



Self-Evaluation Report EAEVE Visitation Toulouse, 2020

### Foreword and acknowledgments

This self-evaluation report (SER) has been prepared in accordance with the instructions of European System of Evaluation of Veterinary Training (ESEVT)-Manual of Standard Operating Procedure (SOP)-30 May 2019.

It results from the collaboration and efforts of all the Veterinary School members, including support staff, academic staff and students.

We warmly thank all the contributors for their willingness to provide factual data, and specific information on education, research, veterinary hospital service and, generally speaking, on the functionning of our educational system and our school.

We are also grateful to the staff members who worked tirelessly to better prepare the School site and organise the expert visit.

We have strived to provide an accurate and useful basis for the evaluation work that will be carried out in March by the visiting expert team in Toulouse.

Pr Pierre Sans, Dean of Ecole Nationale Vétérinaire de Toulouse (ENVT).

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SER 2020 – Introduction

### Introduction



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The "Ecole Nationale Vétérinaire de Toulouse" (ENVT), was created in 1828 in the centre of the town and rebuilt at its present location at the beginning of the 1960s, opening for the first classes in October 1964. It is one of the four French veterinary schools (ENVs) which have a common recruiting system and curriculum but which are independent for the organization of the studies.

In Toulouse, the veterinary education has already been examined in 2010 by the EAEVE. The visiting team made some suggestions which have served as a basis for amendments in the following years and have granted the school full approval.

Moreover, all aspects of ENVT (teaching, research, management, etc.) have been evaluated by the HCERES (Haut Conseil de l'évaluation de la Recherche et de l'Enseignement Supérieur – High Council for the Evaluation of Research and Higher Education, an independent administrative authority, member the European Association for Quality Assurance in Higher Education) in 2015. A new evaluation cycle began in November 2019 for the research units and the institution visitation is planned on March 17-18, 2020.

The whole school has been involved in the preparation of this self-evaluation report and we are grateful to all for their contributions. All members of this school have been informed of the visit and its objectives, and are available to answer any questions. We are looking forward to benefiting from the expertise of the visiting team composed of colleagues from other European veterinary schools and faculties.

## 1 : Objectives, Organisation and Quality Assurance Policy



Ecole Nationale Vétérinaire de Toulouse

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1.1 The Establishment must have as its main objective the provision, in agreement with the EU Directives and ESG recommendations, of adequate, ethical, research-based, evidencebased veterinary training that enables the new graduate to perform as a veterinarian capable of entering all commonly recognised branches of the veterinary profession and to be aware of the importance of lifelong learning.

### The Establishment must develop and follow its mission statement which must embrace all the ESEVT standards.

The "Ecole Nationale Vétérinaire de Toulouse" (ENVT) is a public administrative establishment operating under the supervision of the Ministry of Agriculture and Food (MAA), like the other three ENVs: ENVA, VetAgroSup and Oniris. As an agricultural higher education institution, its main missions are education and research. Article L123-1 of the French *Code de l'Education* states that the national schools are also under the co-supervision of the Ministry in charge of Higher Education and Research (MESR), for consistency and a better coordination of public policies.

The ENVT falls within the provisions of the *Code rural et de la pêche maritime*, whose article L812-1 defines the missions of higher education institutions under the supervision of the MAA as follows:

«[... The public agricultural education:

1. provides training in agriculture, forestry, aquaculture and fisheries, processing and marketing of these products, food industry, agriculture-related industries, health, vegetal and animal protection, hygiene, food quality and safety, planning, development, management and protection of rural lands, forests, water resources, natural environment and landscape;

2. participates in the development of science through basic, applied and clinical research;

3. conducts research, innovation and engineering programmes in the fields of education and training;

4. contributes, in collaboration with relevant agencies, to scientific and technical intelligence, technological innovation and promotion of research results;

5. participates in the dissemination of scientific and technical information;

6. contributes to the development of international scientific, technical and educational cooperation. »

In addition, the scope of the curriculum taught by veterinary schools is defined in article R 812-5:

« The education provided by the national veterinary schools focuses on:

- 1. Health, hygiene, medicine, pharmacy and animal surgery;
- 2. Husbandry and livestock economy;
- 3. Production and control of animal products and animal by-products;

4. The relationship between animals, humans and their environment and their impact on the public health.

National veterinary schools take part in research in these areas. ]»

The veterinary training is harmonised at European level by Directive 2005/36/EC and implemented in France by <u>a professional and diploma reference system</u>. The <u>new version</u> of the veterinary competency framework, see appendix Stand\_1.1\_App001) of this reference system will be enforced in the 1<sup>st</sup> and 2<sup>nd</sup> years of the curriculum in 2021 and will be deployed in the following

years for future classes The <u>decree of 20<sup>th</sup> April 2007</u>, completed by the decree n°2002-482 dated from the 8<sup>th</sup> of April 2002 and books II and VIII of the *Code Rural et de la Pêche Maritime*, organizes the curriculum for future veterinarians in the four ENVs.

It is a professionalizing and global training based on two constant axes: clinical training in all its disciplinary sectors, whether medical or not, and high-level scientific training, particularly in all sectors of modern biology. Training is progressive, combining knowledge and skills in the acquisition of the logic required for the diagnosis/prognosis/treatment/prevention process: from healthy animals (the first two years are dedicated to preclinical and paraclinical sciences) to sick animals (the following three years are dedicated to clinical sciences).

This approach is in line with the World Organization for Animal helath (OIE) recommendations concerning the minimum competences (Day One Competences)<sup>1</sup> that a veterinary graduate must possess and the standards set by the European System of Evaluation of Veterinary Training (ESEVT) in the Manual of Standard Operating Procedure 2019 (EAEVE - FVE)<sup>2</sup>.

Veterinarians, in their multiple missions, are at the crossroads of animal health, human health and environmental protection (Global Health). To meet these major challenges, ENVT, as a higher education and veterinary research institution, strives to train adaptable and enterprising students likely to integrate the labour market. Newly graduates are expected to meet the societal challenges of the territories in which they work and to become stakeholders of their development.

**1.2** The Establishment must be part of a university or a higher education institution providing training recognised as being of an equivalent level and formally recognised as such in the respective country.

The person responsible for the veterinary curriculum and the person(s) responsible for the professional, ethical, and academic affairs of the Veterinary Teaching Hospital (VTH) must hold a veterinary degree.

The decision-making process of the Establishment must allow implementation of its strategic plan and of a cohesive study programme, in compliance with the ESEVT standards.

#### Organisation

Details of the Establishment:

Official name: Ecole Nationale Vétérinaire de Toulouse, ENVT

Address: 23 chemin des Capelles - BP 87614 - 31 076 - Toulouse Cedex 3 - France

Phone number: +33 (0)5 61 19 38 00

Website: www.envt.fr

e-mail: direction@envt.fr

Dean: Pr Pierre Sans

ENVT is a Higher education and research establishment under the supervision of the MAA through one of its four departments named *Direction générale de l'enseignement et de la Recherche* (DGER), in charge of teaching and research.

The main missions of DGER are as follows:

<sup>&</sup>lt;sup>1</sup> OIE recommendations on the Competencies of graduating veterinarians ('Day 1 graduates') to assure National Veterinary Services of quality)

<sup>&</sup>lt;sup>2</sup> European System of Evaluation of Veterinary Training (ESEVT)- Manual of Standard Operating Procedure 2019 (EAEVE – FVE)

- Defining policies for higher education, research and innovation;
- Organizing and supervising the governance of the 12 higher education establishments, including ENVT.

An intermediate consulting committee is the Council of the Deans of French National Veterinary Schools (CDENV), which acts as an advisory body to the DGER in all matters concerning the 4 ENVs.

As the other three ENVs, ENVT does not belong to any university and is an independent school (as are other major higher education engineering and business schools).

As members of the French Agronomy, Veterinary and Forest Institute (IAVFF or Agreenium), the ENVs have decided to develop cooperation among them and to strengthen their relationships with universities. At the local level, ENVT is also a founding member the federative University of Toulouse (UFTMIP).

The Dean of the School is appointed by the MAA for five years, after a formal consultation of the Board of directors of the institution. This is a statutory position that is confirmed by ministerial decree. The Dean is in charge of building his/her own organization at the School and he/she is assisted by a General Secretary and a vice-dean or a deputy (optional). He/she is responsible for running the school and representing it.

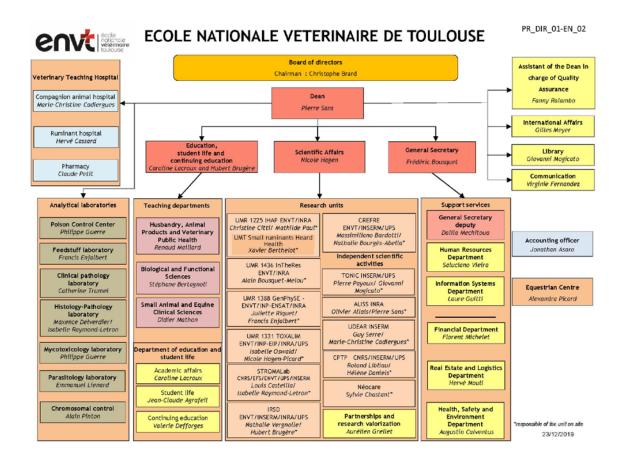
His/her main responsibilities are:

- preparation and execution of the decisions made by the Board of Directors;
- authority on all staff;
- granting delegation of responsibilities;
- running of the school: organization and financial management.

The Dean nominates:

- the Vice-Dean (optional),
- the General Secretary,
- the Head of Education, student life and continuing education,
- the Head of the Scientific affairs;
- the Head of International affairs,
- the Heads of the Teaching departments.

Hereafter is the organizational chart of ENVT:



\* UMR: Joint Research Unit

See appendix Stand\_1.2\_App002

The institution is organized in teaching departments, research units and technical support platforms for teaching or research activities, such as the Veterinary Teaching Hospital (VTH), which includes the small animal hospital, the equine hospital, the exotic and wildlife hospital and ruminant.

All the functional organization charts of the establishment are available (Charts).

There are three teaching departments in charge of organizing educational programmes:

- Department of Biological and Functional Sciences (SBF);
- Department of Small Animal and Equine Clinical Sciences (SCACSL);
- Department of Husbandry, Animal Products and Veterinary Public Health (EP-SPV).

Each is headed by a teaching department manager elected for 3 years by the academics, members of the Department in question. The teaching department manager and his council are in charge of defining and coordinating:

- Teaching contents and methods;
- All activities involving the teaching department in question;
- Internal and external communication of the teaching department;
- Administrative and financial management of the department.

Article R 812-3 of the *Code Rural et de la Pêche Maritime* provides that:

"Public agricultural higher education institutions are directed by a board of directors. The Dean and the executive committee have to implement the strategic decisions taken by this council.

There are different boards, councils and committees defined by the above-mentioned regulatory framework and by internal regulations. They include a scientific council, an academic council and an education and student life council who carry out advisory activities".

**-The Board of Directors** is made up of 36 members, representatives of the academic staff (elected), support staff (elected), students (elected), and external recognized and knowledgeable personalities appointed by the MAA). The veterinary profession is represented in the external bodies. The President and Vice-president of the Board of Directors are elected for 5 years from the qualified people. Three meetings a year at least are scheduled.

- The **Scientific council** is made up of 19 members, elected representatives from staff, from students involved in research training, and external people nominated by the Board of Directors. Its role is to make suggestions on strategic initiatives on research. Two or three meetings a year at least are scheduled.

- The **Academic council** is made up of 40 members, elected representatives of the academic staff. Its role is to ensure proper application of the curriculum and to validate the results of the examination sessions. It gives advisory opinions regarding establishment diplomas, national diplomas awards, the organization of departments and the characteristics of lecturer positions. Two or three meetings a year at least are held. The academic council can also be called for meeting whenever thought necessary.

- The **Education and student life council (CEVE)** is made up of 20 elected members from academic and support staff as well as student representatives. The Board of Directors nominates external members (e.g. representatives of the veterinary profession). Its role is to make propositions on any issue related to student life, including programmes and student evaluation. Two or three meetings a year at least are held.

