



QUALITY OF VETERINARY TRAINING

Executive Summary

The free movement of persons and services in the European Union (EU) are amongst the major principles established by the European treaties. These also apply to the profession of veterinary surgeon through the automatic recognition in the EU of degrees granted by EU veterinary teaching establishments. This relies however on the assumption that an equivalent level of training is provided throughout the EU. Hence the purpose of Directive 78/1027, which establishes the minimum knowledge to be acquired during the training period of a veterinary surgeon.

This directive was however adopted 20 years ago and neither the qualitative nor the quantitative requirements for the content of the veterinary curriculum have been amended since. In addition, the evaluations of veterinary teaching establishments have shown significant differences in the level of the training provided across Europe. These evaluations were part of a scheme developed under the umbrella of the Advisory Committee on Veterinary Training of the European Commission and now run by the European Association of Establishments of Veterinary Education (EAEVE) with support from the Federation of Veterinarians of Europe (FVE).

Furthermore, the last two decades have seen the opening of an excessive number of veterinary teaching establishments in some European countries. This, coupled with the unrestricted accession to veterinary studies in others, is responsible for the dramatic increase in the number of veterinary students and in the size of the profession. Projections over the next 10 years indicate that the veterinary population could double in certain countries.

In some EU Member States where veterinary teaching establishments have been reported to provide an inadequate level of training, the veterinary licensing authorities have threatened to cease recognising degrees granted by these establishments. Licensing authorities of other Member States are also considering refusing the recognition of such degrees.

It is therefore time to review Directive 78/1027 and to develop control mechanisms to ensure that the quality of the veterinary training and the quality of the service provided by the profession are kept to the highest possible standards. If no action is taken, it is feared that Member States confidence in the equivalence of the training provided around Europe could be shaken. The free movement of veterinary surgeons, the mutual trust between State veterinary services across the EU and the recognition of EU veterinary certification by its international trading partners could also be compromised. This in turn could have a major impact on both the perception and reality of the public health situation in Member States.

This paper discusses a number of concepts and proposals such as the expected profile of a 21st century veterinary surgeon (page 8) and the structure of future veterinary courses (page 10). It also envisages the establishment of a system of accreditation of veterinary teaching establishments (page 13), which would provide a source of reference for the profession, veterinary employers and for the public at large.

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Estonia
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Ireland
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1. INTRODUCTION

Under the General System for the recognition of higher education and training of at least three years' duration, Member States have the right to fix the minimum level of qualification as a mean to guarantee the quality of the service provided in their territory¹.

Although this system impedes the free movement of services and people, it does however give Member States the opportunity to control the level of qualification of the professionals concerned to a level, which satisfies the public.

However, in the veterinary sector, the minimum level of qualification and the minimum training requirements have been harmonised for the European Union since 1978 and since the adoption of Directive 78/1027². At the same time, Directive 78/1026³ enshrined into Community law the automatic recognition of veterinary degrees across the EU as well as the freedom of establishment and the freedom to provide a professional service.

Member States and veterinary regulatory bodies have thus lost the possibility to directly influence the level of qualification of veterinary surgeons, especially when these are trained abroad. If a Member State refuses to recognise the degree granted by a veterinary teaching establishment from an EU Member State, it would infringe the European legislation and would certainly be condemned for discrimination between its own citizens and other EU citizens. Discrimination is indeed no longer allowed as requirements should have been harmonised and are meant to be the same throughout the EU for all veterinary teaching establishments.

These requirements have, however, not been amended since the adoption of the Directive in 1978 despite the 1993 recommendation⁴ from the European Commission Advisory Committee on Veterinary Training. The Directive therefore contains out-dated requirements, which remain nonetheless the cornerstone of the automatic recognition of veterinary degrees.

In the meantime, the most advanced veterinary teaching establishments have modernised the content, structure and delivery of their veterinary courses, whilst others are still lagging behind and only just complying with the minimal requirements of the Directive.

The quality of veterinary training is thus not equal across the EU and therefore is a threat to the automatic recognition of veterinary degrees.

¹ Council Directive 89/48/EEC of 21 December 1988 on a general system for the recognition of higher-education degrees awarded on completion of professional education and training of at least three years' duration.

² Council Directive 78/1027/EEC of 18 December 1978 concerning the coordination of provisions laid down by Law, Regulation or Administrative Action in respect of the activities of veterinary surgeons.

³ Council Directive 78/1026/EEC of 18 December 1978 concerning the mutual recognition of degrees, certificates and other evidence of formal qualifications in veterinary medicine, including measures to facilitate the effective exercise of the right of establishment and freedom to provide services.

⁴ ACVT recommendation adopted on 10 February 1993 on the modification of Directive 78/1027/EEC of 18 December 1978 concerning the coordination of provisions laid down by law, regulation or administrative action in respect of the activities of veterinary surgeons.

2. VETERINARY DEMOGRAPHY: A THREAT TO QUALITY?

2.1. Veterinary education

There are 52 veterinary teaching establishments in the EU and 40.000 students are currently enrolled in the 5-year course leading to the degree of veterinary surgeon. In 1998, 5.500 students obtained their final degree and entered the profession.

More than 50 percent of the total number of veterinary students are concentrated within just two countries: Spain and Italy. This is the reflection of the uneven distribution of veterinary teaching establishments across the EU, with many establishments being also concentrated in these two countries, with 10 establishments in Spain and 13 in Italy.

