



Self-Evaluation Report of Veterinary Training



2010



Table des Matières

Contents

Introduction	5
1 Objectives	7
2 Organisation	11
3 Finances	19
4 Curriculum	23
5 Teaching, Quality and Evaluation	39
6 Facilities and Equipment	45
7 Animals and Teaching Material of Animal Origin	53
8 Library and Learning Resources	61
9 Admission and Enrolment	65
10 Academic and Support Staff	71
11 Continuing Education	77
12 Postgraduate Education	81
13 Research	85
Annexes - Syllabus	
- Legal & administrative documents	

Liste des abréviations List of abbreviations

AERC	Assistant d'Enseignement et de Recherche Contractuel
AERES	Agence d'Evaluation de la Recherche et de l'Enseignement Supérieur
AFVAC	Association Française des Vétérinaires pour Animaux de Compagnie
AM	Arrêté Ministériel
BPCST	Biologie, Physique, Chimie, Sciences de la Terre
BTS	Brevet de Technicien Supérieur
BTSA	Brevet de Technicien Supérieur Agricole
CA	Conseil d'Administration
CAF	Capacité d'AutoFinancement
CC	Chargé de Consultations
CES	Certificat d'Etudes Spécialisées
CEVE	Conseil de l'Enseignement et de la Vie Etudiante
CFC	Crédits de Formation Continue
CHSCT	Comité d'Hygiène, de Sécurité et des Conditions de Travail
CHU	Centre Hospitalo-Universitaire
CNECA	Commission Nationale des Enseignants Chercheurs relevant du ministre chargé de l'Agriculture
CNVFCC	Conseil National Vétérinaire de la Formation Continue et Complémentaire
COCT	Commission d'Observation des Conditions de Travail
CTP	Comité Technique Paritaire
DEFV	Diplôme d'Etudes Fondamentales Vétérinaires
DEP	Directeur de l'Enseignement et de la Pédagogie
DESV	Diplôme d'Etudes Spécialisées Vétérinaires
DEUG	Diplôme d'Etudes Universitaires Générales
DGER	Direction Générale de l'Enseignement et de la Recherche
DUT	Diplôme Universitaire de Technologie
EBVS	European Board of Veterinary Specialization
EC	Enseignant-Chercheur
ECTS	European Credit Transfer System
ECVP	European College of Veterinary Pathology
ENVT	Ecole Nationale Vétérinaire de Toulouse
EPA	Etablissement Public à caractère Administrative
EPSPV	Elevage, Produits, Santé Publique Vétérinaire

ET	External Training
FEDER	Fonds Européen de Développement Régional
GDS	Groupements de Défense Sanitaire
GIS	Groupement d'Intérêt Scientifique
GTV	Groupements Techniques Vétérinaires
HDR	Habilitation à Diriger des Recherches
IE	Ingénieur d'Etudes
INPT	Institut National Polytechnique de Toulouse
INRA	Institut National de la Recherche Agronomique
IPAC	Ingénieurs & Professeurs Agrégés et Certifiés
IR	Ingénieur de Recherche
ISPV	Inspecteur de la Santé Publique Vétérinaire
IT	Information Technology
LRU law	Loi relative aux Libertés et Responsabilités des Universités
M1 & M2	Master 1 & Master 2
MAAP	Ministère de l'Alimentation, de l'Agriculture, et de la Pêche
MC	Maître de Conférences
NCA	New Companion Animals
OATOA	Open Archive Toulouse Archive Ouverte
PCR	Personne Compétente en Radioprotection
PE	Projet d'Etablissement
PH	Praticien Hospitalier
PRES	Pôle Recherche Enseignement Supérieur
SBF	Sciences Biologiques et Fonctionnelles
SCACSL	Sciences Cliniques des Animaux de Compagnie, de Sport et de Loisirs
SIMPPS	Système Inter Universitaire de Médecine Préventive et de Promotion de la Santé
SNGTV	Société Nationale Groupements Techniques Vétérinaires
SUDOC	Système Universitaire de Documentation
TICE	Techniques de l'Information et de la Communication pour l'Enseignement
UMR	Unité Mixte de Recherches
UPSP	Unité Propre sur Soutien de Programme

This report has been prepared by a Committee headed by the Dean based on information collected from all services of the School. Its preliminary stages and final versions have been presented orally and on the intranet for comments of the different groups of the School : teachers, students, support staff.

The Ecole Nationale Vétérinaire de Toulouse (ENVT, National Veterinary School of Toulouse) was founded in the centre of Toulouse in 1828. In the early 1960s, it was relocated and rebuilt on the current grounds, where the first classes opened in October 1964. It is one of the four French veterinary schools that share a common curriculum and recruiting system but remain independent regarding the organization of studies.



Veterinary education in Toulouse was previously examined by the EAEVE in 1997. The visiting team made some suggestions which were used as a basis for improvement in the following years and the school was subsequently given full approval (Annex 0.1). Likewise, all aspects of the ENVT (teaching, research, management, etc.) were evaluated by AERES (Agence d'Evaluation de la Recherche et de l'Enseignement Supérieur – Agency of Evaluation of Research and Higher Education, an independent administrative body, member the European Association for Quality Assurance in Higher Education) in March 2010 (see AERES-SER in Annex 0.2 and report in Annex 0.3).

This new EAEVE visit was planned to take place earlier but had to be postponed when the French veterinary schools were inflicted two consecutive curriculum reforms within the space of two years, causing major difficulties in the organisation of the studies and rendering evaluation of the new curriculum almost impossible. The first class in the “new-new-curriculum” completed the common part of the studies and obtained the DEFV in June 2010 ; they will finish their course of study end of June 2011.

The whole school was involved in the preparation of this self-evaluation report and we are grateful to everyone for their contribution. All members of the school are aware of the upcoming visit and its objectives, and are available to answer any questions that may arise. We look forward to benefiting from the expertise of the visiting team of colleagues from other European veterinary schools and faculties.

Chapter 1 – Objectives

1.1. Factual information

Indicate whether there is an official list of the overall objectives of the Faculty. If this is the case, please indicate these. Who determines the official list of objectives of the Faculty?

The School's overall objectives are described in the Projet d'Etablissement (PE) published in 2006 (Annex 1.1). Its focus is broader than education as it also covers research, university integration, international relations, and administrative topics. This project is based on:

- a general discussion between teaching teams, scientists, technical/administrative staff, students and graduates involved in different sectors of the veterinary profession.
- the teaching programme framework imposed by the MAAP (Ministère de l'Alimentation, de l'Agriculture, et de la Pêche - Ministry for Alimentation, Agriculture and Fisheries) on the four Veterinary Schools. The latter takes the 2005/36/EC Directive of the European Parliament (Annex 1.2) into account and describes the knowledge and skills which veterinary students must possess when they graduate. The Coursus Vétérinaire document issued in 2008 is a moderately updated version of this framework (Annex 1.3).

These objectives are based on French law, more specifically :

- from a general viewpoint, on the LRU law "Loi 2007-1199 du 10 août 2007 (Annex 1.4) relative aux libertés et responsabilités des universités" (law on the liberties and responsibilities of universities), which gives the general framework for higher education in France and states the six missions of higher education as follows:
 - initial and continuing education;
 - scientific and technological research, its diffusion and valorisation
 - orientation and professional counselling;
 - diffusion of scientific and technical culture and information;
 - participation in the framing of a European area for higher education and research;
 - international cooperation.
- specifically for all higher education establishments under the responsibility of MAAP as per Décret 2005-1476 November 29th, 2005 modifying a section of the Code Rural (Annex 1.5). It states (among other points) that Public higher education in agriculture, in the same manner as Universities:
 - is responsible for the training of veterinarians;
 - provides education in animal health and protection, food hygiene, quality and security, agro-alimentary and food industries;
 - participates in fundamental, applied and clinical research;
 - contributes to scientific and technical monitoring and to the validation of the results of research
 - participates in the diffusion of scientific and technical knowledge
 - participates in scientific, technical and teaching international cooperation.

The general objective of teaching at the ENVT is summarized by the title of PE's first axis: " Form efficient and adaptable veterinarians". Its more general training aims and associated aspects are detailed in the PE's chapters. Detailed objectives of each teaching module are prepared by the corresponding educational teams (cf. Annex 4.2)

By what procedure is this list revised? Do you have a permanent system for assessing the achievement of the Faculty's general objectives? If so, please describe it.

The Conseil de l'Enseignement et de la Vie Etudiante (CEVE, Commission for Teaching and Student Life) and "Commission des Programmes", headed by the Dean and/or Directeur de l'Enseignement et de la Pédagogie (DEP, Dean for Studies) and composed of teachers and students is in charge of reviewing the objectives. They evaluate the disciplines' programmes, global teaching organisation, examination procedures, etc. The CEVE and Commission des Programmes have resumed their

activities in 2010 after two years of low activity. The objectives of each individual discipline are regularly revised by the teachers in charge.

1.2. Comments

In your view, to what extent are the objectives achieved?

The following objectives are successfully achieved:

- regarding undergraduate teaching, overall training objectives are felt to be well met but there are no objective indicators. Although most students do not feel completely confident in their competencies when they leave school, they usually perform well and are appreciated in industry and by practitioners. The latter acknowledge that they offer a strong theoretical background but regret incomplete practical skills. However, many graduates of the school obtain high positions in academy, industry and administration, which probably results from their own qualities but also from their initial training.
- post-graduate and especially continuing education, which is attended by an increasing number of practitioners each year.
- research organized in strong research units, the most important ones being linked with INRA (Institut National de la Recherche Agronomique).
- international co-operation, based partly on institutional relations (e.g. Munich, Saragossa and African countries) and largely on academic staff's personal relations.

What, in your view, are the main strengths and weaknesses of the Faculty?

Main strengths

- strong scientific training and the important involvement of most teachers, their dedication to teaching, their international recognition (e.g. Boards), their expertise in research and adaptability to the changing administrative and scientific backgrounds,
- the feeling of being part of a "team" for a majority of the staff,
- main research objectives included in national programmes supported by research institutes such as INRA,
- strong partnership between teaching teams and research units, including basic research, and participation of many teachers to Ecoles Doctorales (University groups piloting training in research: University thesis equivalent of PhD & HDR¹),
- selected students with excellent scientific background and a strong ability to acquire knowledge very rapidly, which enables them to adapt rapidly to the challenging conditions of veterinary training.
- the geographical localization of the school,
 - * at the centre of a large city providing a large number of pets for clinical training and clinical research,
 - * in a strong regional and national network of practitioners submitting clinical cases for all kinds of production animal medicine: beef and dairy cattle, meat and dairy sheep, pig, poultry,
- a large and beautiful campus where it is pleasant to work and permitting the extension of facilities to adapt to new needs or new regulations.

Main weaknesses

- structural weaknesses:
 - insufficient teaching staff, especially for practical and clinical training, which subsequently has consequences on training as it limits possibilities of work in small groups as well as on the teachers' workload, thus limiting the time they can devote to research,
 - too few technical staff, technical staff with low salaries,
 - aging facilities and lack of modern equipment in some sectors (e.g. facilities for small and large animal hospitalization, diagnostic imaging).
- operational weaknesses
 - decision chain not clear enough,

¹ Habilitation à Diriger des Recherches ; highest University degree in France, mostly based on research achievements

- small animal clinical research which is insufficiently structured thus needing a greater effort,
- the repeated curriculum changes imposed in recent years on veterinary schools by the MAAP, which has strongly disturbed both teaching staff and students,
- the relatively low interest of graduates for animal production and veterinary public health, although this seems to be less the case in Toulouse than in other French veterinary schools

1.3. Suggestions

If you are not satisfied with the situation, please list your suggestions for change in order of importance and describe any factors which are limiting the further development of your Faculty.

Some of the suggestions are not specific to ENVT and are common to all four French Veterinary Schools as reported in Rapport Vallat (November 2009): "Le parcours de Formation Initiale des Vétérinaires en France. Propositions pour son Evolution" (Veterinary Undergraduate Curriculum in France. Proposals for its Evolution) (Annex 1.5).

More specifically, for ENVT:

- training objectives should be made clearer to the students at the beginning of their curriculum and be periodically re-explained.
- a system of continuous re-evaluation of the objectives should be installed, with authority to enforce its recommendations on each teaching unit. This will be one of the objectives of the Commission des Programmes. It will be part of the implementation of a system of management of Educational quality that is currently under development.
- a clearer decision chain outlining the Departments' responsibilities and clarifying relationships between the Animal Hospital (pets mostly) and the departments should be defined. Work on this goal has already started (September 2010) with the redefinition of the Departments' functions and responsibilities.

Chapter 2 – Organisation

2.1. Factual information

Details of the School

Ecole Nationale Vétérinaire
23 Chemin des Capelles
BP 87614
31076 Toulouse Cedex
☎ +33 561 193 800
Website : www.envt.fr
e-mail : direction@envt.fr

Dean : Professor Alain Milon, DVM, PhD
e-mail : a.milon@envt.fr

Is the School within a University?

The ENVT is not within a University². However, the ENVT recently formed a close association with the Institut National Polytechnique de Toulouse (National Polytechnical Institute, INPT, <http://www.inp-toulouse.fr/>), which is one Toulouse 4 Universities. The INPT is a federation of 7 Grandes Ecoles under the responsibility of the Ministry of Higher Education and Research and MAAP. As a member of the INPT, ENVT acquires more international visibility without losing its autonomy on juridical, financial, and educational matters.



Figure 2.1:
The national polytechnic Institute (INP) of Toulouse is a University federating 7 Grandes Ecoles in the domains of veterinary sciences (ENVT), agronomy (ENSAT, Purpan), chemistry (ENSIACET), electronics, informatics and hydrolics (ENSEEIHT), meteorology (ENM), and mechanics (ENIT)

² Universities are under the responsibility of the Ministère de l'Enseignement Supérieur et de la Recherche (MESR - Ministry of Higher Education and Research), whereas the Veterinary Schools are under the responsibility of the Ministère de l'Agriculture, de l'Alimentation et de la Pêche (MAAP - Ministry of Agriculture, Food and Fisheries).

The ENVT also has institutional relationships through its involvement in several consortiums at the regional and national levels.

In the Midi-Pyrénées Region, ENVT is:



- an associate member of the PRES Toulouse (Pôle Recherche Enseignement Supérieur). The PRES is an association of 16 Toulouse universities and Grandes Ecoles. PRES Toulouse is one of 10 French PRES whose aim is to share education and research expertise among the most important university regions.

(http://www.univtoulouse.fr/42803116/0/fichepagelibre/&RH=1240589758504?RF=presentation_pres).



- a member of Toulouse Agri Campus. This is a GIS (groupement d'intérêt scientifique, group of scientific interest) federating higher education and research in agriculture and veterinary sciences in the Midi-Pyrenees region (<http://www.agromip.educagri.fr>). In Toulouse Agri Campus, the ENVT is strongly involved in the Agro Food Chain master open to students worldwide, to create awareness of the scientific, social and economic realities of the modern agricultural and food industry and to provide scientific and practical training in an international context.

- a member of two Pôles de Compétitivité (Scientific Clusters). These thematic clusters associate regional partners in industry, research and university to develop synergies and cooperation to help industry reach a higher position at national and international levels.

. Agrimip-Innovation which integrates all steps from the production of agrosources to agroproducts "anticipating the needs of the market and society » (<http://www.agrimipinnovation.com/fr/>)

. Cancer-Bio-Santé involved more especially in the prevention of cancer by improving nutrition and in accelerating treatment of the disease" (<http://www.cancerbiosante.fr/>).

At the national level, ENVT is a founding member of Agreenium, the Consortium National pour l'Agriculture, l'Alimentation, la Santé Animale et l'Environnement (National Consortium for Agriculture, Food, Animal Health and Environment) (Annex 2.1). It is a structure of scientific cooperation including:



- . CIRAD (Centre de Coopération Internationale en Recherche Agronomique pour le Développement),
- . INRA (Institut National de la Recherche Agronomique),
- . Montpellier Sup Agro,
- . Agro Campus Ouest,
- . Agro Paris Tech.

Details of the competent authority overseeing the Faculty

The authority directly overseeing the ENVT is the MAAP through one of its subdivisions named Direction Générale de l'Enseignement et de la Recherche (DGER, 1 ter av de Lowendael, 75007 Paris 07). The DGER is the governing body of all schools under the authority of this Ministry.

ENVT, as the other 3 French veterinary schools, is not under the authority of the Ministry of Education, which heads the Universities and many Grandes Ecoles.

An intermediate consulting body is 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.

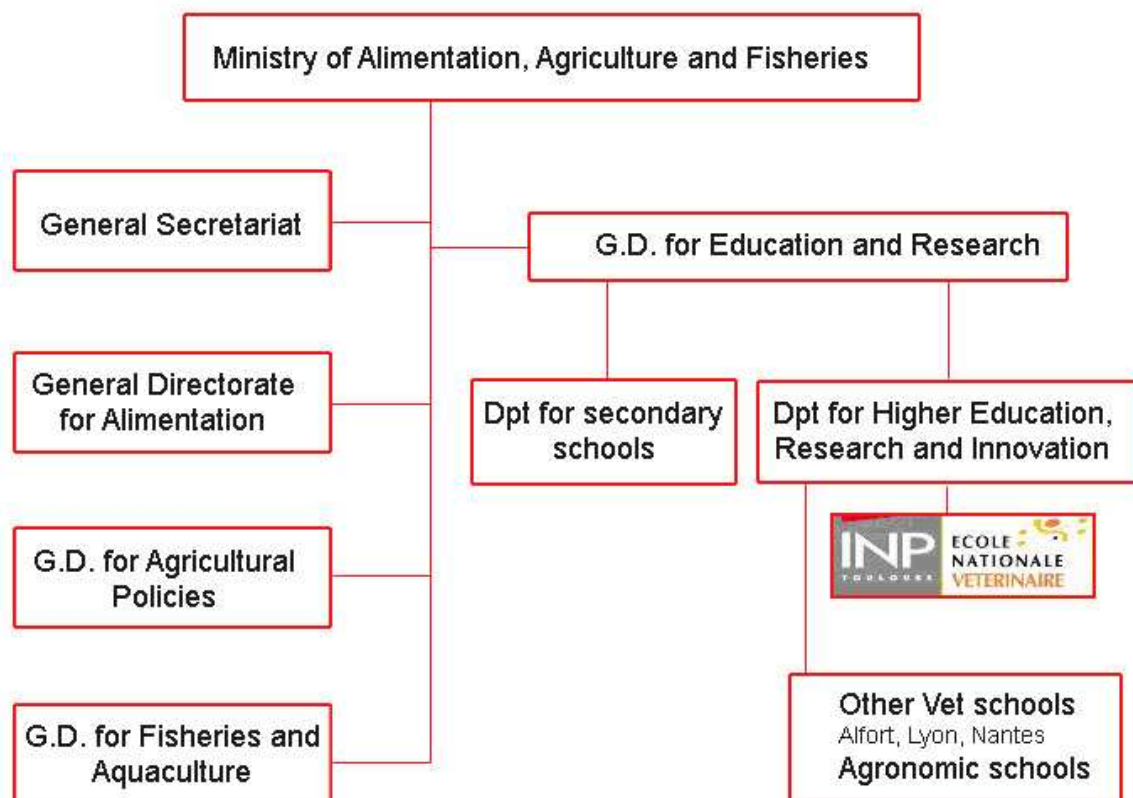


Figure 2.2:
Relationships of the ENVT within Educational structures of the French MAAP (Ministry of Alimentation, Agriculture and Fisheries)

Provide a diagram of the internal administrative structure of the Faculty itself (councils, committees, departments, etc.)