In addition to these regulatory councils, the governance is based on:

- The **Executive committee** (**BURDIR**) is made up of the top managers appointed by the Dean (General secretary, Heads of Education, student life and continuing education, Head of Scientific affairs, the person responsible of the compagnion animal hospital, the assistant of the Dean in charge of the quality assurance). Its role is to assist the Dean in taking strategic decisions and in managing day-to-day affairs. It meets every week.

- The **Steering committee (CODIR)** is made up of members of the executive committee, the department managers, the communication manager and representatives of the research poles. Its role is to assist the executive committee in the creation of projects, preparation of councils and committees, and the execution of actions decided by the Board of Directors. It meets twice a month. Its opinion is sought in particular on post openings and budget preparation. The CODIR is a space for sharing information between the different bodies of the School. The proceedings of the CODIR's meetings are communicated to all the employees of the School. Depending on the subjects on the agenda, its composition may be extended to include project managers.

- the **Scientific facilitation group** for the promotion of Research (**GASPAR**) deals with the scientific animation of the establishment. Its members are the Head of Scientific affairs and the representatives of the research groups involving School staff on site or outside.

- the **Training committee** or **COFOR** brings together the head of the Education and student life department the heads of the three teaching departments and deals with initial training and educational programmes.

-The **Technical committee** is composed of 10 members, 8 of them are elected representatives of the staff. Its role is to guarantee good working conditions for ENVT's staff with a focus on career development and welfare.

**-The Hygiene and Safety committee (CHSCT)** is made up of 19 members, 8 of them are elected representatives of the staff. Its role is to guarantee health and safety of ENVT's staff. The Technical committee and The Hygiene and Safety committee work hand in hand on certain issues, and are due to merge in 2020.

-The Ethics committee for animal experimentation and clinical research is a shared structure with our partners (INRA). It is made up of academic staff (veterinarians or non-veterinarians, clinicians or non-clinicians), specialists and representatives from animal protection bodies. Its role is to express opinions allowing the Ministry of Higher Education and Research to issue project authorizations for studies using animals for scientific purposes (according to the Directive 2010/63/ EU of September 22, 2010). It can also express non-regulatory moral opinions on request for clinical, breeding or other projects related to the use of animals.

All the board, consils and committees are listed in appendix Stand\_1.2\_A003.

In addition to the above-mentioned bodies, the management and animation of a number of strategic missions has been entrusted (by mission letter) to academics from the school. These areas are: simulation for education and self-learning, continuing education, ethics committee, digital education, cultural heritage. Project managers are invited to join the management committees (CODIR and BURDIR) related to these themes.

Additionnally, the School is managing various structuring topics within thematic commissions (information systems commission (COSI), documentation commission, radiation protection commission) in which support services and representatives of academics and students sit.

New strategic bodies have been identified and will be set up during the 2019-2020 academic year: the biosafety/biosecurity commission in charge of managing the strategic axes of biosecurity for all sectors or activities of the establishment (in relation with the CHSCT) and the Communication commission which will be the executive body of ENVT's communication plan.

Pr Caroline Lacroux, DVM, PhD, professor of veterinary pathology, is responsible for the veterinary curriculum ad Head of Education and Student Life.

Pr Marie-Christine Cadiergues, DVM, PhD, ECVD dip, professor of veterinary dermatology, is responsible for the professionnal, ethical, and academic affairs of the compagnion animals veterinary teaching hospital (CHUVAC).

Dr Hervé Cassard, DVM, PhD, is responsible for the professionnal, ethical, and academic affairs of the ruminants teaching hospital.

1.3 The Establishment must have a strategic plan, which includes a SWOT analysis of its current activities, a list of objectives, and an operating plan with a timeframe and

#### indicators for its implementation.

In 2017, ENVT has adopted a 2017-2021 <u>strategic plan</u> approved by the Board of Directors. This is the framework within which the institution pursues its multi-year strategy. This project involves all of its structures and missions, and identifies priority actions to be implemented in order to achieve the aims the school has set for itself. It was the basis for negotiations with the MAA for the contract of objectives and performance (COP) signed for the period 2014-2018 extended to 2019.

The choice was not to structure it around missions (research, education, other missions), but to opt for a transversal approach consistent with the nature of the training and research activities of the school. The school project aims at decompartmentalizing services and structures.

This project is structured around 3 axes:

- excellence at the heart of an attractive and recognized establishment;
- an open and interconnected (network-based) institution;
- a collective solidarity for an exemplary establishment.

To ensure the implementation of this project and its coherence, the establishment relies on quality management as a methodological tool. Objectives and actions have been set by the institution's authorities. Their monitoring is the object of an annual report to the board of directors.

A management seminar was held in January 2019 to mobilize new members of the Steering committee around the project. A revision of the SWOT (see appendix Stand\_1.3\_App004) and a modified operational plan led to the redefinition of the steering committee's role and the assignment of new members.

The new Dean, appointed in November 2019, has decided to work in the continuity of this strategic plan.

1.4 The Establishment must have a policy and associated written procedures for the assurance of the quality and standards of its programmes and awards. It must also commit itself explicitly to the development of a culture which recognises the importance of quality, and quality assurance, within their Establishment. To achieve this, the Establishment must develop and implement a strategy for the continuous enhancement of quality. The development and implementation of the Establishment's strategy must include a role for students and other stakeholders, both internal and external, and the strategy must have a formal status and be publicly available.

Managerial practices are based on a "quality management" approach, hence the decision was taken to make it a specific methodological axis of the school project.

In 2017, the Dean reaffirmed this commitment in its <u>quality policy statement</u> and in 2018 and 2019, the quality department was strengthened in order to make the approach a structuring axis for the establishment (SQUAT chart page 9 of <u>the organization charts of the establishment</u>).

In its last evaluation (2015), the High Council for the Evaluation of Research and Higher Education (HCERES) had praised the efforts made by the establishment to deploy the "brick by brick" quality approach. Since 2017, this quality approach has evolved into a continuous enhancement of existing processes in the establishment. To this end, a process mapping (see appendix Stand\_1.4\_App005) and training of process pilots was adopted with the aim at implementing quality assurance as a political management tool.

Thus, during the management seminar of January 17, 2019–focusing on the review of the school project–, a self-evaluation work was undertaken, resulting in a review of objectives and with the objective to set up a more efficient management.

From an organizational point of view, quality approach is now one of the pillars of the school's running. Many procedures have been formalized Quality Manangement System (QMS). A pragmatic approach has been implemented with the implication of users: assessment and transversal analysis of the needs are now systematically carried out, formalization of the processes requested has been facilitated by the quality department and satisfaction is measured after completion of any process. Hundred staff, academics and students took part to a quality seminar with collaborative workshops on the theme of quality management on 9 November 2017 (quality).

Following this event, a collective called TEPAQUAP composed of staff and students was created in 2018 in order to implement actions chosen by the community in 2017 ("creation of a convivial space, drawing up of a manager/managee charter, definition of a methodology for internal evaluations in order to ensure continuous improvement of activities").

This group is responsible for collecting the needs and proposals emanating from the community, for evaluating certain professional practices, and for submitting to the CODIR improvement actions proposed by collaborative working groups.

The promotion of the quality approach is also supported by the deployment of managerial techniques such as facilitation through collective intelligence and facilitation workshops with the help of collaborative tools.

Quality approach is now rooted in several sectors and activities of ENVT, especially in research activities:

- UMR 1225 IHAP, UMR 1331 TOXALIM and UMR 1436 INTHERES research units comply with INRA quality standards;

- UMR 1388 GenPhySE/chromosome control platform complies with ISO 9001 methodology;

- the central medical biology laboratory is accredited by the ECVCP (European College of Veterinary Clinical Pathology);

- the Experimental and Comparative Histopathology Laboratory (LabHPEC) is GLP accredited (Good Laboratory Practices). It is the unique accredited academic laboratory in France for this discipline;

- the Lifelong training service is referenced in the French DataDock system (quality label);

- the VTH is involved in an ISO 9000 quality approach.

Finally, the ENVT is a member of several quality associations enabling work in a network of continuous improvement, regulatory watch, and innovation. At european level it is a member of the RAQ (RAQ Research Quality Association) and at the national level of the SOFAQ (SOciété Française d'Assurance Qualité). At the regional level, it takes part in the work of quality clubs of higher education establishments in the former Occitania region (QEES club) and professional veterinary organizations (Qualitevet) whose outputs are useful in the fields of education and research.

**1.5** The Establishment must provide evidence that it interacts with its stakeholders and the wider society. Such public information must be clear, objective and readily accessible; the information must include up-to-date information about the study programme, views

and employment destinations of past students as well as the profile of the current student population.

#### The Establishment's website must mention the ESEVT Establishment's status and its last Self Evaluation Report and Visitation Report must be easily available for the public.

ENVT has a website (<u>www.envt.fr</u>) on which all information accessible to the general public is communicated. It includes the strategic plan (link) and the presentation of its research and teaching activities.

All types of educational resources are made available to students on a dedicated Moodle platform (Moodle) or, in some cases, via web pages when communication of the information to a wider audience is required.

In terms of continuing education, the ENVT's offer is available directly on our website (<u>Catalogue</u>). The main targets are veterinary practitioners, industry executives or researchers

ENVT has also developed its digital strategy by joining several social networks that target different audiences.

The profile of the student population is described (see appendix Stand\_1.5\_App006) at the beginning of the academic year, during presentations of the school during external meetings or at the ENVT general assembly.

The web page of the Alumni and Friends of ENVT association (AEAENVT) is also hosted by ENVT's website (Alumni). This association, in close cooperation with ENVT, organizes a yearly meeting (1.5 day) devoted to 1st year students aiming to present the diversity of veterinary activities, with professional testimonials.

A web page on occupational integration linked to the Demographic Atlas of the Veterinary Profession (<u>Atlas</u>) has yet to be created. The school provides data for the demographic atlas and the Dean is member of the group in charge of the yearly release of the atlas.

1.6 The Establishment must monitor and periodically review its activities, both quantitative and qualitative, to ensure that they achieve the objectives set for them and respond to the needs of students and society. The Establishment must make public how this analysis of information has been utilised in the further development of its activities and provide evidence as to the involvement of both students and staff in the provision, analysis and implementation of such data.

Any action planned or taken as a result of this data analysis must be communicated to all those concerned.

The actions and indicators of the contract of objectives and performance (COP) are reviewed annually during the strategic interview between MAA (DGER) and ENVT. The Strategic plan, prepared by the way of a collaborative method, covers a fixed period of 4 or 5 years. After this period, an assessment will be conducted. In order to monitor the objectives of the project, a series of deadlines and indicators were defined for each action and will be measured regularly. In addition, specific measures concern certain missions:

- regarding training, evaluation of teaching by students was made mandatory (see 5.1.4).

- as far as research or international policy are concerned, specific indicators were established by the MAA, and are measured annually.

For the implementation of the strategic project and its follow-up, it was decided to rely on the above-mentioned committees–GASPAR, COFOR, CODIR–in order to guarantee its appropriation by all the components of the establishment.

Finally, not only is our institution evaluated by the EAEVE, but also at national level by the High council for evaluation of research and higher education (HCERES), every 5 years, like any other higher education and research institution.

# 1.7 The Establishment must undergo external review through the ESEVT on a cyclical basis. Evidence must be provided of such external evaluation with the assurance that the progress made since the last ESEVT evaluation was linked to a continuous quality assurance process.

The previous EAEVE assessment was conducted from Dec. 6 to Dec. 10, 2010 and concluded with a conditional approval due to one Category 1 deficiency:

- Lack of appropriate equine surgery facilities and equipment and staff – Category 1 deficiency.

Besides, several remarks were made on the report:

- Need of a better communication and clarification of chain of command,
- Benefit from all pools of strengths between the 4 ENVs,
- Analysis cost-benefit value of time devoted to continuing education at the expense of initial training and research,
- Assignment of a large animal isolation unit closer to the clinical facilities,
- Enhancement of teaching of bio-safety-security within the entire curriculum (porcine production excepted),
- Strenghtening of specialization on the College level (anaesthesia services for example)
- Introducing a student logbook listing gestures and procedures necessary to fulfil 1st dayskills requirements.

