

European Association of Establishments for Veterinary Education
European System of Evaluation of Veterinary Training

**REPORT ON THE VISIT TO THE FACULTY OF
VETERINARY MEDICINE OF TOULOUSE**

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INTRODUCTION

The Ecole Nationale Vétérinaire de Toulouse (ENVT) is one of the 4 veterinary teaching institutions of France. Veterinary schools in France are publicly financed and governed by the Ministry of Agriculture, Rural Development and Fishery. About 50 years ago, ENVT has been relocated and built just outside the city on a large rural campus site in the Mid-Pyrenees region. This south-western part of France is a thriving agricultural and industrial area with strong emphasis on cattle and sheep production. The closeness of the half million city of Toulouse provides a large reservoir of companion animals. The School, which is not part of a university, has recently merged with the school of agronomy and entertains close contacts with universities and other institutions of higher education in the area (University pool of greater Toulouse)

1 OBJECTIVES & STRATEGY

Questions to be covered:

- 1) *Clear statement of objectives?*
- 2) *Do the objectives cover the total education programme adequately?*
- 3) *Is undergraduate education the primary reason for the existence and funding of the establishment?*

1.1 Findings

Overall objectives of the “École Nationale Vétérinaire de Toulouse” (ENVT) are to provide conditions for the highest level of education, learning and research. ENVT participates in international cooperation at the level of teaching, research and technical. The team recognises that the clearly described objectives in the SER are corresponding to reality and to what can be expected. We consider the implementation of the new curriculum a major challenge for the school and notice with satisfaction that the faculty has successfully realised this transition.

1.2 Comments

The objectives of the school and the strategy to meet them are clear. It should be acknowledged positively that the school puts emphasis in certain specific areas. As example the high standards of “production animal” teaching and research shall be mentioned. Excellency in one area, however, should not be the reason to let standards drop below acceptable levels in other species or disciplines.

1.3 Suggestions

We recommend a more holistic way of strategic planning and leading the implementation of this planning down to the individual teaching units. Quality management, already implemented, will be very helpful for the implementation of the strategic planning.

2 ORGANISATION

Questions to be covered:

- 1) *Brief structure and organization summary*
- 2) *Does Faculty have adequate influence on University policy?*
- 3) *Is it suitably “autonomous” i.e. does it have adequate flexibility?*
- 4) *Effective structure for decision making?*
- 5) *Are Departments coordinated amongst themselves in terms of use of resources?*

2.1 Findings

As all French veterinary schools, ENVT also is not part of a University. It is a so called “Higher teaching institution” (Grande Ecole), under the jurisdiction of the Ministry of Agriculture (MAAP). Grandes Ecoles may not deliver academic degrees (Dr.med.vet., PhD etc). For that a University professor has to be member of the delivering committees. French veterinary schools are joining up for research-related and other mainly economic reasons with other higher schools and universities of their region. Therefore, there is a recent close association with the “Institut National Polytechnique de Toulouse” (INTP) which is one of the 4 Toulouse Universities. INTP is a federation of 7 Grandes Écoles (in the domains of veterinary sciences, agronomy, chemistry, electronics, informatics and hydrolics, meteorology and mechanics) under the responsibility of the Ministry of Higher Education and Research and the MAAP. The association with INTP gives more international visibility to ENVT without losing its autonomy on juridical, financial and educational matters.

ENVT has institutional relationships trough its involvement in several consortiums, at regional level with PRES Toulouse, Toulouse Agri Campus, Agrimip-Innovation and Cancer-Bio-Santé; at national level with “Agreenium” a structure of scientific cooperation including CIRAD, INRA, Montpellier Sup Agro, Agro Campus Ouest and Agro Paris Tech.

The authority directly overseeing the ENVT is the MAAP trough the DGER, which is the governing body of all schools under the authority of this Ministry. There is an intermediate consulting body – the Council of the Deans of the Veterinary Schools – which acts as an advisory body of the DGER in all matters concerning the four French Veterinary schools.

ENTV, like all the other schools of MAAP, is directed by a Dean assisted by a General Secretary and a Vice-Dean (optional). The statutory committees are: the Administration Council, the main governing body; the Scientific Committee, the Education Committee, the Education and Student Life Committee, the Joint Technical Committee and the Hygiene, Security and Working Conditions Committee.

The Administration Council decides all the general activities of the school: the school project and contracts with the Ministry; education policy, creation of diplomas; internal rules of the school and resulting positions; research policy; budget and financial matters.

The Dean is nominated by the MAAP after the formal opinion of the Administration Council and the Education Committee. The main responsibilities of the Dean are: preparation and execution of the decisions made by the Administration Council; authority on all personnel; nomination of persons assuming delegated responsibilities; running of the school, organization and financial management.

2.2 Comments

Organisation of the school in general terms remains to a certain extent governed by historical developments, yet we notice, that the school is in the process of implementing new avenues like the integration of the school in the university pool of the greater Toulouse area and emphasis on quality management..

2.3 Suggestions

The schools decision making structures seem to be adequate, but the chain of command may need some streamlining and more clarity.

3 FINANCES

Questions to be covered:

- 1) Short summary of financial and budgetary structure and who controls it?*
- 2) Any additional income generated?*
- 3) Is level of funding adequate?*
- 4) Is there a good balance between capital spends and running costs?*
- 5) Is there a good balance between research and teaching funding?*
- 6) How much autonomy to allocate budget?*

3.1 Findings

ENVT is an administrative public establishment with financial autonomy and two main sources of funding, one from the MAAP and the other from the school own resources (student's fees 1600 Euros/year, research contracts, services and continuous education resources). Special project-based funding can be obtained for investments from the government, the region or research organizations. Funding for building work is usually very complicated as it requires the ENVT to have sufficient resources to afford the investments before being refunded. The schools budget is not sufficient to cover the costs for building or equipment maintenance. The faculty is financed by the "dotation globale de fonctionnement" (overall budget) which amounts up to roughly 39% of the faculty budget, 48% from the tuition fees and services provided by the school and 13% from research activities. The services' main resources come from continuing education and research-development contracts. The percentage of income retained by the school (overhead) ranges from 12%-15% and the remaining funds are specifically allocated to research or to an education project.

3.2 Comments

Considering the actual and overall difficult economic situation in Europe and in France, the team notices positively, that a large array of resources is explored to increase the amount of money available for school projects, including financial support from the region or the PMU (governmental organisation for betting in horse racing).

3.3 Suggestions

Although we acknowledge the great efforts undertaken by the school in Continuing Education for fund generation, we recommend a careful analysis of the cost – benefits ratio of such teaching activities, as it is time consuming, and might be interfering with the main tasks of the school, such as undergraduate teaching and research.

4 CURRICULUM

4.1 GENERAL ASPECTS

Questions to be covered:

- 1) Seems as in SER or indicate variances?*
- 2) Curriculum fixed by law or otherwise?*
- 3) Important to verify clinical training figure in SER corresponds to supervised intensive hands- on clinical training in small groups. Note: extramural vacation work or large group demonstrations should not be included as clinical work.*
- 4) Curriculum balance and coverage OK?*
- 5) Comment on practical : theory ratio*

- 6) *Ratio of clinical work : lectures and practical work must be checked with SOP*
- 7) *Ratio of theory : practical and clinical work must be checked with SOP*
- 8) *Comment on courses integration, electives & extramural work arrangements*

4.1.1 Findings

All French curricula are based on the Arrêté ministériel (Ministry of agriculture) du 20.04.2007 which defines the "Cursus Vétérinaire" (the common trunk) for the first four years of the 5 year curriculum. It also regulates the tracking system for the fifth year, and the compulsory external training (total of 10 weeks in the year A1 and A2, and 4 weeks in the large animal clinic module in A4. A minimum of 4 weeks must be achieved in a foreign country). Only the content of the courses and the balance between theoretical and practical training can be adapted and changed within limits by the individual departments and the teaching units.

Allocation of time between the disciplines is mainly the result of discussions in the Conseil des Enseignants, after consultation of different bodies of the school. The Arrêté ministerial states that the lecture time should not be higher than practical and clinical work taken together, and that clinical work must make up at least 30% of the overall teaching time of the first 8 semesters.

In the lower semesters, there are few integrated courses, most of them being implemented in the fifth year. Teaching is distributed into modules, completed over a period of one semester. Though labelling of modules and subjects sometimes does not correspond exactly with the EU-list of subjects, all main topics are covered, sometimes over different modules.

4.1.2 Comments

Generally speaking, the curriculum appears to be well implemented, and the time / topics allocation does correspond to the figures in the SER. The schedule of the A4 year (clinical rotations) allows intensive and valuable clinical training. There is a great effort in the ENVT to organise the clinical training in small groups, which allows good supervised hands-on training. However, the contact of the students with specialised consultations is depending on the availability of specialists in the clinics. Some important clinical areas (cardiology, neurology, equine surgery) are not covered by teachers of the school at a higher specialisation level.

The early introduction in the curriculum of clinical skill training and the way to deal with the increasing level of difficulty due to the teaching load over the five undergraduate years is very valid, and makes good use of the pedagogical autonomy granted to the French establishments of higher education. However, in regard to the EU recommendations (even to the French rules for the A1), the amount of theoretical classroom lecturing is still too high in the first three years. This is partly related to the traditional way of teaching in the French veterinary schools, and the delay in implementing new teaching modalities and opportunities, like self-directed learning or the more extended use of modern problem oriented learning/teaching methods. The computer-based Moodle platform will give some good opportunities on that level, as soon as it will be completely implemented. Better coordination of the teaching modules in the four French vet schools will also help to solve the problem.