Like all schools of the MAAP (Annex 1.5), ENVT is directed by a Dean assisted by a Secretary General and a Vice-Dean (optional). ENVT is ruled by a Conseil d'Administration. It also has the following statutory consultative committees: Conseil Scientifique, Conseil des Enseignants, Conseil de l'Enseignement et de la Vie Etudiante, Comité Technique Paritaire, Comité d'Hygiène et Sécurité. The school also has a number of other consultative committees such as the Conseil de Direction, the Comité des stages (see below for details of these functions and bodies, and Annex 1.5)

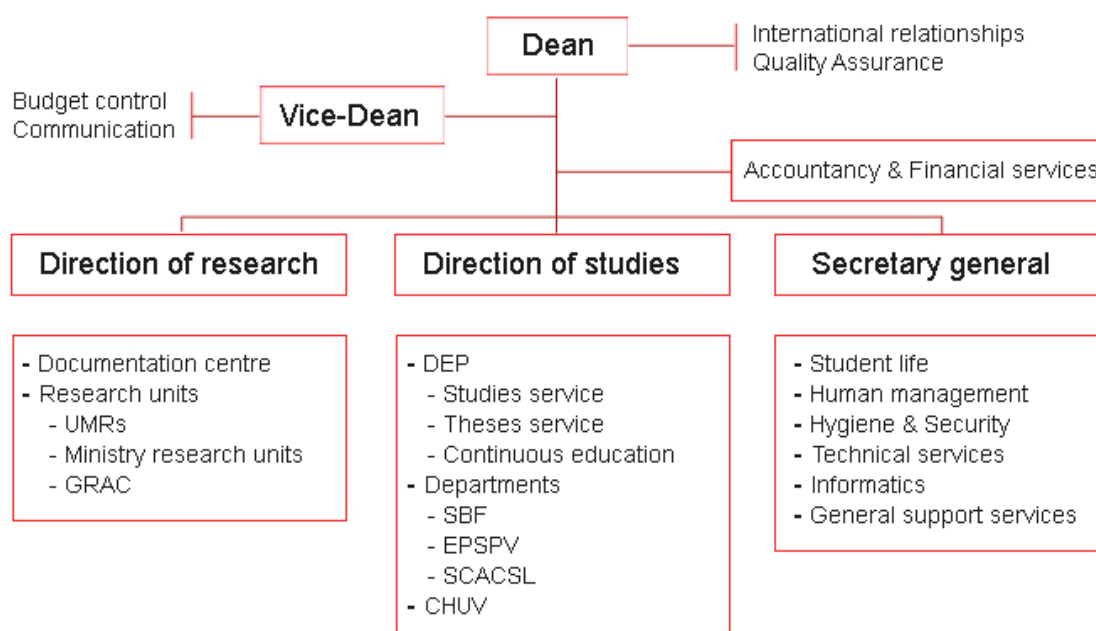


Figure 2.3:

General organization chart of the main administrative functions and departments of the ENVT

(UMR = mixed INRA-ENVT research unit; GRAC = group for research in companion animals; DEP = Direction of education; SBF = biological and functional sciences; EPSPV = breeding, products and veterinary public health; SCACSL = companion animal clinical sciences; CHUV = Animal Hospital)

Indicate the rules concerning the appointment of the elected officials of the Faculty (Dean, Vice-Dean, Heads of Department, etc)

Officials of the Faculty are not elected, they are nominated.

The Dean is nominated by the Ministre de l'Alimentation, de l'Agriculture et de la Pêche after a process including formal opinion of the Conseil d'Administration and Conseil des Enseignants. He is responsible for running the school and representing it.

His main responsibilities are:

- preparation and execution of the decisions made by the Conseil d'Administration,
- authority on all personnel,
- nomination of persons assuming delegated responsibilities,
- running of the school, : organization and financial management.

The Dean nominates:

- the Vice-Dean,
- the General Secretary,
- the Head of Human Resources Management,
- the Head of International Relationships,
- the Dean of Studies,
- the Heads of the Education Departments,
- the Head of the Scientific Committee.

Describe, briefly the responsibilities, constitution and function of the main administrative bodies (councils, committees etc.)

There are 2 kinds of administrative bodies :

- statutory committees which are constituted according to official texts,
- specific *ad hoc* committees validated by the Conseil d'Administration, which are specific to ENVT.

The statutory committees are :

The Conseil d'Administration (CA, Board) is the Veterinary School's main governing body. It is composed of approximately 40 men and women (with a 3 year term) including nominated representatives of the Government, MAAP, Ministère de l'Enseignement Supérieur et de la Recherche, regional, and local administrative bodies ; nominated representatives from Education, the veterinary profession, research; elected representatives of Professors and Assistant-professors, of administrative and technical staff and students' elected representatives (see Table 2.1). Other people can be invited depending on the agenda.

**Table 2.1. :
Summary of the Conseil d'Administration's (Board) composition**

Representatives of :		number	access	
			nominated	elected
State	Préfet de Région*	1	+	
	DGER (Ministry of Agriculture)	1	+	
	DGAL (Ministry of Agriculture)	1	+	
	General veterinary council	1	+	
	University	1	+	
Region	Region council	1	+	
	Department council	1	+	
	Town council	1	+	
Veterinary profession	French Veterinary Association	1	+	
	Unions	2	+	
	Association of Alumni	1	+	
Personalities		6	+	
Professors		4		+
Assistant professors		4		+
Administrative & technical staff		5		+
Students		5		+
Ex officio members	Dean of the school	2	-	-
	Accountant of the school			

* highest state authority in a region; DGAL = Direction Générale de l'Alimentation; General Direction for Food in the MAAP)

The Conseil d'Administration decides all the general activities of the school, namely:

- 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 Conseil Scientifique (Scientific Committee) is a consulting group of 16 to 20 persons comprised of (Annex 13.1) :

a/ elected representatives of the professors and scientists of the school

b/ one or more elected representative(s) of the students in doctoral studies

c/ nominated representatives of national or regional, administrative and private scientific or professional bodies

It advises the CA on the scientific policy of the school, allocation of budgets for scientific activities, characteristics of education positions. It periodically assesses the activities and results of research performed in the school.

The Conseil des Enseignants (Education Committee) is a consulting group of a maximum of 41 elected representatives of professors and other teachers (in equal number). It advises the CA on all education matters, including education programmes, examinations, creation of new diplomas and recruitment of education staff.

The Conseil de l'Enseignement et de la Vie Etudiante (CEVE - Education and Student Life Committee) is a consulting committee of 16 to 20 persons:

a/ equal number of elected representatives of students and teaching staff,,

b/ representatives of administrative and technical staff

c/ nominated members of the CA (chosen within the nominated representatives of Education, veterinary profession, research).

It is consulted on initial and continuous education, programmes, and examinations. It prepares measures to help students in their professional life and all possible improvements for security, medical and social assistance for the students.

The Comité d'Hygiène, de Sécurité et des Conditions de Travail (CHSCT – Hygiene, Security and Working Conditions Committee) (Annex 2.2) exists in all public and private establishments with more than 50 workers.

It is made up of representatives of the management, teaching, technical and administrative staff from the school. It also includes the Médecin du Travail³.

It has 3 missions:

a/ contributing to the physical and mental health care and security of the establishment's workers ,

b/ to contribute to improving working conditions (especially facilitate access of women to all positions and dealing with maternity issues),

c/ to ensure that legal rules are respected in these matters.

The Comité Technique Paritaire (CTP - Joint Technical Committee) is presided by the Dean and is comprised of 20 members with an equal number of representatives from trade unions and the administration staff. Its responsibility is to examine and advise the Dean on the following issues :

a/ technical questions relative to the organization and management of the different services and units,

b/ improvement of work environment and continuous education of support staff,

c/ general aspects of hygiene and security issues (cf. supra),

d/ evolution of staff positions and qualifications.

The Conseils & Comités members' mandate is generally 3 years ; all are supposed to meet at least twice a year.

There are currently 4 *ad hoc* committees:

- Conseil de Direction: presided by the Dean and comprised of the Vice-Dean, the Secretary general, the Science Delegate and the Dean of Studies.

This committee meets every week and advises the Dean on the operational management of the school. When necessary, it is enlarged to the Heads of the departments, research units and services.

- Commission des stages (Extra Mural Studies committee): headed by a teacher helped by a member of the DEP. It is comprised of 2 to 4 department representatives. This committee organizes the students' external training (see § 4.1.4 for more details).

- Commission d'Observation des Conditions de Travail (COCT - Committee on the Observation of Working Conditions). It is headed by the Dean and comprises of the representatives of the

³ a government appointed medical doctor in charge of supervising health and working conditions in all establishments in France

administrative, support and teaching staff. Its functions are to collect personnel grievances, to study possible working difficulties, to offer and monitor solutions.

- Commission des Programmes, formed by CEVE and Heads of Departments. It discusses and makes proposals on all teaching aspects : content of courses, schedules, examinations, etc.

Indicate the involvement of the veterinary profession and general public in the running of the Faculty.

The veterinary profession is involved through its representatives in the Conseil d'Administration: 4 members (see above composition of the Conseil d'Administration). Representatives of the profession also collaborate through the "forum des métiers" and other similar activities and in the extramural training of students.

The general public is not involved but the State and regional bodies are represented in the Conseil d'Administration by the Préfet de Région and the representatives of Councils of the Midi-Pyrénées region, Haute-Garonne department and the city of Toulouse.

2.2. Comments

The relationships between the ENVT and other institutions may seem less than clear with different layers partly overlapping one another. The 2 main points at the basis of these new connexions were:

- the isolation of the veterinary schools from the Universities because they belong to two different ministries,
- the small size of the veterinary schools.

At ENVT, it was thus chosen to search for connexions

- primarily with the University by becoming a member of INPT as this will enable the school to be informed of regional academic life, to create and deliver new diplomas, to share resources and teachings, etc.,
- as an associate member of the PRES, ensuring connexions with all Universities and Grandes Ecoles of Toulouse and its region,
- within the Ministry of Agriculture by
 - acting as an active partner in the network of the 4 French veterinary schools,
 - a strong involvement in INRA-associated research units,
 - being an active partner in the creation of the scientific Consortium Agreenium, which the other 3 French veterinary schools will soon join. Toulouse Veterinary school has been accepted as a founding member due to its scientific achievements

The administrative dispositions have strongly changed over the past few years and the different responsibilities and functions of the committees are yet to be fully understood by part of the teaching and support staff.

2.3. Suggestions

Clarify the school's general organisation for all staff members with the implementation of clear chains of management.

Give a better accessibility to the work of all committees through the new Intranet portal of the school.

Chapter 3 – Finances

3.1. Factual information

3.1.1. General information

Indicate whether the Faculty's current financial model (system) meets the Faculty's mission.

The ENVT's financial system is determined by its status as an "Etablissement public administratif" (EPA - administrative public establishment). It is therefore a legal entity with financial autonomy within the content of the EPAs (instruction N° 03-058-M91, November 13th 2009, Direction générale de la comptabilité) financial and accounting rules.

The school's budget is voted by the Board (cf. chapter 2). To follow the school's activities, expense and revenue reporting and accounting are analytically analyzed along 5 main lines:

- Initial training,
- Continuous education,
- Research,
- Services,
- Current expenditure.

Please specify: - How the allocation of funding (including public funding) to the Faculty is determined, and by what body. - If the allocation of funds, or any significant proportion of it, is linked to a particular factor (e.g. student numbers, research output), please describe this.

The school has two main sources of funding, which are approximately equal

- Public funding from the MAAP (= dotation globale de fonctionnement; global operation funding). The amount is determined by:

- 1/ The number of students (undergraduates + interns + students enrolled for a thesis);
- 2/ The number of teachers;
- 3/ The number of administrative, technical and support staff members;
- 4/ Logistical ratios.

It must be observed that, according to government instructions, public funding will remain unchanged as of September 2009 despite an increase of roughly 125 students (*i.e.* approx. +25% from September 2010 due to the implementation of the new curriculum).

- The school's own resources ("ressources propres")

- 1/ students' registration fees: annual tuition fee fixed by the MAAP amounting to 1 600€ in 2009;
- 2/ research contracts;
- 3/ services, such as revenues generated by the clinics or the laboratories;
- 4/ continuous education resources.

Additionally, special project-based funding can be obtained for investments from the government, the region or research organizations.

Please specify: - How the basis for funding the Faculty compares with those teaching other courses (e.g. whether veterinary training receives a higher budget weighting compared to other disciplines).

In 2008, the total cost of training for a student at ENVT amounted to 17 024 €.

Average yearly training costs of French veterinary students for 2008 was estimated at 16 200€ by the MAAP, and at 16 600€ for students in horticulture and 15 800 € for engineers. For all students in higher education, the average annual cost was of 10 150 € in 2007 (last year for which information is available).

Please specify: - How the allocation of funds within the Faculty is decided.

The school's budget is prepared by the administrative services and the Dean, based on documented needs provided by each Department. The Dean arbitrates and the Board validates.

For undergraduate education, a pedagogical grant is allocated to each teaching unit according to their specific needs (animals, reagents, etc.).

Please specify: - What are the mechanisms for funding major equipment and its replacement?

There is no standard procedure for the funding and replacement of major equipment nor for its maintenance .

In most cases, either the school or one of the research units tries to find financial support from public or private bodies or includes the equipment in the frame of a research contract.

Please specify: - The mechanism(s) for funding capital expenditure (e.g. building work, major items of equipment) and how decisions are taken in this matter.

Major expenditures, such as buildings, are decided by the Board. Funding is usually very complicated calling on multiple sources including the MAAP, the Midi-Pyrenees region, the FEDER (European funds for regional development) and the school's own resources.

One of the difficulties of these allocations is that most are based on a system of repayment of school expenses, which requires the ENVT to have sufficient resources to afford the investments before being refunded. This is not always the case and results in delays and sometimes even in cancellation of projects.

Please specify: - The mechanism(s) to provide the necessary support for building maintenance and how decisions are taken in this matter.

The school was built at the early 1960s and therefore requires extensive maintenance and refurbishment to comply with security, energetic and environmental standards. The school's finances do not suffice to cover all the work that would be necessary so priority is given to the most recent laws (e.g. access for handicapped persons) or to the heating systems and buildings that need it the most.

3.1.2. Information on extra income

What percentage of income from the following sources does the veterinary teaching Faculty have to give to other bodies (university, etc.) ? clinical or diagnostic work; research grants: other (please explain):

The ENVT is financially independent and in that respect does not have to give a percentage of its income to other bodies.

Please indicate whether students pay tuition/registration fees, How much these are, How they are decided, How the funds are distributed.

The students pay tuition fees, the amount of which is determined by the MAAP according to proposals made by the Council of Deans of the 4 French veterinary schools. In 2009, the annual fee amounted to 1 600€ and will be raised to 2 000€ in September 2010.

Tuition fees are part of the school's financing system and included in its budget. Part of the tuition fees is specifically appointed to grants for the compulsory training abroad (cf. § 4.1 & 4.1.4).

3.1.3 Overview income (revenue) and expenditure

**Table 3.1:
Income/Revenue**

Year	State (government)		Income generated by the Faculty		Total
	To university administered outside the Faculty	Direct to Faculty	Income from service provide	Research	
2009	not applicable	4 588 111	5 664 889	1 594 000	11 847 000
2008	not applicable	3 287 000	3 926 000	970 000	8 183 000
2007	not applicable	2 903 000	4 627 000	509 000	8 039 000

**Table 3.2:
Expenditure**

Year	Pay (government)	Non Pay				Total
	Salaries	Teaching support	Research support	Clinical support	Other ¹	
2009	11 212 400	914 259	1 200 537	1 953 251	6 836 554	22 117 001
2008	10 735 000	713 440	1 146 000	1 878 000	6 420 000	20 892 440
2007	10 726 000	678 000	1 015 000	1 774 000	5 510 000	19 703 000

1 : expenditures for common services, investment projects, and continuous education

3.2. Comments

Teaching establishments never have enough finance. Please comment on any of the "Guidelines and Requirements" that are particularly difficult to fulfil in the present financial situation. Please make any comments that you feel would help the experts concerning the Faculty's finances.

The financial position of the school includes the reimbursement of a loan (500 k€/year up to 2017), which limits possibilities for investment.

A limited part of the school's resources and expenditures are strictly restricted to the use of some units or some projects ("ressources affectées", e.g. research grants, fees for continuing education courses). This does prohibits sharing of these resources among common projects.

What is your number one priority for the use of any increased funding?

Recent general discussions about investments have concluded to giving priority to the refurbishment of buildings such as the clinics' laboratory and the equine surgery. This work is planned to start in the autumn of 2010. The clinics buildings for large animals and small animals will be rebuild or upgraded in 2011-2012.

Comment on the degree of autonomy and flexibility available to the Faculty in financial matters.

The school is autonomous with regard to its daily financial management, subject to any budget limits and decisions taken by the Board and financial regulations applicable to administrative institutions. Financial matters are organized around 3 main sectors : investment, operations, salaries. For the latter, part of the staff are state civil servants, thus directly paid by the MAAP without any fund transfer via the ENVT. As of 2011, all salaries will be monitored (at a constant cost) by the MAAP.

Comment on the percentage of income from services that the Faculty is allowed to retain for its own use, and in particular on the extent to which loss of this income acts as a disincentive for the services concerned.

The services' main resources come from continuing education and research-development contracts, all of which rely on the expertise and the networks of a person or a team. The percentage of income retained by the school ranges from 12 to 25% and the remaining funds are specifically allocated to research or an education project.

The percentage retained by the school is not considered as discouraging, especially for continuing education: common services (rooms, equipments, etc.) are made available whatever the number of participants, which is a good incentive to create new courses with limited risks. On the contrary, the lack of flexibility in the use of these funds is sometimes felt as a hindrance : due to the rules of public funds accounting in France, most of the funds thus earned have to be spent before the end of December of each year; if not, the balance has to be retained by the school. This is often perceived as a useless difficulty by groups wishing to save money earned over several years to purchase expensive equipments.

The clinical departments do not retain part of the clinical services' income .

Please make any other general comments that you feel would help the experts concerning the Faculty's finances.

Based on balances from 2003 to 2008, the amount of money (capacité d'autofinancement, CAF, capacity for self-financing) that the school can use for investments was approximately 1.1 M€ per year. In 2009, it was close to 1.5 M€. However, the whole amount of CAF cannot be available for investment, for instance in 2009, the school invested about 1.1 M€ from which 0.5 came from self-financing.

3.3. Suggestions

If you are not satisfied with the situation, please list any shortcomings and provide suggestions –in order of importance and describe any factors which are limiting the further development of your Faculty.

The general trend of public financing is, at the best, the stability of State funding and also the restriction of state paid staff. This is certainly one of the major difficulties faced by this school. Many activities have to be maintained, thus personnel has to be recruited and paid by the school, which makes a very heavy load on the budget.

There should be incentives to develop new services and continuing education courses, especially by making administrative and logistic procedures easier; this has already been done for some continuing education courses (cf. chapter 11).

Chapter 4 – Curriculum

4.1. Factual information

Indicate whether there is a defined national curriculum and (if applicable) how and by what body decisions are taken on this.

The curriculum is based on the following:

- General organisation as per Arrêté Ministériel dated April 20th, 2007: 5 years in a veterinary school or under its direct control (Annex 4.1.a). This is described in the Règlement des Etudes (Annex 4.1.b) which is distributed to all students at the beginning of their studies. It is comprised of :
 - . a common curriculum for the first four years⁴ and a tracking system for the fifth year
 - . compulsory external training.
- Content as per the Cursus Vétérinaire (Annex 1.2) based on scientifically assessed knowledge and evidence-based medicine.
- Knowledge previously acquired in Classes préparatoires, or others before admission (see Chapter 9). It is during this part of their studies that students acquire most of their knowledge in mathematics, physics, chemistry and to a great extent in biochemistry, agronomy, general animal and vegetal biology. Admission in a Veterinary school validates the acquisition of 120 Credits (ECTS).
- Part of the curriculum must be achieved in a foreign country for a minimum duration of 4 weeks. This can be done either as a training period or as part of the curriculum in a veterinary school/faculty for a maximum of 2 semesters.