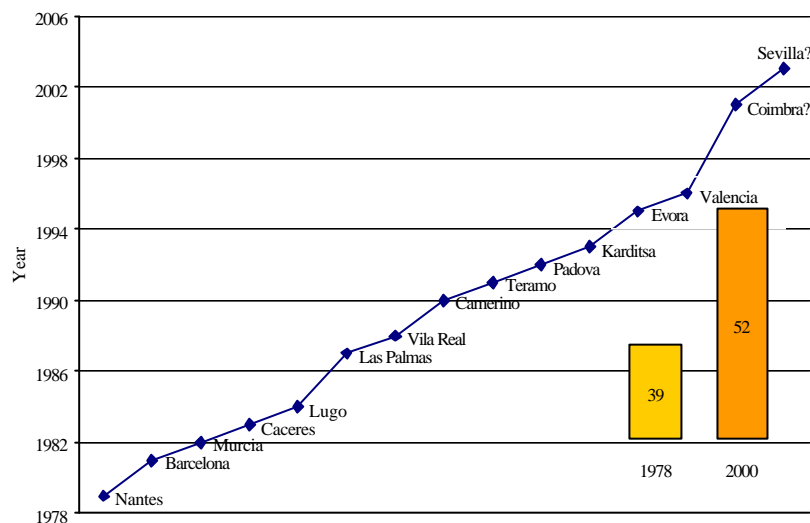


Figure 1: Number of veterinary teaching establishments in the EU

The evaluation of veterinary teaching establishments (see annex) has, however, shown that the multiplication of veterinary teaching establishments was not, in many cases, accompanied by the financial, teaching and equipment resources needed to meet the minimum requirements of Directive 78/1027 (see figure 2).

As a result too many European veterinary teaching establishments now offer a level of training which does not meet the minimum requirement of the Directive.

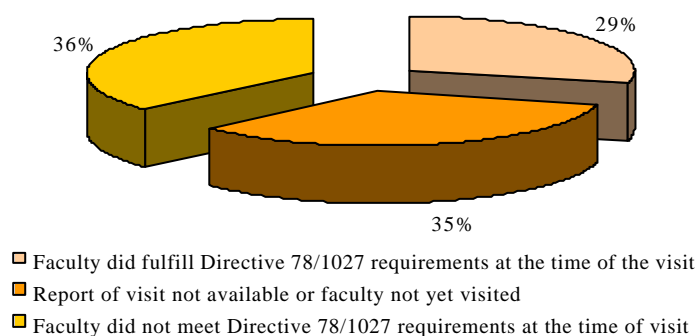


Figure 2: Outcome of evaluation of veterinary teaching establishments

Furthermore, as the Directive requirements, which were elaborated in the 70s, are fairly outdated, some establishments have moved ahead and modernised their teaching methodology and programme, whilst others simply comply with the requirements of the Directive. The level of training is therefore not equal across the EU.

In addition, some countries have a veterinary student population, which does not reflect the size of either their total population or veterinary population. This is very often the result of a policy of free access to higher education.

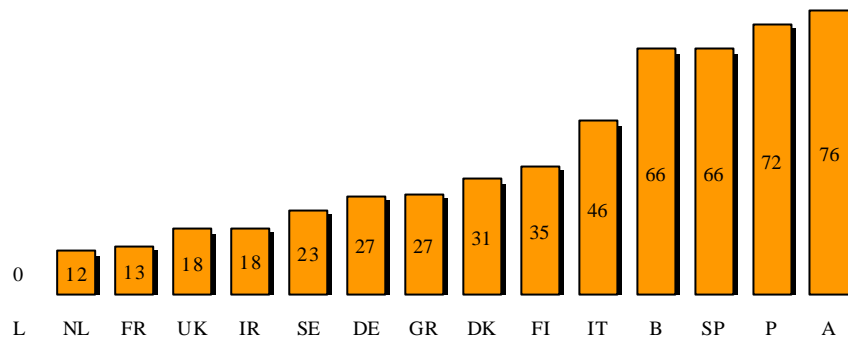


Figure 3: Number of veterinary students for 100 veterinary surgeons

Countries like Belgium, Austria and Germany are confronted with such situations where large numbers of students enrol in the veterinary teaching establishments. This results in an overproduction of veterinary surgeons leading to veterinary underemployment or unemployment and to migration of veterinary surgeons to other less saturated markets.

Also, such high student intakes have put a heavy and barely manageable burden on some establishments, which have facilities to accommodate only a limited number of students. This is in particular the case in Belgium, where there has been in the recent years an increase in the total number of students and especially so of foreign veterinary students from France and the Netherlands.

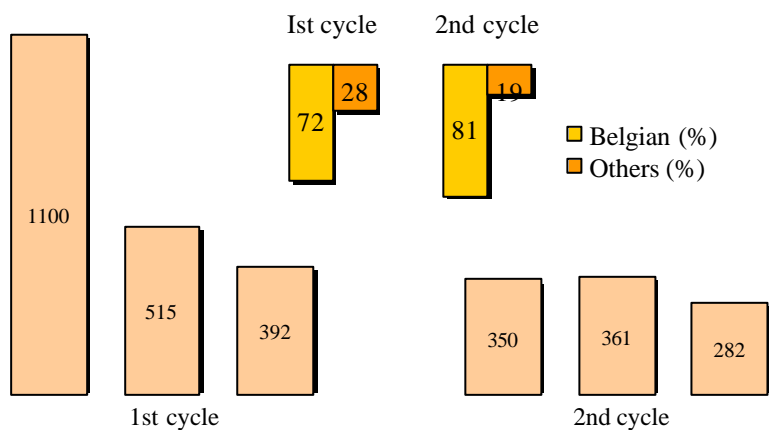


Figure 4: Number and origin of veterinary students in Belgium 1998-1999 Academic year

2.2. Veterinary demography⁵

The number of active veterinary surgeons in the 15 EU Member States is ca. 115.000. This figure includes veterinary surgeons working as private practitioners, those employed in the industry or in the public sector. The figures also includes veterinary surgeons working in other sectors, as well as unemployed veterinary surgeons and those taking a career break.