4.1.3 Suggestions

We recommend that the concepts of research-based teaching and problem-oriented learning should be enhanced. This could in return facilitate a better balance between theoretical and practical teaching /self-directed learning, in order to reduce the amount of theoretical classroom lectures in the first years of the curriculum.

There is a need for a more centralized planning of the curriculum, at school level. This could speed up the introduction of a more integrated teaching, in the basic sciences as well as in the clinical topics.

Attention should be paid to improved training and teaching in the some important clinical sub-specialities (e.g. neurology, cardiology), which are not covered by board certified specialists of the staff. ***The insufficiency of practical training and teaching in equine surgery is, however, a major deficiency and should be corrected as completely and as swiftly as possible.***

4.2 BASIC SUBJECTS & SCIENCES

Questions to be covered:

- 1) Do basic subjects form part of the internal curriculum or are they taught elsewhere?*
- 2) How are carcasses handled for anatomy and pathology with relation to chilling/freezing, hoists, trolleys, changing facilities and disposal?*
- 3) Do incoming students have adequate basic knowledge?*
- 4) Are items taught in basic sciences brought into relation to later courses?*
- 5) Adequacy of hours and course materials as well as balance between practical and theoretical work?*
- 6) Is there adequate hands-on participation by students in anatomy and pathology?*
- 7) Are the groups too large?*

4.2.1 Findings

Some subjects (such as physics and analytic chemistry) are taught in the preparatory course not at the veterinary school. The basic biologic knowledge of the incoming students is adequate. All basic sciences mentioned in the EU Directive and the SOP are taught as independent subjects or part of other subjects within the veterinary curriculum. The content of the subjects is generally the same as at other European veterinary faculties. The number of lectures on certain basic science subjects is relatively low, like physiology, biochemistry and pharmacology (SER Page 28). The number of practicals in anatomy (including histology and embryology) and physiology is low as well and there is no practical training in biochemistry, cellular and molecular biology and genetics including molecular genetics. Anatomy is taught using generally carcasses preserved with zinc chloride, fresh material is very limited, and plastinised demonstration material is widely used (SER Table 7.1). Sheep are used for teaching anatomy, carcasses of other animal species are very limited. The school has introduced several practicals on physiology of A1 semester students involving animals giving them early access to animal work. The groups in the practicals are small enough so that students have access to hand-on work in the laboratories and in the dissection hall. Most teachers of the basic subjects are veterinarians (SER Table 10.1). No diagnostic work is done in the Microbiology section. The number of necropsy cases is adequate, however not balanced between the different species (SER Table 7.2.). Professional English is taught in the first two years.

4.2.2 Comments

A strong training on basic sciences at the veterinary faculty is necessary to provide solid scientific background to the students, it is inevitable to further evidence based teaching. The carcasses used for teaching anatomy have to represent all important animal species; dissection of complete fresh carcasses is necessary to adequate topographical anatomy

knowledge. Due to the limited number of animals and the low number of anatomy practicals, the students cannot have enough hands-on practical training. Introduction of practicals for first year students with own animal work is highly welcomed. Teaching subjects of basic science by veterinarians is a strong point of the school; it makes possible teaching these subjects from a veterinary point of view. Diagnostic work at basic science departments is beneficial; it is a good source of fresh material and current problems. Teaching professional English helps the internationalisation of the graduates and the school.

4.2.3 Suggestions

It appeared that in some basic subjects the allocated time is on the minimal acceptable level. This might be partly corrected by remodelling and updating the concept of self-directed learning and enhancing the opportunities of the e-learning.

Using a sufficient amount of entire fresh (or even some preserved) carcasses of domestic animal species other than sheep, that is dogs, cats and horses will be necessary to properly teach topographic anatomy.

A balanced necropsy material representing all species is also necessary. More poultry and rabbit necropsy material would be desirable.

Diagnostic work in basic science such as in Microbiology, for instance should be carried out for services and teaching.

4.3 ANIMAL PRODUCTION

Questions to be covered:

- 1) Is there a working farm where students can do practical work on animal production?*
- 2) Is there any early exposure to handling of farm animals for city students?*
- 3) Are there sufficient hours of teaching in animal production and is there a good balance between practical and theory?*
- 4) Is agronomy taught and where (silage production, pasture management and use of particular feeds/plants etc.?)*
- 5) Is animal production teaching well integrated with related subjects i.e. herd-health management and ailments caused by poor or in-balanced nutrition?*
- 6) Does the teaching of forensic and state veterinary medicine cover the principles of certification with regard to animal transportation?*

4.3.1 Findings

Although the ENVT has no working or teaching farm, all students get immediately in the beginning of A1 exposure to the handling of farm animals in the physiology teaching facilities (this is especially important for city students). The department of animal production at the ENVT covers a broad spectrum of teaching and research areas, especially by integrating food animal sciences and diseases with food hygiene and food safety as well as with veterinary public health. The academic staff of the department teaches in the first years genetics, animal housing and husbandry, nutrition, economy, ethology, biometrics and epidemiology. In the years A2 and A3, animal diseases of cattle (dairy and beef), sheep and goats, as well of poultry and pigs are taught in lectures. Agronomy such as silage production, pasture management and the use of feeds/plants are taught mainly in A2. Animal welfare and zoonoses such as salmonella are taught as part of the species-oriented lectures (cattle

and sheep, pigs and poultry). The teaching load is distributed as follows: 50% ruminants, 25% pigs and 25% poultry.

Teaching in animal production is well integrated with related subjects such as herd health, management and ailments caused by poor-balanced nutrition and/or poor management skills. These subjects are mainly taught during the farm visits to cattle, pig and poultry farms that take place in the years A4 and A5. Forensic and state veterinary medicine is taught in general lectures and in the species lectures in the years A2 and A3.

Food safety is taught in the years A3, A4 and A5, with hands on teaching at cattle and pig slaughter plants being taught in the years A4 and A5. No or very little hands-on teaching in food safety inspection in rabbits and fish is offered. In the food safety teaching by the animal production department, certification with regard to transportation is included.

4.3.2 Comments

The integration of food hygiene, food safety and veterinary public health (state veterinary medicine) into the teaching programme of the department of animal production provides the ENVT a strong emphasis on food animal production and food of animal origin. The high reputation of the ENVT for a strong teaching in this area is fully justified. It is without doubt that this area covered by the department of food animal production is the strongest field of teaching and research of the ENVT.

4.3.3 Suggestions

The strengths of the ENVT in animal production and food hygiene should be maintained and further developed. Teaching and demonstrating bio-security measures at school and farm level should be improved. This issue, especially in the animal facilities within the ENVT and on some farms visited, definitely needs targeted improvement.

Some hands-on-teaching in meat inspection in rabbits and food hygiene in fish is highly recommended

4.4 CLINICAL SCIENCES

Questions to be covered:

- 1) Does the establishment operate an emergency veterinary service in which students participate and is the latter compulsory or voluntary?*
- 2) Does the establishment operate a mobile clinic and how do students participate in the activities?*
- 3) Are students covered by liability insurance during extramural work?*
- 4) Are allocated hours adequate and in balance with the curriculum?*
- 5) Are disciplines integrated and well coordinated? Is there a satisfactory balance between species?*
- 6) Is each student getting adequate hands-on clinical teaching?*
- 7) Brief comment on adequacy of facilities, environment, organization, caseload, necropsy case load, staff and support staff?*
- 8) Are adequate opportunities offered for each student to handle parturitions, dystocias, displaced abomasums, traumatic reticulitis, milk fever, acetonaemia?*
- 9) Would all students be able to perform an ovaro-hysterectomy on a cat alone?*

4.4.1 Findings

The clinical sciences area is the responsibility of several departments and administrative sections. The department of companion animal clinical science (SCACSL) the Animal Hospital (CHUV) are responsible for the small animals and equine. The clinical training aspects of individual animal medicine and surgery for food producing animals is under the responsibility of production animals department of breeding, products and veterinary public health (EPSPV), and for apparently historic reasons, faculty members from this department also cover the clinical training of non-traditional/exotic pet practice.

Students are introduced to animal handling and clinical procedures early in their curriculum, with increasing emphasis and hands on clinical training coming mainly in year 3 and 4. For those combined years, there are 706,5 h (33,2%) lectures and seminars, 41,5 h (1,9 %) self-directed learning, 349 h (16,4%) lab and other nonclinical duties, whereas clinical work was 1033,5h (48,5%) of these 2 years' efforts.

A tracking system is now in place for the fifth year, (semester 13 and 14) with 6 elective tracks, including clinical tracks in production animals, small animals and in equine, and nonclinical tracking in veterinary public health, research and in industry.

Emergency service

There is a 24-hour emergency service in the small animal section that operates 47 weeks of the year in which all students participate on evenings and/or weekends for the emergency service.

In small animals the routine organisation of emergencies is based on Interns with groups of 3 or 4 A4 students (with support of Chargés de Consultation and teaching staff. Students spend 1 week full-time (including night and week-end watch) in the Emergencies & Critical care ward.

In Production animals there is no specific emergency ward. However, in the event of emergencies requiring hospitalization of an animal, the case is managed by the students under the control of a teacher in the large animal hospital (less than 10 cases per year).

The equine clinic is not open to emergencies because of the unavailability of an equine surgical theatre. Equine emergencies are therefore strictly limited to medical cases, and based on case numbers, acute cases appear to be few.

Hands-on clinical exposure

Practical training and hands-on experience is strong in most areas. For example, all students have hands-on experience in ovariohysterectomy in cats and in caesarian section in sheep. The exceptions include weaknesses in diagnostic imaging and in equine surgery and equine emergencies.