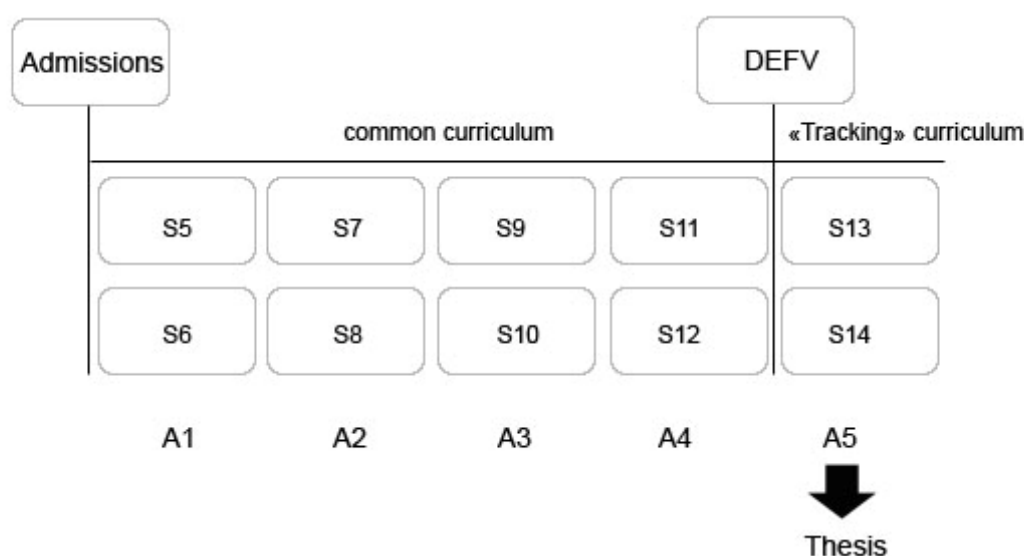


Figure 4.1.

General organisation of the veterinary curriculum in French veterinary schools

Five years numbered A1 to A5 are divided into semesters numbered S5 to S14 (in order to take into account the 4 semesters min. spent in classe préparatoire before admission: S1 to 4). DEFV: Diplôme d'Etudes Fondamentales Vétérinaires.

- Students who successfully pass the first 4 year examinations obtain the DEFV – Diplôme d'Etudes Fondamentales Vétérinaires (Diploma of fundamental veterinary studies), which is a prerequisite to be admitted in fifth year. The University recognises the DEFV as the equivalent of a Master degree.
- The veterinary thesis (diplôme d'Etat de Docteur Vétérinaire) is prepared by all students and is passed at the end of the A5 year. It is compulsory for all practitioners.
- "Semestrialisation" and modules.

⁴ with an exception for 4th year students planning a research carriers (see § 4.1.1.1)

- The ECTS – European Credit Transfer System, with allocation of 30 credits per semester.
- The “supplément au diplôme”.
- Teaching evaluation by students.

Describe the degree of freedom that the Faculty has to change the curriculum.

ENVT, as all French establishments of Higher Education is granted “pedagogical autonomy”. However, it can only organise education within the framework of the Cursus Vétérinaire, *i.e.* choose time allocated to each discipline/module and their chronology.

Outline how decisions on curriculum matters and course content are taken within the Faculty.

For curriculum matters, there is no choice as everything is specified by the Cursus Vétérinaire, including the content of subjects, although level of description varies greatly from one subject to another. Moreover, teachers are free to adapt the content of each subject depending on their evaluation of the students’ needs.

Course content at the ENVT is mostly decided by the Departments and teaching units and controlled by the “Commission des programmes”. Course content and lists of subjects are not identical to the list in the Cursus Vétérinaire, but all subjects are taught.

Outline how decisions are taken on the allocation of hours between the various subjects and on the balance between theoretical and practical teaching (Tables 4.1, 4.2 and 4.3).

Allocation of time between the disciplines is mainly the result of a general discussion that was held in 2005 when the first changes were made to the curriculum as well as a reconduction of the previous years allocations and of the successive adaptations over the years. Most of these adaptations have led to an increase in the number of hours taught, despite an insistence that there should be a decrease in the number of lectures.

Discussions occur in the Conseil des Enseignants and decisions are taken by the DEP after consultation with the CEVE and Commission des Programmes.

The Arrêté Ministériel states that “time for lectures must not be higher than time for practical and clinical work” and that “clinical work must make up at least 30% of the education time of the first 8 semesters”. Balance between theoretical and practical training is established by each teaching unit.

Indicate the presence and disposition of an integrated curriculum. Describe the degree of integration present and the amount of time devoted for EU- and non-EU-listed subjects (Table 4.4)

There are few integrated courses at ENVT for the common curriculum of undergraduates, *i.e.* for years A1 to A4, which is mainly discipline-based; one example is the teaching of Breeding of Herbivores which integrates nutrition, animal productions, reproduction. The tracking system of the A5 year can be considered as an integrated curriculum as it deals only with one or few species, or with one type of professional activities. Six tracks are allowed according to the Arrêté Ministériel: production animals, small animals, equines, veterinary public health, research, industry.

4.1.1. Power of subject and types of training

4.1.1.1. Power of subject

Most of the undergraduate training is based on core subjects taken by all students during the 4 first years. The only exception is for students pursuing a research career, who are allowed to spend their 4th year in a University to prepare a Master. This has not yet occurred and the number of such students will likely remain very low as most students aim for clinical practice.

Elective subjects are offered in the course of the 5th year only with the tracking system; but within each clinical track, each module is compulsory. Two supplementary elective subjects are offered at the

end of training: Mandat sanitaire (necessary for treatment and prevention of infectious diseases requesting official declaration) & Protection against ionizing radiations (compulsory for manipulation of X-rays in clinical practices).

Obligatory extramural work is organized in years A1 and A2 for a total of 10 weeks (see description of corresponding modules) and for 4 weeks as part of the Large animal clinics module in A4 (Table 4.5).

4.1.1.2. Types of training

With the exception of self-directed learning, all available types of training methods are comprehensively used in the school,. There are plans to use self-directed learning more extensively in the new A5 teachings.

4.1.2. Undergraduate curriculum followed by all students

Teaching is distributed into modules, some of which are multidisciplinary. Each module is completed over the period of one semester and examinations are taken at the end of each module, except for a few cases in S9 & S10 due to rotations in clinics. Labelling of modules and subjects sometimes does not correspond with the EU-list of subjects found in Table 4.2.

List of the different modules and repartition in the different semesters is given in Table 4.0. Detailed content of each module is given in Annex 4.2.

Table 4.0.
Repartition of the teaching modules according to semester in 2009-2010

		Module	Module
A1	S5	<ul style="list-style-type: none"> • Methods & Scientific documentation • Anatomy-Diagnostic Imaging • Histology • Physiology • Biochemistry • General Pharmacy, Pharmacology & Toxicology • Extra Mural Studies Veter • English 	S6 <ul style="list-style-type: none"> • General Infectiology • Animal Production • Biostatistics & Epidemiology • Molecular Biology, Genetics and knowledge of companion animal breeds • Bromatology & Nutrition • English
A2	S7	<ul style="list-style-type: none"> • Anatomy, Pathology (general) & Diagnostic Imaging • Special Pharmacy, Pharmacology & Toxicology • Breeding of herbivores • Ethology • Swine & Poultry • English 	S8 <ul style="list-style-type: none"> • Infectious diseases & Zoonoses • Semiology • Parasitology • Clinical pathology • Reproduction of carnivores • External training Miniproject • English
A3	S9 ^a	<ul style="list-style-type: none"> • Internal Medicine (Small Animals) • Food Hygiene • Internal Medicine (Ruminants) • Pathology (Special) • Parasitology • Reproduction • Surgery • Internal Medicine (Equines) • New companion animals • Diagnostic Imaging • Anesthesia & Analgesia • Dermatology • Ophthalmology 	S10 ^a <ul style="list-style-type: none"> • Internal Medicine (Small Animals) • Food Hygiene • Internal Medicine (Ruminants) • Pathology (Special) • Parasitology • Reproduction • Surgery • Internal Medicine (Equines) • New companion animals • Clinical Toxicology • Therapeutics • Preventive medicine
A4	S11 S12	<p>50% of students alternately for 16 weeks</p> <p>full-time in small animal &, equine clinics with the following modules</p> <ul style="list-style-type: none"> • Equine medicine & surgery • Small animal preventive medicine • Small animal medicine • Dermatology • Reproduction • Diagnostic imaging • Anesthesia & Analgesia • Surgery 	<p>full-time in production animal clinics & food hygiene</p> <ul style="list-style-type: none"> • Clinics of ruminants • Clinics of swine and poultry • Food hygiene • Food Hygiene & "Legal" diseases^b • Economics/Practice management^b • Law & Deontology^b • Extra-mural studies (food hygiene & production animals)
A5 ^c	S13 S14	<p>One of the 6 following elective tracks</p> <ul style="list-style-type: none"> - for a semester & preparation of the Doctorat Vétérinaire thesis for the other semester <ul style="list-style-type: none"> • production animals • small animals • equines - for a full year <ul style="list-style-type: none"> • veterinary public health • research • industry 	

^a rotations of clinical training are shared over one semester for half the students in small animal & equine clinics and in large animals and hygiene clinics; controls are organized at the end of these rotations; ^b: before the two 16-week semesters, a 4-week full time teaching period has been created for the 3 modules; ^c: due to changes of curriculum, there was no A5 year in 2009-2010; A5 starts in 2010-2011.

4.1.2.1. Curriculum hours

The number of hours taken by the students each year is given in Table 4.1. In A5, the tracking system allows several possibilities, but most students choose one of the clinical tracks; thus average time spent in the 3 clinical tracks is reported in Table 4.1. Details of the different A5 clinical tracks are in Table 4.1.a.

Table 4.1.
General table of curriculum hours taken by all students

Year	Hours of training							Total
	Theoretical training			Supervised practical training			Other	
	Lectures	Seminars	Self-directed learning	Lab. and desk-based work	Non-clinical work	Clinical work		
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	
A1	409,0	113,5	38,0	119,0	205,0	0,0	12,0	896,5
A2	428,5	32,5	24,0	118,5	243,5	27,0	0,0	874,0
A3	505,5	34,0	17,5	50,0	105,0	345,5	0,0	1057,5
A4	107,0	60,0	24,0	27,0	27,0	688,0	140,0	1073,0
Total A1-4	1450,0	240,0	103,5	314,5	580,5	1060,5	152,0	3901,0
A5*	90,3	11,0	28,2	15,0	0,0	848,0	450,0	1442,5
Total	1540,3	251,0	131,7	329,5	580,5	1908,5	602,0	5343,5

* according to previsions made for 2010-11, means for clinical tracks, see details table 4.1.a

Table 4.1.a
Curriculum hours taken by students in A5 for each track

	(A)	(B)	(C)	(D)	(E)	(F)	(G) Thesis	Total
Production Animals	129	0	13	42	0	629	450	813 +450
Equines	142	33	30	3	0	865	450	1073 +450
Small animals	0	0	41,5	0	0	1050	450	1091.5 +450
<i>Mean of clinical tracks</i>	<i>90,3</i>	<i>11,0</i>	<i>28,2</i>	<i>15,0</i>	<i>0,0</i>	<i>848,0</i>	<i>450</i>	<i>1442.5</i>
Industry				Not applicable				
Research				Not applicable				
Hygiene				Not applicable				

Table 4.2.a
Curriculum hours in EU-listed subjects taken by each student (A1-A4)

	Theoretical training			Supervised practical training			(G)	Total
	(A)	(B)	(C)	(D)	(E)	(F)		
1. Basic subjects								
a) Physics								
b) Chemistry								
c) Animal biology								
d) Plant biology								
e) Biomathematics	20	30						50
1- Total number of hours	20	30	0	0	0	0	0	50
2. Basic Sciences								
a) Anatomy including histology and embryology	125,5		4	16	38			183,5
b) Physiology	59	4			16			79
c) Biochemistry, cellular and molecular biology	23,5	23						46,5
d) Genetics including molecular genetics	20,5	13,5	35					69
e) Pharmacology and pharmacy	46,5	4		29				79,5
f) Toxicology including environmental pollution	11	12		14				37
g) Microbiology incl. virology, bacteriology, mycology	98,5	17	12	28				155,5
h) Immunology	37	1,5		16,5				55
i) Epidemiology including scientific and technical information and documentation methods	15	9						24
j) Professional ethics	10	2	10					22
2- Total number of hours	446,5	86	61	103,5	54	0	0	751
3. Clinical sciences								
a) Obstetrics	12					4		16
b) Pathology including pathological anatomy	26				40	37		103
c) Parasitology	46			3	22	6		77
d) Clinical medicine and surgery incl. anaesthetics	234,5	22	17,5	41		783,5	35	1133,5
e) Clinical lectures on various domestic animal, poultry and other animal species	84	17						101
f) Field veterinary medicine	1	18		6	3	127	35	190
g) Preventive medicine	10				39			49
h) Diagnostic imaging including radiology	26				3	52		81
i) Reproduction and reproduction disorders	48					12		60
j) Veterinary state medicine and public health	14			2			35	51
k) Veterinary legislation and forensic medicine	21	2	10	4				37
l) Therapeutics	29							29
m) Propaedeutics incl. laboratory diagnostic methods	100	6		20	9,5	23		158,5
3- Total number of hours	651,5	65	27,5	76	116,5	1044,5	105	2086

A: Lectures; B: Seminars; C: Self directed learning; D: Laboratory and desk based work; E: Non-clinical animal work; F: Clinical training; G: Others

Table 4.2.b (continued)
Curriculum hours in EU-listed subjects taken by each student (A1-A4)

		Theoretical training			Supervised practical training				Total
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	
4. Animal production									
a)	Animal production	47	30			32	12	35	156
b)	Animal nutrition	83,5	6	3	28	20	4		144,5
c)	Agronomy	3				20			23
d)	Rural economics	30	6	4		20			60
e)	Animal husbandry	25			3	23			51
f)	Veterinary hygiene	1	4	4		20			29
g)	Animal ethology and protection	16	4	4		20			44
4- Total number of hours		205,5	50	15	31	155	16	35	507,5
5. Food hygiene & public health									
a)	Inspection and control of animal foodstuffs or foodstuffs of animal origin and the respective feedstuff production unit	29,5	2						31,5
b)	Food hygiene and technology	20	5		3	18			46
c)	Food science incl. legislation	51,5	0,5						52
d)	Practical work, incl. practical work in places where slaughtering and processing of foodstuffs takes place		1,5		15	27			43,5
5- Total number of hours		101	9	0	18	45	0	0	173
6. Professional knowledge									
a)	Practice management	12,5			12				24,5
b)	Veterinary certification and report writing	2				210			212
c)	Career planning and opportunities	7						12	19
	English	4			74				78
6- Total number of hours		25,5	0	0	86	210	0	12	333,5
Overall total years 1-4		1450	240	103,5	314,5	580,5	1060,5	152	3901
			1793.5			1955.5			

A: Lectures; B: Seminars; C: Self directed learning; D: Laboratory and desk based work; E: Non-clinical animal work; F: Clinical training; G: Others

Table 4.3
Curriculum hours in EU-listed subjects offered and to be taken as electives

	Theoretical training			Supervised practical training			Hours to be taken by each student per subject group	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	
1. Basic subjects								0
2. Basic Sciences								0
3. Clinical sciences: A5 track								
Small Animal Clinics			41.5			1050		1491.5
Equine Clinics	142	33	30	3	0	865	0	1073
4. Animal production: A5 track								
Production Animal Clinics	129	0	13	42	0	629	0	813
5. Food hygiene-public health: A5 track								
Food hygiene				Not applicable				
6. Professional knowledge: A5 track								
Industry				Not applicable				
Research				Not applicable				

A: Lectures; B: Seminars; C: Self directed learning; D: Laboratory and desk based work; E: Non-clinical animal work; F: Clinical training; G: Others

Table 4.4
Curriculum hours in subjects not listed in Table 4.2 & to be taken by each student, including Diploma work (final graduation thesis, or final graduation work)

	Theoretical training			Supervised practical training			Hours to be taken by each student per subject group	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	
1. Basic subjects								0
2. Basic Sciences								0
3. Clinical Sciences								0
4. Animal production								0
5. Food hygiene & public health								
6. Professional knowledge								
Radioprotection in radiology S13	30			12				42
Formation au mandat sanitaire S13	10	3	14					27
Preparation of Doctorate Thesis (estimate)					450			450

A: Lectures; B: Seminars; C: Self directed learning; D: Laboratory and desk based work; E: Non-clinical animal work; F: Clinical training; G: Others

4.1.3. Further information on the curriculum

Provide the visiting team with highlights and any unusual or innovative aspects of the teaching programme, e.g. tracking and orientation programmes.

The tracking system in A5 is not completely new as there has been an “Appro” (Approfondissement = Advanced studies) year before. However, its options were then limited to clinics.

Another innovative aspect of the curriculum is the survey carried out among students upon admission and before being given information about the different veterinary careers and prepare their first extra mural training in rural practice (Stage Veter). This is part of the strong effort made by the school to interest and drag students towards production animal medicine and health management.

State the parts of the programme that must be attended as obligatory by the students and how the attendance is verified.

All parts of the programme are compulsory. Control of attendance is made in all teaching activities except lectures.

Please provide specific information on the practical clinical training. If clinical training is provided through obligatory clinical rotations in different areas, please give an outline description of how this is structured, in terms of: - are such rotations a structured part of the training given to all undergraduate students? - the total number of days or weeks of such rotations; - the year(s) in which they occur; - the different areas covered and the time spent in each area; - whether attendance is full-time, for part of the day, and/or other (e.g. based on case needs); - the activities and case responsibilities that students are expected to undertake. - the group sizes in the clinical rotations

Mandatory clinical (including food hygiene) rotations are organized for all undergraduates starting in A3 . Roughly, time spent in clinics is equally shared between two sectors in A3 and A4:

- 1/ Small animals and Equines, and
- 2/ Production animals and Food Hygiene.

In A3, students attend clinics in the morning for a 16 week-semester in each sector.

In A4, they attend clinics morning and afternoon in all sectors for one semester ; they also have one a week night and a week-end watch at the Small Animal Emergency unit.

In A5 and for the 3 clinical tracks, most of the student's time is spent in clinic rotations for a period of approximately 30 weeks.

The size of the groups and the duration spent by each student in the rotations differs greatly depending on the discipline within each sector. It can range from 4 to 16 students and from 0.5 day to 4 weeks.

A summary of time spent by students in mandatory clinical rotations is given in Tables 4.4.1a&b

Table 4.4.1.a
Time spent by students in clinical rotations small animals in academic year 2009-2010.

Clinical rotation	Year	Nb ½ days/ student	Nb students per group	Autonomy ^a - / ± / +	Comments
Consultation of Preventive Medicine	A3	10	10/12	±	
	A4	9		+	
	A5				
Consultation of First Line Medicine	A3	18	7/8	±	
	A4				
	A5				
Consultation of Internal Medicine	A3	9	3/4	±	
	A4				
	A5				
Emergency - Critical care	A3	9*	3/4	±	*: >> 9: students also on night & week-end watch
	A4				
	A5				
Specialized Consultation of Ophthalmology	A3	3	3/4	-	
	A4				
	A5				
Specialized Consultation of Dentistry	A3	1	3/4	-	
	A4				
	A5				
Specialized Consultation of Behaviour	A3	1	3/4	-	
	A4				
	A5				
Specialized Consultation of Nutrition	A3	1	3/4	-	
	A4				
	A5				
Specialized Consultation of Reproduction	A3	2	3/4	-	
	A4				
	A5				
Specialized Consultation of Dermatology	A3	9	3/4	±	
	A4				
	A5				
Specialized Consultation of Surgery	A3	9	3/4	±	
	A4				
	A5				
Surgery block	A3	5	3/4	-	
	A4	18	3/4	±/+	
	A5				
Anesthesia-Analgesia	A3	5	3/4	-	
	A4	9	3/4	±	
	A5				
Hospital of Internal Medicine	A3	2.5	3/4	±	
	A4	9	3/4	±	
	A5				
Surgery hospital	A3	2.5	3/4	±	
	A4	9	3/4	±	
	A5				
Diagnostic Imaging	A3	5	3/4	±	
	A4	9	3/4	±	
	A5				
Equines	A3	10	7/8		
	A4	18	7/8		
	A5				
New companion Animals	A3	10	7/8		
	A4				
	A5				

a = degree of increasing autonomy from 0 (-) to complete autonomy under control (+), the latter mostly expected in A5

Table 4.4.1.b
Time spent by students in clinical rotations Large animals & hygiene in academic year 2009-2010.