ENVT has initiated a work to rectify the major deficiency and to improve the situation. The findings of the EAEVE were first analysed and an improvement plan was undertaken: the construction of the equine surgery facilities was decided on and funded. The structure of the equine team was changed. The former quality manager and the previous Dean decided to strengthen the quality policy (cf. chapter 1.4). An interim report was sent in June 2014 to inform the ECOVE about the changes made and to describe the new situation.

A follow-up visit took place on 27 October 2014 and the establishment was approved on 12 January 2015.

#### Comments

Since the last evaluation, the ENVT has undergone many changes: governance has been improved through a better definition of the roles of internal bodies. In addition, the ENVT's identity has been strengthened through the adoption of a new visual identity and a more active communication policy. New facilities (emergency/critical care) were opened to improve customer service and students' teaching.

ENVT as a whole is in the process of transforming its professional practices and infrastructures and has initiated the process of modernization. The new Dean, appointed in 2019, has oriented his project in this direction in a context of great societal evolution and changing veterinary profession.

To succeed in this metamorphosis, ENVT needs resources to analyse these processes and to implement a continuous improvement policy in all its activities.

Although the establishment does not claim an ISO 9000 or 9001 certification, many activities now wish to be part of a continuous improvement process, with the aim of obtaining this label.

#### Suggestions for improvement

Processes and procedures will be implemented to meet internal quality assurance standards and guidelines in higher education institutions. Following the recent creation of a quality department (SQUAT), a network of quality contact persons will be soon set up in the different sectors of ENVT.

To improve efficiency, digitalization will be promoted. ENVT has recently hired one person in charge of dematerialization of procedures to change our practices. Moreover, we plan to promote users' feedbacks for all our activities and to encourage them to make suggestions.



SER 2020 – Finances

### 2: Finances



#### Ecole Nationale Vétérinaire de Toulouse

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2.1 Finances must be demonstrably adequate to sustain the requirements for the Establishment to meet its mission and to achieve its objectives for education, research and services. The description must include both expenditures (separated into personnel costs, operating costs, maintenance costs and equipment) and revenues (separated into public funding, tuition fees, services, research grants and other sources).

ENVT is a public administrative institution independent and separate from a university. It has its own budget, which is set up every year and covers the period 1 January to 31 December of year N. In order to build this budget, a management consultation is organized in late summer of year N-1 including all the resource centre managers of the institution's various activities: initial veterinary training, continuing training, clinical activities, research, management and general services detailed in the budget architecture (see appendix Stand 2.1\_App001). During the management consultation, the managers report their needs in terms of budget for year N+1 to the institution's financial department.

Budgetary trade-offs are made by the Executive Committee and presented to the Steering Committee in early autumn.

Under the coordination of the Secretary General, the Financial Department subsequently examines the technical construction of the budget, the regulatory bases laid down in Decree No 2012-1246 of 7 November 2012 on public budgetary and accounting management implemented within ENVT since 2015. The aim of this step is to guarantee the sincerity and overall budgetary balance of ENVT's budget in order to allow the financing of operating, investment and payroll expenses. The specificity of ENVT's budget is that the salaries of civil servants are directly covered by the Ministry of Agriculture and Food (MAA). Only the salaries of the school's publicly-funded contractual staff are taken care of by the school's budget.

This initial budget is the subject of an amending budget known as the "technical amending budget" at the end of the year, which makes it possible to adjust the estimated revenues and expenditures to the actual budget implementation during the first 10 months of the year.

The draft budget is submitted by the school's management to the vote of the Board of Directors in November of year N-1 in order to be made enforceable on 1 January of year N. Provisional budgets for years N+1 and N+2 are also requested by DGER.

Finally, each year before 15 March of year N+1, the institution's accounting officer draws up an accounting balance sheet called "Financial Account" which includes the entire budget implementation as well as all accounting entries relating to the institution's assets and liabilities. This Financial Account is presented to and approved by the Board of Directors.

#### Income:

The 2018-2019 reference year shows that the major part of revenues (70%) comes from the MAA. The latter allocates an operating allocation to the institution (5.0 million) and covers all the salaries of public employees (198 FTE) for a total amount of 5.3 million.

There has been a steady increase in the Department's staffing over the past 3 years. This positive trend is due in particular to the increase in the number of students in initial training, as also reflected in the increase in enrolment fees between 2016 and 2018.

In addition, the MAA supports ENVT's research activities by granting a specific allocation and participates in the financing of infrastructures by granting investment allocations for projects.

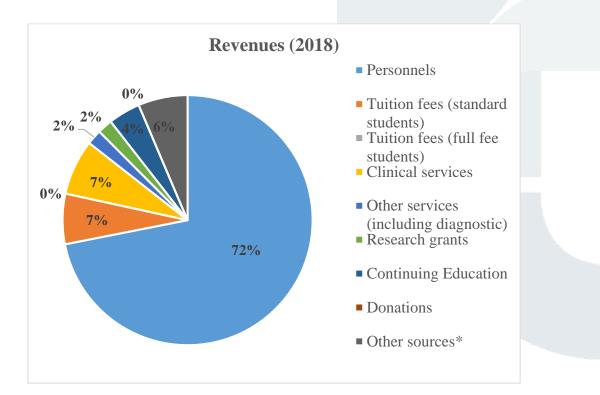
Finally, the school has its own resources (turnover of the hospitals, enrolment fees for students in initial and continuing training, scientific partnerships with private companies for research

and analysis programmes, research agreements with publicly-funded bodies). The graph below shows the distribution of ENVT's revenues and shows that the major part of the salaries of civil servants is financed by the MAA. In France, the students' tuition fees are quiet low (around 2.3  $k \in per$  year and they are fixed by law.

| Revenue sources                       | 2018-2019<br>(financial year<br>of 2018) - € | 2017-2018<br>(2017) - € | 2016-2017<br>(2016) - € | Mean       |
|---------------------------------------|--|-------------------------|-------------------------|------------|
| Civil servants                        | 15 364 404                                   | 15 160 557              | 14 715 273              | 15 080 078 |
| Public authorities                    | 4 987 038                                    | 4 380 579               | 3 830 548               | 4 399 388  |
| Tuition fees (standard students)      | 1 845 000                                    | 1 898 000               | 1 435 000               | 1 726 000  |
| Tuition fees (full fee students)      | 0  | 0                       | 0                       | 0          |
| Clinical services                     | 2 028 000                                    | 2 020 000               | 2 090 000               | 2 046 000  |
| Other services (including diagnostic) | 550 080                                      | 1 205 555               | 877 753                 | 877 796    |
| Research grants                       | 548 557                                      | 1 344 386               | 625 140                 | 839 361    |
| Continuing Education                  | 1 174 000                                    | 1 087 000               | 951 000                 | 1 070 667  |
| Donations                             | 385  | 2 419                   | 70                      | 958        |
| Other sources*                        | 1 808 443                                    | 2 131 982               | 568 000                 | 1 502 808  |
| Total revenues                        | 28 305 907                                   | 29 230 478              | 25 092 784              | 27 543 056 |

Table 2.1.2. Annual revenues during the last 3 academic years (in Euros)

\* real-estate operations



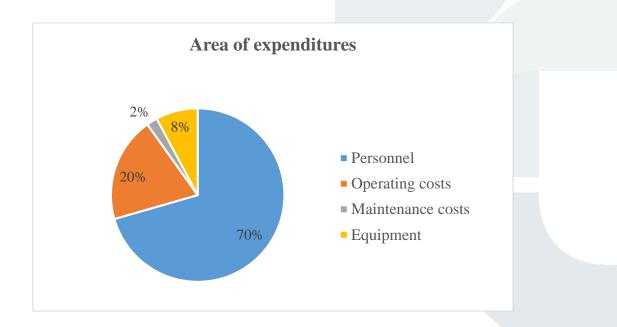
#### **Expenditures:**

The breakdown of expenses shows the predominant share of personnel cost and operating expenses for all the school's activities. This is due above all to the size of the campus (54 hectares, 44,000m2 of premises) and the number of complex infrastructures (hospitals, laboratories, practical training areas, etc.).

Within the budget, it is possible to identify expenses by activity and discriminate between expenses attributable to training, continuing education, research, clinical activities and support functions as detailed in the institution's budget architecture.

| Area of expenditures      | 2018-2019<br>(financial year of<br>2018) - € | 2017-2018<br>(financial year of<br>2017) - € | 2016-2017<br>(financial year<br>of 2016) - € | Mean       |
|---------------------------|--|--|--|------------|
| Civil servants            | 15 364 404                                   | 15 160 557                                   | 14 715 273                                   | 15 080 078 |
| Personnel paid by<br>ENVT | 3 839 389                                    | 3 461 152                                    | 2 893 375                                    | 3 397 972  |
| Operating costs           | 5 736 577                                    | 5 077 805                                    | 4 591 595                                    | 5 135 326  |
| Maintenance costs         | 477 175                                      | 529 206                                      | 579 170                                      | 528 517    |
| Equipment                 | 2 397 090                                    | 1 938 657                                    | 1 817 336                                    | 2 051 028  |
| Total expenditures        | 27 814 635                                   | 26 167 377                                   | 24 596 749                                   | 26 192 921 |

Table 2.1.1. Annual expenditures during the last 3 academic years (in Euros)



| Academic year | Total expenditures | Total revenues | Balance*** |
|---------------|--------------------|----------------|------------|
| 2016-2017     | 24 597 749         | 25 092 784     | 495 035    |
| 2017-2018     | 26 167 377         | 29 230 478     | 3 063 101  |
| 2018-2019     | 27 814 635         | 28 305 907     | 491 272    |

Table 2.1.3. Annual balance between expenditures and revenues (in Euros)

\*\*\* Total revenues minus total expenditures

2.2 Clinical and field services must function as instructional resources. Instructional integrity of these resources must take priority over financial self-sufficiency of clinical services operations.

The Establishment must have sufficient autonomy in order to use the resources to implement its strategic plan and to meet the ESEVT Standards.

The companion animal Veterinary Teaching Hospital (CAVTH) budget (small animal and equine hospitals) and the large animal hospital are two distinct responsibility resource centres within the general budget of ENVT.

All hospital-generated revenues are recorded in both the CLOVIS hospital management software and ENVT's financial information system.

The revenues generated by the clinical activities are entirely and exclusively allocated to the operation of the small animal hospital, the equine hospital and the large animal hospital.

The general budget covers part of the operating costs, in particular the costs of fluids and cleaning services for the premises as well as the share of expenses borne by the support functions.

The CAVTH and the large animal hospital are administrated by a secondary authorizing officer who has delegation of signature from the Dean of ENVT.

The managers of CAVTH and of the large animal hospital coordinate the activity of the staff under their responsibility. In conjunction with the Human Resources Department (HRD), they ensure the recruitment of the contractual human resources necessary for the operation of these entities and, finally, they propose a provisional budget to the management each year in the context of the management consultation. The latter lists all revenues (clientele and other revenues) and expenses (operations, investment and payroll of contract employees) of the hospitals.

### The Establishment must have sufficient autonomy in order to use the resources to implement its strategic plan and to meet the ESEVT Standards.

Each year, in order to build its budget, the school receives from the MAA a provisional notification of budget communicated in September which details the amount of subsidies allocated for the running of the school, the number of positions that ENVT is authorized to recruit on its own resources and the budget granted for investments.

The main financial trajectories (working capital, self-financing capacity, cash flow, investment projects, employment ceiling on the budget) are the subject of a direct exchange between the DGER (within the MAA) and ENVT during the annual strategic interview which takes place in early or late summer.

Before this meeting is held, the institution's management prepares a strategic note detailing the actions carried out during the year, presenting the progress of the objectives and performance contract, detailing the projects for the coming academic year and finally proposing the profiles of lecturer positions and support service staff open to recruitment through public competitive examinations.

Following the ENVT's internal management consultation, all the financial tables are communicated to the MAA and to the regional budget assessor (CBR) for validation by the supervisory authorities before they are sent to the Board of Directors for approval on the budget at its November meeting.

### **2.3** Resources allocation must be regularly reviewed to ensure that available resources meet the requirements.

The management dialogue is based on a memorandum drawn up by the Financial affairs department (DFA) and sent to the heads of budget responsibility centres, in particular those responsible for training departments and heads of support services.

It includes the main orientations and strategic choices of the management for the preparation of the budget for the following year.

Managers are invited to report their needs for each budget (operating, investment and payroll). They are received by the DFA who thus collects the information it needs to make decisions and further passes on explanations for its choices to the members of the Steering committee during a presentation.

The Executive Committee proposes the necessary trade-offs to ensure a balanced budget and a presentation of the budget is then made to the Steering Committee.

After the validation by the supervisory bodies (MAA and regional budget assessor) and the vote of the budget by the Board of Directors, each resource centre manager receives a notification of budget at the beginning of the year. This document details the large masses of budgets granted and the investment projects validated for the coming financial year.

At the same time as the management dialogue (end of the year), a review of the volume of remaining needs and an assessment of the possibilities for the responsibility centres to adjust the budget are carried out before the amending budget.

#### **Comments:**

Through the public funding and the income proceeding from services and research, ENVT have sufficient self-financing capacity to ensure its main missions (teaching and research).

Nevertheless, ENVT is facing challenges:

- growth in operating and maintenance costs of infrastructures built in the early 1960s;

- alienation of student residences for 55 years (when the gross operating surplus could have contributed to the general budget of the establishment);

- increase in student numbers;
- financial balance of the hospitals.

#### **Suggestions for improvement:**

ENVT must continue its efforts to maintain a balanced budget. It must develop budgetary and accounting control and strengthen the analytical accounting of its activities, which is essential to ensure the quality of the institution's financial management.

Efforts must focus on the evolution of its economic model, particularly for the Veterinary teaching hospitals. Audit results of the CAVTH will provide suggestions on how to improve its financial balance without compromising the quality of teaching.

A review of the expenditures and revenues chains is necessary together with the implementation of a centralised service platform to professionalize the financial functioning of the school. To improve the ENVT's financial management, we are considering to limit the number of budgetary centres. This will make it easier to understand by the ENVT's community.

Finally, ENVT will need significant financial support from its supervisory body and partners such as the Occitanie Region to upgrade its infrastructures in order to rationalize the campus' operating costs. Thus, the State-Region Program 2021-2026 (CPER, under negotiation) is a major milestone for ENVT. The MAA has already announced that ENVT is a priority for real estate investment under this program.



SER 2020 – Curriculum

### 3 : Curriculum



#### Ecole Nationale Vétérinaire de Toulouse

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3.1 The curriculum must be designed, resourced and managed to ensure all graduates have achieved the graduate attributes expected to be fully compliant with the EU Directive 2005/36/EC (as amended by directive 2013/55/EU) and its Annex V.4.1. The curriculum must include the subjects (input) listed in Annex V.4.1 of EU Directive 2005/36/EC and must allow the acquisition of the Day One Competences (output) (see Annex 2). This must concern all groups of subjects, i.e. Basic Sciences, Clinical Sciences in companion animals (including equine and exotic pets), Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management), Food Safety and Quality, and Professional Knowledge

See 1.1

As recommended by the OIE in its General Recommendations on Day One Skills (Annex 2 of the 2019 SOP from 30<sup>th</sup> May 2019 and approved by the ECCVT on 17<sup>th</sup> January 2019), a new skill framework was issued in 2017. It is based on eight macro skills divided into several abilities that must be acquired by each student during his/her training (see 3.2). This <u>new</u> framework has begun to be implemented in September 2019 for years 1 and 2, and will be deployed in the following years for future classes.

After this very selective entrance examination (see standard 7.), the following four years (semesters S5 to S12, the common core) are held in one of the four ENVs and lead to the *Diplôme d'Etudes Fondamentales Vétérinaires* (DEFV), a Diploma of Fundamental studies in veterinary medicine equivalent to a Master's degree. The last year (semesters S13 and S14) is a year of pre-specialisation. Different options can be chosen by students:

- clinical study where students complement and refine their knowledge in small animals (including exotics), food animals or equines;

- one year at university in the field of research (2<sup>nd</sup> year of a Master's degree or 1<sup>st</sup> year of PhD programme);

- one year in the field of industry (professional Master's degree) or veterinary public health.

This last year can be held in one of the four ENVs, at another university or abroad. For the option clinical study (that is 93%), one semester is dedicated to the completion of the veterinary thesis.

The training ends with the defense of a veterinary thesis once the student has successfully completed the entire course (i.e. the 300 ECTS credits, each year in an ENV corresponds to 60 ECTS credits). This thesis must be defended before the end of the civil year following the completion of the fifth year; thus the average duration of studies can be considered as 7.5 years.

The French professional and diploma reference framework impose:

- that during the first 4 years of study (core curriculum), lecture courses in whole class should not exceed 50% of the training time and that clinical rotations should represent at least 30% of the curriculum,

- that the fourth year must be predominantly clinical and practical, and divided into two equivalent semesters. One is devoted to the medicine of small animals, sports and leisure animals, and the other one to large animal medicine and veterinary public health,

- that in the fifth and final year, students can choose one of the 6 possible majors (small animals, large animals, equines, veterinary public health, research or industry)

(See appendix Stand\_3.1\_App001: French veterinary curriculum),

- that each student must complete a mandatory period abroad.

Apart from these requirements, which cannot be modified, ENVT has flexibility in the organisation of its curriculum and the content of the courses in each semester: the teaching content, the name of the courses, the number of hours and the ECTS credits allocated (see appendix Stand\_3.1\_App002 : ENVT curriculum) Moreover, ENVT also decides on the exact balance between theoretical, practical and clinical courses. ENVT is also self-governing with regard to the themes, duration and timing of compulsory and optional Extra-Practical Training (EPT) during the studies, including EPT abroad. These choices, as well as the teaching methods and the way to assess knowledge and skills, are the result of discussions, decisions and votes in several councils of the institution: the Training committee (COFOR), the Education and student life council (CEVE), the Academic council (CE) and finally the Board of Directors (CA). This explains the differences between the curricula of the four ENVs, although the fifth year benefits from the complementarity and expertise of each of these schools.

The education provided evolves along the curriculum years to provide students with a solid basis in scientific knowledge and to enable them to acquire skills to meet all the requirements of their future profession, including the transversal skills (largely taken into account in the context of the new curriculum: everyday life skills, clinical communication, empowerment, etc) or specific skills (radiation protection, legislation, law, practice management, customer relationship management, etc). These changes also take into account societal requirements and new constraints. For example, in 2018-2019, a new course entirely dedicated to animal ethics and welfare was introduced. In addition, new teaching methods have also been developed: flipped classes, self-learning simulation methods and the use of mannequins to learn technical gestures.

| Academic years*                         | А      | В     | С  | D     | E    | F   | G  | Н    |
|---|--------|-------|----|-------|------|-----|----|------|
| Year 1                                  | 388    | 133   | 41 | 177.7 | 36   | 6   | 0  | 782  |
| Year 2                                  | 506    | 53    | 18 | 175.5 | 33   | 0   | 8  | 794  |
| Year 3                                  | 516    | 101   | 28 | 40    | 36   | 233 | 0  | 954  |
| Year 4                                  | 110.25 | 128,5 | 39 | 21    | 49.5 | 762 | 12 | 1122 |
| Year 5 (Track) :                        |        |       |    |       |      |     |    |      |
| Major– ruminants                        | 180    | 32    | 0  | 0     | 0    | 418 | 0  | 630  |
| Major – pig farming<br>and medicine     | 4      | 20    | 0  | 12    | 0    | 565 | 8  | 609  |
| Major – poultry<br>farming and diseases | 4      | 36    | 64 | 36    | 0    | 508 | 8  | 656  |
| Major - small animal clinics            | 34     | 139   | 0  | 38    | 20   | 736 | 0  | 967  |
| Major – smal animal and exotics clinics | 34     | 61    | 0  | 34    | 0    | 845 | 0  | 974  |
| Major – Equine<br>clinics               | 149    | 76    | 3  | 33    | 11   | 774 | 0  | 1045 |

Table 3.1.1. Curriculum hours in each academic year taken by each student

A: lectures; B: seminars; C: supervised self learning; D: laboratory and desk based work, E: nonclinical animal work; F: clinical animal work; G: others (specify); H: total

| Table 3.1.2. Curriculum hours in EU-listed subjects taken by e |
|--|
|--|

|  | Α        | В        | С                               | D                                    | Ε                           | F                          | G                   | Н       |
|--|----------|----------|---------------------------------|--------------------------------------|-----------------------------|----------------------------|---------------------|---------|
| Subjects   | Lectures | Seminars | Supervise<br>d self<br>learning | Laboratory<br>and desk<br>based work | Non-clinical<br>animal work | Clinical<br>animal<br>work | Others<br>(specify) | Total   |
| Year 1 to 4  |          |          |                                 |                                      |                             |                            |                     |         |
| A. Basic subjects                                    | 33       | 0        | 0                               | 54                                   | 0                           | 0                          | 0                   | 87      |
| Medical physics                                      |          |          |                                 |                                      |                             |                            |                     | 0       |
| Chemistry (inorganic and organic sections)           |          |          |                                 |                                      |                             |                            |                     | 0       |
| Animal biology, zoology and cell biology             | 13       |          |                                 | 24                                   |                             |                            |                     | 37      |
| Feed plant biology and toxic plants                  |          |          |                                 |                                      |                             |                            |                     | 0       |
| Biomedical statistics                                | 20       |          |                                 | 30                                   |                             |                            |                     | 50      |
| B. Specific veterinary subjects                      | 1457.25  | 415.5    | 126                             | 360.2                                | 154.5                       | 1001                       | 20                  | 3534.45 |
| a. Basic Sciences                                    | 636      | 160      | 63                              | 212.7                                | 63                          | 45                         | 8                   | 1187.70 |
| Anatomy, histology and<br>embryology                 | 78.5     | 2        | 32                              | 31                                   | 41                          |                            |                     | 184.50  |
| Physiology   | 63       | 6        | 3                               |                                      | 16                          |                            |                     | 88      |
| Biochemistry   | 24       | 26       |                                 |                                      |                             |                            |                     | 50      |
| General and molecular genetics                       | 41.5     | 16       | 15                              | 10.5                                 |                             |                            |                     | 83      |
| Pharmacology, pharmacy and pharmacotherapy           | 50       | 16       | 3                               | 14                                   |                             |                            |                     | 83      |
| Pathology  | 26       |          | 4                               |                                      |                             | 45                         |                     | 75      |
| Toxicology   | 4        | 8        | 2                               | 11                                   |                             |                            |                     | 25      |
| Parasitology   | 84       |          |                                 | 47.7                                 |                             |                            |                     | 131.7   |
| Microbiology   | 52       |          |                                 | 28.5                                 |                             |                            |                     | 80.5    |
| Immunology   | 51       |          |                                 |                                      |                             |                            |                     | 51      |
| Epidemiology   | 7        |          |                                 | 10                                   |                             |                            |                     | 17      |
| Information literacy and data management             |          | 9        | 1                               |                                      |                             |                            |                     | 10      |
| Professional ethics and communication                | 37       | 22       |                                 | 56                                   |                             |                            |                     | 115     |
| Animal health economics and practice management      | 24       | 9        |                                 |                                      | 6                           |                            |                     | 39      |
| Animal ethology                                      | 9        |          |                                 | 2                                    |                             |                            |                     | 11      |
| Animal welfare                                       | 20       | 13       |                                 |                                      |                             |                            |                     | 33      |
| Animal nutrition                                     | 65       | 33       | 3                               | 2                                    |                             |                            | 8                   | 111     |
| b. Clinical Sciences                                 | 575.5    | 155.5    | 24                              | 82.5                                 | 52.5                        | 941                        | 12                  | 1843    |
| Obstetrics, reproduction and reproductive disorders  | 64       | 5.5      |                                 | 9                                    | 9.5                         | 15.5                       |                     | 103.5   |
| Diagnostic pathology                                 | 54       | 20       | 20.5                            | 11.5                                 |                             | 29                         |                     | 135     |
| Medicine   | 188.5    | 18.5     | 1                               | 6                                    |                             | 183                        |                     | 397     |
| Surgery  | 88       | 1        |                                 | 10.5                                 |                             | 146                        |                     | 245.5   |
| Anesthesiology                                       | 24       | 10       |                                 |                                      |                             | 67.5                       |                     | 101.5   |
| Clinical practical training in common animal species | 29       | 82       | 2.5                             | 8.5                                  | 22                          | 400                        | 12                  | 556     |
| Preventive medicine                                  | 14       | 6        |                                 | 24                                   | 3                           | 48                         |                     | 95      |
| Diagnostic imaging                                   | 32       | 11       |                                 |                                      |                             | 52                         |                     | 95      |

| Therapy in all common domestic animal species   | 28       | 1.5      |                                 | 3                                    |                             |                            |                     | 32.5     |
|---|----------|----------|---------------------------------|--------------------------------------|-----------------------------|----------------------------|---------------------|----------|
| Propaedeutics of all common<br>domestic animal species  | 54       |          |                                 | 10                                   | 18                          |                            |                     | 82       |
| c. Animal Production  | 86       | 49       | 16                              | 7                                    | 0                           | 15                         | 0                   | 173      |
| Animal Production, including<br>breeding, husbandry and<br>economics  | 86       | 43       |                                 | 7                                    |                             | 6                          |                     | 142      |
| Herd health management  |          | 6        | 16                              |                                      |                             | 9                          |                     | 31       |
| d. Food Safety and Quality,<br>Veterinary Public Health and<br>One Health Concept   | 159.75   | 51       | 23                              | 58                                   | 39                          | 0                          | 0                   | 330.75   |
| Veterinary legislation including<br>official controls and regulatory<br>veterinary services, forensic<br>veterinary medicine and<br>certification | 87.75    | 6        | 14                              | 24                                   |                             |                            |                     | 131.75   |
| Control of food, feed and animal by-products  | 21       | 21       | 3                               |                                      |                             |                            |                     | 45       |
| Zoonoses  | 5        |          |                                 | 34                                   |                             |                            |                     | 39       |
| Food hygiene and food<br>microbiology   | 34       | 18       | 2                               |                                      |                             |                            |                     | 54       |
| Food technology   | 12       | 6        | 4                               |                                      | 39                          |                            |                     | 61       |
| Total number of hours<br>A1-A4  | 1490,25  | 415,5    | 126                             | 414,2                                | 154,5                       | 1001                       | 20                  | 3621,45  |
|   | Α        | В        | С                               | D                                    | Е                           | F                          | G                   | Н        |
| Subjects  | Lectures | Seminars | Supervise<br>d self<br>learning | Laboratory<br>and desk<br>based work | Non-clinical<br>animal work | Clinical<br>animal<br>work | Others<br>(specify) | Total    |
| 5th year  |          |          | learning                        | based work                           |                             | WOIK                       |                     |          |
| Major in ruminants  |          |          |                                 |                                      |                             |                            |                     |          |
| Diagnostic pathology  |          |          |                                 |                                      |                             | 120                        |                     | 120      |
| Medicine  | 180      | 32       |                                 |                                      |                             | 298                        |                     | 510      |
| Total number of hours A1-A5   | 1670.25  | 447.5    | 126                             | 414.2                                | 154.5                       | 1419                       | 20                  | 4251.45  |
| Major in pig farming and medicine   |          |          |                                 |                                      |                             |                            |                     |          |
| Clinical practical training in common animal species  | 4        | 20       | 0                               | 12                                   | 0                           | 565                        | 8                   | 609      |
| Total number of hours A1-A5   | 1494.25  | 435.5    | 126                             | 426.2                                | 154.5                       | 1566                       | 28                  | 4230.45  |
| Major in poultry farming and  |          |          |                                 |                                      |                             |                            |                     |          |
| Animal health economics and   | 4        | 4        |                                 | 4                                    |                             | 8                          | 8                   | 28       |
| practice management<br>Clinical practical training in all   |          | 32       | 64                              | 32                                   |                             | 500                        | 0                   | 628      |
| common domestic animal species Total number of hours A1-A5  | 1494.25  | 451.5    | 190                             | 450.2                                | 154.5                       | 1509                       | 28                  | 4277.45  |
| Major in small animal clinics   | 17/7.23  |          | 170                             | 430.2                                | 134.5                       | 1507                       | 20                  | -2775    |
| Clinical practical training in  |          | 10       |                                 |                                      |                             |                            |                     | 10       |
| common animal species   |          | 10       |                                 |                                      |                             |                            |                     | 10       |
| Diagnostic imaging  |          | 30       |                                 |                                      |                             | 32                         |                     | 62       |
| Medicine  | 22       | 66       |                                 | 37                                   |                             | 420                        |                     | 545      |
|   |          |          |                                 |                                      |                             |                            |                     |          |
| Obstetrics, reproduction and reproductive disorders   | 4        | 8        |                                 | 1                                    | 20                          |                            |                     | 33       |
|   |          |          |                                 | 1                                    | 20                          | 28                         |                     | 33<br>41 |
| reproductive disorders  | 4        | 8        |                                 | 1                                    | 20                          | 28<br>256                  |                     |          |

| Major in small animal and exe   | otics clinics |       |     |       |       |        |    |         |
|---|---------------|-------|-----|-------|-------|--------|----|---------|
| Anaesthesiology   |               |       |     |       |       | 64     |    | 64      |
| Clinical practical training in common animal species  | 2             | 31    |     | 32    |       | 460.5  |    | 525.5   |
| Diagnostic imaging  |               | 7     |     |       |       |        |    | 7       |
| Medicine  | 20            | 14    |     | 2     |       | 192    |    | 228     |
| Obstetrics, reproduction and reproductive disorders   | 4             | 4     |     |       |       |        |    | 8       |
| Preventive medicine   | 8             |       |     |       |       |        |    | 8       |
| Surgery   |               | 5     |     |       |       | 128    |    | 133     |
| Total number of hours A1-A5   | 1524.25       | 476.5 | 126 | 448.2 | 154.5 | 1845.5 | 20 | 4594.95 |
| Major in equine clinics   |               |       |     |       |       |        |    |         |
| Animal nutrition  | 5             | 3     | 1   | 10    |       |        |    | 19      |
| Professional ethics and communication   | 7,5           |       |     |       |       |        |    | 7,5     |
| Anaesthesiology   | 9,5           | 2,5   |     |       |       | 75     |    | 12      |
| Diagnostic imaging  | 31            | 10    |     |       |       | 25     |    | 51      |
| Medicine  | 48            | 60    | 2   | 23    | 7     | 370    |    | 897     |
| Obstetrics, reproduction and reproductive disorders   | 21            |       |     |       |       | 105    |    | 21      |
| Preventive medicine   | 1             |       |     |       |       | 15     |    | 1       |
| Surgery   | 20.5          |       |     |       | 0,5   | 184    |    | 21      |
| Veterinary legislation including<br>official controls and regulatory<br>veterinary services, forensic<br>veterinary medicine and<br>certification | 5,5           |       |     |       | 3     |        |    | 8,5     |
| Total number of hours A1-A5   | 1639.25       | 491   | 129 | 447.2 | 165   | 1775   | 20 | 4666.45 |

Table 3.1.3. Practical rotations under academic staff supervision (excluding EPT)

| List of practical<br>rotations(Disciplines/Species) EN | Species                      | Duration<br>(weeks) | Year of programme |
|--|------------------------------|---------------------|-------------------|
| Intra-mura   | al clinics (VTH)             |                     |                   |
| Medicine   | Ruminants                    | 4                   | 3                 |
| Medicine   | Ruminants                    | 2                   | 4                 |
| Diagnostic pathology                                   | Compagnion animals           | 1                   | 3                 |
| Diagnostic pathology                                   | Ruminants                    | 1                   | 3                 |
| Clinical pathology                                     | Compagnion animals           | 0,5                 | 4                 |
| Clinical pathology                                     | Ruminants                    | 0,5                 | 4                 |
| Obstetrics, reproduction and reproductive disorders    | Ruminants                    | 1                   | 4                 |
| Medicine   | Exotic pets                  | 2                   | 3                 |
| Diagnostic imaging                                     | Compagnion animals (or pets) | 1                   | 3                 |
| Professional ethics and communication                  | Compagnion animals           | 1                   | 3                 |
| Preventive medicine                                    | Compagnion animals           | 2                   | 3                 |
| Medicine   | Compagnion animals           | 1                   | 3                 |
| Medicine   | Compagnion animals           | 1                   | 3                 |

| Anesthesiology  | Compagnion animals         | 1   | 3 |
|---|----------------------------|-----|---|
| Surgery   | Compagnion animals         | 1   | 3 |
| Medicine  | Compagnion animals         | 3   | 4 |
| Obstetrics, reproduction and reproductive disorders         | Compagnion animals         | 1   | 4 |
| Preventive medicine   | Compagnion animals         | 1   | 4 |
| Medicine  | Compagnion animals         | 1   | 4 |
| Medicine  | Compagnion animals         | 1   | 4 |
| Medicine  | Compagnion animals         | 2   | 4 |
| Surgery   | Compagnion animals         | 4   | 4 |
| Diagnostic imaging  | Compagnion animals         | 1   | 4 |
| Anesthesiology  | Compagnion animals         | 1   | 4 |
| Medicine (ophthalmology)                                    | Compagnion animals         | 1   | 4 |
| Medicine, Surgery, Anesthesiology and Diagnostic<br>Imaging | Equine                     | 2   | 4 |
| Medicine, Obstetrics and Preventive medicine                | Equine                     | 2   | 3 |
| Aml   | bulatory clinics           |     |   |
|   |                            |     |   |
| Herd H  | ealth Management           |     |   |
| Obstetrics, reproduction and reproductive disorders         | Ruminants                  | 2   | 3 |
| Herd health management                                      | Ruminants                  | 2   | 4 |
| Herd health management                                      | Pigs and poultry           | 3   | 4 |
| H   | SQ & VPH                   |     |   |
| Control of food, feed and animal by-products                |                            | 0.3 | 4 |
| Control of food, feed and animal by-products                | multi-species              | 0.3 | 4 |
| Control of food, feed and animal by-products                |                            | 0.2 | 3 |
| Control of food, feed and animal by-products                | multi-species              | 0.2 | 3 |
|   | Tracks                     |     |   |
| Major –   | small animal clinics       |     |   |
| Surgery   | Compagnion animals         | 7   | 5 |
| Medicine  | Compagnion animals         | 4   | 5 |
| Medicine  | Compagnion animals         | 1.5 | 5 |
| Medicine (dermatology)                                      | Compagnion animals         | 2   | 5 |
| Medicine (ophthalmology)                                    | Compagnion animals         | 1.5 | 5 |
| Preventive medicine   | Compagnion animals         | 0.5 | 5 |
| Medicine  | Compagnion animals         | 1   | 5 |
| Anesthesiology  | Compagnion animals         | 3   | 5 |
| Medicine  | Compagnion animals         | 2   | 5 |
| Diagnostic imaging  | Compagnion animals         | 1.5 | 5 |
| Major – small   | animal clinics and exotics |     |   |
| Surgery   | Compagnion animals         | 3.5 | 5 |
| Medicine  | Compagnion animals         | 2.5 | 5 |
| Medicine  | Compagnion animals         | 1   | 5 |
| Medicine (dermatology)                                      | Compagnion animals         | 1   | 5 |
| Medicine (ophthalmology)                                    | Compagnion animals         | 0.5 | 5 |
|   |                            |     |   |

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| Anesthesiology   | Compagnion animals   | 1.5 | 5 |  |  |  |
|--|----------------------|-----|---|--|--|--|
| Medicine   | Compagnion animals   | 1   | 5 |  |  |  |
| Medicine and surgery   | Exotic pets          | 10  | 5 |  |  |  |
| Medicine and surgery   | Exotic pets          | 2   | 5 |  |  |  |
| Major  | – ruminants          |     |   |  |  |  |
| Medicine   | Ruminants            | 19  | 5 |  |  |  |
| Major – pig fa   | rming and medicine   |     |   |  |  |  |
| Medicine   | Pigs                 | 1   | 5 |  |  |  |
| Major – poultry  | farming and diseases |     |   |  |  |  |
| Medicine   | Poultry              | 3   | 5 |  |  |  |
| Major – equine clinics   |                      |     |   |  |  |  |
| Medicine, Surgery, Anesthesiology, Preventive Medicine<br>and Diagnostic Imaging | Equine               | 10  | 5 |  |  |  |

Students who choose the major "large animal medicine" have the opportunity to do a 18 to 20week "stage tutoré" (tutored training), alternating periods in a clinic and periods of academic training at ENVT (3 periods of 6 weeks each, interspersed with 2-week periods at ENVT). A veterinary clinic located in a rural area can welcome a fifth-year student and contribute to strengthen the network of veterinarians in those areas. A "stage tutoré" is based on a strong relation between the student, the mentor and an ENVT lecturer. The mentor is the contact person within the clinic and follows the student's learning. This veterinarian will also come to ENVT once or twice, particularly for the validation of the training. During the weeks at school, sessions to share activities encountered in the field and skills acquired are organised (<u>Tutored training</u>).

The host veterinary clinics apply through an electronic application form examined by the French Vetererinarian Statutory Body (CNOV: *Conseil National de l'Ordre des Vétérinaires*). The steering committee of the "*stage tutoré*" validates the eligibility of the application. If the clinic is eligible, it is visited by lecturers from the four ENVs and then approved. For these EPT the evaluation is dual, assessing both the mentor and the tutored student. This national system is fully supported by ENVT (for the four ENVs) with a financial support from the MAA.

Table 3.1.4. Curriculum hours taken as electives for each student.

There are no elective modules in the curriculum. Track contents  $(5^{th} \text{ year})$  are available in table 3.1.2.

| Subjects  | A    | B   | С | D | E    | F   | G | H |
|---|------|-----|---|---|------|-----|---|---|
| Clinical practical training in all common domestic animal species (exotics pets)  |      |     |   | 6 |      | 80  |   |   |
| Herd health management  | 23.5 | 3.5 |   |   |      | 9   |   |   |
| Clinical practical training in all common domestic animal species (horses)  |      | 34  | 1 | 2 |      | 171 |   |   |
| Laboratory Animal Science   | 44   | 10  | 0 | 1 | 11.5 | 0   | 0 | 0 |
| Anatomy, histology and embryology   | 1    | 1   |   |   | 4    |     |   |   |
| Anesthesiology  | 4    | 4   |   |   | 5    |     |   |   |
| Animal ethology   | 2    |     |   |   |      |     |   |   |
| Animal health economics and practice management   | 7    |     |   |   |      |     |   |   |
| Animal welfare  | 0.5  |     |   |   |      |     |   |   |
| Clinical practical training in all common domestic animal species   | 9    |     |   |   | 2.5  |     |   |   |
| Diagnostic imaging  | 2    |     |   |   |      |     |   |   |
| General and molecular genetics  | 2    |     |   |   |      |     |   |   |
| Information literacy and data management  | 5.5  | 3   |   | 1 |      |     |   |   |
| Physiology  | 5    |     |   |   |      |     |   |   |
| Professional ethics and communication   | 2    | 2   |   |   |      |     |   |   |
| Veterinary legislation including official controls<br>and regulatory veterinary services, forensic<br>veterinary medicine and certification | 4    |     |   |   |      |     |   |   |

Table 3.1.5. Optional courses proposed to students (not compulsory)

A: lectures; B: seminars; C: supervised self learning; D: laboratory and desk based work, E: nonclinical animal work; F: clinical animal work; G: others (specify); H: total

#### Description of the core clinical rotations and emergency services

Training is progressive, combining knowledge and the acquisition of the necessary skills for diagnosis, prognosis, treatment and prevention: from healthy animals (the first two years preclinical and paraclinical) to sick animals (third and fourth years), the fourth year being entirely devoted to the clinical rotations, with equal shares between small, sports and leisure animals and food animals). Clinical and emergency rotations, scheduled in the third and fourth years, are included in the standard curriculum. Each clinical rotation description guide (Fiches pédagogiques) describes the objectives of each rotation according to the year of study, but also specifies what is expected of students during these rotations: level of responsibility, degree of independence, demonstration to other students from lower grades, etc.

#### 3<sup>rd</sup>-year:

Students are introduced to clinical activities during the 3<sup>rd</sup>-year of the curriculum. They then have 7 weeks of rotations in groups of 9-11 at the small animal hospital during which they are in direct contact with the animals (internal medicine, preventive medicine, anaesthesia, surgery, diagnostic imaging). They also have two rotations of 2 weeks in groups of 16 students at the ruminant hospital, 2 weeks at the equine hospital and spend 2 weeks at the exotic and wildlife hospital in groups of 8-10 students where they alternate in 2 subgroups on the basis of one week with exotics pets and the following week with wildlife. A progressive clinical teaching from individual bovine gynaecology to reproduction management in dairy cattle is provided during

the 3<sup>rd</sup>-year. The sequence combines (1) hard skills teaching by simulation (transrectal palpation model) (2) examination of cows' genital tracts at the slaughterhouse followed by observation of the corresponding genital tracts just after slaughtering (once a year for each student in groups of 8-10 students) and reproduction monitoring in cattle farm (once visit a year for each student in groups of 6-8).

See appendix Stand\_3.1\_App003

#### <u>4<sup>rd</sup>-year</u>:

The 4<sup>th</sup>-year devoted to clinical training is divided in rotations in the different clinics. Then, students take part in consultations, hospitalizations and clinical procedures for 18 weeks at the small animal hospital and for 2 weeks at the equine clinic in groups of 5-10, in collaboration with 5<sup>th</sup>-year students. Group sizes enable each of them, in collaboration with one 5<sup>th</sup>-year student, to handle one new equine patient every day and to follow it throughout the week.

The 5 weeks per student spent at the ruminant clinic in groups of 7-8 are divided in two weeks at the ruminant hospital, one week at the necropsy service and two weeks in external clinics organized around farm visits (2-3 per student). During this academic year, reproduction monitoring in cattle farms (one visit every 15 days with 6-8 students) is expanded to integrate the management of feeding and other risk factors. This involves farm-type audit visits for cases of infertility, abortion or mastitis (12-15 yearly with six 4<sup>th</sup>-year students and two 5<sup>th</sup>-year students) and evaluation of the sexual function of bulls in farms or at the hospital (8-10 yearly with forty 4<sup>th</sup>-year students and twenty 5<sup>th</sup>-year students).

Students also spend 3 weeks at the poultry and swine clinic where they are introduced to poultry and pig population medicine, of which one week with groups of 12 students specifically dedicated to visits of farms, necropsy and laboratory training. Students are split in small groups of 3 to 5 for visits of pig farms and 5 to 7 for visits of poultry farms or necropsy of poultry.

See appendix Stand\_3.1\_App003

#### 5th-year:

In accordance with their choice of major (deepening teaching) in their 5<sup>th</sup>-year, the students spend 22 weeks at the small animal hospital in groups of 1 to 6 depending on the rotations, 10 weeks at the equine hospital in groups of 2-4 and 11 weeks in the exotic pet and wildlife hospital (6-7 weeks with exotics pets and 4-5 weeks with wildlife) in groups of 2-8 students. This hospital also welcomes students for optional teaching for 2 weeks. The duration of the rotations is 4 weeks (group size: 2-4) at both the ruminant hospital, the necropsy service and ambulatory clinics.

#### Direct involvement of undergraduate students in the core clinical rotations:

#### Compagnion animals and exotics:

During their training in the small animal clinic and the exotic pet and wildlife clinic, 3<sup>rd</sup>-year students have to conduct clinical examinations during their rotation and to collect the history of animals in consultation, mainly healthy ones but also diseased ones (in internal medicine for small mammals), together with 4<sup>th</sup> and/or 5<sup>th</sup>-year students, under the supervision of the pedagogical teams. 4<sup>th</sup>-year students together with 5<sup>th</sup>-year students are assigned clinical cases, for which they contribute to clinical examination, nursing care and report writing. During hospitalization, they can perform or assist in various secondary examinations depending on the complexity of the case. They perform castrations, participate to routine surgeries and anesthesias and learn how to work in accordance with the principle of diagnostic approach. 5<sup>th</sup>-year students are assigned clinical cases, for which they are in charge of clinical examinations,

nursing care and report writing, under the supervision of post graduate students and senior clinicians. During hospitalizations, they can perform or assist in various secondary examinations or surgeries depending on the complexity of it. They perform routine surgeries and anesthesias and participate or assist in more complex ones. They contribute to the diagnostic approach, and are highly encouraged to suggest therapeutic solutions.

#### Equines:

During their equine clinical training, 4<sup>th</sup>-year students are divided in two groups: consultations and hospitals. Although they participate in the morning follow-up of hospitalized horses, the consultations group is mainly involved in consultations and diurnal emergencies, from receiving owners to general and thorough clinical examinations (e.g. musculoskeletal system) and the writing of case reports. Similarly, even though the hospital group attends consultations, they are more specifically involved in clinical examinations and in-patient treatments and care and take part in the on-duty shifts. In case of surgical interventions, they prepare the horse and participate to anesthesia. 5<sup>th</sup>-year students, together with the interns, are responsible for cases and contribute to the supervision of the 4<sup>th</sup>-year students. They guide them to collect past relevant history of the patient and the condition, and to conduct the general and static clinical examination of the patient in the presence of an intern and / or clinician. Consultations in locomotor pathology, medicine and ophthalmology are prepared the day before depending on the chief complaint and potential previous reports. For elective surgeries, 5<sup>th</sup>-year students conduct the general clinical examination and take the blood samples; the additional examinations are carried out under the supervision of an intern. On the day of the surgery, the 5<sup>th</sup>-year students place the intravascular catheter and manage the pre- and post-operative care (treatments, etc.). They conduct the clinical and biological examinations under the supervision of an intern, and prepare the anesthesia protocol which they also contribute to implement. A logbook makes it possible to trace all the students' acquisitions in terms of acts.

#### <u>Ruminants</u>:

During their training in the ruminant clinic, each 3<sup>rd</sup>-year student takes care of 1-2 clinical cases, conducts the daily clinical examinations, practices nursing care and reports in writing the data regarding this examination. After the presentation of the cases to the lecturer and the proposal of a diagnosis of affection, students harvest the samples required for complementary examinations, diagnostic tests and treatment. They also learn from all the other cases during the daily rounds done by the lecturers and write a complete report during each rotation.

4<sup>th</sup>-year students handle 4-5 clinical cases and contribute to daily clinical examinations, the diagnoses proposals, the nursing care, report writing, blood sampling, diagnostic tests and treatments. Students also participate in routine surgeries, anesthesias and benefit from a personalized follow-up by the lecturer responsible for the case. As part of their week at the necropsy service, students participate in the carrying out of 10 to 20 necropsies, which they present and put in perspective with the anamnesis conclusions in the presence of the lecturer. Each student is assigned 1-2 farm visits during their rotation, which implies the preparation of the visit, its conduct, exchanging with the lecturer at the end of the visit, writing the section devoted to housing and the audit report, and its restitution to the group and the lecturer.

At the ruminant hospital, 5<sup>th</sup>-year students are responsible, under the supervision of an academic, for 4-8 clinical cases on each rotation, including the complete diagnostic approach, prognosis, paraclinic and diagnostic tests and treatments. Students also participate in routine surgeries, anesthesias and are involved in more complex surgeries and euthanasias. They are in charge of registering cases in the Filemaker bovine recording system. One or two complex clinical cases are presented by the students and discussed with the large animal clinic team each week. During the rotation at the necropsy service, students perform the necropsies with 4<sup>th</sup>-year

students, exchange with the lecturers and write the necropsy reports which are corrected and validated by the lecturers in charge. Each student manages 1-4 farm visits during their rotation, including the preparation of the visit (preparation of the equipment) and the taking over of the entire audit with the recovery of the data and the writing of the report followed by a personalized exchange with a lecturer. During the reproduction monitoring in cattle farms, the students perform the examinations of the genital tract by transrectal palpation and / or ultrasound and proposes a diagnosis to the teacher.

For both 3<sup>rd</sup> and 4<sup>th</sup>-year students on large animal clinical rotations, a procedure describing the pedagogical objectives, the schedules, the functioning of the clinics, expectations regarding student involvement and the modalities of evaluation has been available since September 2019.

#### Poultry and pigs:

In the poultry and pig clinic, 4<sup>th</sup>-year students are involved in all the steps of instruction of their clinical cases, including hypotheses listing before farm visits, technical and biosecurity assessment of the farm during the visit (recording of technical parameters, clinical examination of animals...), necropsy and diagnostic laboratory work (when relevant), and writing of the report. At the very beginning of each session, specific instructions are given on biosecurity and professional communication. During the rotation, specific sessions are devoted to the preparation of their report. They present their conclusions during a final session with the lecturers and other students. Emphasis is placed on evidence-based medicine, communication, biosecurity and ethics.

To summarize our global strategy, during the 3<sup>rd</sup> and 4<sup>th</sup> years, the pedagogical approach is pragmatic, mainly based on clinical examination and relies on companionship by students from subsequent years under the supervision of a lecturer. On the other hand, for 5<sup>th</sup>-year students, the pedagogical approach is more active and more time is dedicated to study the case in depth, thus enabling to promote evidence-based medicine.

### Description of the teaching in slaughterhouses and in premises for the production processing distribution/sale or consumption of food of animal origin

Students have compulsory basic training in slaughterhouses and premises producing food of animal origin. This training is organized outside ENVT because such facilities are not available on the campus (see standard 4. 3). The visits enable students to observe facilities and equipment and to understand animal slaughtering and preparation techniques, the management of by-products and the control of hygiene, to acquire knowledge about the technologies used and understand sanitary control of the production line. During the course, the deepening of the knowledge about carcass lesions allows students to work on a number of carcasses and offals of animals unfit for consumption stored for demonstration purposes (visual inspection, palpation, selective cuts, etc.) and to be trained in the evaluation of meat safety in collaboration with the official control service of each slaughterhouse. Because of the rarity of some lesions, the teaching is completed by the use of organs with lesions, and slides illustrating cases that are not encountered in slaughterhouses. Moreover, during their 4th extra-practical practical training, students spend 4 halfdays in a slaughterhouse (the location of slaughterhouses depends on the place of training), where they follow the veterinary inspector and are involved in all his/her duties.

## Description of the selection procedures of the electives by the students and the degree of freedom in their choice (e.g. what happens when too many students select one specific track)

There are no elective modules during the first 4 years.

At the end of the 1<sup>st</sup> semester of the 4<sup>th</sup> year students communicate their choice of track for the 5th year. If too many students apply for the same major, priority is given to the ones whose better performed during their studies.

During their 5<sup>th</sup> year, students, have also the opportunity to enrol in one or more optional courses, most often offered during their semester of preparation for a veterinary thesis. At ENVT, optional courses are offered in equine clinics (4 consecutive weeks), exotic clinics (2 consecutive weeks), sheep and goat clinics (4 independent weeks spread over the year, each organised by one of the 4 ENVs) and training in the use and protection of laboratory animals (UPAL, two weeks leading to the certification in animal experiments level 1 with European approval FELASA) (cf. table 3.1.5). Despite being optional, registrations are considered firm and definitive at the beginning of the academic year (A5). They are also open to final year students from other ENVs. These optional courses, mainly clinical, are offered throughout the academic year and students have the opportunity to follow them at the most suitable time, depending on the organization of their year. This also avoids over-registration during some weeks and therefore offers the opportunity for the greatest number of students to benefit from these optional courses.

### Description of the procedures (e.g. logbooks) used to ascertain the achievement of each core practical/clinical activity (pre-clinical, clinical, ambulatory clinics, EPT) by all students

During ambulatory visits and clinical rotations, the assessment of the implementation of key practical and clinical activities during teaching is currently carried out by the teacher in charge of practical and clinical rotations. Students are directly supervised by a mentor (in case of EPT) and an additional evaluation is carried out by the lecturers during the validation test (oral interview, written report and/or oral presentation). One or several clinical cases that were encountered during the EPT or ambulatory visits are to be presented.

3.2 "The programmes must be competency-based and designed so that they meet the objectives set for them, including the intended learning outcomes. The qualification resulting from a programme must be clearly specified and communicated and must refer to the correct level of the national qualifications framework for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area.

The Establishment must provide proof of a QA system that promotes and monitors the presence of an academic environment highly conducive to learning including self-learning. Details of the type, provision and updating of appropriate learning opportunities for the students must be clearly described, as well as the involvement of students.

The Establishment must also describe how it encourages and prepares students for selflearning and lifelong learning."

See standard 3.1

The <u>new veterinary competency framework</u> describe 8 macro competencies that students must have earned at the end of their studies :

- Advise and Prevent
- Establishing a diagnosis
- Care and treatment
- Taking action for public health

- Working in a company
- Communicate
- Acting as a Scientist
- Act responsibly

The contribution of each teaching module to the different competencies and sub-competencies is defined in a <u>ENVT's matrix</u>.

As indicated above, ENVT is committed to developing innovative training methods, which are reviewed each year: small group sessions, workshops, inverted classes, the use of tools such as Socrative system, serious games, simulation, learning technical gestures on mannequins or stuffed toys, etc. This aims at limiting lessons in lecture rooms and promoting quality interactive classes. Students are also active in their training and are in direct and regular contact with lecturers. For example, for each teaching subjects, they appoint representatives who liaise with the lecturers. During their studies, they also work with temporary staff on site, as well as with the lecturers and mentors during the Extra-Practical Trainings. This enables a progressive professional integration from the year 3 onwards. Finally, timetable is scheduled in order to give students some free time and to promote the work in small groups.

Moreover, a large part of the curriculum is devoted to clinical rotations (from the 3<sup>rd</sup> to the 5<sup>th</sup> year) and the students have to a personal final work called "veterinary thesis". The thesis is an initiation to the scientific approach (questioning, critical analysis, setting up in supervised autonomy, of a protocol to answer this question.

The campus also has a library and the digital environment essential for training (wifi, moodle and PRISMES platforms, video recording room), as well as a simulation room dedicated to self-learning with models and mannequins.

A riding-centre is located on ENVT premises with the aim of providing leisure activity to people outside the school and to staff and students. The centre which houses and takes care of horses is also used for practical work. Health monitoring and vaccinations are carried out by students doing their rotations at the equine clinic. The 25 horses of the riding-centre are available for some educational activities, in particular for doing electrocardiograms during physiology classes, for training during ophthalmology classes, for dentistry, for farriery, for conducting locomotive examinations, etc.

Finally, ENVT offers vocational training and CPD (Continuing Professional Development) closely linked to initial training. Students are regularly informed of post-graduate training opportunities (school diplomas, specific clinical rotations) and lifelong learning opportunities provided by the school.

#### **3.3 "Programme learning outcomes must:**

• ensure the effective alignment of all content, teaching, learning and assessment activities of the degree programme to form a cohesive framework

• include a description of Day One Competences

• form the basis for explicit statements of the objectives and learning outcomes of individual units of study

• be communicated to staff and students

• be regularly reviewed, managed and updated to ensure they remain relevant, adequate and are effectively achieved. "

The learning objectives aim to provide all students with a broad knowledge and basic skills in veterinary medicine for all major domestic species. The curriculum allows them to obtain more advanced skills in a specific track (A5). The education plan is available on our website (Training programme).

For each subject, knowledge and skill assessment is managed by the lecturers of the training units. The assessment methods are varied, combining written or oral examinations during the final examination sessions. For some disciplines, continuous assessment is implemented during directed-learning and knowledge tests are sometimes offered at the beginning of a teaching session or in flipped classes.

The syllabus is subject to a continuous dialogue between teachers and with the Department of Education and student life (DEVE). This syllabus is discussed at COFOR meetings, discussed and arbitrated by the CEVE, before being submitted to the CA for a final vote. This, combined with student feedbacks from routine teaching assessments (see standard 8.), can be used to identify possible overlaps, redundancies and omissions in the syllabus and permit to correct them if necessary. (See appendix Stand\_3.3\_App004)

## **3.4** "The Establishment must have a formally constituted committee structure (which includes effective student representation), with clear and empowered reporting lines, to oversee and manage the curriculum and its delivery. The committee(s) must:

• determine the pedagogical basis, design, delivery methods and assessment methods of the curriculum

• oversee QA of the curriculum, particularly gathering, evaluating, making change and responding to feedback from stakeholders, peer reviewers and external assessors, and data from examination/assessment outcomes

• perform on going and periodic review of the curriculum at least every seven years by involving staff, students and stakeholders, these reviews must lead to continuous improvement. Any action taken or planned as a result of such a review must be communicated to all those concerned

• identify and meet training needs for all types of staff, maintaining and enhancing their competence for the ongoing curriculum development.''

For each module, the objectives and learning outcomes as well as the assessment procedures are available at the beginning of the academic year in the course description guides (*Fiches pédagogiques*), which are module-specific. The sheets are available on the website and are updated every year (Syllabus).

Decisions relating to the assessment of knowledge/skills are taken during CEVE meetings and when major changes to the curriculum and assessment are decided, they are voted by the Board of Directors and lead, if necessary, to a revision of the <u>academic regulation</u>. Teaching is assessed every year by the students through questionnaires completed via the digital Sphinx platform. These results of this assessment are sent to the heads of modules, the heads of teaching departments, the head of the department of Education and student life and the Dean (see appendix Stand\_3.4\_App005). Comments and suggestions are taken into account and improvements are made (see 9.5). At the beginning of each academic year, following suggestions from students, course modifications are indicated in the module descriptions (updated each year).

ENVT has also set up a "Tepaquap" working group bringing together teachers and students. This group is focusing on the best <u>methodology for assessing teaching</u>, with the aim to

guarantee the quality and a regular improvement of theoretical and practical teaching provided at ENVT.

3.5 "External Practical Trainings (EPT) are compulsory training activities organised outside the Establishment, the student being under the direct supervision of a nonacademic person (e.g. a practitioner). EPT cannot replace the core intramural training nor the extramural training under the close supervision of academic staff (e.g. ambulatory clinics, herd health management, practical training in FSQ and VPH).

Since the veterinary degree is a professional qualification with Day One Competences, EPT must complement and strengthen the academic education inter alia by enhancing student's professional knowledge."

In veterinary training, External Practical Training periods are schedules throughout the curriculum (EPT). Students must validate at least 14 weeks of EPT before the beginning of their fifth year. These compulsory EPT are considered as fully-fledged teaching modules (in accordance with Articles 11 and 20 of the academic regulation), they are supervised by the academic staff and assessed with written and oral examinations. If they wish, students may also carry out optional EPT for a minimum duration of one week. For each EPT, the student must have a refering teacher, who approves the location and the subject of the EPT and implements a method of assessment (oral interview, written report, and/or oral report). EPT is generally carried out outside the periods of compulsory teaching and is subjected to an EPT agreement.

| Fields of Practice                          | Topics  | Minimum duration<br>(weeks) | Year in the curriculum |
|---|---|-----------------------------|------------------------|
| Large animals (pre-clinical)                | Veterinarians-<br>Livestock-<br>Territories             | 4                           | 1                      |
| Small animals (pre-clinical)                |   | 0                           | 0                      |
| Large animals (clinical)                    | Large anuimal clinics                                   | 4                           | 4                      |
| FSQ & VPH                                   | Slaughterhouse<br>(food inspection &<br>animal welfare) | 0.5                         | 4                      |
| Others: Research and<br>development Project |   | 6                           | 2                      |

Table 3.5.1. External Practical Training (EPT) for each student (core curriculum: Y1-Y4)\*

\*: for a detailed description of the EPTs, see appendix Stand\_3.5\_App006.

In the fifth year, the duration, the period and the topic of the mandatory EPT depend on the chosen major. It permits to complete clinical knowledge and pratice and is mandatory to validate the 5th year.

3.6 "The EPT providers must have an agreement with the Establishment and the student (in order to state their respective rights and duties, including insurance matters), provide a standardised evaluation of the performance of the student during their EPT and be allowed to provide feedback to the Establishment on the EPT programme. If any training is given to EPT providers, this must have clearly defined contents.

### There must be a member of the academic staff responsible for the overall supervision of the EPT, including liaison with EPT providers."

All EPT, both mandatory and optional, are subject to an agreement signed by the student, the host organisation's supervisor and the Dean. He/she is then covered by the ENVT's insurance.

EPT applications are looked at by the EPT commission and the head of the Education and student life. If the EPT is approved, a referring teacher is assigned to the student. For EPT in a veterinary practice, a SNVEL (Syndicat National des Vétérinaires d'Exercice Libéral) <u>"Envie</u> de clientèle" charter is attached to the agreement. This charter describes the commitments that the student and the mentor agree to comply with. Indeed, as it is an exercise of mentoring, the veterinarian must be committed to teach good practices to the student who in turn undertakes to respect them.

The EPT commission is managed by Professor Stéphane Bertagnoli appointed by the Dean. Two to four members of the teaching departments sit on the EPT committee for a period of four years. This commission also includes the Head of Education and student life. The person in charge of international affairs is invited to attend meetings when matters within his/her competences are discussed.

### 3.7 Students must take responsibility for their own learning during EPT. This includes preparing properly before each placement, keeping a proper record of their experience during EPT by using a logbook provided by the Establishment and evaluating the EPT. Students must be allowed to complain officially and/or anonymously about issues occurring during EPT. The Establishment must have a system of QA to monitor the implementation, progress and then feedback within the EPT activities.

Students actively and autonomously search for their EPT places and themes taking into account the specifications defined for each EPT, and apply via the Sphinx digital form dedicated to EPT. This makes it possible to build a database of EPT locations and tutors, accessible to all the students.

Prior to departure, the student prepares the EPT and reviews the situation in collaboration with his/ her referering teacher: check of technical and practical issues; assistance with methodology, litterature search and report writing. Then, the student contacts his/her teacher during the EPT to report on the progress of the project. The lecturer also checks that the EPT conditions are met. Once the EPT is completed, each student must fill in an assessment form of their EPT on the dedicated software (Sphinx database). This assessment is also available to students looking for EPT.

The referring lecturer tutor (also called academic tutor) is at the front line to solve any problem occurring with the trainee and/or the supervisor. If necessary, he/she refers the case to the person in charge of the EPT commission and the Head of the Education and student life, or even to the Dean. When filling in the EPT assessment form, the student can alert on the practices of certain host structures that do not comply with the specifications of EPT. The EPT commission may then decide to prohibit the departure of students to these host structures.

#### Comments

Like other ENV, ENVT's curriculum combines a solid core programme followed by all the students and the possibility of choosing from a list of tracks. This coexistence allows all graduates to attain the day-one skills at the end of 4<sup>th</sup> year but to be trained further with slightly different additional skills. The high proportion of practical and clinical training is a strenght

clearly identified by the foreign students who apply to ENVT for clinical rotations. Although very demanding in terms of supervision, this training approach enables a good hands-on.

Since the last EAEVE visit, new educational methods (flipped classroom, e-learning) have emerged and the use of a digital platform (Moodle) is now widespread. Interdisciplinary approaches has been promoted and new modules were created (e.g ethics, designated veterinarian for laboratory animals, practice management) improving students' professional adaptability. Moreover, we have promoted the students' open-mindedness by defining a clear strategy for EPTs and by developing international (incoming and outoming) mobility.

Finally, ENVT actively participated in the development of the new reference framework for the French veterinary diploma through the contribution of several lecturers to thematic working groups. An inter-ENVs steering group (Compet-Vet group) is responsible for developing and implementing the skill framework of the new curriculum, as well as the methods for assessing students' skills. More generally, a closer cooperation between ENVs is underway with the aim of sharing best practices, pooling training resources and developing joint modules contents.

#### Suggestions for improvement

The implementation of the new reference framework for the French veterinary diploma must be an opportunity to:

- continue to decrease the proportion of lectures especially during the first years of the curriculum and to promote multidisciplinarity approaches through the curriculum;

- improve the preparation for clinical procedures before the beginning of the clinical rotation (in particular through the new clinical skills lab);

- better monitor the progression of each student through a competence-based approach: the Inter-ENVs Compet Vet project, will include the monitoring, the validation and the assessment of students' skills (see appendix Stand\_3.5\_App007). The creation for each student, of an individual and secure e-portofolio of skills, based on a case book and an activity book should considerably improve the assessment of clinical and practical activities. This will be made possible with the software Compet Vet Suivi (monitoring the acquisition of skills), Compet Vet Eval (assessing skills) and Compet Vet Valid (validation) (under construction, scheduled release in 2020 - See competency matrix);

- to build a clear strategy regarding the balance between *intra-muros* and supervised *extra-muros* training to enhance and secure the acquisition of Day-One Competences. A mandatory EPT in a private pet clinic as part of the 4<sup>th</sup> year clinical rotations is under discussion. It would increase students' clinical exposure to first-opinion cases and allow a useful experience in practice management.

### 4: Facilities and equipment



4.1 All aspects of the physical facilities must provide an environment conducive to learning, including internet access. The veterinary Establishment must have a clear strategy and programme for maintaining and upgrading its buildings and equipment. Facilities must comply with all relevant legislation including health, safety, biosecurity, accessibility to people with reduced mobility, and EU animal welfare and care standards.

The school offers an exceptional living space of 54 hectares planted in trees and located only a few kilometres away from the city centre; it is situated on an urban area that has become heavily densified in its periphery. This context characterizes the establishment as a « school within the city » (see appendix Stand\_4.1\_App001). The school currently owns forty main buildings distributed in five sectors (see document Stand\_4.1\_App002 (master map and levels map)):

- Administration and support services
- Clinics and hospitals
- Education
- Educational Services and Research Laboratories
- Student Life

The spatial organization of the site can be is composed of three subsets (see appendix Stand\_4.1\_App002):

- The "regalian" sector, which includes the school's teaching, clinical, research and general administration activities as well as the pastures strictly dedicated to animals used in research and for teaching.

- The "non-regalian" sector intended to accommodate student (extracurricular) living spaces such as the student social house, sports areas, as well as catering and accommodation spaces (residence halls) and finally the equestrian centre.

- The 3rd sub-unit constitutes a land reserve, mainly used by the equestrian centre

On the basis of the State's reference system, the mapping of the establishment's built estate is as follows: 86 buildings with a surface area of 49,564 m<sup>2</sup> and a footprint of 28,264 m<sup>2</sup> (*see appendix Stand\_4.1\_App003*). Nearly 60% (SP) of the school's property are buildings directly related to teaching, clinical and research activities.

Recent structural works operations were mainly co-funded by the National/Regional plan (CPER) over the period 2015/2020 for €11.1 million as well as major maintenance operations, renewal and optimisation of operations for an average €1 million per year

Besides, the **Information Systems Department** manages the IT network infrastructures: all buildings housing offices, technical or hospital platforms and research premises are connected to the campus's main system via IT network. This star-shaped network has a single Internet access protected by traditional "firewall" security devices. Our site is connected to the RENATER national academic network via the regional federation of universities and "grandes écoles" REMIP. Infrastructures and network equipment are regularly renewed at the end of its depreciation period (between 6 and 8 years) or earlier if capacity building is required. Our suppliers are required to provide us with hardware and software solutions that meet current business standards.

The **Health**, **Safety and Environment** (HSE) department organizes mandatory inspections of all lifting equipment and trolleys, compressors, X-ray equipment and hoists according to respective regulatory periodicities. The maintenance of chemical fume hood cabinets, centrifuges, microbiological safety stations, anaesthesia equipment in laboratories, clinics or

operating theatres, is organized by the services using them. The HSE department visits the services concerned every year to ensure that the maintenance of these devices is actually done. (annual schedule available upon request).

The following table presents the projects developed during the reference period: these operations aim to raise the level of equipment made available to staff and students, but also to improve the quality of service, particularly in terms of biosecurity and animal welfare.

| Main projects  | Cost         | Туре            |
|--|--------------|-----------------|
| Construction of emergencies and intensive care (CHUVAC)  | 1 200 000 €  | New building    |
| Building of a new ruminant Veterinary Teaching Hospital  | 3 882 400 €  | New building    |
| Addition of new buildings to the small animal Veterinary<br>Teaching Hospital (operating theatres) | 2 001 600 €  | New building    |
| Animal Training Platform (ATP)   | 720 000 €    | Restructuration |
| Energy transition  | 1 795 200 €  | Restructuration |
| Experimental animal housing A2   | 1 555 200 €  | Restructuration |
| TOTAL  | 11 154 400 € |                 |

4.2 "Lecture theatres, teaching laboratories, tutorial rooms, clinical facilities and other teaching spaces must be adequate in number, size and equipped for the instructional purposes and must be well maintained. The facilities must be adapted for the number of students enrolled. Students must have ready access to adequate and sufficient study, self-learning, recreation, locker, sanitary and food services facilities.

Offices, teaching preparation and research laboratories must be sufficient for the needs of the academic and support staff

| Use   | Number | Size (m <sup>2</sup> ) | Equipment  |
|---|--------|------------------------|--|
|   | 5      | 625                    | 524 seats, Projector, boards, sound system, wifi   |
| Lecturing   | 1      | 145                    | 210 seats, Projector, boards, sound system, wifi<br>Camera for recording lectures and conferences, place<br>adapted for people with reduced mobility |
|   | 2      | 29                     | Boards   |
| Crown work (cominger tytorials )                                      | 19     | 940                    | Projector, boards, sound system, wifi  |
| Group work (seminars, tutorials,)                                     | 2      | 64                     | Library, Wifi  |
|   | 1      | 190                    | Library, computers, printer  |
|   | 7      | 732                    | Projector, boards, wifi  |
|   | 1      | 74                     | Computer, Projector, boards  |
|   | 1      | 54                     | Microscopes, projector, boards, wifi   |
| Practical work (laboratories,)  | 1      | 166                    | Anatomical collections   |
|   | 1      | 66                     | Plant collections  |
|   | 1      | 132                    | Parasitology practical room  |
|   | 5      | 34                     | Preparation of training material   |
| Skill laboratories (preclinical simulation-based training on models,) | 3      | 50                     | Nurses simulation room, biological analysis<br>simulation, calving simulator (anatomy preparation<br>room)   |

|  | Number of rooms | Places |
|--|-----------------|--------|
| Study and self-learning                                    | 4               | 82     |
| Catering, canteens,  | 1               | 460    |
| Locker rooms   | 64              | 300    |
| Accommodation for students on call                         | 3               | 37     |
| Leisure (rest area)  | 29              | 412    |
| Sanitary facilities (toilets, wash basins and/or showers,) | 203             |        |

|                       | Surface area ( <sup>m2</sup> ) | Surface area/ workstation |  |
|-----------------------|--------------------------------|---------------------------|--|
| Staff offices         | 3 798                          | 16.16                     |  |
| Research laboratories | 3 064                          | 29.64                     |  |

**4.3** "The Establishment's livestock facilities, animal housing, core clinical teaching facilities and equipment must:

• be sufficient in capacity and adapted for the number of students enrolled in order to allow hands-on training for all students

• be of a high standard, well maintained and fit for the purpose

• promote best husbandry, welfare and management practices

• ensure relevant biosecurity and bio-containment

• be designed to enhance learning."

### Description of the premises for housing

Besides the medical facilities (clinical activities and hospitalization), pedagogic animals or animals used for research are housed in different premises. Their number may vary with the studies, the period of the year and the teaching activities.

|   | Number of<br>rooms | Sur | face area (m²) |
|---|--------------------|-----|----------------|
| RESEARCH                                | 16                 |     | 981.95         |
| Research animals                        | 6                  |     | 722.8          |
| