualification as enshrined in EU legislation. This does not admit the possibility of a two-cycle structure. In addition, PGEU supported the contribution of Bologna to the development of ECTS and to the promotion of student mobility.

EAFP’s La Laguna position paper, drafted in 2004 and endorsed in 2005, echoed the view of PGEU. The integrity of the pharmacy qualification, which it expressed as ECTS 300, derived from a planned interaction of theoretical, laboratory and patient-centred training in a multi-disciplinary framework. Its 2006 conference focused on quality assurance and accreditation, featuring country presentations on Finland, Germany, Hungary, Italy, Norway, Spain and UK.

Pharmacists constitute one of the four professions chosen by DG MARKT (with medical doctors, pharmacists and physiotherapists) to pilot the Internal Market Information [IMI] project commencing in 2007. IMI seeks to identify and implement ways of improving communication and information exchange between national authorities.
VII. ARCHITECT


Section 8 Architect

Article 46
Training of architects

1. Training as an architect shall comprise a total of at least four years of full-time study or six years of study, at least three years of which on a full-time basis, at a university or comparable teaching institution. The training must lead to successful completion of a university-level examination. That training, which must be of university level, and of which architecture is the principal component, must maintain a balance between theoretical and practical aspects of architectural training and guarantee the acquisition of the following knowledge and skills:

(a) ability to create architectural designs that satisfy both aesthetic and technical requirements;
(b) adequate knowledge of the history and theories of architecture and the related arts, technologies and human sciences;
(c) knowledge of the fine arts as an influence on the quality of architectural design;
(d) adequate knowledge of urban design, planning and the skills involved in the planning process;
(e) understanding of the relationship between people and buildings, and between buildings and their environment, and of the need to relate buildings and the spaces between them to human needs and scale;
(f) understanding of the profession of architecture and the role of the architect in society, in particular in preparing briefs that take account of social factors;
(g) understanding of the methods of investigation and preparation of the brief for a design project;
(h) understanding of the structural design, constructional and engineering problems associated with building design;
(i) adequate knowledge of physical problems and technologies and of the function of buildings so as to provide them with internal conditions of comfort and protection against the climate;
(j) the necessary design skills to meet building users' requirements within the constraints imposed by cost factors and building regulations;
(k) adequate knowledge of the industries, organisations, regulations and procedures involved in translating design concepts into buildings and integrating plans into overall planning.

[…]

2. **Professional bodies operating at EU level**
   - Architects Council of Europe [ACE], [http://www.ace-cae.org/](http://www.ace-cae.org/)
     ACE represents the professional bodies of all EU/EEA states, with the exception of Iceland and Liechtenstein.

3. **Academic associations operating at EU level**
     ENHSA is an ERASMUS Thematic Network with 80 partners, coordinated by Aristotle University in Thessaloniki.
     EAAE is an association of architecture schools and departments in higher education institutions. It covers all EU/EEA countries except Hungary, Latvia and Luxembourg.

4. **Student associations operating at EU level**
     There are no traceable statements on Bologna.

5. **Regulatory bodies operating at EU level**
   - ACE combines regulatory and professional functions.

6. **Trends and pronouncements**
   - In 2006, ACE set up a Work Group to monitor the implementation of the Directive, with particular attention being paid to access to the new comitology, to the transposition process, and to the interface with the Services Directive. ACE also has a Work Group on education, the documents of which are not on open access. However, one of ACE’s 21 key messages for the 21st century reads as follows:
     
   ‘ACE supports the maintenance of high quality courses of architectural education, matching the “Bologna” model and based on a minimum duration of 5 years study at university level before access to the practice of architecture. Such education should ensure the acquisition of the knowledge and skills set out in Article 3 of the “Architects” Directive and should be followed by at least two years of practical experience. This approach is in accordance with the recommended international standards for architectural practice as unanimously agreed by the International Union of Architects.’