Clinical rotation	Year	Nb ½ days/ student	Nb students per group	Autonomy - / ± / + ^b	Comments
Food hygiene	A3	2	7	-	abattoirs , factories
	A4	8	7	-	
	A5 ⁵	5	10		
Internal medicine and surgery for ruminants (Cattle, sheep, goats)	A3	24	14-16	±	
	A4	12	4	+	
	A5				
Necropsy for ruminants	A3	10	5/6	±	
	A4	10	4	± to +	
	A5				
Ambulatory clinics (Herd cases)	A3	0		-	
	A4	20	8	±	
	A5				
Herd management (reproduction and milk quality, nutrition, risk factor analysis, computer-assisted risk evaluation)	A3	10	14-16	±	
	A4	20	8	+	
	A5				
Case studies	A3	-	-	-	
	A4	2	16	+	
	A5				
Ambulatory clinics (practice)	A3	-	-	-	
	A4	40	-	- to ±	
	A5				
Laboratory exams (microbiology, serology, parasitology, ...) for ruminants	A3	8	16	+	
	A4				
	A5				

a = degree of increasing autonomy from 0 (-) to complete autonomy under control (+), the latter mostly expected in A5

Describe clinical exercises in which students are involved prior to the commencement of clinical rotations.

* Reproductive physiology and echography of the cow

The teaching of reproductive physiology is based on the pedagogic model of the cow which is the species of interest for its therapeutic and zootechnic applications (theriogenology). Indeed, teaching bovine gynecology is essential for the practice of veterinary medicine and constitutes the princeps application of our teaching. In that context, a supervised practical training of functional exploration of the genital tract of cows by ultrasonography was developed aiming at describing the dynamic of follicular growth during the ovarian cycle and the embryo and foetus development during pregnancy. This teaching provides the basis for current ultrasonography applications in bovine gynecologia, *i.e.* pregnancy diagnosis and pharmacological control of the ovarian activity. This teaching is coupled with that of propedeutic and semiology of the bovine genital tract in order to coordinate the training and increase their pedagogic impact. These teaching are performed with 7-9 students distributed in two groups that take part in turning workshops. In the first workshop, under the supervision of by two teachers, the students examine genital tracts of cows obtained at the slaughter house and replaced their observations in a pathophysiological context; they can use posters that summarise basic teaching. During the second workshop, the students perform ultrasonography and rectal palpations of the genital tract of ten cows in different physiological states. The students are guided individually and step by step throughout training.

* Electrocardiography & heart sound in horses.

Teaching and practice of the following basic acts and skills: horse contention, use of a stethoscope, identification of the cardiac exploratory zone (including apex choc), description of main normal and abnormal heart sounds, pulse taking at the femoral artery and relationship with heart sounds, identification of pauses, influence of effort on heart sounds, register and ECG and interpret it, describe the auriculoventricular blocks and relate them with pauses, evaluate the effects of an effort on P wave.

* Canine hemodynamics

The pedagogical objective of this practical teaching in clinical physiology is 1) to use clinical monitoring instruments to assess cardiorespiratory variables in a specific clinical setting, *ie*

⁵ Only for Hygiene track, as part of CEAV

anaesthesia, and 2) to interpret the anesthesia-induced changes on these variables. Another clearly defined objective is for the learners to be actively involved by articulating what they know and engaging with others while seeking solutions to a specific problem. This small group teaching involves one instructor (a Professor) and 7-8 students and is performed over two separate sessions (3-4 hours each at <1 week-interval). The first session is a presentation of the overall objectives and the procedures that will be performed on the second session. It is held in a lecture room or a meeting room. Most of the procedures have not been described in the lectures of physiology. The different monitoring methods (blood pressure measurement, pulse oxymetry, capnography, electrocardiography) are presented with their characteristics, their advantages and limits (eg, artefacts). A particular emphasis is made on the different skills required to get benefit from the second session, including collaborative and interactive skills, professional attitudes, ethics (eg, the reasons for using a teaching dog, the consequent obligations for students) etc. Students can take notes during this session and have to be aware of all the procedures before the beginning of the second session. The second session is only a practical session performed in a surgical room. No notes are allowed as the objective of this session for the students is to be active and perform by themselves most of the practical procedures under the supervision of the instructor. One healthy Beagle dog is used. Basic rules regarding handling of the dog are explained. A basic pre-anaesthetic clinical examination is performed by the students including cardio-respiratory auscultation, palpation of pulse, rectal temperature. The students prepare the materials needed for the anaesthesia and check the monitoring instruments before induction. The anaesthesia protocol includes pre-medication (acepromazine, IM), induction (sodium thiopental, IV), endotracheal intubation and maintenance of anaesthesia (isoflurane). Once the dog has been anaesthetized, the different variables are interpreted (e.g. decrease in systemic blood pressure, increase in heart rate...). Alterations of these basal variables are induced by administration of medetomidine (inducing peripheral vasoconstriction, bradycardia, systemic hypertension). These alterations should be explained by the students as soon as they appear on the screen of the monitor. These effects are reversed by administration of the antagonist drug, atipamezole. Isoflurane administration is then stopped and the students follow up the recovery of the animal with associated changes in the cardiorespiratory variables.

- * Ruminants: practical training of contention, manipulation, propaedeutics, and semiology by anatomical system 3 to 4 half-day sessions per student.
- * Surgery: 2 practicals in A2 and A3
 - surgeon asepsy, use of a electrocoagulation unit and sutures in A2 (3h30 for groups of 16 students): video presentation followed by individual use of electrocoagulation and practice of suture on swine feet (1 per student)
 - patient, surgeon and tools asepsy, anesthesia, laparotomy, ovariectomy and gastrotomy of female rabbits in A3 (4h to 4h30): after video presentation, students practice per groups of 2.

Outline the student involvement in the emergency and hospitalisation activities of the clinics.

- * Emergency
 - Small animals: Routine organisation of emergencies is based on Interns with groups of 3 or 4 A4 students (and A5 in the future), 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.
 - Production animals: There is no specific Emergency ward. In case of emergency requiring hospitalization of an animal, the case is managed by the students under the control of a teacher in the large animal hospital.
- * Hospital

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 nurses.

Specify student participation in the activities of the mobile clinic and indicate whether or not the hours spent in the mobile (ambulatory) clinic are included in those in Table 4.2.

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 a farm audit. 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. These hours are included in the syllabus and table.

4.1.4. Obligatory extramural training

Extramural training periods are compulsory for all students; one of these has to be accomplished in a foreign country.

Please indicate the guidelines pertaining to this activity, and the manner by which it is assessed.

There is an Extramural Training Committee (Commission des Stages) made up of 2 to 4 teachers of each Department and one person from the DEP.

ET is fully incorporated in the overall training; each compulsory ET period corresponds to a module which is evaluated.

The organization of ET is presented at the beginning of the cursus, then at the beginning of each relevant year (cf. Annex 4.3). There is a specific module for the preparation of the first extramural training in A1. Documents are given to the students presenting all the guidelines for these trainings. Students are responsible for finding the place of their training and organizing it with a teacher of the ENVV and the person in charge of training at the site of training. Each compulsory external training period is evaluated by a 3-teacher jury, based on 3 criteria: 1/ evaluation by the person responsible for the training; 2/ written report; 3/ oral presentation.

Table 4.5
Obligatory extramural work that students must undertake as part of their course

Nature of work	Duration		Year in which work is carried out
	Hours	% total study time	
Rural or mixed veterinary practice & large animal breeding	3+1 weeks		A1
Technical or scientific "mini-project"	6 weeks		A2
Clinic in production animals + abattoir	4 weeks		A4 (large animal track)

Students can also organize optional external trainings themselves, which are validated only if the training has been organized with a teacher and has a Convention de stage. Such trainings can be registered in the Supplément au Diplôme.

4.1.5. Specific information on the practical training in Food Hygiene & Public Health

In France, food hygiene is controlled by specialized civil servants: ISPV (Inspecteurs de la Santé Publique Vétérinaire ; inspectors of veterinary public health). They are veterinary graduates who have a specific 2-year training after the DEFV (end of A4) in the Ecole Nationale des Services Vétérinaires (National School of the Veterinary Services) under the responsibility of the MAAP. Moreover,

veterinarians can be hired by contract for certain periods of time and certain missions, esp. for the control of slaughterhouses or of meat products. ISPV and contractual veterinary inspectors are assisted by specialized technicians (2-year training in a specialized school).

Describe arrangements for teaching in a slaughterhouse and/or in premises for the production, processing, distribution/sale or consumption of food of animal origin.

Students have compulsory basic training in slaughterhouses and premises for production of food of animal origin. These are organized outside the School because such facilities are not available on the campus.

Indicate the distance to slaughterhouses where students undergo training, and the species covered. Outline the structure and the frequency of these visits (group size, number of trainers, duration, etc.).

The slaughterhouses used for student training are within 80 km from the school. They receive and prepare adult cattle, calves, sheep and swine, and more rarely horses.

In A3, visits of a slaughterhouse are organized for groups of 6 to 8 students with a teacher and the participation of the veterinary in charge of meat inspection at the slaughterhouse. The 3-hour visit aims at observing and understanding the facilities and equipment, the operations of the animal killing and preparation, the management of by-products and the control of hygiene.

In A4, similar groups spend three 3-hour practical training on food improper for commercialisation and stored for demonstration purposes: visual inspection, palpations, selective cuts, etc. Students also are initiated to the evaluation of security and safety of meat.

In A4 each student spends 4 half-days of extramural training in a slaughterhouse (locations of the slaughter houses depend on the training location), where he/she follows the official veterinary and practices in all his activities.

4.1.6. Ratios

4.1.6.1. General indicators - types of training

Total number of teaching hours		
A	1540.3	Lectures
B	251.0	Seminars
C	131.7	Self-directed learning
D	329.5	Laboratory and desk based work
E	580.5	Non clinical animal work
F	1908.5	Clinical work
G	602.0	Other

R 6:	Theoretical training (A+B+C)	=	$\frac{1922.7}{2818.5}$	=	$\frac{1}{1.47}$
	Supervised practical training (D+E+F)				
R 7:	Clinical work (F)	=	$\frac{1908.5}{910}$	=	$\frac{1}{0.48}$
	Laboratory & desk based + non clinical animal work (D+E)				
R 8:	Self-directed learning (C)	=	$\frac{131.7}{4741.2}$	=	$\frac{1}{36}$
	Teaching load (A+B+C+D+E+F)				

4.1.6.2. Special indicators of training in Food Hygiene & Public Health

R 9:	Total of hours in veterinary curriculum	=	5343.5	=	1
	Total of hours Food hygiene + Public health		173		0.03
R 10:	Total of hours Food hygiene + Public health		173		1
	Hours obligatory extramural work in veterinary inspection		34		0.19

4.2. Comments

All subjects listed in Annex 5.4.1 of the 205/36/EU Directive are taught: the entirety or parts of some basic subjects are covered in the Classes Préparatoires' programmes but the majority is taught during the 5-years at the veterinary school.

Please comment on the way in which the veterinary curriculum prepares the graduate for the various parts of the veterinary profession, especially under the specific conditions prevailing in your country/region.

1/ Comments made by the teachers of the various modules

All the teachers have been asked to make personal comments about the "way in which the veterinary curriculum prepares the graduate for the different parts of the veterinary profession". The main points are:

- Training of students is sufficient in most subjects for basic professional activity;
- Time allocated to the subject is often estimated to be too short to allow proper learning by the students;
- Practical/clinical training is frequently estimated to be insufficient.

2/ General comments

From a general point of view, overall training of the students is adequate and sometimes excessive in basic subjects and basic sciences. In clinical sciences, animal production and food hygiene, practical training of the students is sometimes deemed insufficient. This should lead to a re-evaluation of the time and resources allocated to the different subjects. It is however essential to remember that:

- a/ Veterinary studies are Higher Education *i.e.* science-based education;
- b/ Life-long education can only be based on solid bases to be further enlarged or updated, if veterinary professionals are to stay fully efficient over the years.

Please comment on the way the curriculum is structured and reviewed.

Structure of the curriculum is based on a progression from pre-clinical to para-clinical and clinical/applied sciences, trying to organize a logical evolution of student training.

However, with the recent curriculum changes redundancies persist in some areas and parts of the curriculum have been overextended with no real coordination as the Commission des Programmes was not active in 2008 and 2009.

Please comment on the major developments in the curriculum, now and in the near future.

The first new developments in the curriculum will take place this academic year and applies to A5 students. It is a new programme imposed, by the Ministry to accommodate EAEVE requirement of a full 5-year training within a veterinary school or under its authority.

This makes a total of 7 years (at a minimum) for the total of the veterinary studies, which is considered to be too long by a majority of teaching staff, who wish to see time spent in Classes Préparatoires reduced to one year.

Please comment on the local conditions or circumstances that might influence the ratios in 4.1.6.

Ratios in 4.1.6 show that:

- A special focus is put on clinical training in this school, with much time devoted to it whatever the species
- Self directed learning is only in the early stages of implementation. There are 2 likely main causes:
 - most teachers and students are not familiar with this form of teaching/learning;
 - many teachers feel reluctant towards unguided teaching, considering that students are already overworked and that self-directed learning may risk increasing their workload.

4.3. Suggestions

To maintain and raise the high level of the training's scientific basis so as to ensure that graduates will continue accessing positions in academy, research and industry, and also that practitioners can easily update their initial training by efficient life-long learning. This implies that a strict policy of recruitment of teachers is set up in the school, especially as a notable part of the senior teaching staff will retire in the coming years (cf. chapter 10).

To evaluate the different adaptations made to face the repeated changes imposed on the curriculum and to make the necessary amendments, and more especially by having an efficient system of quality assurance for the training programme (cf. chapter 5).

Chapter 5 - Teaching and learning: quality and evaluation

5.1. Factual information

5.1.1. The teaching programme

Describe the measures taken to ensure co-ordination of teaching between different departments, sections, institutes and services.

The Règlement des Etudes establishes that a Commission des Programmes be set up to control (Annex 4.1.b, Article 8) :

- that the coordination of teachings is respected,
- that the teaching objectives are in agreement with the national reference for the diploma (Annex 1.2 Cursus vétérinaire).

Describe the pedagogical approach of the institution. In particular, describe the use of newer approaches, such as problem-based learning, interactive computer-assisted learning, etc.

There is no institution policy on a uniform pedagogical approach. In higher education, the diversity of pedagogical approaches (by the different teachers) is at the core of the students training. Clinical training is the backbone of the “problem-based” approach used with all species. For courses on production animals, training is built on an integrated clinical and zootechnical approach through visits to breeding unit from A3 to A5.

ENVT has begun to harmonize and centralize its internet teaching making use of resources provided by the Moodle system (<http://moodle.envt.fr/>). A person was recruited to train teachers on the use of Moodle to put together and create courses, examinations etc.

Indicate the extent to which course notes are used to supplement or substitute for the use of standard veterinary textbooks.

Course notes are largely used by students even when full text or documents are provided by teachers. Textbooks are little used at undergraduate level.

Describe (if applicable) any established or contractual arrangements that support undergraduate teaching between the Faculty and outside bodies, e.g. farms, breeding centres, practitioners, state veterinary services, factories/processing plants, outside laboratories, etc. Briefly describe how these arrangements work out in practice in terms of the contact this provides for all students or for selected students

There are some contracts between the ENVT and outside bodies for the teaching of all undergraduates in production animals and food hygiene:

- Bernussou is an education center intended for farmers and breeding technicians. It has a dairy herd, a beef cattle herd and a pig unit. Students spend 2 days there during the course of their first year with teachers from the education center. This is both a first contact with farm animal rational production and an overview of production management
- Unicor (animal feed industry) and Midatest (genetic selection) concluded agreements with the ENVT regarding health management of their customers' herds and a selection unit, respectively. The visits relative to these agreements are integrated in the general organisation of pig and bovine farm herd care.
- Various abattoirs in Montauban, Castelnaudary and Saint-Gaudens and food transforming plants (cf. § 6.1.6 & 6.1.7).

- A network of rural practitioners accepting students for their Veter external training (cf Annexes 4.2.5.7. a&b).

Describe the general learning objectives underlying the veterinary curriculum and how this is ensured.

General learning objectives are defined by the Cursus Vétérinaire (cf. § 1.1 and Annex 1.2.b) and are not specific to the ENVT. Teachers follow these objectives for all modules.

Describe how the Faculty collects the data required to ensure students are equipped with these Day one skills (evidence of learning).

The objective of examinations is to ensure that students have all the qualifications to graduate as veterinarians. Day-one skills are not specifically tested (e.g. by a final synthetic examination at the end of the curriculum), but are part of the Cursus Vétérinaire programme, thus of examinations that all graduates must pass.

5.1.2. The teaching environment

Describe the available staff development facilities, particularly in relation to teaching skills.

Special courses sponsored by the MAAP were offered some years ago to train junior teaching staff but these have been abandoned and no special teaching training is available. However, most teaching units train their junior staff for teaching. This is especially important as the recruitment of teachers comprises a formal lecture, which is part of the selection process.

Describe the available systems for reward of teaching excellence (e.g., accelerated promotion, prizes, etc).

There is no real system of reward for teaching excellence. However, there is a system of continuous evaluation of all MAAP teachers (agriculture and veterinary schools) by the CNECA (Commission nationale des enseignants-chercheurs relevant du Ministre chargé de l'agriculture). CNECA constitutes committees of elected representatives of teachers who evaluate MAAP teachers every 4 years, and whenever a teacher asks for promotion. These committees determine their evaluation on 3 points: research, teaching, and transversal activities (administrative responsibilities, role as expert, etc.). Promotions are obtained according to the ranking made by the CNECA.

Describe other measures taken to improve the quality of teaching and of learning opportunities.

Recently IT has had a fast extension at ENVT with the development of a Moodle platform and also of specific platforms by groups of academic staff. This has contributed to give students access to a large amount of teaching material but there is still a lack of feedback on the efficiency of these new initiatives.

5.1.3. The examination system

Is there a central examination policy for the Faculty as a whole? If 'yes', by whom is it decided?

The Règlement des Etudes (Annex 4.1.b) determines examinations rules and periods. They are then organized for each module with the cooperation of the DEP.

Are there special periods (without teaching) during the year for examinations?

There are special periods without teaching at the end of each semester.

What form(s) of examination are used (written papers, multiple-choice questions, oral, practical, clinical examination, continuous assessment, etc.)?

All forms of examinations are used. End-of-module oral examinations have been mostly abandoned. However, there are numerous oral presentations/examinations of personal work and in the clinics.

Is use made of external examiners?

There are no external examiners at undergraduate level, except when an external teacher has been called upon to participate notably in the teaching of a subject, e.g. for Law and Deontology.

How many retakes of an examination are allowed?

Usually, a student is allowed to take a normal session examination and a “rattrapage” (resit) a few days or weeks later. If he/she fails, he/she must retake the examination the following year (normal and resit sessions).

Do students have to pass the examination within a certain time?

Students have to take the examinations at the times determined by the DEP, according to proposals made by the teaching team and during the semester when they attended the corresponding lectures.

Do students have to pass an examination before they can start other courses?

Generally, 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. Students who have failed only one module are allowed to continue from A1 to A2 or from A3 to A4 but they have to retake it during their A2/A4 year respectively) (cf § 9.1.3). This will be extended in 2010 to the A2 to A3 progression. End of A4 is a “blocking” point as the DEFV is delivered at this time, before the A5 tracking.

5.1.4. Evaluation of teaching and learning

Evaluation of teaching is organized by the Règlement des Etudes: “all teachings are evaluated by students. The evaluation procedure is defined by the DEP after consulting the CE and CEVE; it is published at the beginning of each academic year. Information collected is managed by the DEP and reported according to procedures defined by the Dean after consulting the CE and CEVE.”

There is no evaluation of learning other than the regular examinations taken by students at the end of each module.

Describe the method(s) used to assess the quality of teaching in the Faculty.

After each module and control of the module, students are asked to fill in an anonymous evaluation questionnaire available on the School's intranet. This questionnaire uses Sphinx software.

The questionnaire is the same for all modules (Annex 5.1). Its aim is to evaluate general organisation of the module, teaching methods (lectures, seminars, practicals, etc.), methods of examinations, time spent by the student. An open field is provided at the bottom of the questionnaire for comments and suggestions. Additional questions can be added upon request by module's organizer.

Describe the method(s) used to assess the quality of learning in the Faculty.

Examinations *per se* are a method of evaluating learning quality as students can only pass if their learning has been judged as sufficient in each module. There is no other evaluation of overall learning performances and of learning quality.

Indicate whether the evaluation is a Faculty procedure, or one set up by individual departments, by students or by individuals.