In all clinical areas, small animals, equine, food animal and the non-traditional/exotic pets, students are directly involved in the examination of animals, the diagnosis, and treatments of hospitalized animals of all the clinics (under the supervision of chargés de consultation, praticiens hospitaliers and teaching staff). For small animals, they also benefit from the support of some professional nursing staff.

In contrast, the equine clinical area has been understaffed and is lacking appropriate facilities. The equine teaching appeared to provide all students with key basic technical and theoretical skills. However, the low and skewed case load and lack of a surgical suite/after hours case accession excludes the possibility for each student to see first-hand a range of common diseases, and have sufficient confidence to safely perform triage or primary care on equine emergencies. *This constitutes a major deficiency.*

Mobile clinic

There is a mobile clinic for production animals (ruminants, swine and poultry). It deals with herd health management, including monitoring of breeding units (esp. for reproduction) and in some referred cases, farm audits. Students are involved in the preparation of the documents for the visit, the collection of data during the visit, the analysis of this data, the monitoring of all ancillary analyses and the preparation of the pre-report under the supervision of teachers, residents and interns.

Insurance coverage

The insurance coverage of the students is well organised by law, even for students doing clinical work in other countries.

Integration

With the exception of lack of surgical exposure in the equine area, the hours of teaching and proportion of theoretical and hands-on education appear to be adequate and in balance with the curriculum. However, there is still an imbalance between non-clinical and clinical topics, where too many hours are allocated to the para-clinical disciplines. Main disciplines like surgery and internal medicine had to reduce the learning objectives, and to some extent (specially the practical work in CA) the objectives of the day-one competencies might not completely be reached. On the other side, the new-new-curriculum enhanced the teaching in the 4th and 5th year, which is consuming a lot more teaching time, without any financial or personal support from the school toward the department in return.

The companion animal and food animal training have good to excellent integration of various areas. In small animal clinics, all students see both medical and surgical case as well as gain exposure to coupling in preventive health approach and nutritional considerations/problems.

The food animal section has close interaction with colleagues from pathology, having a significant portion of their case-load being submitted for necropsy (with pathologists within this department) as part of a herd evaluation or individual animal medicine.

Clinical facilities and case load

Facilities for most of the clinical areas are adequate and reasonably well equipped, though many in need of considerable repair or upgrading, as noted below under clinical facilities. The equine facilities however are below standard with the key deficit the lack of an up to date surgery suit and ready and effective access to suitable isolation boxes and/or buildings designed to ease infections control and bio-security.

The individual animal food animal training was integrated with production animal medicine and even with reproduction and food hygiene and food safety. This area had a good caseload with ample hands on teaching. It was also highly integrated so that the students see from the individual animal to the farm visit, population based assessment and management/nutritional evaluations and as well has a close link with pathologist and necropsy.

In small animals the clinics had a good and varied case-load with ample hands-on exposure for the students, having them take an active role in the clinical management of all individual cases. An area for isolating small animals is available.

4.4.2 Comments

Students are provided an introduction to animal examination very early on in their curriculum, which is a positive aspect of the clinical training. The amount of time spent in clinics appears

adequate and reasonably balanced, and the direct involvement of students in case management from the outset of the case to its conclusion provides strength in the clinical training.

There are EBVS-residency training programs in a number of clinical and para-clinical areas, and the dean's office has supported the initiation of this. The programs undoubtedly enhance both the clinical education of the disciplines for the students and the quality of clinical service and care for the hospital patients. In the small animal area there are however some key areas, such as neurology, and cardiology, as well as diagnostic imaging lacking board-certified specialists. The diagnostic imaging section has one faculty member currently enrolled in an alternate residency training program elsewhere and thus this area in due time is anticipated to have substantially improved coverage.

There appears to be lack of leadership or faculty ownership in the area of anaesthesia/analgesia. A newly hired Diplomate in Emergency and Critical Care appears to have overlapping duties with current faculty members (non certified specialists) in charge of anaesthesia. The two latter teachers have their main interests are also in acute and intensive care medicine and not in anaesthesia. One consequence is the apparent lack of ownership/responsibility within the faculty for the area of anaesthesia/analgesia. Despite this students appear to obtain a satisfactory level of training

Facilities for most of the clinical areas are adequate and reasonably well equipped, though many in need of considerable repair or upgrading, as noted below under clinical facilities. New building plans are underway for the equine area, small animals and later the food animal clinic which should greatly help address these issues. The food animal section has close integration with necropsy facilities and faculty, as they have a significant portion of their case-load being submitted for necropsy as part of a herd evaluation or individual animal medicine.

The equine area however is below standard and lacks an acceptable surgery suite altogether. As well it lacks ready and convenient access to suitable isolation boxes and/or buildings in close proximity to the clinic to assist routine infection control and attend to issues of bio-security. There is, however, an appropriate isolation unit for large animals within the experimental section of the school, somewhat distant and not easily accessible from the hospital.

The case-load for the companion animals, exotics and food animal clinics appear to provide wide and varied clinical case load for teaching.

However, the equine case-load appears insufficient to provide minimal clinical exposure clinical patients for all students in the curriculum. At approximately 350/year the horse clinical accessions appear to be heavily weighted towards ophthalmologic and oncologic (sarcoïd) patients. A partnership has been set up, for the equine internship program, with the region's biggest equine private hospital, where interns (but not students) rotate in surgery and for emergencies. A project for an equine surgical unit will be put together in 2011 in view of opening the equine clinic to surgical emergencies. The team was unable to assess via the SER or through the visit and interviews the extent and nature of the experience each student could be afforded with the private clinic.

4.4.3 Suggestion

More support need be provided to the equine area in infrastructure and personnel so that they can attain at last a critical mass of veterinarians to provide a platform for students to see both common and acute care problems in the horse. **Presently, this constitutes a serious**

deficiency. The school has already begun addressing this with building plans to create an equine surgery suite, and has recently having hired a new junior faculty member to take charge of equine surgical cases. However, it remains to be seen whether these initiatives can provide the critical mass to ensure all students get access to more complete service (medicine and surgery including emergencies) on site. If some of the clinical teaching in the equine is done at an off campus site, as has been alluded to during our visit, the school should make sure that they review these clinical experiences acquired and the educational outcomes (which presently is not the case). Further, such clinical teaching should occur in a setting that provides interaction with experts in the field, referenced resources, modern and complete clinical laboratories, advanced diagnostic instrumentation and evidenced based outcome control (including necropsy).

The area of diagnostic imaging currently lacks specialist expertise. It will be important for the school that the expertise being gained by the faculty member currently undergoing residency training elsewhere returns to ENVT and takes charge of the education in this discipline.

One area the team had difficulties in assessing was the actual amount of hands-on clinical training and seeing actual clinical practice. This was particularly evident in the equine area where students were reportedly at other veterinary schools and visited a clinic nearby, 30 km distant but without a clinic log book the team had no way to assess the nature or extent of these efforts. Experience can include exposure to clinical education at off-campus sites, provided the faculty reviews these clinical experiences and educational outcomes. A log-book for each student to document and assure the type and level of practical experience for each student should be introduced helping substantiate the educational efficiency of both intramural and extramural clinical training.

Anaesthesia/analgesia appears to have no faculty member driving or taking ownership of this discipline. While the discipline currently appears to be well covered and taught, the faculty need be observant that this discipline retains its place in the curriculum. Each discipline Anaesthesia and Emergency and Critical Care should develop independently although some overlap is obvious. The faculty should encourage and support this development according to modern and international trends and should abandon the outdated perception that anaesthesia and emergency-critical-care are one and the same discipline of specialisation.

There are some areas of animal clinics need strengthening in the future, such as key specialty disciplines of cardiology, and/or neurology. These, and other areas such as oncology, will be needed in the future to complement other clinical specialist disciplines both for future education of students and for residency training programs.

4.5 FOOD HYGIENE & TECHNOLOGY AND VETERINARY PUBLIC HEALTH

Questions to be covered:

- 1) Briefly comment on structure of practical training i.e. practicals, slaughterhouse, processing plants etc.*
- 2) How is food hygiene course linked to animal production, pathology, pharmacology& toxicology incl. residues and withdrawal times and parasitology?*
- 3) Is training mostly internal on-site or external?*
- 4) How is inspection experience in milk, cheese, fish, meat, poultry offered?*
- 5) Do all students have training in the slaughterhouse?*

4.5.1 Findings

Students have compulsory basic training in slaughterhouses and premises for production of food of animal origin outside the school. A total of 173 hours of teaching are taken by each student. The three slaughterhouses used for training veterinary students are situated in Montauban, Castelnaudary and Saint-Gaudens, which are within 80 Km from the school. These slaughterhouses receive and prepare adult cattle, calves, sheep and swine, and more rarely horses. In A3 a 3 hour visit to a slaughterhouse is organized for a group of 6-8 students with a teacher and the participation of the veterinary in charge of meat inspection at the abattoir. The aim of this visit is observing and understanding the facilities and equipment, the operations of animal killing and preparation, the management of by-products and the hygiene control.

In A4, groups of 6-8 students spend 3-3 hours (total 9 hours) in practical training on food unfit for consumption and stored for demonstration purposes (visual inspection, palpation, selective cuts, etc.); they are also initiated in the evaluation of meat security and safety. Still in A4 each student spends 4 half-days of extramural training in a slaughterhouse following the official veterinary surgeon and practicing in all of his activities.

Foodstuff processing units (meat salting, cheese processing, food caning and meat preparation as well as catering center) are 20 to 60 Km away from the school. 3 hours visits to these units are organized for groups of 6 to 8 students accompanied by the teacher of Food Hygiene and the person in charge of the visited site. The aims of these visits are knowledge of technologies used and sanitary control of production.

In A4 students have laboratory work concerning microbiological analyses of food of animal origin, in order to evaluate their security and the hygiene of the process.