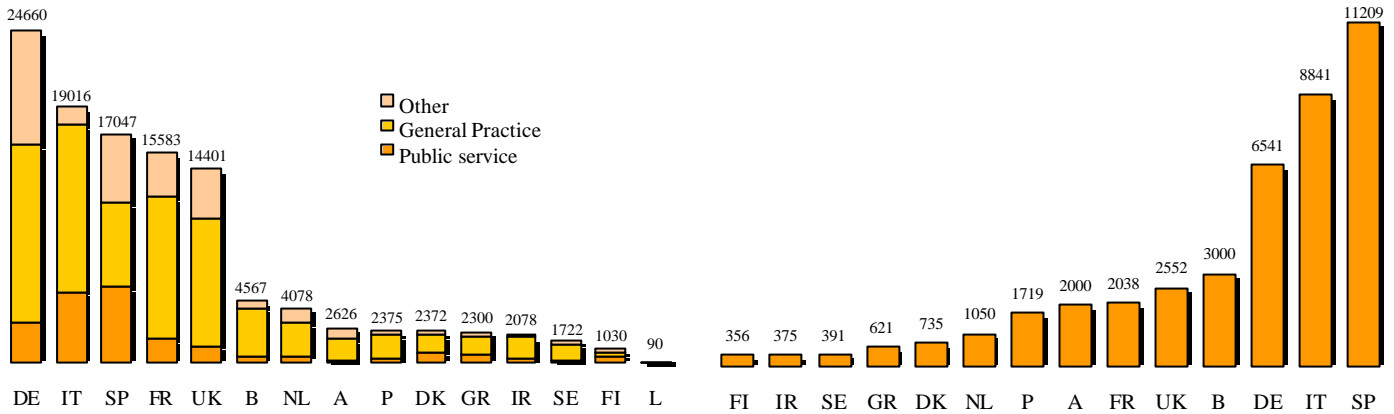


Figure 5: Number of active veterinary surgeons

Figure 6: Number of veterinary students

Taking into account the annual retirement rate of veterinary surgeons⁶ and the number of young graduates entering the profession every year, an estimate of the size of the profession in 10-year time was calculated⁷.

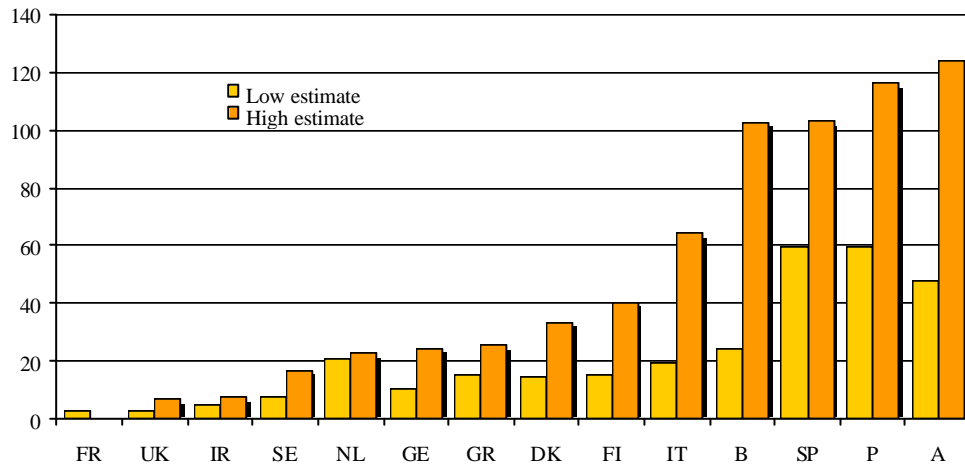


Figure 7: Estimation of the veterinary population increase by 2010 in EU Member States

A worst-case scenario shows that the veterinary population could double in countries such as Austria, Portugal or Spain, in comparison to countries such as France, Ireland or the UK, where the veterinary

⁵ Source: FVE 1998 survey on veterinary demography

⁶ To calculate this annual retirement rate, it was estimated that veterinary surgeons in the EU work on average 35 years.

⁷ The number of young graduates entering the profession annually in the near future can be estimated in two ways. by assuming that this number will be equal either to the number of students, who graduated in 1998 (i.e. 5.500), or to the total number of veterinary students enrolled during the 1996-97 academic year divided by the duration of the veterinary studies (i.e. 41.000/5=8.200). Two projections can thus be established. One is based on a low estimate (number of students having obtained their degree in 1998), the other one on a high estimate (total number of students).

population would remain stable. In the 15 EU Member States, the expected increase represents between 20 and 44 percent of the current veterinary population.

Additional factors must be taken into account that may also affect the veterinary profession.

- Increasing number of women entering the veterinary profession (see figure 9)
- Change in farming community and in farm management
- New approach to meat inspection and food hygiene
- EU enlargement.

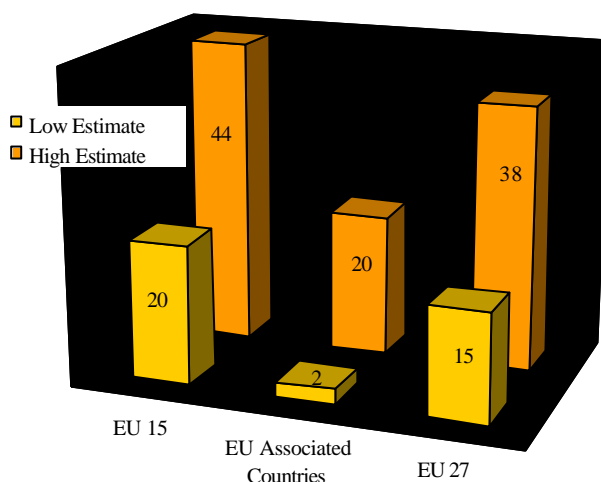


Figure 8: Estimation of the veterinary population increase by 2010 in the EU

The impact of the EU enlargement on the veterinary demography deserves special attention. A similar extrapolation as the one carried out for current EU Member States indicates that the veterinary population in the 12 countries, which have started accession negotiations with the EU, could grow between 2 and 20% by 2010 (see figure 8). Although the rate of growth is not as high as the average one for the current 15 EU Member States, where there are on average 3 veterinary surgeons for 10.000 inhabitants (115.000 veterinary surgeons for 375 million inhabitants), there are, nevertheless, 3.7 veterinary surgeons for 10.000 inhabitants in the EU Associated Countries (39.000 veterinary surgeons for 105 million inhabitants). In addition, the current modernisation of the farming sector together with the privatisation of large State veterinary services is leading to a massive veterinary unemployment or underemployment in certain countries, such as Bulgaria and Romania in particular⁸.