Evaluation of teaching quality by the students is under the responsibility of the DEP. After consulting teachers, the DEP prepares the questionnaires, uploads them on the Intranet, collects and analyzes the answers and forwards them to the Dean, the Heads of Departments, the module organizers and students.

Some teaching teams organize their own evaluations when they want to collect some specific information.

Indicate the use of external evaluators.

There are no external evaluators at undergraduate level. But there are two external evaluators (one academic and one practitioner) for the evaluation of Interns.

Describe the role of students in the evaluation of teaching and teachers.

As described above, students are asked to give their opinion on methods and contents of all teaching activities. The questionnaire does not aim at evaluating teachers but the teaching of the module. However, students can give their opinion on individual teachers through the open field at the end of the questionnaire.

Moreover, student representatives participate in the CEVE and the Commission des Programmes, which meet regularly; they thus have the possibility to raise all education questions they want with the DEP and the teachers' representatives.

Describe the follow-up given to the evaluation.

Evaluation of teaching was discontinued for about 3 years before being reintroduced in 2008-2009. Therefore, there is no long-term possibility to evaluate follow-up.

Results of a module evaluation are given to all teachers taking part in a module, to the Chair of the Department and the DEP before the preparation of the same module for the following academic year. A synthesis of these results is also given to the students.

Module coordinators discuss the results of the evaluation and suggest amendments that could be brought to the organization and/or content of the module. The Chair of the Department ensures that all module organizers carry out this work and inform the other department members of the changes.

At the School level, the DEP brings this subject up at least once a year at a meeting of the Commission des Programmes (CEVE + department Chairs), where student representatives can give their opinion and ask for teaching amendments.

5.1.5. Student welfare

Describe any measures taken to protect students from zoonoses (e.g. rabies) and physical hazards.

The student's general health is checked at their entrance in ENVT (beginning of A1 year) by the SIMPPS (Système Inter Universitaire de Médecine Préventive et de Promotion de la Santé – University Preventive Medicine) which provides many services for students (Annex 5.2). The school has also made arrangements to buy rabies vaccines and offer vaccination to voluntary students (vaccination is made by the SIMPPS).

Describe the facilities (not related to the teaching programme) which the establishment provides for students.

Students enjoy a very large and modern “Cercle des Elèves”, which they manage according to a contract with the Dean of the School. It includes a bar (without alcoholic beverages), games, a cooperative, etc. In the evenings, access to the bar is restricted and it operates as a private club. There are also facilities to practice different sports: a stadium for rugby and football, a track for athletics, two tennis courts, a track for canine agility competitions, There is an Equine center which is managed by the school. It is open to everyone but lower fees are offered to the school's students and staff.

Housing for students is also available on the campus as well as a restaurant, where students of the school and other establishments and staff can enjoy relatively cheap meals. The housing system does not belong to the school and is managed by a private company. Although non-veterinary students can be housed there, it is implicit that veterinary students have a priority in obtaining an apartment.

Describe the guidance offered by the Faculty (or its parent institution) for students with problems (social problems, study problems)

Guidance on student problems is initially given by DEP and Vie Etudiante staff, and in some cases, by other members of the education staff and the Dean. In some difficult cases, a tutoring of students by one or several teachers has been installed to help students overcome the curriculum difficulties they encounter.

Psychological problems are not a rare occurrence at ENVT and probably under evaluated. When people with possible problems are detected by teachers, DEP or sometimes reported by the students to the Service de la Vie Etudiante or to the person in charge of Hygiene and Security, counselling is offered via the SIMPPS specialists and the Médecin du Travail.

Social problems are often detected by the DEP staff, and they are managed by the Service de la Vie Etudiante, which refers most difficult cases to the relevant medical or administrative authority. One of the most frequent difficulties is the lack of financial resources of some students. A system of grants has been installed by the French government based on family resources and number of children. Yearly amount of the grant ranges from free registration + social security fee (1600 + 198 € in 2009) to the same + slightly more than 4000€.

A summary of the allocation of grants for the 3 preceding years is given in Table 5.1

Table 5.1:
Number of student benefiting from grants to help them finance veterinary studies at ENVT

Year	Yearly amount of grant (€)						
	0	1445	2177	2790	3401	3905	4140
			+ free registration + social security fee				
2008-09	41	28	16	9	7	17	10
2009-10	61	28	14	13	12	13	10

Moreover, some welfare veterinary associations allocate a limited number of additional small grants to those who need it most.

Describe the guidance offered by the Faculty (or its parent institution) for future career development or job selection.

General information about careers is given in the Forum des Métiers at the beginning of the curriculum; some more focussed information is given by teaching staff at various teaching encounters, but there is no central office/function for guidance. It is not rare that individual teachers are asked by students for guidance in their area of specialization.

5.2. Comments

Please give general comments about the quality of the teaching programme under the above headings.

The general frame of the teaching programme is imposed on veterinary schools (Cursus Vétérinaire) and fits what is implicitly considered by most teachers as an adequate teaching programme, rather well organized with a progression from theoretical to practical knowledge and skills. Moreover, a larger place has now been made to clinical and applied training starting in A3, with full time in A4 and A5, which hopefully should offer better training opportunities. Some points of the Cursus Vétérinaire document are nevertheless criticized on but flexibility in its application allows teaching teams some margin of freedom to adapt it to what they consider more relevant teaching options (e.g. detailed content, number of hours).

The quantity of information as scientific/medical content delivered to students is considered to be sometimes too intense or too large. In many cases, there is an overload of information delivered (and sometimes of knowledge required at examinations) as compared to less time spent on methods, explanations, practical uses, etc. This can create a misbalance between disciplines taught over a same period, with students led to prioritize the discipline with the most pressure by teaching staff.

5.3. Suggestions

The ENVT is developing a policy of quality assurance of its teaching. One person was recruited at the beginning of 2010 to implement procedures for continuous improvement of quality, and to develop a culture which recognizes the importance of quality assurance. The students are taking part in this action. The processes and the procedures will be implemented to satisfy standards and guidelines of internal quality assurance in higher education institutions. There is a strong will of this school to reach the EAEVE level 2 in the near future and apply for accreditation.

Teaching in the ENVT is based on recent evolutions due to changes of the curriculum. Beyond these changes, a more global thinking is necessary, based on a re-evaluation of the true needs of each discipline. Such an evolution could rely on the recently implemented evaluation of teaching by students, and should preserve the equilibrium between research, administrative and teaching tasks of teachers at the individual level.

Chapter 6 – Facilities and equipment

6.1. Factual information

6.1.1. Premises in general

ENVT is located on a vast campus (58 ha) in the western part of Toulouse, close to an INRA research centre (Saint Martin du Touch), the Purpan engineer school (Ecole d'Ingénieurs de Purpan) and the Purpan CHU (Purpan teaching hospital). Most universities are on the opposite side of the town, including the faculties of science, medicine, pharmacy and dentistry, and a large agronomical campus.

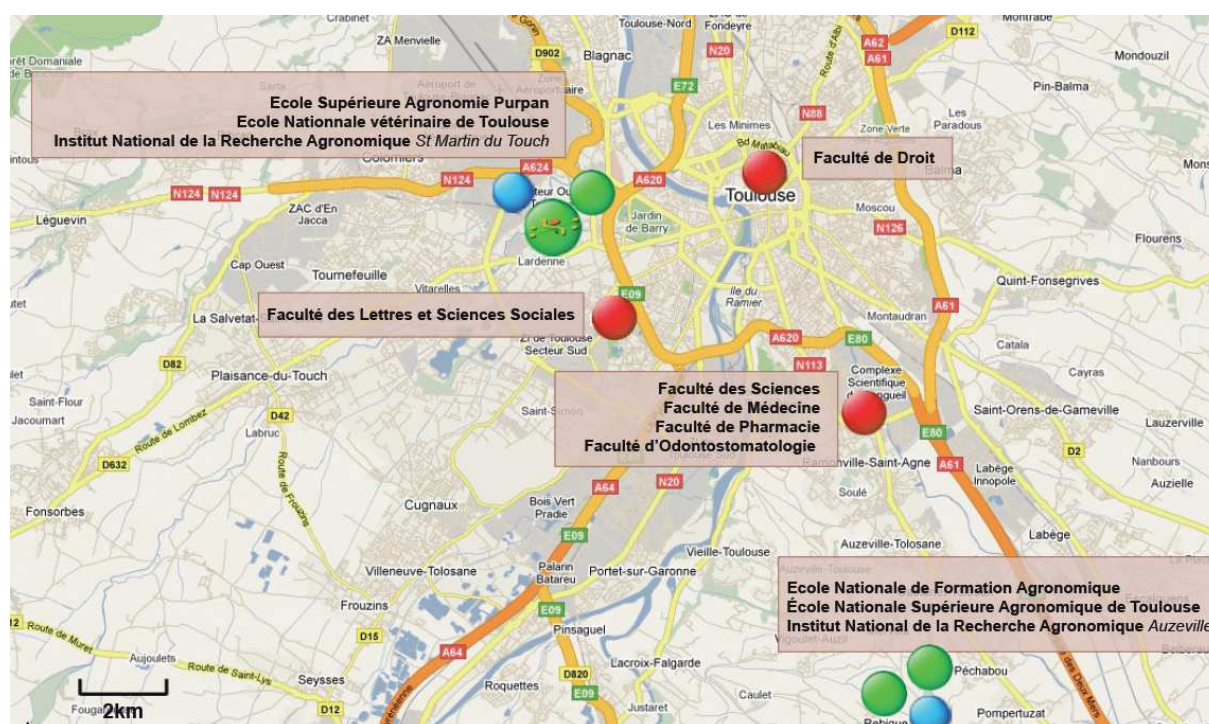









Figure 6.2.
Location of the ENVT's various areas of activity

	administrative & service buildings, library	1.1.: reception, 1.2: administrative building, 1.4: library, 11.1: technical services; 18: Equine centre; 21b: Lucien Baychelier room
	lecture halls, teaching rooms	1.3a-e: lecture halls, 6.3: histology, 5.2: parasitology, 7.2: nutrition & food hygiene, 8.6: physiology, 14: ophthalmology, 21.a: "birago diop" room
	clinics	4.2: small animals surgery block, 12: wild fauna & new companion animals, 13 & 13c: cattle, 13b: horses, 15: surgery & pharmacy, 16: small animals hospitals, 17: small animals consultations, 24: necropsy
	teaching & research units	2.1: small animals medicine-cattle medicine, 2.2: cattle medicine, 3.1& 3.2: pharmacy & toxicology – biochemistry & clinical pathology-, 4.1: reproduction-surgery-anesthesia, 5.1: parasitology, 6.1: histology & pathology- anatomy & embryology, 7.1: food hygiene - plant toxicology & nutrition, 8.1 physiology – pharmacology – therapeutics & animal production; 9.1: avian and porcine medicine; 9.2: biomathematics; 10.1: Infectious diseases
	"student area"	A, B, C, D: students rooms, 21: restaurant (including smaller room for guests), 23: students club.

6.1.2. Premises used for clinics and hospitalisation

Table 6.1.
Places available for hospitalisation and animals to be accommodated

	Species	Number places
Regular hospitalisation	Cattle	30
	Horses	16
	Small ruminants	10
	Pigs	0
	Dogs	58
	Cats	14
	Others	about 70 (individual cages for NCA) 2 large aviaries for wild birds
Isolation facilities	Farm animals and horses	in research facilities UMR 1225
	Small animals	1 room
	Others	0

6.1.3. Premises for animals

Give a description of the facilities for rearing and maintaining normal animals for teaching purposes. If the Faculty has no farm of its own, please explain in the SER the practical arrangements made for teaching such subjects as animal husbandry, herd health, and the techniques of handling production animals.

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 secured contracts.

6.1.4. Premises used for theoretical, practical and supervised teaching

Table 6.2.
Premises for clinical work and student training

Small animals	Number consulting rooms	11
	Number surgical suites	7
Equines	Number consulting areas	1
	Number surgical suites	0
Food animals	Number consulting areas	1 “multi-use” hall/corridor
	Number surgical suites	
Others		0

Table 6.3.
Premises for lecturing: number of places per lecture hall

Hall	Main lecture hall	Lecture hall 1	Lecture hall 2	Lecture hall 3	Lecture hall 4	"Birago Diop" room
Places	210	120	120	120	164	42
Total number of places in lecture halls: 776						

Table 6.4.
Premises for group work

Room	MB1	MB2	MB3	MB4	MB	English	Nutrition	Histology Pathology
Places	30	22	20	20	20	30	20	22*
Room	Food Hygiene	Surgery	Ophthal- mology	Physiology	Yellow room	Small animal hospital	Parasit- ology	Animal production
Places	28	30	30*	25*	20	15	15	16
Room	<u>Ruminant pathology</u>							
Places	10							
Total number of places in rooms for group work: 373								

* rooms also used for practical work

Table 6.5.
Premises for practical work

Laboratory	Biochemistry Pharmacy	Infectiology	Anatomy Dissection	Anatomy Practicals	Parasitology	Physiology
Places	25	34	40	20	20	15
Total number of places in laboratories: 154						

Please give a brief description of health and safety measures in place in the premises for practical work and in the laboratories to which undergraduate students have access.

Rooms used for practicals have special security signs detailing security procedures just like all other ENVT buildings. Fire drills are organized at least once a year. Regarding health hazards, students are informed of preventive measures. Whenever necessary, they must wear adapted clothing and protection equipment. ENVT is committed to the respect the principles stated by the Code du Travail: avoid risks, replace dangerous compounds by less harmful ones, inform students, organize collective and individual preventive procedures. In anatomy for instance, formalin used for preparation of animals has been replaced by zinc chloride.

6.1.5. Diagnostic laboratories and clinical support services

6.1.5.1. Diagnostic laboratories

Briefly describe the facilities available for clinical diagnostic work.

6.1.5.1.1. Pathology

The Anatomic pathology sector provides comprehensive diagnostic services including post mortem examinations, histopathology, biopsy evaluation and diagnostic immuno-histochemistry (more than 20 antibodies currently available). The team's pathologists are Diplomates of the European College of Veterinary Pathology (E.C.V.P.) or graduates of the French diploma of specialization in Veterinary Pathology (D.E.S.V.). They are interested and have experience in a wide range of animals including companion animals, livestock, pocket pets and birds.

Concerning facilities, necropsies are performed in a new building built in 2006 (floor area over 400 m² for necropsy room and cold stores). For the microscopical activity, we use two laboratories:

- One for histopathology (paraffin – embedded and frozen sections),
 - Another for immunohistochemistry (with a specific automaton).
- For students and residents, we have a room with a multihead microscope.

6.1.5.1.2. Clinical pathology

There are two clinical pathology facilities for clinical work at ENVT

- The clinics' Central laboratory is open to all clinics of the school, research units and industry. This laboratory is operated by 3 skilled technicians under the supervision of the Professor of Clinical Pathology helped by a resident and two post-graduates. It is open from Monday to Friday, from 8 am to 6 pm. It uses modern equipment and provides routine hematology and chemistry test results within 1 hour.
- The emergency laboratory for the use of interns, residents and other consultants at night and week-ends. It is well-equipped with the benchtop analyzers found in veterinary clinics as well as some ancillary equipment. Quality control is carried out by the central laboratory's technicians laboratory. The equipment permits all analyses needed for the diagnosis and monitoring of emergency or hospitalized cases.

6.1.5.1.3. Parasitology

The laboratory of Parasitology provides diagnostic services including:

- Coprology examinations in livestock, companion animals and pocket pets,
- Serology analyses in helminthology and protozoology, (Elisa, Western Blot, I.F),
- Molecular diagnostic by real-time PCR in protozoology,
- Identification of helminths, acarii and insects,
- Mycology diagnostic.

The Parasitology lab team is composed of two Diplomates from the European Veterinary Parasitology College, three DVM, one engineer and 3 technicians.

Five Labs are available for parasitology diagnostics, one is dedicated to the students. They carry out some common parasitological examinations under the supervision of the technical staff.

6.1.5.2. Central clinical support services

Indicate the nature of these services and how they are organised (e.g. diagnostic imaging, anaesthesia, etc.)

- Diagnostic imaging is available for:
 - Diagnostic radiology
 - * For small animals on 2 different sites: the consultations and the surgery facilities. Radiographic digital system. DICOM linked to PC and Printer and conventional fluoroscopy.
 - * For horses and cattle in the large animal clinics.

X-rays are performed by specialized technicians under the responsibility of teaching staff qualified in radioprotection (PCR: personne compétente en radioprotection). Practical low dose limits for students are also controlled by individual passive dosimeters

- 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. Adapted equipment for US-guided biopsy.

- 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.

6.1.6. Slaughterhouse facilities

Describe briefly the slaughterhouse facility to which the Faculty has access, including distances from the Faculty and level of activity.

The slaughterhouses used to train the veterinary students are within 80 km (1 hour-drive) from the school. Their turnover is about 10 000 tons/year. (cf. § 4.1.5). They are located in Montauban, Castelnau-d'Aud and Saint-Gaudens.

6.1.7. Foodstuff processing unit

Describe briefly any access that the Faculty has to foodstuff processing units.

3-hour visits are organised to factories located 20 to 60 km from the ENVT and involved in meat salting, cheese processing, food canning and food & meat preparation as well as to a catering center. Visits are organized in groups of 6 to 8 students accompanied by a teacher in Food Hygiene and a person in charge of the visited site. Studies points are : knowledge of technologies used and sanitary control of the production.

Control of food security in a medium-size processing site is taught in during a day visit (5 hours) to a unit by groups of 12-14 students with 1 or 2 teachers in Food Hygiene. Examples of such sites are a poultry processing site and an animal by-products processing site 100 and 120 km approx. from ENVT respectively. The visits are commented by the person in charge of quality assurance of the sites, with the support of the school's teachers. Studies points are: settings and operations in the unit, evaluation of the sanitary control plan.

6.1.8. Waste management

Briefly describe the systems and equipment used for disposing of waste material; cadavers, carcasses, biological waste of different types, excreta, etc.

Cadavers and animal carcasses are eliminated regularly by specialized companies (Ferso & Sif). Some cadavers of pet animals are taken by the owners or are incinerated by a commercial company. Different specialized companies are used for the disposal of all dangerous waste: DASRI (déchets d'activité de soins à risque contagieux; waste products of treatments, possibly contagious), chemicals, DEEE (electronic parts, computers and refrigerators), manure. These companies (Midicoll, Eoval, Veolia) give written proofs of the removal of wastes and are responsible for their total elimination.

6.1.9. Future changes

Outline any proposed changes in the premises that will have a substantial effect on the Faculty, and indicate the stage which these have reached.

Several changes are currently being made to the clinics' buildings and some new projects are planned for the next 2 years:

- Two projects have started or will start in 2010: an equine surgery and a central laboratory of clinical pathology
- The following facilities are scheduled:
 - in 2011: an extension to the small animal hospital with the Emergency-critical care unit, hospital facilities for contagious animals, and for treatment of animals with anticancer drugs (according to legal rules for collection of effluents); a new small animal diagnostic imaging building for scanner and/or IRM; a new system of ventilation of the small animal surgery facilities . Studies and planning for these projects have already started.
 - in 2012: building of a new bovine clinic.

6.2. Comments

Comment on the adequacy of the buildings in general for undergraduate teaching.

- Lecture halls and rooms for group work

The number of large lecture halls is adequate at the present time, but there is a shortage of smaller rooms for group work. If the number of students increases in the future, the number of seats in lecture halls may turn out to be insufficient. Moreover, the large lecture halls are rather uncomfortable.

The number of small multi-purpose rooms (up to about 40 seats) is insufficient for group and/or practical work and there is competition for their use with continuous education.

- Laboratories for practical training

The size of the laboratories for practical training is too small in some cases (e.g. Microbiology) but sufficient in other ones (e.g. Pharmacy)

- Hospitalization facilities

They are not adequate, hence the new renovations and why this point is the number one priority with regard to improvements to be made in the next years (cf. § 6.3)

Comment on the adequacy of the equipment in general for undergraduate teaching.

Equipment is usually good to very good. All teaching rooms are well equipped for use of videoprojection. For practicals, equipment is mostly sufficient, due partly to the use or sharing of resources provided by research units or by continuous education.

Comment on the maintenance of buildings and equipment.

Maintenance of buildings could be better but is mostly satisfactory. It is a very difficult and expensive issue because the buildings are becoming old (almost 50 year-old) and because there are many, mostly small, buildings spread over a very wide area.