The common curriculum of undergraduates (A1 to A4) is mainly discipline-based. However animal production, pathology, pharmacology and toxicology including residues and withdrawal times, parasitology and other subjects are prerequisites for food hygiene courses (HIDA OA), as is stated in the syllabus. Training is mostly external. Students have the scientific knowledge about milk, cheese, fish, meat, eggs, poultry and game, but the practical training (hands-on) is offered only for the meat of domestic ungulates. All students have training in the slaughterhouse of domestic ungulates.

Chair: Students have compulsory basic training in slaughterhouses and premises for production of food of animal origin outside the school. A total of 173 hours of teaching are taken by each student (Table 4.2b). The three slaughterhouses used for training veterinary students are situated in Montauban, Castelnaudary and Saint-Gaudens, which are within 80 Km from the school (pág 50). These slaughterhouses receive and prepare adult cattle, calves, sheep and swine, and more rarely horses. In **A3 a 3 hour visit to a slaughterhouse** is organized for a group of 6-8 students with a teacher and the participation of the veterinary in charge of meat inspection at the abattoir. The aim of this visit is observing and understanding the facilities and equipment, the operations of animal killing and preparation, the management of by-products and the hygiene control (pág. 36).

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Foodstuff processing units (meat salting, cheese processing, food caning and meat preparation as well as catering center) are 20 to 60 Km away from the school (pág. 50). **3 hours visits** to these units are organized for groups of 6 to 8 students accompanied by the teacher of Food Hygiene and the person in charge of the visited site. The aims of these visits are knowledge of technologies used and sanitary control of production. (pág. 50).

Poultry and animal by-products processing plants are at 100 and 120 Km from the school, respectively (pág. 50). Visits to these plants have the duration of 5 hours and are organized

for groups of 12-14 students, which are accompanied by 1 or 2 teachers of Food Hygiene and the person in charge of the quality assurance of the site. The aim of these visits is: control of food security, settings and operations in the unit, evaluation of the sanitary control plan. (pág.50)

2) How is food hygiene course linked to animal production, pathology, pharmacology and toxicology including residues and withdrawal times and parasitology?

The common curriculum of undergraduates (A1 to A4) is mainly discipline-based. However animal production, pathology, pharmacology and toxicology including residues and withdrawal times, parasitology and other subjects are prerequisites for food hygiene courses (HIDAOA), as is stated in the syllabus.

3) Is training mostly internal on-site or external?

Training is mostly external

4) How is inspection experience in milk, cheese, fish, meat and poultry offered? Not completely answered.

Students have the scientific knowledge about milk, cheese, fish, meat, eggs, poultry and game, but the practical training (hands-on) is offered only for the meat of domestic ungulates.

5) Do all students have training in the slaughterhouse? All students have training in the slaughterhouse of domestic ungulates.

4.5.2 Comments

Practical training of the students is not sufficient in the inspection of poultry, rabbits and fish. They have good preparation in the other subjects of veterinary public health, food hygiene and technology.

4.5.3 Suggestions

Taking into account that most of the veterinary meat and food inspectors start working in practice based only on the knowledge they acquired during undergraduate training, they need practical training in the inspection of poultry, rabbits and fish. This should find appropriate consideration in the curriculum.

4.6 ELECTIVES, OPTIONAL DISCIPLINES & OTHER SUBJECTS

4.6.1 Findings

In the 5th year of the course 6 elective tracks are proposed – production animal clinic, small animal clinic, equine clinic, veterinary public health, research and industry – only three of them are functioning (the clinics). The elective subjects are offered just in the tracking system. Within each clinical track each module is compulsory. The two supplementary elective subjects offered in the tracking system are compulsory for the three clinical tracks.

Obligatory extramural work is organized in years A1 and A2 for a total of 10 weeks (Extra Mural Studies Veter and External Training Mini Project) and in A4 for 4 weeks as part of the large animal clinics module. Stage Veter is the first extra mural training in rural practice, which aims to interest and drag students towards production animal medicine and health management.

4.6.2 Comments

There are no true electives, but elective tracks. Electives are missing in the curriculum.

4.6.3 Suggestions

Electives must be offered.

5 TEACHING QUALITY & EVALUATION

5.1 TEACHING METHODOLOGY

Questions to be covered:

- 1) Brief summary of teaching methodology used*
- 2) Are specific learning objectives set for subject and courses?*
- 3) Do students work from teachers`scripts or textbooks or other information technology form?*
- 4) Is problem-oriented teaching used?*
- 5) How are courses and teaching evaluated?*
- 6) Is teaching mostly theoretical or has practical application a higher rang of importance?*
- 7) How much real-life clinical exposure opportunity is offered i.e. hands-on work, 24-hour duty, acute cases, case responsibility, caser follow-up, interaction with clients, practice management etc.?*

5.1.1 Findings

Teaching is well balanced between lectures, seminars and practical trainings. The balance between theoretical lectures, practicals and clinical work is basically good; however in the case of basic science the number of the lectures is low. The lectures are powerpoint aided, the powerpoint presentation of the teachers is available in advance on the homepage of the school, they can downloaded before the lectures. WiFi is available in the whole campus, so students can use it anywhere. Course notes are used as well (SER 5.1.1.). Problem-oriented teaching is present even in the first years at the physiology practicals, and it is more common in the case of clinical work and farm visits. The large amount of ruminant and companion animal but not horse cases makes not only problem-based learning possible, but it gives a good opportunity for the students to see real life cases, they are involved in emergency service, there are regular farm visits. Teaching is evaluated after finishing each module using questionnaires, teachers receive the results of the evaluation, however a feedback from the side of the teachers to students is missing. Teaching qualities of academic staff members are evaluated by an external body every 4 year as part of their general activities. In general, teachers across the Faculty show great enthusiasm towards learning environment and teaching. Using internet based teaching methods is getting more widespread, teachers receive technical support from the school in using Moodle system, its use in teaching is getting widespread, however it is not fully implemented yet. Integration of animal production units and slaughter houses in the education is appropriate. Special courses to increase the teaching skills of teachers used to be sponsored by the ENVT, teaching skills of the young teaching staff is now based mainly on the help of the older academic staff members in a form of a mentor system. Some lectures are taught in English and students have to study at least one month abroad.

5.1.2 Comments

The teaching methods used at the school are appropriate and the availability of powerpoint presentations before the lectures makes it very easy to add notes. The large caseload on ruminants and companion animals provides direct access for students to hands-on practical training. A veterinary school has to provide a minimum training on all common animal species, including equine. Evaluation of the courses is beneficial both for the teachers

and the students. Extending modern, internet based teaching methods makes learning easier for the students. The compulsory study of students abroad together with having some lectures in English and teaching professional English help the internationalisation of the students.

5.1.3 Suggestions

Training on horses including more and a wider spectrum of cases has to be developed.

Regular feedback to students on actions of the teachers after receiving results on evaluation should be implemented.

Extended use of internet-based teaching methods is highly recommended.

5.2 EXAMINATIONS

Queries to be covered:

- 1) How often are students examined and when?*
- 2) Are there external examiners?*
- 3) How many times can a student retake?*
- 4) Are examination structured or piecemeal?*
- 5) Is the examination system effective and does it require students to have to sit and pass examinations in basic subjects and foundation subjects before continuing on to the later disciplines.*

5.2.1 Findings

Examinations are organized for each module at the end of each semester after attendance the corresponding lectures and according to proposals of the teaching team and the cooperation of DEP. There are external examiners when a subject is taught by an external teacher. A student is allowed to take normal session examinations and do a retake few days later. In case of failure the examination must be retaken the following year.

In general students must pass all examinations of a given year before continuing to the next year. In some rare cases students are allowed to attend new courses without having passed the preceding examinations. No one can transit to A5 without the A4 done, when DEFV is delivered.

5.2.2 Comments

The examinations are well structured, since they occur at the end of each semester. Examinations must be retaken the following year.

The team recognised different formats of examinations, summative and formative as well, which allows the students and the teachers to follow the learning progresses.

5.2.3 Suggestions

The use of a booklet (clinical log book) to monitor the individual student's level in hands-on clinical learning should be introduced and signed off by student and staff for each gesture and teaching objective accomplished. Completeness and satisfactory fulfilment of all actions outlined in the log book shall be a "conditio sine qua non" for graduation.

6 PHYSICAL FACILITIES & EQUIPMENT

6.1 GENERAL ASPECTS

Questions to be covered:

- 1) Brief description of facilities with observations on age, suitability etc.*
- 2) Adequacy of lecture rooms, laboratory and dissection/necropsy halls?*
- 3) Vehicle availability to transfer students from site to site or to external establishments?*
- 4) Health and safety items i.e. biohazard warnings, fire extinguishers, eye washes, sluices, chemicals, medicines and dangerous drugs storage?*
- 5) Adequate facilities for training in food hygiene, carcass handling, access to slaughterhouse, the provision of laboratories for microbiology, toxicology, organoleptics and residue work?*
- 6) Comment on suitability of site in terms of size, area, local animal caseload, access, transport etc. and availability of suitable equipment for teaching and research?*

6.1.1 Findings

The school is located on the outskirts of Toulouse on an area of 58 ha in a very pleasant environment with easy public transport connection to the city. The campus includes numerous individual buildings of institutes, lecture halls, hospitals etc., and a large students' hostel accommodating 70% of the students, canteen, sport facilities, riding school etc are present as well. Most of the buildings were erected nearly 50 years ago, some newer buildings were built later and several plans of development were seen. All buildings are accessible to disabled. The lecture halls and the practical rooms are large enough, they are all equipped with projectors, so in all lectures, practicals and seminars computer aided presentations can be given; however, students cannot use laptops in the lecture halls extensively since no electric sockets are available for the audience. The number of seats in the lecture halls, seminar rooms and laboratories is appropriate but the seats in some lecture halls do not seem to be very comfortable for several hours. The students' laboratories are well equipped; all necessary practical work can be carried out by students, individual equipment (e.g. microscopes) is sufficient. The laboratory equipment in general is adequate in the different units. Common places for students like reading rooms and rooms for group work are limited. Transportation of students to farm visits is provided by the school. Safety measures and waste management are appropriate. Major investments are paid by the Ministry or/and the local regional authorities.