   - At its 2003 conference, ENHSA discussed curriculum, relations of HEIs with professional bodies, mobility and quality assurance.
Provisions for amending the Directive

The following statement accompanies the references to course content made in the Articles reproduced above:

‘The content listed in Annex V, point 5.n.n may be amended in accordance with the procedure referred to in Article 58(2) with a view to adapting it to scientific and technical progress. Such updates may not entail, for any Member State, any amendment of its existing legislative principles relating to the system of professions as regards training and the conditions of access by natural persons.’

Article 58(2) refers to the rules, which empower the Commission to discharge the duties imposed on it by EU law, and which render it accountable to the European Parliament. These are enshrined in Decision 1999/468/EC. As far as the Directive is concerned, they oblige the Commission to set up a regulatory committee (presumably multi-function and multi-formation, since it will cover the general system and the transitional professions as well as the sectoral), composed of Member State representatives and chaired by a non-voting representative of the Commission. The Committee’s proposals are referred to Council, which must reach a qualified majority vote within 3 months, and to Parliament. Its membership must be listed in the Official Journal. Article 58(1) of the Directive accordingly promises such a Committee:

<table>
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<tr>
<th>Article 58</th>
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<tr>
<td>Committee on the recognition of professional qualifications</td>
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<tr>
<td>1. The Commission shall be assisted by a Committee on the recognition of professional qualifications, hereinafter referred to as ‘the Committee’, made up of representatives of the Member States and chaired by a representative of the Commission. […]</td>
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<th>Article 59</th>
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<tr>
<td>Consultation</td>
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<td>The Commission shall ensure the consultation of experts from the professional groups concerned in an appropriate manner in particular in the context of the work of the committee referred to in Article 58 and shall provide a reasoned report on these consultations to that committee.</td>
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</table>

In addition to the Committee [C26900], there is to be a Group of Coordinators [E02061]. These are persons designated by Member States (1 per MS) to ‘promote the uniform application’ of the Directive and to gather all information necessary for this purpose. They may be assisted by national contact points, which are also to be designated by Member States.
Commission Decision 2007/17/EC (March 19 2007) has now established the basis for setting up the Group of Coordinators, which technically – and described as such in recitals 3 and 4 – is an Expert Group. The Decision clarifies its role:

**Article 2 Tasks**

The Group's tasks are the following:

(a) to establish cooperation between Member States’ authorities and the Commission on questions relating to the recognition of professional qualifications;
(b) to monitor the evolution of policies having an impact on professions regulated as to qualifications;
(c) to facilitate the implementation of Directive 2005/36/EC, in particular through the elaboration of documents of interest, such as interpreting guidelines;
(d) to bring about an exchange of experience and good practice in the fields referred to in the previous points.

Moreover, the chair of the Group of Coordinators (the Commission representative) may ask experts or observers with specific competence on a subject on the agenda to participate in the work of the Group or in the deliberations or work of a sub-group if, in the opinion of the Commission, this is necessary or useful. [Art.5(3)]

The Committee itself has no remit for curriculum development. Indeed, recital 39 notes that: 'in view of the speed of technological change and scientific progress, life-long learning is of particular importance for a large number of professions. In this context, it is for the Member States to adopt the detailed arrangements under which, through suitable ongoing training, professionals will keep abreast of technical and scientific progress.'

Such changes may, nevertheless, entail revision of the minimum training conditions in the sectoral professions. Accordingly, recital 29 of the Directive notes that 'where a national and European-level professional organization or association for a regulated profession makes a reasoned request for specific provisions for the recognition of qualifications on the basis of coordination of minimum training conditions, the Commission shall assess the appropriateness of adopting a proposal for the amendment of this Directive.'

Presumably, the reasoned request will reach the Committee via the Group of Coordinators, access to which may be by invitation or by solicitation of the MS representative. It is this person who, as per Article 2.b of the Decision, will have responsibility, inter alia, for monitoring the interface between the Directive, the initiatives emanating from DG Education & Culture, and the Bologna Process.