6.3. Suggestions

If you are unhappy with any situation, please list any improvements you would make in order of preference.

The first rank priority is the upgrading of clinical facilities. Decision was made by the Board to renovate some buildings and build new ones where necessary. See § 6.1.9.

The second rank priority is to increase the number of medium size rooms for teaching/practicals. One possibility could be to clearly separate facilities used for continuous education and undergraduate training.

An upgrading of the lecture halls should also be done in the very next future.

Chapter 7 - Animals and teaching material of animal origin

7.1. Factual information

7.1.1. Anatomy

Indicate the materials that are used in practical anatomical training, and how these are obtained and stored.

Table 7.1:
Material used in practical anatomical training

	Dog		Ruminant		Equine		Other	
	2009-10	2008-09	2009-10	2008-09	2009-10	2008-09	2009-10	2008-09
Live animals	3	3	0	0	0	0	0	0
Cadavers	0	0	64	56	0	4	0	0
Specimens	5	5	5	5	5	5	5 swine	5 swine
Other (mannequin)	1	1	-	-	-	-	-	-
Ultrasound	6	0	0	0	0	0	0	0
CA teaching	CDRom osteo & splanchno	0	CDRom osteo	0	CDRom osteo	0	CDRom osteo	0

7.1.2. Pathology

Table 7.2:
Number of necropsies over the past 3 years

		Number of necropsies			Average
		2009-10	2008-09	2007-08	
Food-producing animals	Cattle	545	507	521	524
	Small Rumin.	244	274	308	275
	Pigs	necropsy performed on site during mobile clinic			~60
	Other farm***	16	8	10	11
Equine*		0	5	17	not applicable
Poultry**		36 sets of 5-10	24 sets of 5-10	24 sets of 5-10	210 ^a
Rabbits		1 set of 5-10	2 sets of 5-10	2 sets of 5-10	12 ^b
Companion Animals/ Exotic	Dogs	129	86	103	106
	Cats	99	94	61	85
	NCA & wild animals	681	455	403	513

* due to hoist dysfunction and new necropsy hall difficulties, equine necropsies cannot be performed until repair has been done;
 ** some necropsies are also carried out during Ambulatory clinics; reported here: necropsies performed on groups of cadavers at the vet school even if cadavers were collected during ambulatory clinics: mainly chicken, hens, turkeys, ducks, guinea fowl, rarely quails, pheasants; *** lamas, dromedaries, deers.

a: 28*7.5; b: 1.6*7.5

7.1.3. Animal production

Indicate the availability of food-producing animals for the practical teaching of students: a) on the site of the institution; b) on other sites to which the institution has access.

- Semiology & propaedeutics: 2 bovines at the school. Ten cows are especially purchased for the A1 Physiology-Echography & A2 Reproduction-Semiology practicals. The cows are sold after these trainings.
- Cesarean training: 1 ewe for groups of 4 students (2 A3 + 2 A4); animals are monitored for 1 week, then euthanized and necropsied.
- Tutorials of reproduction at abattoirs: per group of 8 A3 students, 80 cows are available for rectal palpation, vaginoscopy, urethral catheterization, and post mortem examination of uterus.
- At Bernussou: 1 dairy herd, 1 beef cow herd, 1 swine breeding unit. These are used to study production systems and to teach basic medical acts, such as: injection, neutering, swine insemination, cow mechanical milking.

7.1.4. Food hygiene/Public health

Indicate the availability of farm animals and products of animal origin for the practical teaching of students in veterinary public health, food hygiene, inspection and technology.

All food hygiene, inspection and technology practical teaching is performed outside the school (cf. above). Moreover, due to the improvement of animal's sanitary status, there has been a significant decrease of cases useful for the teaching of veterinary inspection in abattoirs. This is why it is also taught with the help of a large set of slides illustrating cases which cannot be observed directly.

7.1.5. Consultations and patient flow services

7.1.5.1. Consultations

State: the number of weeks, in the course of the year, during which the clinics are open; the number of consultation days each week; the consultation hours.

The consultations times are

- For small animals: 46 weeks per year, from Monday to Friday, from 8:30 to 12:30 and 14:00 to 17:00. The emergency consultation is open 24/24 and 7/7 for 46 weeks.
- NCA consultation and Wild species emergency centre: 365 days per year, 24/24.
- Equines: 46 weeks per year, from Monday to Friday, from 8:00 to 12:00 and 14:00 to 17:00.
- Farm animals: almost no consultation (<10 per year). Mostly hospitalization. Service available on call from 8:00 to 20:00, 7 days a week, 47 weeks per year.

7.1.5.2. Patient flow

The number of animals to be stated are for all disciplines combined (medicine, surgery, reproduction, etc.). In Table 7.3 only animals coming into the Faculty should be included. Animals studied in practical teaching outside the Faculty should be entered in the section entitled "Ambulatory Clinic" (Table 7.4).

The term "consultation" refers to those patients which come in and go out during daily consultation hours. "Hospitalisation" refers to those patients which are retained in the clinic as "in patients" following presentation.

Table 7.3:
Number of cases: a) received for consultation, and b) hospitalised in the Faculty's clinics, in the past three years.

Species		Number of cases						average	
		2007-08		2008-09		2009-10			
		a	b	a	b	a	b		
Food-producing animals	Bovine		470		452		489		470
	Ovine, caprine		246		142		125		171
	Porcine				not applicable				
	Other farm animals		9		3		10		7
Poultry					not applicable				
Rabbits					not applicable				
Equines		227	140	268	150	253			346
Companion animal / exotics	Canine	8547		9027		9169		8914	
	Feline	4001	4618	5599	6134	5535	5044	5045	5265
	NCA & wild animals	1409	689	1639	786	1207	323	1418	599

7.1.6. Vehicles for animal transport

State the number and nature of the Faculty vehicles that can be used to bring sick animals to the clinics.

Three cattle transporting vehicles for all animals hospitalized and/or necropsied (~100 000 km/year)

7.1.7. On-call emergency service

Outline what emergency service is available (full-time, 24 h service, ON-CALL or 8-22 h duty) and discriminate for species.

An emergency service is available full time for small animals all year round except for 2 weeks at Christmas and 4 weeks in August.

An all year emergency service is also available for wild animals as a contract from the Office de la Chasse.

There is no emergency service for production animals. In case of emergency, the service can be called as mentioned above (cf. § 7.1.5.1). At present, the equine clinic is not opened to emergencies because of the unavailability of an equine surgical theatre. Equine emergencies are therefore strictly limited to medical cases. A partnership has been set up, for the equine internship program, with the region's biggest equine private hospital, where interns rotate in surgery and for emergencies. A project for an equine surgical unit will be put together in 2010 in view of opening the equine clinic to surgical emergencies.

7.1.8. On farm teaching and outside patient care

7.1.8.1 Ambulatory (mobile) clinic

The Ambulatory (Mobile) Clinic is defined as a unit which provides on-call outside services to farms and other institutions and is generally operated on a commercial basis. State the number of hours of operation per week. Is emergency service provided 24 h/day, 365 days per year? What is the degree of student participation (include duties)?

Cf. above, service to farms is only a herd medicine service; there is no commercial mobile clinic providing services to local breeders. Emergency service is not frequent in food producing animals (cf. 7.1.7).

State the number, the type and the seating capacity of the vehicles used to transport students working in the ambulatory (mobile) clinic.

Four 9-seat vehicles and a 5-seat vehicle, shared by all external teachings, are mainly used for clinical training in animal production.

State the approximate number of sick animals (specify cattle, swine, equine, poultry or small ruminants, others) seen by the ambulatory clinic per year during the past three years (Table 7.4).

Not applicable, as this is only population medicine.

State the average number of visits in a year made by the ambulatory clinic to farms and other institutions.

Teaching is based on population medicine. The numbers indicated in Table 7.4 reflect the number of farms and producing units, not the number of individual animals. Note that in 2009-10, 16 herd visits (8+8) were done via visio conference (including Viet-Nam).

Table 7.4a:
Number of cases seen by the Ambulatory (mobile clinics) in the past three years.

Species		Number of cases*			Average
		2007-08	2008-09	2009-10	
Food producing animals	Cattle	74	90	77	80
	Small ruminants	16	30	25	24
	Pigs	66	24	22	37
	Other farm animals	0	0	0	0
Poultry (n° of flocks)		50	16	36	34
Rabbits (n° of producing units)		2	2	2	2
Equine		not applicable			
Other		0	0	0	0

* number of cases is number of farms not of individual cases

7.1.8.2. Other on farm services and outside teaching

If there is no on duty Ambulatory (Mobile) clinic, a Faculty may have defined contracts with farms or other institutions to allow for outside teaching and patient care. Similarly, a Faculty may provide herd-health services. Please indicate if and to what extent this applies to your Faculty. If applicable please provide no. of patients seen on outside teaching

Not applicable to animal production at ENVT (with a few rare exceptions).

Table 7.4b:
Number of patients seen on outside teaching in the past three years.

Species		Number of cases			average
		2007-08	2008-09	2009-10	
Food producing animals	Cattle				
	Small ruminants				
	Pigs				
	Other farm animals				
Equine		not applicable, all animals seen on site			
Other		0	0	0	0

7.1.9. Other information

Indicate any notable additional outside sources of material for clinical training purposes, such as animal charities, animals awaiting slaughter, etc.

There are no other sources of material available for clinical training.

Indicate how the level of clinical service that is offered by the Faculty (in small companion animals, equines and production animals) compares with outside practices in terms of facilities, hours of service, equipment, expertise, responsiveness, etc.

- Production animals: very few consultations, almost no obstetrics but a greater number of hospitalizations than in practices. Especially, activity and expertise in population medicine. Many necropsies and no selling of pharmaceutical drugs.
- Equines: a particular expertise is offered to outside practices in the following areas with adequate equipment: Ophthalmology, Internal medicine (oncology, cardiology, full aspects of endoscopy).
- Small animals: With the exception of tomodesitometry and MRI, the teaching hospital possesses most of the equipment and instruments necessary for advanced diagnosis and treatment in internal medicine (i.e. endoscopy, ultrasonography), surgery (i.e. coelioscopy), and ophthalmology (i.e. ocular electrophysiology, diode laser). The teaching hospital is open every day, 24 hours a day and for more than 46 weeks a year. Some of the facilities will be rebuilt in the near future (with a priority given to emergency and intensive care areas as well as imaging facilities).
- NCA: continuous service 24 hours a day and 365 days per year, with better expertise and staffing than outside practices.

Provide an indication in percentage terms of the proportion of cases that are primary (i.e. first opinion), and referrals (provide a breakdown by species, if helpful). If the Faculty has a particular aim or policy as regards this mix, describe it.

- Production animals: more than 95% of the cases are referred (hospitalized and herd cases).
- Equines: 90% of ophthalmology, oncology and internal medicine cases are referred cases. Oncology represents almost 50% of the internal medicine cases.
- Small animals: Clinical activities like the consultations for "Disease prevention" (prophylactic procedures) and "General practice" work only with primary cases. For the other "more specialized" activities the percentage of referred cases varies between 40 to 80%, from day to day and from one activity to another.
- NCA: approximately 10% of cases are referred for hospitalization.

Indicate what areas of clinical specialisation are covered, and the extent of the coverage (for example, a veterinarian with a particular specialisation may see patients in the clinic for one day a week, 3 afternoons, etc.).

- Production animals: activities are organized by species or group of species (ruminants, pig/poultry) and by discipline: pathology, internal medicine, theriogenology, udder health, and separating individual and population medicine.
- Equines: specialists are working full week under appointments.
- Small animals: There are specialized consultations in Ophthalmology, Dermatology, Cardiology, Orthopaedic surgery, Oncology.
- NCA: ophthalmology and surgery are referred internally

Indicate the relationship the Faculty has with outside practitioners (in small companion animals, equines and production animals) in terms of matters such as referral work, providing diagnostic or advisory services for private practitioners, practitioners participating in teaching, holiday or 'seeing practice' work for students, feedback on the level of clinical training. Describe (if applicable) any other relationships with outside organisations that are routinely used to provide students with training (in particular practical training) in other clinical subjects (e.g. pathology work, interaction with state veterinary work).

Relationships between the ENVT and local practitioners are mainly based on personal contacts between one teacher and one practitioner. This leads to referral of cases or calls for advice.

- Production animals:
 - Very dense network of practitioners, which are the basis of the referral system used for the ambulatory clinic.
 - Telephone consultations.
 - Some laboratory diagnosis based on specialized analysis performed specifically in ENVT's research units.
 - Continuing education via the Journées Bovines Toulousaines.
 - Relationship with outside organisations: GTV (Groupements Techniques Vétérinaires) & GDS (Groupements de défense sanitaire) for the organisation of external training and the content of practical training.
- Equines: mainly based on the expertise and personal relationships of the equine clinicians.
- Small animals: The small animal clinicians work with a large network of veterinarians from the Toulouse suburbs and more largely the Midi-Pyrénées area. Some diagnostic services are provided to these practitioners (*i.e.* ultrasonography, endoscopy ..), and some of them participate in the following clinical activities: dental care, behaviour and oncology. Teachers from the small animal clinic strongly contribute to the continuing education of post-graduate through short courses (*e.g.* ultrasonography, cardiology), several-week long diplomas (*i.e.* orthopaedic surgery, clinical laboratory, ophthalmology), and specialisation (see chapter 12).
- NCA: good relationships with outside practitioners; organization of continuous education (*e.g.* rabbit diseases)

Provide an outline of the administrative system(s) used for the patients, e.g. in terms of how case records are kept, how data are retrieved, whether systems are centralised, etc.

Two different systems are in use at the ENVT:

- Clovis for small animals, equines and NCAs. This system is common to small animal, equine and NCA clinics of all 4 French veterinary schools. It was first installed in 2001 and is regularly upgraded. It allows a complete retrieval of demographic information, case management, and administrative information (billing for example). It can also be used for retrospective studies.
- An "in-house" system (based on File maker) for ruminants. This system was first installed towards the end of the 1990s before implementation of Clovis system. It is a home-made product specially built and continuously upgraded to the specific needs of the ruminant clinics. It manages case and herd management, retrieval of statistical information, etc.

7.1.10. Ratios

Table 7.5:
Animals available for clinical training (in the clinics of the Faculty or seen through the Ambulatory clinic) as ratio to the number of students in last full year of clinical training*

R 11:	$\frac{\text{n}^\circ \text{ of students graduating annually}}{\text{n}^\circ \text{ of food producing animals seen at the faculty}}$	$= \frac{109}{648} = \frac{1}{5.94}$
R 12:	$\frac{\text{n}^\circ \text{ of students graduating annually}}{\text{n}^\circ \text{ of individual food animal consultations outside the faculty}}$	not applicable
R 13:	$\frac{\text{n}^\circ \text{ of students graduating annually}}{\text{n}^\circ \text{ of herd health visits}}$	$= \frac{109}{104} = \frac{1}{0.95}$
R 14:	$\frac{\text{n}^\circ \text{ of students graduating annually}}{\text{n}^\circ \text{ of equine cases}}$	$= \frac{109}{346} = \frac{1}{3.17}$
R 15:	$\frac{\text{n}^\circ \text{ of students graduating annually}}{\text{n}^\circ \text{ of poultry/rabbit cases}}$	not applicable
R 16:	$\frac{\text{n}^\circ \text{ of students graduating annually}}{\text{n}^\circ \text{ of companion animals seen at faculty}}$	$= \frac{109}{13959} = \frac{1}{128}$
R 17:	$\frac{\text{n}^\circ \text{ of students graduating annually}}{\text{Poultry(flocks)/rabbits (producing units) seen}}$	$= \frac{109}{36} = \frac{1}{0.33}$

* last full year of common curriculum, i.e. A4, n = 109 in 2009-10.

Table 7.6:
Animals available for necropsy

R 18:	$\frac{\text{n}^\circ \text{ of students graduating annually}}{\text{n}^\circ \text{ of necropsies food producing animals + equines}}$	$= \frac{109}{870} = \frac{1}{7.98}$
R 19:	$\frac{\text{n}^\circ \text{ of students graduating annually}}{\text{n}^\circ \text{ of necropsies poultry + rabbits}}$	$= \frac{109}{222} = \frac{1}{2.04}$
R 20:	$\frac{\text{n}^\circ \text{ of students graduating annually}}{\text{n}^\circ \text{ of necropsies companion animals}}$	$= \frac{109}{191} = \frac{1}{1.75}$

7.1.11. Other species

Indicate how the Faculty deals with fish and other food producing species

There is no specific teaching of fish diseases, but there is an Aquaculture module taught at Nantes veterinary school, which students can attend during their A5 year.

7.2. Comments

Feel free to comment on all data provided in this Chapter. Comment on major developments in the clinical services, now and in the near future. Comment on local conditions or circumstances that might influence the ratios in tables 7.5 and 7.6.

The new curriculum has led to a general re-organization of clinical teaching:

- In Small animals, decision was taken:
 - 1/ to lead students progressively from mostly normal healthy animals in A3 (preventive medicine) to diseased animals in A4 and a more intense “specialized” focus in A5.
 - 2/ according to the discipline, to organize a progressive training leading students to progressively acquire (controlled) autonomy in the management of cases.
 - 3/ to base clinical training on a hospital operating almost like a general veterinary practice & offering a wide range of recruitment from very basic to referred cases, thus the large number of cases seen each year.
- In Equines: an improvement of the number of equine cases can be expected with the recruitment of a surgeon specialized in this species at the end of 2010.
- Production animals: teaching is based on the following choices:
 - 1/ only population medicine for pig and poultry; individual and population medicine for ruminants only.
 - 2/ In population medicine, to integrate breeding techniques and medicine in all species either by a multidisciplinary team or by a specialist of a species (pig, poultry).
 - 3/ Progressive training from the individual to the population.
 - 4/ As the school is far from the main breeding regions and all cases cannot be seen within the school (obstetrics for instance), use is made of a network of practitioners (practical training in A4) with a list of cases to be observed and acts to be performed, and control of these activities by the school as a presentation of clinical cases by the students.

7.3. Suggestions

If the denominators in tables 7.5 and 7.6 for your Faculty are not meeting the range as indicated in Annex I, Supplement A, what can be done to improve these ratios?

There is no general plan to change the clinic's policy of case recruitment as these are considered to be sufficiently numerous to offer enough (and adequately varied) teaching material for undergraduates and post-graduate students.

Chapter 8 - Library and learning resources

8.1. Factual information

8.1.1. Library and other information technology services

Give a general description of the library/libraries of the Faculty/university that are available to students. Indicate how the library/libraries are managed (e.g. library committee). For each major library of the Faculty, please provide the following information, either in narrative or tabular form.

The school has a main, central library available to the students and staff of the school and of other Toulouse universities. Each unit also offers its own small library with a limited number of books and journals specifically chosen to meet the needs of the speciality.

The ENVT library is part of the Toulouse & Midi-Pyrénées (<http://archipel.univ-toulouse.fr/>) library network, which provides staff, researchers and students access to a wide range of scientific and medical journals; students have occasionally encountered difficulties to borrow books from external libraries, and this issue is currently being addressed.



Main library: - is this specific to the veterinary training establishment? - is this common to two or more establishments?

The main library is specific to the veterinary school. Its content is mostly orientated towards veterinary books and journals. It is not shared with another establishment but is open (after registration and payment of fees) to anyone wishing to consult or borrow the books and journals available.

Main library: - Full time equivalents of part time employees - Number of full-time employees

There are 3.4 FTE and an additional one for the technician in charge of IT equipment. Among these 4.4 FTE, 3 are full-time employees. Moreover, 2 instructors (students working 4 hours a week) help out at the reception desk from October to June.

Main library: - Number of journals received each year as hard copies, - Numbers of full access electronic journals,

The library receives 182 journals as hard copies; most of them in the veterinary field. Furthermore, electronic access is provided to 1922 journals via Science Direct and EBSCO (a comprehensive list of available journals is given on the library's web page : <http://www.envt.fr/Documentation/page65.php>). Some veterinary journals are also directly available from the school's website. Recent issues of the most frequently read veterinary journals are freely accessible as hard copies on shelves in the reading room.

Main library: - Availabilities for online literature search,

Access to the library's Electronic catalogue is provided:

- from anywhere using the Internet, which is the students' and teachers' preferred mean of access,
- from computer terminals available in the library or from the students' own computers using a Wi-Fi connexion .

Access to the following resources is also available:

- National catalogue of French universities libraries (SUDOC – Système Universitaire de DOcumentation; university system of documentation) which offers over 9 million references (<http://corail.sudoc.abes.fr/xslt/>).
- OATAO (Open Archive Toulouse Archive Ouverte): open archives system which is an open access repository that collects the work of Toulouse researchers and renders it freely available over the web where ever possible. It can include articles, book chapters, reports, conference papers, etc... (<http://oatao.univ-toulouse.fr/>).

Additionally, a member of the library staff is permanently available to help students access these resources.

Main library: - Availability of textbooks

The catalogue of the library is comprised of :

- 6380 books: 2877 are old books, mostly veterinary and medical. The others are recent books, 2600 of which are freely accessible. The most frequently consulted books are on shelves within the reading room.
- over 25000 theses, mostly French and European veterinary theses.

Main library: - Number of student reading places

The reading room is furnished with a number of wide tables that can accommodate an average of 70 people, however only 46 chairs are available. The number of electrical outlets is insufficient for the number of students who usually work with their own portable computers.

Main library: - Library opening hours

	Week-days	Week-ends
During term-time	Monday to Thursday : 8:30 – 12:00 & 13:00 – 18:00 Friday : 8:30 – 12:00 & 13:00 – 17:00	Closed
During vacations	Monday to Thursday: 9:00 – 12:00 & 13:00 – 17:00 Friday : 9:00 – 12:00 & 13:00 – 16:00	Closed 1 week at Christmas and in August

Main library: - Indicate how the facilities are used by students

The library is used by students as both documentation center and study room as such rooms are not available on the campus.

Subsidiary libraries of the Faculty : - Please describe the subsidiary (e.g. Departmental) libraries of the Faculty, and arrangements for student access. - Indicate whether the main library holds a list of individual books of the subsidiary libraries.

There are small libraries in all teaching and research units of the school. They have a limited number of books and journals related to their "speciality". These are intended for the specific and daily use of the teachers and research staff of these units but may also be used by the students needing to research a subject. Other students have access upon request, but this opportunity is rarely used.

These specific resources are insufficiently referenced by the main library, whose staff however does not hesitate to ask for information when they think a book or journal may be found in one of the units' bookcases.

Subsidiary libraries of the Faculty : - Describe any other information services and how are they are supported and how student access is regulated

Access to all electronic resources of the library is provided to students and staff over the Internet/Intranet. 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.

8.2. Comments

Over the past ten years, the increasing availability of electronic resources has greatly impacted the role of the library:

- Except when searching for older resources and some journals which cannot be accessed via electronic resources, teachers and research staff have almost ceased to use the library,
- Students are also trained at using electronic databases and have free access to many on-line journals.

Please comment on the adequacy of the books and accessible journals

Book resources are good and sufficient except for the most recent period when severe budget restrictions have limited acquisition of more recent textbooks. Often, only one copy is available and some of the most recent textbooks have not been purchased. Budget for 2010 should permit the acquisition of about 80 books.

However, veterinary students have free electronic access to a very large range of scientific journals through the ScienceDirect system and the school's direct subscription to most major veterinary journals. Unfortunately, on-line access to some journals or series is not available due to cost, even for very frequently used resources such as "Veterinary Clinics of North America".

Please comment on the adequacy of the opening hours

Students seem generally satisfied with the library's opening hours, except for the daily lunch time closing period; however, the limited personnel resources do not allow longer opening hours.

Please comment on the adequacy of the provision of reading spaces and support personnel.

Reading space would be sufficient if the reading room was reserved to that purpose but the room also serves as study room and student work area and space becomes limited, more especially during examination periods.

An effort is being made to ensure that one person is available at all time in the reading room during opening hours to help students. However, working staff is not sufficient to allow for extended opening hours.

Please comment on the Faculty's provision of IT-facilities

Information Technology facilities are well provided for at the ENVT ; Web access is available to all students and staff across the campus via a Wi-Fi connexion. This Wi-Fi network is not available from the "Cit  Universitaire", i.e. the apartments in which many students reside because these are private settings. However, they have a connection through the Internet.

A copying machine with possibility to make free pdf copies is available in the reading room; hard copies can also be made using pre-paid cards. Although it is not possible to have a strict control, users have to conform with copyright laws which prohibit the copy of more than 30% of a journal and 10% of a book.

Please comment on the Faculty's approach to self-learning, and on the further developments in this area.

Self-learning documents are now easily available on the school's various teaching websites and it is likely that library's role (CDs, DVDs) will continue to decrease in this area. An effort is made to develop teaching material on the Moodle platform with the help of the newly recruited person (cf. § 5.1.1).

8.3. Suggestions

To avoid use of the library as a working room by individuals or groups of students preparing group-work, the school should provide a limited number of small rooms for such work. A first step has been taken with the transformation of one of the library's side rooms into a room reserved for group work. Additional funding of the library should be attributed to:

- the purchase of at least 2 copies of all recent major textbooks used by the students,
- access to more electronic resources, especially in the area of veterinary medicine,
- upgrading of the outdated computers of the reading room,
- upgrading of the school's intranet servers to facilitate students' access and uploading of documents.

Chapter 9 - Student admission and enrolment

9.1. Undergraduate courses

9.1.1. Undergraduate student numbers

The undergraduate curriculum can be successfully completed in a minimum of 5 years (cf. Chapter 4)

MNY = 5 years

Table 9.1.
Undergraduate student composition in year prior to visitation (2009-2010)

Total number of undergraduate students*	464
Total number of male students	126 (27.2%)
Total number of female students	338 (72.8%)
Foreign students - from EU countries	3
- from non-EU countries	1

* Due to curriculum changes, there was no A5 training year in 2009-10,

9.1.2. Student admission

State the minimum admission requirements.

There are currently 4 ways to be admitted as a student in one of the 4 French Veterinary schools. The four schools share the same recruiting system and selection process (excepted for Concours D) with Schools of Engineers in Agronomy. Details of the recruiting system can be found at <http://www.concours-agro-veto.net/>: see Table 9.1.1.

The number of seats offered in the 4 pathways is determined every year by the MAAP; the number of seats allocated in each school is identical and decided upon by the Conseil des Directeurs (Council of Deans). Students can choose the school they wish to enter depending on the rank they obtain at the selection examination (Concours).

There are no other possibilities of admission, except for:

- students in Erasmus projects, as the selection process does not apply to them. Erasmus students are selected based on their personal dossier for one semester or one year under the responsibility of the DEP. The number of Erasmus students ranges from 10 to 20 per year.
- foreign students admitted "sur titres" (i.e. according to the diplomas of their country). This possibility is granted to a limited number of students based on appraisal of the application file sent by the French Embassy in their country and decision by the Council of the Deans of the veterinary schools (cf. Annexe 9.2).

Table 9.1.1.

The 4 types of selection examinations for the enrollment of veterinary students; prerequisites and modalities of each concours; numbers refer to the total number of seats available at the 2009 recruiting session for all four French veterinary schools

	Number	Prerequisites	Form of examination
Concours A	376	Baccalauréat	Programme BPSCT (Annex 9.1). Written tests for admissibility, Oral tests for admission
Concours B	44	DEUG ⁶ in Life Sciences (2 years in a University)	Written tests for admissibility, Oral tests for admission
Concours C	36	BTS, BTSA, DUT ⁷ with relevant options (2 years in schools or University)	Written tests for admissibility, Oral tests for admission
Concours D	4	Doctorate ⁸ in Medicine, Pharmacy, Dentistry, Science; Master 2, or equivalent	Dossier and motivation letter for admissibility; interview with jury for admission

Indicate whether there is a limit to the number of students admitted each year. Describe how the number of government-funded student places is determined.

All student places are government funded. The number of students admitted each year by the 4 concours is determined by the MAAP for each concours and per school.

Describe whether students applying for and/or starting veterinary training have an equal or very variable knowledge base in scientific disciplines from their previous studies.

Scientific knowledge of most students is more than sufficient; it is usually a little higher in students selected by Concours A. Moreover, all students have solid bases in mathematics, physics, chemistry, biochemistry, vegetal and animal biology, which are the subjects of the Concours A, B & C or which were part of their previous studies for Concours D.

The official programmes of the 4 Concours are given in Annex 9.3.

Outline any changes foreseen in the number of students admitted annually. If applicable, describe how the Faculty plans to adjust to these changes.

Number of admitted students and selection criteria will probably change in the coming years.

- number: unconfirmed information indicates an increase of 20 to 30 students in each of the Veterinary Schools;

- criteria for admission: no information available at the present time.

It is currently too early for the school to plan adaptations as future changes are not yet known and plans to adjust cannot be made.

⁶ DEUG = Diplôme d'Etudes Universitaires Générales (Diploma of General University Studies) has been created in the 1970s and kept in the LMD reform as an intermediate diploma before the licence. It is validated by passing the 4 first semesters post baccalauréat.

⁷ BTS = Brevet de Technicien Supérieur (Diploma of Technician), BTSA = Brevet de Technicien Supérieur Agricole (Diploma of Technician in Agriculture), DUT = Diplôme Universitaire de Technologie (University Diploma in Technology)

⁸ In Medicine, Pharmacy and Dentistry, doctorates are not equivalent to Doctorates in Science

Table 9.2:
Intake of veterinary students in the past five years

Year	Number applying for admission	Number admitted	
		"standard" intake	other entry mode
2009		119	0
2008		114	1***
2007	Not applicable *	109	0
2006		108	0
2005		123**	0

* The number of students applying specifically for ENVT cannot be known as the applicants rate their choice at national level and are recruited in one school or another according to their rank at the national selection examination; ** At change point between the new and new-new-curriculum, students were enrolled over a 2 year period to accommodate for the increased number of years spent in classe préparatoire, i.e. 55+68 students in 2005 and 2004, respectively; *** Student admitted "sur titres".

In table 9.2, students admitted for a temporary period such as Erasmus students are not reported.

9.1.3. Student flow

Table 9.3:
Student flow and total number of undergraduate veterinary students

Table 9.3 establishes to what extent students make progress in their studies. To this end, we look at the students who were admitted initially and which year they have reached after the MNY (see page 63) has elapsed.

Number of students present after admitted year 2006 – 108 admitted		n° of additional students
1 st year	0	0
2 nd year	1*	0
3 rd year	0	0
4 th year	105**	0
5 th year (MNY)	0	0
>5 th year	0	0
Number undergraduate veterinary students		-

* one student with medical problems was authorized to retake his first and second years and interrupt his studies for a year 2009-10; ** two students were authorized to interrupt their studies for one year 2009-10

During the transitional period between the new- and new-new-cursus, students following the new cursus were able to complete a 4-year cursus ending June 2009. Students following the "new-new" cursus with its 5 years MNY will complete their cursus in June 2011 only.

A more relevant view of the success/failure rate can be based on:

- the number of admissions in 2006 (see Table 9.3)
- the success rate of students having completed the "new cursus" in June 2009, i.e. admitted in 2004: 122 graduated out of 123 recruited.

Table 9.4:
Number of students graduating annually over the past five years

Year	Number graduating
2010	0, not applicable due to change of curriculum
2009	108+14*
2008	95
2007	120
2006	106
average	111

* Because of the curriculum change, the MAAP authorized students completing their studies in 4 years in 2009 to spend one more year as students; 14 chose this option.

The graduating reference used in this table is a student who completed and validated the whole course (8 semesters up to 2009, according to the curriculum changes) but did not necessarily pass his/her Doctorat. See above, no student could complete his veterinary studies in 2010.

Table 9.5:
Average duration of studies (distribution of students in 2009-2010)

Duration of attendance	number
Year 0	117 (expected September 2010)
Year 1	117
Year 2	116
Year 3	108
Year 4	109
Year 5	13*
Year 6	1*

* see legend of preceding table

Describe the requirements (in terms of completing subjects and examinations) for progression to a subsequent year of the course.

The essential rule to progress from one year to the next is to acquire all the credits of the year. Progress from A1 to A2 or from A3 to A4 is still possible for students who have failed only one module (they have to retake it during A2/A4 year respectively). As indicated § 5.1.3, the possibility to progress from one year to the following with one failed module will be extended to progression from A2 to A3 starting in 2010 –decision validated by the school's Board.

Describe the academic circumstances under which the Faculty would oblige students to leave the course.

Students are obliged to leave the course if they fail:

- to obtain all (A1+A2) credits within a maximum of 2 years in each of these years
- to obtain all (A3+A4) credits within a maximum of 2 years in each of these years
- to obtain the A5 credits (but not necessarily the Doctorate thesis) within 2 years

9.2. Comments

Comment on standard of the students starting the course

There is a current debate about selection conditions of veterinary students in France. This debate is mainly based on the observed fact that most graduates chose to practice away from rural areas and it is hoped that a diversification of recruiting conditions may influence this trend. The analysis has been detailed in a special report written by Dr Guéné for the Ministry of Agriculture (Annex 9.4). A committee of experts headed by Dr Vallat made proposals (Annex 1.5.), which have not yet led to decisions by the MAAP. The high level of the different Concours in Basic Sciences may tend to select students on their learning abilities rather than on true motivation to become a veterinarian; it may also eliminate students who would have become very good veterinary professionals.

The majority of the school's teachers believe that the new Concours A requiring a minimum of 2 years in Classe Préparatoire is a waste of time as a large part of the subjects taught have no or very little relevance for veterinary training. However, students who enter veterinary studies are able to rapidly and efficiently acquire new knowledge and skills.

Comment on the ability of the Faculty to satisfactorily decide the number of students it can accept. Comment on the factors that determine the number of students admitted.

The School has no power to decide on the number of students it can accept as this is a political decision and decided each year by the MAAP. In 2010, a total of 117 students will be admitted at the ENVV (A: 96; B: 11; C: 9; D: 1).

Comment on the adequacy of the facilities and teaching programme to train the existing number of students.

The facilities for training of students are mostly adequate, even if some sectors are aging, especially in the clinics. There is also an insufficient number of small rooms for group work with or without teachers. This situation will probably become more critical as the number of students increases as expected in the coming years.

Comment on the progress made by students in their studies, and the Faculty's ability to ensure that satisfactory progress is maintained. Comment on the percentage of students that will eventually graduate.

Apart for examinations, the School has no procedure to ensure that students progress satisfactorily. However, most of the students pass their module examinations and the only question is whether these examinations are an efficient method of evaluating students' abilities.

Almost 100% of students entering the school graduate, usually within the 5 year minimum. This is probably the result of the very selective recruiting procedure and also a general attitude of the teaching staff, which is to support students and help them when needed.

9.3. Suggestions

If you are not satisfied with the situation, please state in order of importance any suggestions that you may have concerning this Chapter if you feel unhappy about: The number of students admitted; The drop-out percentage and reasons, if known; The average duration of studies; Other aspects.

The majority of teachers is rather satisfied with the students progress along the 5 years of training. However, considering the lack of facilities and teaching staff of some disciplines, they are also concerned that the number of students may become critical if it is notably increased in the near future.

		Budgeted posts (FTE)		Non-budgeted posts (FTE)		Total (FTE)	
		VS	NVS	VS	NVS	VS	NVS
1 Academic staff							
	Teaching staff (total FTE	73.63	7.8	10.51	0	84.14	7.8
	Research staff (total FTE)	0	1.7	0.5	2.15	0.5	3.85
	Others (English teachers) (FTE)	0	2	0	0	0	2
	Total FTE	73.63	11.5	11.01	2.15	84.64	13.65
	Total FTE (VS+NVS)	98.29					
	FTE providing last year teaching	not applicable					
2 Support staff							
a)	Responsible for the care and treatment of animals	0	11.4	0	6.45	0	17.85
b)	Responsible for the preparation of practical and clinical teaching	0	8.2	0	1.9	0	10.1
c)	Responsible for administration, general services, maintenance, etc.	1	69.1	0	25.2	1	94.3
d)	Engaged in research work	0	10.6	0	0.7	0	11.3
e)	Other: Laboratory technicians Riding instructors	0	0.6	0	2.17	0	2.77
	Total support staff	1	99.9	0	36.42	136.32	
Total staff						247.66	

Table 10.2 a:
Allocation of academic (veterinary surgeon and non veterinary surgeon) teaching staff – expressed as FTE – to the various departments

Department name	Professor		MC + AERC		Others		Total
	VS	NVS	VS	NVS	VS	NVS	
Sciences biologiques et fonctionnelles	7	2	6	2	3.24	2	22.24
Elevage et produits	13	1.8	14	1	4.48	0	33.28
Sciences cliniques animaux de compagnie	6	0	17.5	1	12.92	0	38.42
Total	26	3.8	37.5	4	20.64	2	93.94

Table 10.2 b:
Allocation of support staff – expressed as FTE –to the various departments

Department name	Support Staff		
	Technical (bde)	Animal carers (a)	Administrative (c)
Sciences biologiques et fonctionnelles	4.67	3.4	6.4
Elevage et produits	14.8	7.6	11.1
Sciences cliniques animaux de compagnie	4.7	6.85	11.5

Tab. 10.3:
Ratios students*/staff

R1:	N°total FTE in veterinary training	=	93.94	=	1
	N°undergraduate veterinary students	=	554	=	5.90
R 2:	N°total FTE at Faculty	=	not relevant		
	N°undergraduate students at Faculty	=			
R 3:	N°total VS FTE in veterinary training	=	84.14	=	1
	N°undergraduate veterinary students	=	554	=	6.58
R 4:	N°total VS FTE in veterinary training	=	84.14	=	1
	N°students graduating annually	=	110	=	1.31
R 4b:	N°total FTE academic staff in veterinary training	=	111.34	=	1
	N°total FTE support staff in veterinary training	=	136.32	=	1.22

* students 2009-2010 A1 to A4 + no estimation of A5 in 2009-10 = 95% A4 ; total n = 554

Outline how the allocation of staff to the Faculty is determined.

Allocation of staff is made mostly by the MAAP and partly by the School
In the school, the Dean decides the staff's allocation depending on the Department's Chairs and the CE's recommendations.

Indicate whether there are difficulties in recruiting or retaining staff.

There are many difficulties in recruiting staff:

- academic staff: the curriculum of young aspiring “enseignant-chercheurs” to the position of professor is long and difficult. At present, it is likely that a notable portion of younger staff will not become professors. Moreover, junior staff salaries are low compared to those found in industry or private practices, which considerably limits the number of gifted applicants to academic positions, and more especially in specialized areas (e.g. diagnostic imaging, equine medicine or surgery).
- support staff: there are few budgeted positions available (see below). As for employees with temporary contracts and low levels of qualification (rangs B & C), French law dictates that their worktime must be equal to or less than 70% of FTE and forbids them for filling the 30% remaining with a secondary job. These staff members are generally paid a percentage of the SMIC (French minimum wage), a very low income, which turns off candidates and, in some cases, limits recruitment to unqualified people.

There are no major difficulties retaining staff and most academic and support staff members are stable.

Describe (if appropriate) any relevant trends or changes in staff levels or the ability to fill vacancies over the past decade.

Trends for academic and support staff differ:

- Academic staff: the number of positions available and the ratio of Professors to Assistant-Professors tend to remain stable. The main change has been the creation of Praticien Hospitalier with, currently 2 positions budgeted by the Ministry and one by the School. Another change is the increasing difficulty to recruit teaching staff in small animal clinical disciplines or specialized areas such as pig production or pathology.
- Support staff: the number of support staff budgeted by the Ministry has steadily decreased over recent years. Some re-qualification procedures have also reduced the number of positions available (re-qualification is the merger of 2 low-budget positions into a single one with a higher qualification). This has led to an increase in the number of staff paid on the school's budget and a correspondingly heavy load on the budget.

Indicate whether it is easy to employ additional staff from service income (e.g. from revenues of clinical or diagnostic work).

It is easy to hire staff from service income on temporary contracts. However, French law dictates that such staff can only be employed at 0.7 FTE and that after 6 years, they must be either discharged or employed on a stable position.

Describe the regulations governing outside work, including consultation and private practice, by staff working at the establishment.

There is a special disposition allowing “enseignants-chercheurs” to be employed by industry or to have a private practice as long as they perform their “obligations de service”, i.e. minimum amount of work stated by law. This has been confirmed in a Circulaire by Ministry of Budget in 2008 (Annex 10.4). However, most of the EC's external activities are either teaching in other schools/faculties or research work for external laboratories. In many cases, teachers are not paid for these external activities.

Describe the possibilities and financial provisions for the academic staff to: a) attend scientific meetings;

The possibility to attend scientific meetings is widely used by most academic staff and there is no or very little restriction by the administration. The limitation is mostly financial as there is no or little school funding for travelling, accommodation and registration: budgeting has thus to come from the department's or unit's budget.

Describe the possibilities and financial provisions for the academic staff to: b) go on a sabbatical leave.

Sabbatical leave is a disposition made available by law (article 15 of décret 2009-1030, Annex 10.1) to all “enseignants-chercheurs” (EC) for a duration of 6 to 12 months at a six year interval. During this leave, EC keep their salaries. This possibility is almost never used.

10.2. Comments

Comment on the numbers of personnel in the various categories.

More than the number of teaching staff, the number of support and administrative staff is often perceived as a limiting and discouraging factor in some sectors. For example:

- Progressive decrease of administrative staff and increase of administrative and accounting tasks in the teaching units has progressively led teachers to spend much time on these tasks for which they are not trained, which they perform reluctantly and often poorly, thus causing many little operating difficulties.
- Decrease of support staff in the clinics has led to let many consumables (syringes, needles, bandages, etc.) being made available on a self-service basis with the corresponding wastes and financial losses.

Comment on the salary levels, especially those of academic staff in relation to the level of income in the private sector.

In some sectors, the salaries are notably lower than in the private sector, especially for junior staff at the beginning of their career. For example, assistant professors and professors start their careers with net monthly salary of ~1850 € and ~2450 €, respectively. This is a limiting factor for many Diplomates of the different European colleges of Specialists who are also dissuaded by the lack of flexibility of recruiting rules and administrative progression.

Comment on the ease or difficulty of recruiting and retaining personnel.

Salary is not the only difficulty for hiring teaching staff: French University rules impose rigid recruiting criteria: age limit (about <30 for junior positions), PhD Thesis. Moreover, the beginning of the career is especially difficult as an HDR (habilitation à diriger des recherches) - a heavy research workload - is requested to become a professor and, in clinical sciences, preferably a Board certification when available.

For support and administrative staff, low salaries and part-time positions for people on school contracts are a severe limitation to the number of people willing to work for the school, and on the availability of skilled professionals.

Comment on the percentage of veterinarians in the academic staff.

Most academic staff members are veterinarians, which is a prerequisite in all clinical sciences because they practice veterinary medicine and surgery.

In all other sectors, recruitment is open to University graduates of all disciplines: participation of other specialists as teaching members in very specific positions is analyzed as a strong point, especially because they have adapted both their teaching and their research to the objectives and the teams of the school and have kept the basic scientific attitude of their original training and the network of cooperation they had. The unit of Biomathematics is a very good example of such a success. A notable part of the teachers in basic Sciences are Veterinary graduates, who have also gained speciality training at the University, and thus are also able to teach these sciences mostly with an applied focus, a “veterinary/animal health and production purpose”, rather than for the academic knowledge of the science.

10.3. Suggestions

In this period of budget restriction, it is unlikely that new positions will be offered by the MAAP. Thus efforts have started and will continue to be put on:

- reallocation of support staff resources according to the school's objectives,
- a better support of teaching staff to limit the time they spend on administrative tasks,
- efforts to attract junior teaching staff by the quality of the research performed and the possibility to be trained for Board certification by Diplomates of the EBVS Colleges.

Chapter 11 - Continuing education

11.1. Factual information

11.1.1. Organization of compulsory Continuing Education

In France, the Code Rural (Annex 11.1; section 1, § R 242-33X) has made continuing education compulsory for veterinary practitioners. This compulsory continuing education is organized by the CNVFCC (Conseil National Vétérinaire de la Formation Continue et Complémentaire; <http://www.cnvfcc.veterinaire.fr/>), which qualifies people and organizations to give CE and grants the corresponding CE credits.

The time of CE of each practitioner is quantified as CFC_{ECTS} (Crédits de Formation Continue ECTS) (Annex 11.2). Each practitioner should get 10 CFC_{ECTS} over 5 years, at least 50% of which should be acquired by attending lectures or conferences. ENVT has qualified as an organisation entitled to validate CE courses in France and to deliver the corresponding CFC_{ECTS}.

The ENVT started offering continuing education more than 25 years ago and some of the CE courses are therefore not organized by the CE Bureau but by the teaching units themselves. The CE Bureau comprises 1.3 persons ; there is a newly installed (2009) CE Advisory Board headed by the Dean and Vice Dean made up of 2 teachers from each Department + a financial controller. The function of this Advisory Board is to define the objectives and general policy of the ENVT regarding CE before submitting them to the Dean for approval by the Board (CA).

11.1.2. Courses organized by or with ENVT

There are various types of continuing education courses organized by ENVT or with the participation of its teaching staff:

- CE courses are organized by ENVT on a regular basis (generally yearly) and are the most important ones. Others are organized depending on opportunities arising. Most of them lead to a diploma (see Tables 11.1 & 11.2).
- CE sessions are organized by professional associations at the ENVT site or outside with the participation of ENVT's teaching staff. Some examples of such organizations are : AFVAC (small animal practitioners), SNGTV (large animal practitioners), or industrial companies (drugs, pet food).

11.1.2.1. CES (Certificat d'enseignement spécialisé – Certificate for advanced education)

These are nationally recognized courses, created by the MAAP. They require a minimum of 120 hrs of theoretical and practical training and an external practical training period of at least 180 hours. Teaching is done by the school's staff and external lecturers. The 3 CES offered are listed Table 11.1

Table 11.1.
National continuing education diplomas delivered by ENVT

	Nb students/yr	Nb hours/student	Year of creation	Diploma
Animal hematology and clinical biochemistry	30	120 + ≥180	1984	CES
Small animal osteo- articular traumatology	25	204	1986	CES
Ophthalmology	25	157	1981	CES

11.1.2.2. Other CE organized by ENVT and leading to a diploma

ENVT delivers two other kinds of diplomas

- “School diplomas”, for teaching courses presented by a group of teachers, validated by the Conseil des Enseignants and the Deans’ Committee,
- Certificates of success, for other teaching courses.

Table 11.2.
Other continuing education diplomas delivered by ENVT

	Nb hours per student	Diploma	Number of students		
			2007	2008	2009
Necropsy, sampling, histology of laboratory animals	31	“School diploma”	13	9	12
Normal and abnormal embryology of laboratory animals	120	“School diploma”	-	-	7
Nutrition and feeding of dairy cows	40	“School diploma”	35	23	25
Population pharmacokinetics level 1	40	“School diploma”	-	-	6
Use and protection of laboratory animals level 1	80	“School diploma” ⁹	75	57	34
Use and protection of laboratory animals level 2	40	“School diploma”	42	38	23
Veterinary expertise	115	“School diploma”	-	18	32
Veterinary management	130	“School diploma”	18	21	24
Animal health and epidemiological monitoring in southern countries	80	Master	3	1	-
Experimental toxicology: evaluation of human risks	50	Certificate in a Master course	-	1	1

⁹ FELASA accredited C level diploma (Federation of European Laboratory Animal Science Associations)

Table 11.2. (continued)
Other continuing education diplomas delivered by ENVT

	Nb hours per student	Diploma	Number of students		
			2007	2008	2009
Acupuncture	20	Certificate	-	6	6
Anesthesia	27.5	Certificate	-	9	-
Canine ultrasonography	8	Certificate	15	-	5
Cytology	42.5	Certificate	-	12	7
Dangerous dogs: the expert report	4	Certificate	23	23	-
Evaluations of dogs dangerousness	16	Certificate	-	80	111
Fertility and behaviour of laboratory animals	40	Certificate	6	-	-
French course on rabbit breeding		Certificate	-	6	18
Internal Medicine Small animals (CEAV)	240	Certificate	45	-	-
Intestinal surgery	7.5	Certificate	19	-	
Methods for macroscopic examination of rat and mouse	16	Certificate	20	9	10
Milk production	7	Certificate	33	85	68
Ophthalmology course (ESAVS)	75	Certificate	-	28	31
Neuroanatomy of laboratory animals	64	Certificate	6	10	11
Necropsy, sampling and histopathology « mouse models of human cancer »	42.5	Certificate	-	-	12
Pharmacokinetics for non-specialists	11	Certificate	50	12	-
Reproduction		Certificate	-	10	-
Restraint, treatments, and sampling in laboratory animals	16	Certificate	-	10	10
Training for members of ethics committees	13	Certificate	-	18	7
Ultrasonography of the cow's genital system	8	Certificate	23	10	9
Wound treatment	12.5	Certificate	20	18	-
Zoonoses	6	Certificate	60	-	-

11.1.2.3. CE for non-veterinarians

ENVT is registered as a CE organization in the Midi-Pyrénées region, and is thus allowed to offer teaching courses intended for all audiences. For instance, courses on animal experimentation are open to animal technicians and courses of pharmacokinetics are open to doctors, pharmacists, pharmaceutical industry engineers. Masters in which ENVT is involved are also open to continuous education.

11.2. Comments

Continuing education is thought to be one of the school's strong points. The courses offered are regularly attended by many veterinarians, mostly practitioners who often have to wait for more than 3 years before being enrolled in a CES. This is perceived as a source of prestige, acknowledging the expertise of some teachers in certain professional fields; it is also a source of income for the school and for the departments organizing these courses (in 2009, for instance, the total income generated by CE courses reached 872 k€, 25% of which is retained by the school as administrative fees; the remaining 75% belongs to the organizing department/unit which uses it to cover the cost of running the courses and according to its needs).

Continuing education is one of the missions set by the MAAP for veterinary teachers (Article 3 of Décret 2009-1030, Annex 10.1). However, CE is a time-consuming activity which may come in the way of initial training and research; this is especially important for junior teachers and teachers in clinical sciences (last year, the equivalent of 5.3 FTEs was spent in continuing education by the ENVT's teaching staff, of which almost 4 FTEs in the SCACSL department).

Until recently, the CE availability relied principally on the expertise of some teachers, who offered to organize a given course and were supported by the school, but there was no specific policy. A scientific and pedagogic committee was created in 2009 with the aim of defining a coordinated policy for CE at ENVT.

11.3. Suggestions

As the number of courses increases and the need for CE credits for practitioners is starting to be settled, there is a need :

- to define a real policy for CE at the school's level. It is expected to be the first result of the new CE Advisory Board.
- for new teaching facilities to welcome and train participants; this could be achieved by a better sharing of existing possibilities and/or the creation of new teaching rooms. There is also a need to improve some of the teaching rooms (for instance with air conditioning, which is much needed during summer in the south of France).

New forms of CE are tentatively starting to be installed. The Moodle platform is being tested with this in mind. It would facilitate some forms of CE for practitioners who could then avoid to "waste" time and money on travel and accommodation. However, these new TICE are not adapted to some of the practical aspects of CE.

Chapter 12 – Postgraduate education

Post-graduate training in French veterinary schools has been lagging behind for a long time. Internship programmes were first organized in the late 1990s and are now fully effective in small animals, production animals and equines.

Residency programmes have suffered from a political will to promote a specifically “French specialisation”. This specialisation was created in 1996 (Annexes 12.1& 12.2) and until 2008 the recognition of EBVS diplomates as French specialists was not possible (Annexes 12.3 & 12.4).

However, some of the school’s teachers have been very active at European level and a number of them are, as charter diplomats, “founding fathers” of European colleges. Nowadays, specifically French specialization diplomas have mostly been abandoned but some “French specialties” remain and are still offered to some students misled into taking these courses.

12.1. Factual information

At the beginning of 2010 the school had:

- 23 Diplomates of European Boards of Specialists and 2 French specialists as part of the teaching staff.
- 8 EBVS certified training programmes.

12.1.1. Clinical speciality training (Interns & Residents)

Table 12.1:
Clinical specialty training

Clinical discipline	Nbr. of Interns 2009-10	Nbr. of Residents	Diploma/title anticipated
Internships			
Small animals	10		Diplôme
Production animals	2		national
Equines	4		d'internat
Residencies			
Surgery ECVS		2	Specialist in
Animal nutrition ECVN		1	Specialist in
Pathology ECVP		4	Specialist in
Bovine health ECBHM		1	Specialist in
Clinical pathology ECVCP		1	Specialist in
Equine medicine ECEIM		1	Specialist in
Pharmacology & therapeutics ECVPT		1	Specialist in
Food hygiene DESV		1	Specialist in
Dermatology ECVD		1	Specialist in

Indicate whether students involved in this training receive a grant or a salary

Interns do not receive a salary as this has been forbidden by the MAAP.

Some residents receive a salary as employees of the ENVT as permanent teaching staff and contract employees (chargés de consultation or industry); others only benefit from more limited grants.

Indicate any programmes that are certified by the European Board of Veterinary Specializations.

See Table 12.1, EBVS certified programmes indicated

12.1.2. Research education programmes

There are no PhD programmes at ENVT because ENVT is not a University, thus is not allowed by French law to deliver PhDs. However, many laboratories are habilitated for doctoral studies (see chapter 13).

There are 8 Master programmes which are co-organized by ENVT and partners of the University:

- M2P Pharmacologie et métiers du médicament (A Bousquet-Melou)
- M2R Epidémiologie clinique (D Concordet)
- M2P Productions animales en région chaude (P Jacquet)
- M1R+M2R Agrofood chain (C Petit)
- M2R Innovation pharmacologique (A Bousquet-Melou)
- M2P Vectorologie-vaccinologie (S Bertagnoli)
- M2R Immunologie et maladies Infectieuses (S Bertagnoli)
- M2R Elaboration de la qualité et de la sécurité des aliments (V Gayraud)

Table 12.2:
Number of research students enrolled in different programmes

Type of degree	Full time	Part time	Duration
	Not relevant		

Please indicate when and where and whether the students require a grant or salary

Students in Master training do not receive a salary.

12.2. Comments

Comment on the number of postgraduate diplomas/titles awarded annually.

As indicated above, specialization is still recent in France and at the school. Therefore the flow of Diplomates is very low with the exception of Pathologists, who started a French speciality in the early 1990s and have delivered to this day 26 diplomas *i.e.* approximately 1.5 Diplome per year. Five of these have also successfully passed the ECVF examination.

Involvement of teaching staff in research programmes started more than 40 years ago and is a constant activity of the school. However, due to the administrative regulations ruling French Universities, veterinary schools are not yet authorized to create their own programmes of Doctoral studies and must look for co-habilitations (cf. chapter 13).

Comment on the percentage of veterinarians participating in postgraduate research training programmes.

For 2010-2011, 8 students finishing the A4 year indicated their wish to take a Master2 course, 4 of them in masters co-organized by ENVT. This is a relatively high number (~7% of students getting the

DEFV), especially compared to the number close to zero of students declaring at the beginning of their studies that they wish to go into research.

12.3. Suggestions

Regarding specialisation: to continue to reinforce the training programmes currently available and to support initiatives of creation of new residency programmes.

Regarding research programmes, see Chapter 13.

Chapter 13 - Research

Research is organized in research units co-directed by the National Agronomic Research Institute (INRA-ENVT) or managed directly (Unités Propres sur Soutien de Programme - UPSP). Research units contain one to several research teams (the latter being the most common set-up) and each team is made up of full-time researchers, ENVV academic personnel and technical staff.

The school has currently five research units lead by INRA-ENVV, two of which are fully onto the campus. The remaining three are on campus research teams belonging to an external unit. One UPSP and one professor from an external INRA unit are also present.

About 60% of the academic staff works in the Units, the others (mostly clinicians) carry out clinical research without formal organization but with frequent collaborations, including with the research units.

Research activities are administratively supervised by a scientific delegate chosen among the academic or research senior staff and a scientific council giving proper advices about scientific policies (Annex 13.1).

13.1. Factual information

Indicate the involvement of undergraduate students in research, including the time spent, percentage of students involved and outcome required.

The “Lecture scientifique” module in year A1 (2x2 hours of lectures, plus one 3-hour session with a librarian of the institution, in groups) initiates all students to the analysis of scientific articles, bibliometric parameters and the referees system in scientific publications. In addition, all students are exposed to research literature and results through many lectures and some practicals, e.g. English/Toxicology in which they have to analyse a research paper and, depending on the year, either write a report or present it orally; in English in both cases.

A two-day forum presenting to the students the various activities a veterinarian can develop as a professional is organized during year A1. 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.

Furthermore, a special session of about three hours is also offered to give interested students more detailed information regarding the Masters they need to apply for in Toulouse if they wish to follow a research course and enter a PhD program. All professors responsible for or participating in Masters are present at this session, where they give a short explanatory talk and then answer the students' questions. In 2009-10, a group of about 50 students (all years mixed up) attended these presentations.

Students are encouraged to do their end of the second year (A2) compulsory external training (called “mini-projet”) in a research laboratory, including the school's laboratories. This short internship is validated by a written report (similar to a classical scientific publication, though simpler) and an oral presentation. This is for the students a very good opportunity to verify their interest in research work.

Moreover, students can undertake an experimental thesis for their Doctorate in Veterinary Medicine at the end of their curriculum. Depending on years, an average of 20 to 30% of our students choose this possibility.

For students wishing to pursue a scientific career, administrative dispositions regulating veterinary studies state that an external training period can be done, during the six first semesters in a research body (The students wishing to pursue a scientific career can benefit from special arrangements and a personalised organisation of their studies to facilitate their scientific training (order dated April 20th, 2007, Annex 4.1). They are allowed to continue their studies after the first 3 years

- by preparing a Master's degree outside the veterinary school during the fourth year. The order states : «Pour les étudiants s'orientant vers le domaine professionnel de la recherche, ces deux derniers semestres [A4 = S9-S10] peuvent être remplacés par l'inscription, le suivi et la validation des deux derniers semestres d'un diplôme national de master ».
 - by taking the "Research" or "Industry" track during their fifth year.
- This opportunity has not been used by A4 students and 8 A5 students will spend the 2010-11 academic year in the research and industry tracks.

13.2. Comments

Scientific activities are a strong point of the school, and this seems to have an effect on the professional orientations of the students. According to a poll made in A1 after entrance, only about 2% of students indicate that a research career is their first objective, and another 2% that it may be their second choice. This ratio has to be compared to the 7% of students choosing to follow a Master curriculum for their A5 year (cf. §12.2). However, there has been a strong decline in research vocations in the last ten years. An activity that used to be regarded as prestigious and rewarding is now considered by many students as too demanding, too difficult to access and poorly paid. This devaluation is observed among the citizens as well, and is an important challenge that we have to deal with, especially in the training of our students as science provides the robust methods of reasoning they will need.

The possibilities offered to train veterinary students for research are a very good opportunity. However, it is mostly considered that this should not be done before the end of the common track. Students will not be encouraged by the staff of the school to prepare a Master degree outside the Veterinary School for their A4 year and it is likely that students will not take it up, but the option cannot be forbidden.

Comment on the opportunities for students to participate in active research work.

There are three possibilities for the students to take part in active research work:

- During compulsory internship with a "mini projet" carried out in the institution or outside the institution.
- During an additional internship carried out for personal interest and after approval by the staff, in the school itself or outside.
- During preparation of an experimental Doctoral thesis.

13.3. Suggestions

Will students be given more opportunity to participate in research activities? If so, how will this be done?

Possibilities for increasing the number of students for short internships in research are very slim because of the research staff being already almost saturated. This would obviously simply impair their research potential.

To stimulate and increase students' interest and participation in research activities, a project has recently been suggested by Dr Christine Citti, co-director of the Research Unity UMR 1225 (Scientific delegate from mid 2010). This consists in offering the opportunities to students to organize by themselves a series of scientific seminars given by high-skilled, international and national scientists in fields related to research in veterinary medicine (genetics, infectious diseases, surgery...). The institution would support the logistic for travel and accommodation of the guest speaker. It would also provide conference rooms and help the students with setting up the seminar topics and invitation. This has been previously done in other European countries and proved to be very efficient and rewarding for the students.

Finally, there is a will to increase the activities related to small-animal clinical research. This would give in turn more opportunities for students to do project-oriented research in an applied sector which is attractive for a majority of them.