6.1.2 Comments

The buildings were purpose built, most of them meeting only the requirements of the early 60's.

6.1.3 Suggestions

Reconstruction and maintenance work on the buildings is urgent in some areas and should be carried out appropriately.

Refurbishing of some lecture halls including changing the seats and providing electric sockets should be done.

6.2 CLINICAL FACILITIES & ORGANISATION

Questions to be covered:

- 1) Make brief overview of facilities indicating departmental responsibilities*
- 2) Are there diagnostic laboratory facilities and do they carry out external work?*
- 3) Comment on clinical facilities and organization of clinical services.*
- 4) Is there a 24h emergency care service, adequate hospitalization/treatment ?isolation facilities and/or mobile clinic?*
- 5) Are there possibilities for additional animal materials from stables, farms, kennels, game reserves etc?*

6.2.1 Findings

The equine clinic building is outdated and a surgical facility including equipment is completely missing. **This constitutes a potential cat. 1 deficiency.**

Overview of facilities including departmental responsibilities

The cows used for the practical training in physiology (ultrasonography) and semiology are bred outdoor in a pasture; they are housed during training in a stable of 14 stalls. For many years, the school has chosen not to have its own farm but to train students on “real” sites with which the school has formal contracts. The school also has an equine centre nearby where students can see and gain contact with a larger number (50+) of clinically normal horses, However, these animals cannot be used for any of the practical training as is done with the cattle.

Places available for hospitalisation and animals to be accomodated

For regular hospitalisation there are places for 30 cattle, and 10 small ruminant in the food animal clinic and 16 horses in the equine clinic

In the small animal clinic there are hospitalization places available for 58 dogs, and 14 cats. Additionally there are about 70 other places for hospitalization, including individual cages for NCA as well as 2 large aviaries for wild birds

Isolation facilities

For isolation of suspect infections in farm animals and horses there is 1 large state of the art room in the research facilities UMR 1225.

For Small animals 1 room for isolation of infectious/contagious cases is available.

The department of companion animal clinical sciences (SCACSL) and the Animal Hospital (CHUV) is responsible for the small animal, the horse clinic, and the food animal clinic, whereas the teaching in bovine medicine and reproduction is the responsibility of the department of breeding, products and veterinary public health (EPSPV). The section of nontraditional exotics animals (NAV) is part of the companion animal/Animal hospital but is led by a faculty member from EPSPV.

For Clinical work and student training in small animals there are 11 consulting rooms and 7 surgical suites. In food animals there is one consulting area that is used as multipurpose for both consultation and surgery. In the equine clinic there is a consulting area but no surgical suite.

Diagnostic laboratory facilities

These include an anatomic pathology sector that provides comprehensive diagnostic

services including post mortem examinations, histopathology, biopsy evaluation and diagnostic immuno-histochemistry.

There are two clinical pathology facilities for clinical work at ENVT: the clinics' Central laboratory that is open to all clinics of the school, research units and industry, and the emergency laboratory for the use of interns, residents and other consultants at night and week-ends.

The equipment permits all analyses needed for the diagnosis and monitoring of emergency or hospitalised cases.

The laboratory of Parasitology provides diagnostic services:

Diagnostic imaging is available for small animals on 2 different sites: the consultations and the surgery facilities. Ultrasound equipment: abdominal ultrasound and echocardiography for all species on their own consultation site. The ultrasound machine used for small animals is equipped with 3 transducers, color flow and duplex doppler as well as equipment for ultrasound guided biopsy.

For horses and cattle in the large animal clinics X-rays are performed by specialized technicians.

6.2.2 Comments

The ENVT faculty appears well aware that the buildings are in substantial need of upgrading. The visiting team was provided with plans and time scale for new construction of much of the clinical area that should address the more pressing needs.

Clinical facilities and organization of clinical services.

According to information available at the time of the team's visit the faculty board's top priority is the upgrading of clinical facilities, with renovation of some buildings and building new ones where necessary. In particular, the equine area, with construction of a surgical suite is the high priority. Accordingly, plans for renovations of the equine clinic and construction of a surgical suite are already underway

Clinical facilities are adequate and reasonably well equipped for small animals, apart from The orthopaedic surgery unit being a separate building, with no onsite capability for radiology during surgery nor for recovery on-site, the animals needing be moved outdoors in both instances to the main clinic building.

The food animal buildings are functional but outdated and in need of a more modern building with consideration of bio-security (hand wash stations, ability to limit contact between patients). Additionally, if surgery is to be performed in the food animal teaching clinic, a separate and modern surgery separate from the general clinical area is needed.

The equine clinic is also in need of refurbishing, but most marked need is for a modern state surgical suite.

There is a 24h emergency care service, adequate hospitalization/treatment for the small animal section and non-traditional- check) for most of the school year

The clinical pathology laboratories are well-equipped with the benchtop analyzers found in veterinary clinics as well as some ancillary equipment.

The clinical pathology laboratory provides service to the clinics and research of the ENVT clinical but little to no analyses are performed for external clients. For some activities, for example some farm visits, selected samples are sent outside the ENVT for routine analyses.

Anaesthesia is organized for all species by a centralized team composed of a teacher (Assistant professor in Anaesthesia-Analgesia), a Praticien hospitalier, a nurse and a student

in postgraduate training. However, the leading members of this team do not view anesthesia as central to their academic/specialist ambitions.

Diagnostic imaging facilities are currently acceptable but lack newer imaging technology to keep pace with medical developments, in particular for companion animals.

Isolation facilities and/or mobile clinic

The isolation facilities (one large room in the research facility UMR 1225) designated for use by both the food animal and equine areas' are adequate but in the future building plans should be in closer proximity and providing more stall space for both services.

While isolation facilities are available for all species in equine and food animals improved accessibility in close proximity to the clinic is advised to adequately control infection risk of hospitalised patients to others in the clinic - such as influenza, herpes virus, strangles, salmonella MRSA.

There is a mobile clinic service to farms only as a herd medicine service; there is no commercial mobile clinic providing services to local breeders. Emergency service is not frequent in food producing animals.

Possibilities for additional animal materials.

There is a riding stable on the campus with 50 + horses that can be used for non-invasive (clinical exam/ palpation of limbs). This group of horses also is cared for regarding medical treatment (such as lameness or wounds). The animals when treated are included in the equine case-load listed. Additionally, the school has an agreement with the city of Toulouse to provide preventive medical care (vaccination, deworming) for the dogs of the homeless in the city. This also provides primary care experience for the students, as lower grade medical problems are frequently detected on this service. The clinic for the non-traditional and exotic animals receives a considerable case-load from the wildlife- injured birds of prey and exotic pets /reptiles that students gain exposure to in their normal clinical rotations (small animal) and a selected few for an elective period in A5.

At the present time, the bio-security strategy of the school is only marginally acceptable.

6.2.3 Suggestions

A equine (large animal) surgery facility has to be built, including anaesthesia and recovery boxes, an operating suite with proper sterility and safety measures, a system to move and transport anaesthetised horses, all including proper equipment for orthopaedic and soft tissue equine surgery, anaesthesia and monitoring.

It will be important to ensure that the orthopaedic surgical unit's remoteness from imaging and recovery rooms is being urgently addressed.

Isolation for large animals also needs improvement and therefore should be included as key part of the rebuilding plans for both the equine hospital and in the subsequent years the food animal clinic. Premises and equipment to enhance bio-security should be adapted in conformity with the general concept of bio-security. The overall concepts of bio-security – bio-safety as well as animal welfare should be enhanced in practice and teaching.

Small animal orthopaedic surgery premises should not physically be distant and isolated from the post-OP recovery and imagery services.

Special attention should be paid to the anaesthesia service and a clear separation should be done between emergency / recovery and intensive care on one hand, and anaesthesia on the other hand, in order to further develop especially anaesthesia services.

7 ANIMALS & TEACHING MATERIALS OF ANIMAL ORIGIN

Questions to be covered:

- 1) What sources are available which provide access to animal material?*
- 2) Is there a working farm where students can do practical work in the animal production subjects?*
- 3) Ratios students graduating : clinical caseload pets / livestock / necropsies*
- 4) Adequate fresh chilled or prepared material for anatomy?*
- 5) Adequate necropsy material and is it balanced?*
- 6) Are adequate clinical materials available to enable staff to maintain or develop their skills and is there a reasonable balance between small animal and large animal cases?*
- 7) Are the students given adequate exposure to slaughtering of various species as well as to materials for supporting food hygiene training?*

7.1 Findings

The practical anatomy teaching occurs mainly on small ruminants (about 60 / year). There are very few cadavers of other species. Specimens of isolated body parts are available for dogs, equine and swine.

For the pathology, equine necropsies cannot be performed until repair of the necropsy hall. Pig necropsies are performed on site during mobile clinic. There is sufficient number of necropsies for the other species.

For the animal production, two bovines are at the school and ten cows are specially purchased for the A1 and A2 practicals. Tutorials of reproduction happen at the abattoirs. Students have also contact with herd animals at the farm in Bernussou for the study of production systems as well as teaching of basic medical acts. More or less all bovine examined at the school are hospitalized (three cattle transporting vehicles). There is no mobile clinic, nor emergency service for production animals, except for the herd health medicine.

The equine and CA clinic are opened 46 weeks / year. An emergency service is available for CA during this time.

7.2 Comments

The lack of fresh cadavers of dogs seems to be more a question of organisation than opportunities. Otherwise, the number of animals for the basic teaching is sufficient in all modules.

For the clinical training, the ratios R 12 (individual food animals) and R 15 (poultry / rabbit) are not applicable for the school. The other ratios are higher than the established range of denominators of the SOP.

As the school is far from the main breeding regions, use is made of a network of practitioners with a list of cases to be observed and acts to be performed (practical training A 4).

The question of adequate clinical material available to enable teaching has been discussed in chapter 4. With exception of the equine clinic, especially regarding the surgical cases, the

case load is sufficient in the other clinics to enable staff to maintain or develop their skills. It seems also to be sufficient for the training of residents in order to get board certified in clinical topics.

7.3 Suggestions

- The number and type of cases has to be increased in the equine clinic. The fact, that a surgeon has been appointed is certainly positive, but more effort should be done to enhance the activity and the image of the equine clinic.
- The number and type of carcasses for the teaching in anatomy has to be increased and better adapted to meet the needs of knowledge for clinical teaching in the common domestic species (dogs, cats, horses, pigs, poultry).

8 LIBRARY & EDUCATIONAL RESOURCES

Questions to be covered:

- 1) Brief overview of library facilities*
- 2) Number of journals subscribed to and on-line services?*
- 3) Exchanges with other university libraries?*
- 4) Central library indexing?*
- 5) Departmental libraries, accessible easily to students?*
- 6) Are journals, periodicals, standard texts sufficient?*
- 7) Is the balance teaching : research acceptable?*
- 8) Are the opening hours student-friendly and are there adequate staff?*
- 9) Do students use the library well and are they trained to use it?*
- 10) Do students really have access to departmental libraries?*

8.1 Findings

The ENVT has a main central library which is part of the Toulouse & Midi-Pyrénées library network and small departmental libraries with specific books and journals to meet the needs of each specialty. The central library is specific to the veterinary school with the majority of books and journals related with veterinary medicine.

There are 46 student reading places with access to 182 journals as hard copies and to 1922 electronic journals via Science Direct and EBSCO. Some veterinary journals are directly available from the school's website. There is access to the National catalogue of French universities libraries with 9 million references and to OATAO a system of open archives that collects the work of Toulouse researchers and renders it freely available over the web. The library's catalogue is composed by 6.380 books and 25.000 theses.

The library is open on weekdays from 8.30 to 17.00/18.00 hrs but closed during the weekends, one week in Christmas and in August. There are 3 full-time employees and 2 part-time instructors, what is a limitation in the opening hours especially at lunch time. The departmental libraries are accessible to students upon request. Students are trained at using electronic database and have free access to many on-line journals.

8.2 Comments

8.3 Suggestions

Increasing subscriptions for electronic access to journals and e-books

9 ADMISSION & ENROLMENT

Questions to be covered:

- 1) Is a selection procedure in operation and is it legal?*
- 2) Is there a “numerous clauses” and what are the criteria used?*
- 3) What is the link between budget and the number of students?*
- 4) Does the intake take account of the national need for veterinarians?*
- 5) Does the admission procedure result in students who have the aptitude, knowledge base and motivation for veterinary studies?*
- 6) Does the admission procedure take into account the limitations of the resources available?*
- 7) Is there a high drop-out rate and what are the reasons?*
- 8) Does the admission process result in access inequalities?*

9.1 Findings

In France there is a 2 year-long preparation school specific for students aspiring admission to agricultural- or veterinary medicine studies. At the end of this formation (which is not provided by veterinarians or teachers of a veterinary faculty) a selective exam is being administered. The score of this exam determines admission. Admission criteria including the number of seats offered is determined every year by the MAPP for each entry exam and for each of the four schools. The higher the score the likelier it is that the student may be admitted at the school of choice. The school has no direct influence on the quota of admissions, as it is a political decision each year by the MAPP. The admission procedure is based by the rank obtained in the exam by the students. Almost 100% of admitted students graduate within 5 years. We have no reason to believe that there are any inequalities regarding gender, disabilities or financial background regarding admission to the course. However, many students comment that the preparatory classes prepare only little or insufficiently for the curricular challenges and topics in basic sciences of veterinary medicine.

The amount of public funding of the school is determined by the number of students, of teachers, of administrative and support staff and logistical ratios. On the other side, the students fees (1600 Euros in 2009) are also part of the school's own resources. The total cost of training for a student at ENVT amounted in 2008 to 17000 Euros (average for French vet students 16200 Euros as estimated by the MAAP, whereas the mean costs to form any student in higher education is 10150 Euros).

The public funding remains unchanged since 2009, and will not increase despite the increase of roughly 25 % of the students since 2010, due to the implementation of the new curriculum.

9.2 Comments

The actual process of recruitment tends to select students on their learning abilities rather than on true motivation to become a veterinarian, so students who would have become very good veterinary professionals might be eliminated by a exam selecting for other than skills in biology and animal medicine. However, the selection of motivated and agro-biologically oriented students through the preparation schools keeps the drop-out rate low during the undergraduate years and make the teaching easier.

9.3 Suggestions

As for most veterinary schools in EU, there is a need to redefine the criteria of public funding for veterinary undergraduates on the MAAP level. It should be avoidable to use Continued Education revenues for undergraduates teaching purposes.

The preparation school's curriculum should be more closely integrated into the veterinary needs of basic science training. The examination procedure for admission should be better adapted to the needs of veterinary sciences.

10 ACADEMIC & SUPPORT STAFF

Questions to be covered:

- 1) Ratio of teaching staff : students is?*
- 2) Ratio of teaching staff to support staff is ?*
- 3) How and by whom are all staff appointments and staffing levels decided?*
- 4) Percentage of staff who are veterinarians?*
- 5) Comment on staff ratios in relation to the SOP.*
- 6) Comment on staff shortage or mis-proportion*
- 7) Can staff move within the establishment?*
- 8) Are posts which fall vacant automatically filled or must they be fought for?*
- 9) Are certain staff able to be flexibly deployed i.e. for clinical services etc.?*
- 10) Does the establishment encourage staff to acquire additional skills and training?*
- 11) How free is the establishment to decide staffing levels and benefits?*

10.1 Findings

R1 is 1/5.90 (1/5.64) - 5.90 (5.64) FTE; R4b is 1/1.22 (1/1.40) – 1.22 (1.40) FTE. Staff appointments are mostly a responsibility of MAAP and only in part of the school. In the school the Dean decides the staff's allocation, after listening to Department's Chairs and Education Committee's recommendations. The numbers of positions available for Academic staff and the ratio Professor to Assistant-Professor tend to remain stable. Support staff budgeted by MAPP has decreased over recent years. Some requalification procedures have reduced the number of positions available, situation responsible for an increasing number of staff paid by the school's budget, which has an adverse effect on the budget. It is easy to hire staff from service income on temporary contracts, only at 0.7 FTE as stated by French law and after 6 Years they must be dismissed or employed on a permanent position. Nearly all academic staff members are veterinarians.

10.2 Comments

The ratio teaching staff to students is below the one established in the SOP. Concerning support and administrative staff the ratios are a consequence of low salaries, few budgeted positions available, full-time positions not available and lack of skilled professionals.

10.3 Suggestions

There is a clear necessity to hire more support and administrative staff.

The team recognised the effort of implementation of residencies in many of the clinical specialities, which enhances teaching and research. However efforts should be made to convince the government to make public funding available for the appointment of residents. The question of the recognition of this position in academia should also be supported and debated at a higher administrative level in the school and at the Ministry..

In all areas where standard EBVS residency programs can be implemented, residents should be trained. No Diplomate should be employed and should serve the School without training residents.

Increasing support staff (specially nurses) would be beneficial for improving teaching and research quality.

Appointment policy should be adapted to international standards, and a strategy should be more clearly defined and implemented on school level to enhance the flexibility in the replacement of teaching and research positions. A clearer career development planning would make the positions more attractive.

11 CONTINUING EDUCATION

Questions to be covered:

- 1) Is Continuing Professional Education (CPE) in the objectives?*
- 2) Is a CPE programme in place?*
- 3) Who is the CPE programme aimed at (practitioners, state veterinarians, specialists, production animal/herd health veterinarians, small animal veterinarians)?*
- 4) How is the CPE structured?*

11.1 Findings

In France, Continuing Education (CE) is compulsory for veterinary practitioners and is controlled by the Conseil National Vétérinaire de la Formation Continue et Complémentaire. The ENVT is offering CE since more than 25 years. Part of the courses is being organised by the CE Bureau of the school, part by the teaching units themselves. The CE Bureau comprises 1,3 employment units. Besides that, there is a newly installed CE Advisory Board (Dean, Vice-Dean, 2 teachers from each Dept, a financial controller), which defines the objectives and general policy of the school regarding CE.

There are various types of CE courses, the most important ones being organised on a regular basis (yearly), the others depending on opportunities. Most of them lead to a diploma (CES in Hematology and clinical biochemistry, CA osteo-articular traumatology, Ophthalmology; school diploma in Necropsy, Embryology, Nutrition and feeding of dairy cows, Population pharmacokinetic, Laboratory animals, Veterinary expertise, Veterinary management; Master in Animal Health and epidemiological monitoring in southern countries, certificates in Experimental toxicology, Anaesthesia, Dangerous dogs, Intestinal surgery, Reproduction and about 20 other topics). Many more CE sessions are also organised by professional associations with the participation of the teaching staff (AFVAC, SNGTV).

In 2009, total income generated by CE reached €87000, 25% of which is retained by the school as administration fees. The rest belongs to the organising unit

11.2 Comments

CE is not only a source of prestige and one of the objectives of the School, it is also a very important source of income for the departments and teaching units. On the other hand, these activities are time consuming and might be in competition with the main tasks of the school. There is therefore a need for a centralized policy at school level, as started with the new CE board.

11.3 Suggestions

A careful analysis of the cost – benefits of the different CE activities should be realised, in order to define a common future strategy within the school.

New forms of CE should be explored, based on the experiences made with the Moodle platform, that have been recently tested, and that facilitates the access to CE for the practitioners.

12 POSTGRADUATE EDUCATION

Questions to be covered:

- 1) Outline the types and structure of post graduate research training*
- 2) How many interns and residents are enrolled?*
- 3) Does a Masters or PhD programme exist and what structured training is given?*
- 4) Are there minimum publication requirements for postgraduates?*

12.1 Findings

Postgraduate education is regarded as a priority of ENVT with focusing on specialist training. The school has 23 Diplomates of the European (and American) Board of Veterinary Specialisation (EBVS) besides having 2 French National specialists. The school can offer 8 EBVS certified programs (SER Chapter 12). Being a “Grande Ecole” and not a university faculty, the school is not entitled to issue PhD degrees nor the common Dr. Degree required for graduation; that is the reason why the School has neither its own PhD programs nor a PhD school; however, research work with an aim of getting a PhD degree is carried out at the ENVT in cooperation with universities. There are about 30 PhD students working at the school. Furthermore 8 master programs are organised at the school in cooperation with the local university (SER 12.1.2). The master degree is equivalent to the med.vet. graduation degree with thesis. In the case of PhD students (research doctor degree – doctorat de recherche) formal courses or training are not prescribed but definite requirements including publications are set up, however, the number of required publications is relatively small. Unfortunately, not all EBVS-diplomates employed at the school are offering resident programs.

12.2 Comments

Training of specialists (residents) is done at the school; the number of internships is high; the number of residents could be higher. Strengthening PhD training is very important for a school where research-based teaching should be a priority.

12.3 Suggestions

The career track of specialists and PhD holders should be differentiated and harmonised. In certain – mainly clinical areas – Diplomate status and PhD should receive appropriate recognition and validation for promotion and employment.

All Diplomats entitled to be engaged in resident training should be encouraged and should receive all support necessary to start resident programs.

Strengthening co-operations with local universities with the aim of extending PhD training including course work and formal training is suggested. Increasing the requirements for publications is encouraged as well.

The team strongly emphasises that specialisation on all levels should receive sustained support from the school and the departments.

13 RESEARCH

Questions to be covered:

- 1) Briefly outline the research commitment and concepts*
- 2) Is there sufficient use of existing research to introduce undergraduates to the concepts?*
- 3) Is the research effort cohesive or fragmented?*
- 4) Is there a clear research strategy within the establishment?*

13.1 Findings

The importance of research as basis of academic teaching is widely reflected at the school, it is a priority of ENVT. Research is organized in research units, co-directed by the National Agronomic Research Institute (INRA-ENVT) (according to the SER: UMR = mixed INRA-ENVT research unit) or managed directly (Unités Propres sur Soutien de Programme - UPSP). The school has currently five research units led by INRA-ENVT. There is one UPSP and one professor from an external INRA unit. About 60% of the academic staff works in the Units. Others (mostly clinicians; according the SER: GRAC = group for research in companion animals) carry out clinical research without formal organization. This group however has frequent collaborations, including with the research units. Those in the production animal sections or food safety appear to benefit greatly through close links with the INRA. On the other hand there is no clear mechanism of support for research activities in the GRAC- those faculty members responsible for the companion animals. A total of about 90% of the research budget comes from grants. Clinical research on companion animals is much less intensive due to limited availability of grants in this field and limited school support. As such, research activities on companion animals are financed largely from income of the departments.

A lecture module in the first year introduces all students to the analysis of scientific articles, bibliometric parameters and the peer review system in scientific publications. In addition, all students are exposed to research literature and results through many lectures and some practicals, such as English/Toxicology, during which they have to analyse and to provide critique on research papers. Also, in the first year, students have a two-day forum presenting the various career activities a veterinarian can develop. Part of the forum is devoted to research, involving the scientific delegate and a researcher working within the institution. This includes a one-hour presentation followed by a discussion with the students.

Further along in their course of studies there are three distinct possibilities for students to take part in active research work:

1. During compulsory “thesis work” with a “mini project” carried out in the institution or outside the institution.
2. During an additional internship carried out for personal interest and after approval by the staff, in the school itself or outside.
3. During preparation of an experimental Doctoral thesis. Several students are involved in research; 20-30% of them carry out research in order to prepare an experimental doctoral thesis. The end product Dr. degree of graduation is the same for a mini-literature review project or for this so called experimental doctoral thesis.

Additionally, special sessions are offered to interested students regarding the Masters they need to apply for in Toulouse if they wish to follow a research course and enter a PhD program. Prospective supervisors- professors responsible for or participating in Masters degree courses are present at this session, where they give a short explanatory talk and then field students' questions.

Research units, containing most often several research teams, are composed of full-time researchers, ENVT academic personnel and technical staff. This system within the UMR- the mixed INRA/ENVT appears to be very well organised and cohesive. On the other hand those involved in the companion animal area (GRAC) do not have a common platform or leadership structure. As such, research activities in the GRAC appeared driven by small groups or single faculty members with no identifiable research teams.

Research activities are overseen by a scientific committee chosen among the academic or research senior staff and a scientific council giving advice about scientific policies. There appears to be a strong link and support for excellence in research activities in the food animal/production animal segment. Additionally, the ENVT appears to be making strategic management efforts for renewal and replacement of the pool of veterinary research faculty through actively encouraging students to take on research careers. The ENVT also provides early access for students to meet potential mentors and has established a research track within the veterinary education. Students intending to pursue a scientific career can benefit from special arrangements and a personalised organisation of their studies by ENVT to facilitate their scientific training after completion of their common track.

13.2 Comments

The close collaborative relationship with INRA for the food animal/production animal/food safety area is a very positive and strong component of the research and ENVT. In the basic sciences, research is generally strong, and with ongoing agreements with universities in the region the ENVT provide ample opportunity for collaboration.

In the clinical sciences, (companion animals) there are some areas, for example, ophthalmology, that are of high activity and quality. However, the department as a whole lacks research leadership to facilitate team work and identifying common areas of research focus. Funding for companion animal research work is limited. The generation of funds through continuing education activities is laudable but needs be balanced against the faculty members energies and resources needed to be active and productive in research. Support of clinical research is very important since it provides the basis to evidence based learning and research-based teaching.

13.3 Suggestions

The companion animal section could benefit from identifying common (clinical) research goals and grouping in research teams with common interests to help attain a larger critical mass. Leadership in research in this department could also help identify potential untapped funding sources or opportunities for the department, and as well provide guidance and set goals for the research activity and productivity for individual faculty members to assist them in advancing in their academic careers. Intensification of clinical research in the field of companion animals is necessary; research cooperation with pharmaceutical companies or human institutions is encouraged.

EXECUTIVE SUMMARY

The Ecole Nationale Vétérinaire de Toulouse (ENVT) is one of the 4 veterinary teaching institutions of France. Veterinary schools in France are publicly financed and governed by the Ministry of Agriculture, Rural Development and Fishery. About 50 years ago, ENVT has been relocated and built just outside the city on a large rural campus site in the Mid-Pyrenees region. This south-western part of France is a thriving agricultural and industrial area with strong emphasis on cattle and sheep production. The closeness of the half million city of Toulouse provides a large reservoir of companion animals. The School, which is not part of a university, has recently merged with the school of agronomy and entertains close contacts with universities and other institutions of higher education in the area (University pool of greater Toulouse); this allows transversality mainly in research (PhD programs) and an increased international profile. ENVT is organised like most schools that is headed by a dean, administered, governed and consulted by appropriate committees and divided into 3 departments and a Teaching Hospital. Between committees and the departments, better communication and clarification of the chain of command is needed. The schools strong area is animal production with emphasis on bovines and pigs. The weakest area of teaching and service is without doubt equine medicine&surgery. Areas of strength and weakness are in part sequel of regional conditions and customs and it may be challenging and expensive to create pools of excellence in all areas in all 4 schools. Well regulated and organised movement of students in higher semesters between the 4 National Veterinary Schools should be considered to allow students benefiting from all pools of strengths which have evolved differently in each school.

ENVT's strategic long-term planning is governed by emphasis on quality management and control; dedicated staff is continuously developing this area.

The financial basis of the School is relatively sound despite governmental budget cuts; one of the reasons is the effort of the faculty to generate income through offering Continuous Education for practitioners. The cost-benefit value of those time consuming efforts should, however, be analysed to insure that disproportional amounts of time for research output are not being lost.