2.3. Impact on internal market and on international trade

If European veterinary teaching establishments are unable to train young veterinary graduates to a comparable high level across the EU, it is feared that national veterinary regulatory bodies might start to question the level of training of incoming veterinary surgeons and the quality of their degree. This could primarily affect practising veterinary surgeons, willing to establish themselves in another country. This could however also affect the free movement of goods across the EU. Indeed, the free movement of animals and of products of animal origin relies heavily on the mutual trust between the individual State veterinary services. Inadequate training could affect public health as veterinary surgeons are involved in controlling the safety of food of animal origin and preventing the transfer of animal disease to man. In the end, the EU international

⁸ Source: FVE report to the TAIEX office on the Regulation of the Private Veterinary Sector in the EU Associated Countries.

trading partners could also question certification established by veterinary surgeons for products of animal origin or for live animals, if these veterinary surgeons are not properly trained.

The most likely consequence of the increase of the veterinary population on the functioning of the internal market is, however, a higher rate of veterinary unemployment or underemployment and the migration of veterinary surgeons, which is likely to affect the quality of the service provided by the profession.

The current pattern of migration, from countries with high veterinary demography to countries, where more stringent policies are in place to control both the size of the veterinary profession and the quality of its service, is thus expected to increase.

2.4. Recommendations

The uncontrolled opening of new veterinary teaching establishments and the unlimited access of veterinary students to veterinary teaching establishment represents a threat to the quality of the training delivered and ultimately for the quality of the service provided by the veterinary profession.

FVE therefore urges

- **All EU Member States and EU Associated Countries to cease the opening of new veterinary teaching establishments in Europe, as there is clearly no need for such establishments;**
- **All EU Member States and EU Associated Countries to introduce control mechanisms to limit the number of veterinary students to a level commensurate with the teaching facilities;**
- **The European Commission to limit its financial support to the construction of new veterinary teaching establishments in countries where there are no such establishments. FVE also invites the European Commission to help upgrading the facilities of existing establishments, when these do not to meet the minimum requirements established under the European legislation.**

3. PREPARING THE PROFESSION FOR THE 21st CENTURY

As with many other aspects of modern life, the role of veterinary surgeons in society is changing faster than ever. The days described by James Herriot are long gone and the career options for holders of a veterinary degree are continually diversifying. The veterinary curriculum, like the teaching methodology, therefore needs to be constantly reviewed in order to prepare the profession for the 21st century.

3.1. Profile of a 21st century veterinary surgeon

3.1.1. New opportunities and challenges

A veterinary surgeon in the 21st century must have more knowledge in emerging disciplines of veterinary science – such as animal welfare, ethology and exotic animals, which have mainly emerged as a result of the increased awareness of animal owners.

Another expanding field for the 21st century veterinary surgeon is public health. Veterinary surgeons are to some extent the guardians to human health as it relates to zoonoses, and graduates must now obtain a deeper knowledge of the subject within the veterinary curriculum. Consumers require reassurance as the quality of food products from “stable to table” and veterinary surgeons seem to be most appropriate for this job.

Animal owners and consumers expect a veterinary surgeon to have a deeper and specialised knowledge in areas of companion, experimental, exotic, aquatic and marine animal veterinary medicine. In addition, it is necessary that veterinary surgeons gain a deeper knowledge of farm and animal management, especially in animal food production.

3.1.2. The young generation and feminisation of the veterinary profession

The profile of a veterinary surgeon in the future will not simply depend on the scientific characteristics of the profession but increasingly on its psychological and sociological characteristics. In general, employers are increasingly asking for personality qualities among employees, such as good communication skills, “emotional competence” and an ability to act in project and group work. The demands and needs of the society is changing and so should the characteristics of the profession. The young generation will probably be better prepared to meet these new needs. They are brought up in a society where these qualities are emphasised as something necessary to become successful and generally speaking it fits with the young people’s own values. Also the gender discussion has contributed to making emotions and care a human and not simply a female trait. This can be seen in professional as well as in private life. Among young people, men and women have more equal conditions and rights to develop their personal characteristics, than previously. What used to be a characteristic of a *female* employee tends nowadays, to be more a characteristic of a *young* employee.

Career breaks and part-time work for child rearing will increasingly be associated with young people rather than with women, although women are still more likely to utilise this possibility than men. Young people’s general approach to life will probably result in a reduction in the full-time workforce. The interest for the veterinary profession is increasing among women and in many countries females represent a majority among the veterinary students. The increasing proportion of women within the profession is likely to accentuate the reduction in the full-time workforce and also to have an impact on many other aspects of professional life in practice, from education, through recruitment, practice organisation and structure and even retirement.

Women tend to prefer working in groups, mostly in teams of experts. Hence, in some countries it has been seen that women tend to avoid practices in remote and rural areas and prefer to work in city surroundings. This might also be related to a desire to work with companion animals. It has also been observed that women tend to avoid taking on practice management responsibilities despite being able to increase their income as partners. However, in some countries (for example Sweden), the situation is the opposite, with increasing number of women in management positions.

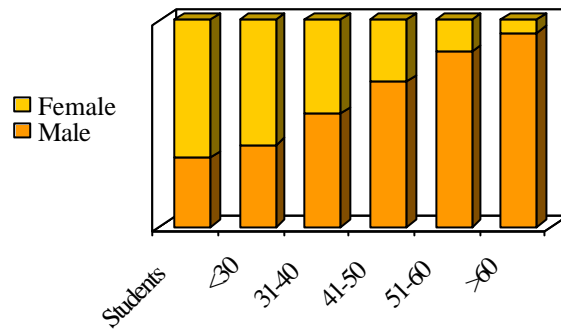


Figure 9: Age and Gender of the Veterinary Profession (% of total)⁹

The profession should make a proper analysis of the impact of the increasing proportion of women in the veterinary profession. An absolute dominance of men *or* women in a profession is probably not desirable. Why has the veterinary profession become more attractive to women than to men? How important is it for the development of the profession and for society that the proportion of female and male veterinary surgeons is approximately equal?