The curriculum, which has been fully adapted to the EU directives in terms of quantity (5 years) and quality (omni-competence, 1st-day skills) is still in the transition phase of application. A two year preparation school with final exam, is a traditional means for selecting 1st year students; the effectiveness of this selection process for veterinary schools was questioned by some staff and the majority of students. In any case, the preparation classes cannot and should not be counted as part of the veterinary curriculum. The curriculum itself is balanced and hands-on teaching is satisfactory. The concept of research-based and problem-oriented teaching needs however further enhancement as well as better integration of basic sciences in clinical areas. Tracking options and an increased offer of "Electives" should also be made available. Strongholds of teaching are "Food Animal Medicine", "Public Health and Food Hygiene&Safety". " Basic Science" teaching as well as teaching and services in small animal medicine&surgery in the larger sense are acceptable to excellent in a few areas. Exceptions to otherwise satisfactory standards are the animal material for gross anatomy teaching and the recovery units for dogs in (orthopaedic) surgery. Inacceptable, however, is the lack of proper surgery facilities, including inexistence of equipment for performing aseptic equine surgery in general anaesthesia with a lack of tools for up-to date diagnostics and monitoring. Any correction of this insufficiency (recommendation for category 1 deficiency) will be linked to the employment of senior teaching staff in equine surgery. Pre-requisite to ensure minimum standards will be the construction or appropriate adaptation of equine (large animal) surgery facilities. The large animal isolation unit should then be moved closer to the clinical facilities. Overall, the teaching of bio-safety-security needs enhancement within the entire curriculum, with the exception of "porcine production" where these concepts are satisfactorily taught.

Anaesthesia services for both small and large animals are of concern as lack of specialisation, ownership and organisation in this service is apparent. Since undergraduate teaching of anaesthesia seems sufficient, only a strong recommendation for analysis and rectification of this staff-related problem is given. By the same token, independent and further development of the speciality “Emergency and Critical Care”, presently headed by an American Diplomat, should receive more attention and support. In this area and in all others where College diplomates are employed, residency training programmes should be activated. Favouring specialisation on the College level should be a strategic goal of the school’s employment policy.

A “student logbook”, listing gestures and procedures necessary to fulfil 1st day-skills requirements, should be introduced.

In summary the school fulfils all the minimum requirements as laid down in the directive EU/36/2005 and the EAEVE SOP, except in the area of equine medicine and surgery, where the minimum standards have not been reached, and where the team believes that this constitutes a single but serious deficiency. ***The team therefore suggests “conditional approval” for the ENVT.*** Rectification within a reasonable time may be anticipated since building plans, with budget approved, for a new equine surgery unit has been evidenced during the visit.

Annex 1 Listing of Category 1 Deficiencies

The lack of appropriate equine surgery facilities and equipment is suggested to constitute a Category 1 deficiency.

Annex 2 Student`s Report

Organization

The ENVT Campus is situated a few kilometers outside the center of Toulouse. The school is not within a University but has recently formed a close collaboration with the INPT (the Institut National Polytechnique de Toulouse), which is one of 4 Universities in Toulouse. Through this collaboration the ENVT keeps its autonomy on juridical, financial and educational matters but acquires more international visibility. The school also gets the opportunities to participate in the academic life in the region, to create and deliver new diplomas and share resources for teaching etc. Besides the collaboration with the INPT the school also has several international collaborations with other veterinary schools both in Europe and non-European countries.

There are 2 kinds of administrative bodies within the school; statutory committees which are constituted according to official texts, and specific ad hoc committees validated by the Conseil d’Administration. The statutory committees and ad hoc-committees are well described in the SER. The students are well represented in relevant committees and they have the right to vote on decisions made. If students want to raise topics they can ask in advance to have this put on the agenda but there is also a possibility to raise topics to discuss during meetings. Protocols from meetings are made public on the school website for all students to read.

The ENVT is situated on a large campus and the teaching is conducted in several buildings spread out on the campus. Lecture halls are old but functional and are provided with equipment to show powerpoint-presentations and videos. There are a limited amount of rooms for study and group work within the school, which is pointed out by the students. In the

clinics there are several small rooms for students to be able to rest, eat and study, however the overall maintenance of buildings in the clinics are somewhat neglected.

Admission and enrolment

There are four ways to get admitted to the veterinary schools in France. Details of the recruiting system can be found at <http://www.concoursagro-veto.net/>: see Table 9.1.1. Students can choose which school they wish to enter depending on the rank they obtain at the selection examination. There are also possibilities for a limited number of foreign students to get admitted to the school through a decision by the Council of the Deans of the veterinary schools and also for a limited time through Erasmus projects.

The students are of the opinion that the selection process is fair, although hard work is necessary during preparation classes to be able to pass the examination and to get a good ranking. In general students admitted to the ENVT seem very well motivated and the numbers of drop-outs are low. The ENVT is mainly chosen by students that are interested in large animal practice as it is widely known that this particular school is very strong in that area.

Student accommodation, safety, union facilities, social programmes and sport

Student accommodation: Student housing facilities are situated on the large campus and there are rooms available for about 200 students. According to students there are no problems to get a room and they are not too expensive. There are rooms of two different sizes and they are equipped with a kitchen and a bathroom. Next to the student housing facility there is a restaurant, which serves lunch on a daily basis at relatively cheap prices. There are regular bus transportations available to the city. A supermarket is situated about 20 minutes walk from the campus and every week nearby farmers deliver vegetables at discount prices for students.

Union facilities; Students in the ENVT enjoy a modern facility, "Cercle des Elèves" which is run by the student union. The facility is open daily for students to study, have a cup of coffee and socialize. On evenings access to the bar is restricted and it operates as a private club for students.

Social programmes; In the facility run by the student union there are several social activities arranged such as movie-evenings, party's etcetera.

Sports; Within "Le Cercle des Elèves" there are dressing rooms and showers of high standards for the students to use when practicing sports on the campus. Several sports activities are arranged on a regular basis such as rugby, football, volleyball and tennis. There are also a track for athletics and facilities for agility practice and competitions. There is an Equine center on the campus that is open for the public. Lower fees are offered to the students of the school.

Teaching methodology and examinations

Different kinds of teaching methodology are used within the ENVT. There are lectures, seminars, training of practical skills and clinical hands-on training. What is worth mentioning is that training of practical skills is introduced early in the curriculum and this is much appreciated by the students. Learning objectives are in general clearly stated by the teachers and the students know what they are expected to achieve in each course.

Problem-based learning is not really implemented in the school, although the clinical hands-on teaching during the clinical years can be described as somewhat problem-oriented. There is an increase of level of difficulty during the five years. According to students, classes in basic sciences are in general quite easy to manage but the level of difficulty increases when

coming into the clinical sciences. The big difference from preparation school is that in the ENVT the students expect to take larger responsibility for their own learning.

The ENVT has begun to use the so-called Moodle-platform to harmonize and centralize the web-based teaching within the school. At the moment most of the slides from lectures are presented on the Moodle website which is very appreciated by the students.

The examinations are for the most part described by students as fair and well correlated to learning objectives. Different kinds of examinations are used in different courses. There are written theoretical examinations, written multiple choice examinations, oral presentations, assignments, mandatory reports from farm visits, web-based tests, evaluation of practical skills etc. The students are satisfied with the mix of different forms of examinations and they are of the opinion that there is an adequate balance between evaluation of theoretical knowledge and practical skills. It is allowed to retake the examination twice before having to retake the course, but most students pass the examinations on their first attempt.

Teaching quality and the assessment thereof

The quality of the teaching is generally good and students tell about a satisfactory learning climate in most courses.

The teaching is evaluated through an anonymous questionnaire at the end of each course. It is not mandatory to do the evaluation but most students take the opportunity to do so. The opinion among the students is that their effort in giving feedback to the school results in important improvements. The result from each evaluation is made public on the school website.

The ENVT has recently started working on implementing an internal quality assurance program and the students are also active in this process. There is a plan to develop a policy and to implement procedures for continuous improvement of the teaching quality within the school.

Clinical learning and hands-on applications

Mandatory clinical rotations are organized for all students and the students rotate between clinical work on small-animals, equines and production animals/food hygiene. A substantial part of the clinical work is done in the School's teaching hospital and there is also a mobile clinic for farm visits (only production animals).

Group sizes on the clinics are small enough for students to be able to practice clinical skills and the students seem very well integrated in the clinical work. The staff, both veterinarians and technical support, seems very student friendly and dedicated to teaching. The students are involved in the daily work at the clinics and they have opportunities to take the history, practice clinical examinations, perform different diagnostic techniques, participate in surgeries etc. Hands-on clinical training is sufficient in most species except in equines where the case load is very low.

Extramural training periods are compulsory for all students and one of these periods has to be accomplished in a foreign country. The school has a committee for administrating the extramural training and there is a database available for students to help them find a training site. Students are responsible for finding the place for their training and also to organize this in collaboration with a teacher from the ENVT and the staff in charge of the training at the training site. Each compulsory external training period is evaluated by a jury consisting of three teachers from the ENVT. The jury evaluates the student performance through an evaluation by the person responsible for the training, a written report and an oral presentation. In general, students at the ENVT have a positive approach to the extramural

training period and they think that this is an opportunity for them to see other schools and clinics.

Library

The ENVT library is part of the Toulouse & Midi-Pyrénées library network, which provides staff, researchers and students access to a wide range of scientific and medical journals. The main library is situated close to the entrance of the campus and apart from being a resource for literature it is also used by many of the students to study and for group work. In addition to the main library are also small libraries in all teaching and research units of the school that have a limited number of books and journals related to their special area of interest.

The main library has subscriptions for many journals within the veterinary field and there is a range of old and new textbooks for students to read and borrow. There are also hard copies for 182 journals at the library and electronic access is provided for an additional 1922 journals. Students can access the electronic catalogue through the internet, either by using their own computer or from computer terminals available in the library. This access is administered by the school through the individual registration of all staff members and the annual registration of the students at the beginning of the school year.

The students are quite satisfied with the opening hours of the library and there is always library staff there to help if needed. Wi-Fi is available in all the buildings of the school and also in the union facility. Through a personal login the students can get access to the school intranet through a VPN tunnel, even when they are not in the school buildings. This makes all student material on the Moodle platform and electronic journals prescribed by the school library readily available at all times.

ECOVE Decision: CONDITIONAL APPROVAL

Cat 1. Def. confirmed: Lack of appropriate equine surgery facilities and equipment