If we look at future trends there will be more women entering the profession and the work pattern will be affected by the need for maternity leave and an increase in part-time working arrangements.¹⁰

⁹ Source: FVE survey - Data include Austria, Belgium (students only), Finland, Greece (students excepted), Germany, Ireland, Luxembourg, Portugal (students only), Spain, Sweden and the UK.

¹⁰ Source: Society of Practising Veterinary Surgeons (UK).

3.2. Structure of future veterinary courses

The previous section outlining the profile of a veterinary surgeon in the 21st century emphasised the need for an increased knowledge base for graduates in both new and traditional areas. Graduates from veterinary schools have to deal with increasingly complicated and diverse problems as the volume of scientific knowledge increases at a faster rate than ever before, whilst at the same time there is an increasing expectation of the public regarding the level and quality of service. The time when an individual veterinary surgeon could reasonably be expected to possess the needed skills and knowledge to minister to the health and needs of all kinds of animals at a level acceptable to the public is long gone. The concept of a universal veterinary surgeon is an anachronism.

Therefore, it is necessary to define omnicompetence as a level of acceptable **basic veterinary knowledge** and to define a core curriculum to deliver this level of **basic veterinary knowledge**.

Besides changing the core curriculum to reflect this belief, there is a need to change the methods of teaching the veterinary curriculum. There is clear evidence and justification for taking up active learning procedures in order to be able to teach more of the new knowledge without compromising the quality of education nor prolonging study time.

This core curriculum should ideally be complemented by electives (lectures, seminars and practical training) at all stages, which would allow students to deepen their knowledge in one or more components of the core curriculum and would support individual interests and talents.

Proper selection procedures should ensure that veterinary students have received (prior to their entry upon the undergraduate course) not only a good grounding in appropriate science subjects but also a broad education in more general areas. This all-round capability should be nurtured throughout the course and students should be encouraged to develop not only an understanding of scientific methods but also their own powers of deductive thought and of communication with others.

It cannot be stressed too strongly that a sound knowledge of and ability to use, at least one and preferably more, of the major European languages is essential to the art of communication within the European community.

All Veterinary Schools in the EU Member States should follow a core curriculum leading to omnicompetence for future veterinary candidates.

The essential competences required of a common European core curriculum in veterinary education can be listed in three main areas (see table 1). Each area contains a number of statements, which broadly define the competences:

- Theoretically-based veterinary competences
- Practically-based veterinary competences
- General competences - which are not necessarily restricted to the veterinary graduate.

Table 1: Basic veterinary knowledge to be delivered by the core curriculum

Theoretically-based veterinary knowledge

Young graduates should demonstrate an understanding of:

- a. the sciences on which the activities of the veterinary profession in all aspects are based.
- b. Research methods and the contribution of basic and applied research to all aspects of veterinary science.
- c. the structure and functions of healthy animals, and veterinary relevant aspects of their husbandry.
- d. Legislation relating to the welfare (including transport) of domestic and laboratory animals and notifiable diseases.
- e. Veterinary public health from stable to table including food microbiology, food technology, zoonoses, risk analysis, HACCP etc.
- f. the aetiology, pathogenesis, clinical signs, diagnosis, treatment, prevention and control of the common diseases and disorders that occur in the common domestic species in the European Union.
- g. Animal production.

Practically-based veterinary knowledge

Young graduates should have acquired the practical knowledge to be able to:

- a. Obtain an accurate and relevant history of the individual animal or animal group, and its/their environment and perform a complete clinical examination.
- b. Attend all species in an emergency and perform basic first aid.
- c. Collect, preserve and transport clinical samples, perform standard laboratory techniques, and interpret the results, as well as those generated by other laboratories.
- d. Use radiographic, ultrasonic, and other technical equipment, which can be used as a diagnostic aid, safely and in accordance with current regulations to obtain results.
- e. Know the procedures to follow after suspecting and/or diagnosing notifiable and zoonotic diseases.
- f. Know the principles and have had practical experience of surgical and medical treatment of diseases in single animals and advise on, and administer, appropriate treatment.
- g. Analyse animal health and production records; understand the importance of animal health economics in the context of acceptable animal welfare. Advise on, and carry out, preventative and prophylactic programmes appropriate to the species and commensurate with accepted animal health, welfare and public health standards.
- h. Perform a basic gross post mortem examination, record details and know how to sample tissues, store and transport them.
- i. Perform ante mortem and post mortem inspection of animals destined for the food chain and be able to recognise conditions including zoonoses affecting the quality and safety of products of animal origin.
- j. Perform risk analysis (risk assessment, risk management and risk communication).
- k. Perform laboratory analysis of food for human consumption.
- l. Perform advisory services in food production (HACCP) to prevent food borne diseases.
- m. Understand the legislative principles of laboratory animal husbandry and know the aetiology, pathogenesis, clinical signs, diagnosis, treatment, prevention and control of the common diseases and disorders that occur in the laboratory animal species used in modern science.
- n. Understand basic research tasks and know the principles of writing scientific papers and reports based on studies performed during the last two years of the curriculum.

General veterinary knowledge

Young graduates should have acquired a general knowledge to be able to:

- a. Communicate effectively, by the spoken and written word, to the public, professional colleagues and responsible authorities. In particular be able to produce case reports in a form satisfactory to colleagues and understandable by the public.
- b. Work as a member of a team in the delivery of services to clients and authorities.
- c. Be aware of the role of veterinary surgeons in the European as well as a national community particularly in relation to ethical principles.
- d. Have an elementary knowledge of the organisation and management of a veterinary practice, veterinary laboratories, public health inspection unit including meat inspection, research facilities or other fields of veterinary employment. This should include:
 - awareness of the responsibilities in relation to current employment and health and safety legislation, lay staff and public liability
 - knowledge of the principles of certification
 - awareness of the need to understand calculation of fees, drawing up of accounts, and systems for record keeping and book-keeping, including computer records and case reports
 - awareness of professional standards and policies
 - knowledge of correct prescription, dispensing, safe storage and safe disposal of medicines and waste
 - awareness of sources of data on licensed medicines, chemicals etc.
- e. Understand the benefit, need, and professional obligation, for a programme of CPD throughout their professional life and future career development including where and how it can be achieved.
- f. Demonstrate their capability to conduct themselves in a professional manner with regard to the veterinary surgeon's professional and legal responsibilities and understand the ethical codes as set out in the national Guide to Professional Conduct in the country of present work.
- g. Demonstrate awareness of when, and from where, to seek professional advice and assistance.
- h. Understand the basic principles of veterinary legislation within the EU.
- i. Understand the basic principles of applying for funding from scientific programmes within the EU.

3.3. Recommendations

The veterinary profession fulfils many tasks from companion animal medicine to public health. Emerging fields, such as environmental protection, food quality control, animal welfare, or care of exotics are increasingly involving veterinary surgeons.

The majority of applicants to the veterinary degree courses see their eventual role as mixed or companion animal practitioners, and have little idea of these emerging and alternative career paths.

As the challenges, technologies and even disease patterns continue to evolve, so must the veterinary curriculum. Yet, the minimum standards to be met by veterinary teaching establishments remain unchanged since 1978 and advances in teaching methodologies are ignored.

FVE therefore urges:

- **Its member associations to better inform secondary pupils about the different facets of the veterinary profession.**
- **EU Member States and EU Associated Countries to adapt enrolment procedures to facilitate the recruitment of students that would be willing to enter farm animal practice, food inspection or research.**

4. QUALITY ASSURANCE IN VETERINARY EDUCATION

4.1. The ACVT evaluation system

In the late 80s, the ACVT undertook a pilot study of a possible system of evaluation of veterinary teaching establishments. The ACVT concluded that *the pilot study (has) shown that, by means of a system of self-evaluation reports supplemented by site visits by group of experts, it is possible to identify strengths and weaknesses in the training given at veterinary training institutions and to arrive at suggestions for remedying the weaknesses*¹¹.

It was therefore proposed and a decision taken to establish a permanent system of evaluation that should aim at securing a *comparably high standard of veterinary training throughout the European Community*.

This evaluation system is now run by the European Association of Establishments of Veterinary Education (EAEVE) with support from FVE. At the end of 2000, almost all veterinary teaching establishments within the EU would have been visited. Then, in 2001 a new round of visits is expected to start. The methodology will remain the same (self-examination reports and on-site visits by group of experts).

The evaluation system has shed some light on the teaching facilities of most European veterinary teaching establishments. It has helped in many instances to improve the quality of the training provided and has therefore largely fulfilled its initial objective. However, because it is a voluntary system, there is no mechanism to ensure that recommendations of the team of visitors and more critically, those concerning non-compliance with requirements of Directive 78/1027 - the so-called category I deficiencies - are acted upon. In addition, this evaluation system has had little influence on the opening of an excessive number of veterinary teaching establishments in some European countries as well as on the control of the number of veterinary students in others, which are the main impediments to training quality.

Finally, the evaluation system has been criticised for placing too much emphasis on the clinical part of the veterinary training and for neglecting other essential elements of the veterinary curriculum such as animal production or food hygiene.

4.2. The American Accreditation System

In other parts of the world, more stringent systems of control have been developed. For instance, in the United States, the opening of a new establishment is subject to the approval of its facilities and resources by the American Veterinary Medical Association (AVMA). Yet, even there, where accreditation of veterinary teaching establishments has been in place since 1949, an establishment, which has been refused accreditation, may continue to exist. However, the graduates from such establishments would be subjected to the same educational assurances demanded of foreign graduates. They would have to pass a proficiency examination before being licensed by individual State Boards.

4.3. The Trans Tasman Mutual Recognition Act

The Trans Tasman Mutual Recognition Act (TTMRA) on registration of veterinary surgeons in New Zealand and Australia is similar to the European Union 1978 Mutual Recognition Directive. Under the TTMRA, any veterinary surgeon registered in any jurisdiction in New Zealand or Australia is entitled to registration without further examination in any other jurisdiction in either country.

Such registration also applies to holders of veterinary degrees who are graduates of veterinary teaching establishments, which have been assessed and approved by an internationally recognised authority which has a rigorous assessment and review process.

¹¹ Advisory Committee on Veterinary Training Report and Recommendations of 1 March 1990 on the Evaluation of Veterinary teaching establishments in Member States of the European Community.

Such authorities recognised by the Veterinary Council of New Zealand are:

- Australasian Veterinary teaching establishments Accreditation Committee (AVSAC)
- Royal College of Veterinary Surgeons (RCVS)
- American Veterinary Medical Association (AVMA)

The EAEVE was not considered as an organisation equivalent to AVSAC, RCVS or AVMA in that visits and assessments are not mandatory and that the EAEVE does not have the power to enforce the rectification of any shortcomings, which may be identified.

Furthermore, as no accreditation system exists in Europe, the most advanced European veterinary teaching establishments are seeking accreditation from bodies outside the EU.

4.4. Towards a European Accreditation System

In a 1998 recommendation¹², the Council of Ministers invited Member States to *promote cooperation between the authorities responsible for quality assessment or quality assurance in higher education and promote networking*. In particular the Council recommended supporting higher education institutions willing to co-operate in the field of quality assurance on a transnational basis.

The Council also recommended that the Commission, in close cooperation with the Member States should encourage the *cooperation between the authorities responsible for quality assessment and quality assurance in higher education, also involving organisations and associations of higher education institutions with a European remit and the necessary experience in quality assessment and quality assurance*.

In a 1993 letter addressed to the FVE, the services of the European Commission indicated that they were *hopeful that the veterinary profession will take over the very effective scheme developed by the ACVT*. However, at the same time, the responsibility for running the evaluation system was handed over to the EAEVE by the ACVT.

4.4.1. Openness, transparency and independence

The evaluation system, as indicated above, was essentially designed *to identify strengths and weaknesses* of the training provided by veterinary teaching establishments. An accreditation system would have a fundamentally different objective and should aim at re-assuring the public about the quality of the training provided. It must be a quality assurance scheme designed to single out those establishments meeting a set of standards considered as essential for the quality of the training.

As such, an accreditation system must be open, transparent and independent. Open so that the scheme can be subjected to challenge and be improved whenever necessary, transparent to the effect that the outcome of visits is made public and independent in so far as there should be no conflict of interests for those involved in the accreditation process.

However, to be credible, the scheme must be run by the profession itself, like in the United States. Yet, it will be critical for the success of the scheme that the practising and the teaching side of the profession continue to work together to define the standards to be met by establishments for the purpose of their accreditation.

¹²Council Recommendation 98/561/EC of 24 September 1998 on European co-operation in quality assurance in higher education. *Official Journal L 270*, 07/10/1998 p. 0056 - 0059

FVE therefore endorses the principles of the Standard Operating Procedures (SOPs) for the evaluation system, which have been developed by the working group of the Advisory Committee on Veterinary Training (ACVT) and the EAEVE. These SOPs should form the backbone of the future accreditation system.

From these SOPs, it is important to single out the essential criteria that veterinary teaching establishments should meet (see table 2).

4.4.2.Relation with ACVT and European Commission

The main problem encountered in the present system is the lack of resources from the European Commission to operate the ACVT.

Indeed, since 1992, the services of the European Commission decided to withdraw their financial support and subsequently their administrative support for the evaluation system, furthermore, at the Edinburgh Summit, Heads of States and Governments decided that in the interest of subsidiarity, the functioning of Directives governing the mutual recognition of professional qualifications had to be simplified.

Reports of visits are therefore piling up and awaiting the yearly meeting of the ACVT, where they will be finalised.

Furthermore, the essential question about the evaluation system was that of the link between the EAEVE, the ACVT and the Commission

The future accreditation system should work independently but the ACVT, the Commission and Member States are kept informed of its work.

An accreditation Committee should therefore be established under this system where reports of the visits would be reviewed and decisions taken as to the accreditation of the evaluated establishment. Again, the functioning of this Committee should be open, transparent and independent.

4.4.3.Enforcement

Although an accreditation system can be developed and run under the current legal framework, such a system, like the current evaluation system, would have no power to ensure that corrective measures are taken when deficiencies have been identified.

As a first and immediate step, it is hoped that the development of an accreditation system, through greater openness and transparency, would encourage establishments to become accredited and to address their deficiencies when asked to do so. However, it is clear that the ultimate scheme should include an element of coercion.

Ultimately, the recognition of degrees should therefore be subject to the accreditation of the teaching establishments. Thus, only those graduates from accredited establishments would keep the right to move freely in the EU, whilst the others would have to take proficiency examinations should they want to establish themselves in another EU country.

Table 2: Essential criteria to be met by veterinary teaching establishments

A. The Curriculum

A.1 A standard veterinary curriculum should:

- Comprise at least five years of full-time theoretical and practical study;
- Combine the acquisition of basic knowledge in all fields of veterinary science with more advanced training in one given field (a variable time but no more than 10 percent of the total training including extra mural work);
- Be designed to allow all students to acquire:
 - an adequate general knowledge and technical expertise in biomedical sciences;
 - a **basic** knowledge of the broad field of veterinary science (omnicompetence);
 - increased knowledge and technical skills in a limited area of veterinary science.
 - the skills to enable and encourage all students to continue learning through the process of Continuing Professional Development (CPD)
- allow for extra mural practical clinical training to be supervised by the institution and not to exceed six months

A.2 Training in biomedical science should enable each student to:

- acquire basic knowledge of the life sciences;
- learn and experience problem-solving skills;
- gain knowledge of the principles of scientific research;
- demonstrate sufficient scientific curiosity.

A.3 Training in the basic knowledge of veterinary science should enable each student to:

- acquire training in all subjects covering the domestic species of cattle, horses, dog and cat
- acquire a more basic training in the domestic species of sheep, pigs, poultry and farmed fish
- acquire basic training in exotic species including rabbits, rodents, cagebirds and pet reptiles
- acquire a knowledge of emergency first aid for all species and the ability to recognise the clinical criteria for referral for more specialised veterinary treatment
- acquire basic training in food safety and public health emerging from contact with all domestic species

A.4 Training in a limited area of veterinary science should enable each student to:

- have the opportunity to “elect” to study a particular area of veterinary science in more depth
- achieve this elective study both in the host institute as well as by extra mural instruction

B. Teaching

Within the standard veterinary curriculum the delivery of teaching should include:

- a ratio of one teacher to a maximum of 5 students in the clinical sciences and one teacher to a maximum of 8 students in other subjects
- the acquisition of problem-solving skills, covering methods of acquiring, documenting and analysing scientific, technical and clinical data
- acquisition of skills in written and oral communication at all stages of the curriculum
- the theory of animal production integrated with on-farm practical training
- methods for both didactic and practical teaching of handling and examining animals prior to the start of clinical training
- exposure to medical and surgical cases to ensure sufficient hands-on experience for all students
- further development of problem solving and clinical skills through the students full involvement in case management
- individual teachers responsible for the theoretical didactic aspects of clinical training who are involved in the practical side in the institution’s clinics
- interaction between students and research active staff working in both the biomedical and the clinical fields in order to stimulate students’ interest in research
- practical training in food hygiene to familiarise students with food safety evaluation methods at various stages in the food chain, particularly in slaughterhouses
- training in food hygiene at a practical level to ensure that all students are able to gain hands-on experience

C. Monitoring and evaluation:

C.1 Students

- Performance must be evaluated by a variety of methods by both internal and external examiners
- Written work, project work, practical work and problem solving exercises must also be evaluated
- Evaluation methods must be known and understood by staff and students

C.2 Teachers

A system must be available to allow students to evaluate both teachers and teaching
Students should be able to participate in the design and monitoring of courses and the overall curriculum

D. Animals and Teaching materials of Animal origin

- Farms within Institutes should contain the major animal species relevant to veterinary practice
- Adequate clinical material including all of the major species relevant to veterinary practice must be made available
- Practical hands-on clinical experience should account for at least 20 percent of the entire curriculum.
- Clinical material should be varied, providing experience in routine and more complex procedures
- Clinical services must have access to and maintain close links with appropriate diagnostic support services
- An adequate data retrieval system should be available to undertake case studies
- The institution must ensure that the students are exposed to an adequate supply of teaching material in the food hygiene area

4.5. Recommendations

The current European legislation establishes the automatic recognition of veterinary degrees delivered in the EU, assuming that an equivalent level of training is provided throughout the EU.

However, some European countries have an excessive number of veterinary teaching establishments, which lack the minimum resources required to properly train veterinary students, whilst others have an unlimited access to veterinary studies, which impedes on the quality of the training provided.

Control mechanisms must be established to guarantee that the level of the training is comparable throughout the EU and to re-assure veterinary employers and the public at large about the quality of the veterinary training.

FVE therefore urges:

- **The EA EVE to collaborate with FVE to develop an open, transparent and independent European accreditation system of veterinary teaching establishments, which should be run by the profession itself including veterinary practitioners, academics and veterinary employers.**
- **The European Commission and the Council to develop a legal framework whereby recognition of degrees would be subject to the accreditation of the veterinary teaching establishments.**

5. CONCLUSIONS

Despite numerous signals that the quality of the training is not equal throughout the EU and that some veterinary teaching establishments provide an inadequate level of training, the European Commission and Member States have failed to take any measures.

However, in some EU Member States, veterinary licensing authorities have threatened to no longer recognise degrees granted by establishments providing an inadequate level of training. Licensing authorities of other Member States are also considering refusing the recognition of such degrees.

If no action is taken, it is feared that within Member States confidence in the equivalence of the training provided around Europe could be shaken, which in turn could compromise the free movement of veterinary surgeons, the mutual trust between State veterinary services across the EU and the recognition of EU veterinary certification by its international trading partners.

Therefore, in order to ensure that the quality of the service provided by the profession is kept to the highest possible standard, the FVE urges:

- **All EU Member States and EU Associated Countries to cease the opening of new veterinary teaching establishments in Europe, as there is clearly no need for such establishments;**
- **All EU Member States and EU Associated Countries to introduce control mechanisms to limit the number of veterinary students to a level commensurate with the teaching facilities;**
- **The European Commission to limit its financial support to the construction of new veterinary teaching establishments in countries where there are no such establishments. FVE also invites the European Commission to help upgrading the facilities of existing establishments, when these do not meet the minimum requirements established under the European legislation.**
- **Its member associations to better inform secondary pupils about the different facets of the veterinary profession.**
- **EU Member States and EU Associated Countries to adapt enrolment procedures to facilitate the recruitment of students that would be willing to enter farm animal practice, food inspection or research.**
- **The EAEVE to collaborate with FVE to develop an open, transparent and independent European accreditation system of veterinary teaching establishments, which should be run by the profession itself including veterinary practitioners, academics and veterinary employers.**
- **The European Commission and the Council to develop a legal framework whereby recognition of degrees would be subject to the accreditation of the veterinary teaching establishments.**

ANNEX

OVERVIEW OF THE EVALUATION SYSTEM OF VETERINARY TEACHING ESTABLISHMENTS

A voluntary system of evaluation of veterinary teaching establishments was developed in the late 80s under the umbrella of the Advisory Committee on Veterinary Training (ACVT) of the European Commission. This system is intended to ensure that veterinary training is of a comparably high standard throughout the European Union.

This system is now run by the European Association of Establishments of Veterinary Education (EAEVE), with support from the FVE.

There are 52 veterinary teaching establishments within the 15 EU countries. Evaluations are carried out at a 7 to 10-year interval, so that 5 to 7 visits are carried out each year.

Weaknesses which lead to suspicions that the training given does not conform to the requirements of Directive 78/1027/EEC are classified as category I deficiencies, for example, deficiencies in training, a high students/teachers ratio, the inadequacy of facilities...

There are also category II deficiencies, which are suggestions for changes, which the team of experts consider would improve the training, even though these suggestions relate only to weaknesses that leave the conformity of training to the above directive unaffected.

Two to three years after submission of the report, the institution concerned is requested to provide details of the changes introduced to improve deficiencies. When an establishment considers that it has rectified a category I deficiency, it should inform the EAEVE accordingly.

CONTENTS

QUALITY OF VETERINARY TRAINING	1
1. INTRODUCTION	2
2. VETERINARY DEMOGRAPHY: A THREAT TO QUALITY?	3
2.1. Veterinary education.....	3
2.2. Veterinary demography.....	5
2.3. Impact on internal market and on international trade	6
2.4. Recommendations	7
3. PREPARING THE PROFESSION FOR THE 21 st CENTURY	8
3.1. Profile of a 21 st century veterinary surgeon.....	8
3.1.1. New opportunities and challenges.....	8
3.1.2. The young generation and feminisation of the veterinary profession.....	8
3.2. Structure of future veterinary courses.....	10
3.3. Recommendations	12
4. QUALITY ASSURANCE IN VETERINARY EDUCATION.....	13
4.1. The ACVT evaluation system.....	13
4.2. The American Accreditation System.....	13
4.3. The Trans Tasman Mutual Recognition Act.....	13
4.4. Towards a European Accreditation System.....	14
4.4.1. Openness, transparency and independence	14
4.4.2. Relation with ACVT and European Commission	15
4.4.3. Enforcement.....	15
4.5. Recommendations	17
5. CONCLUSIONS	18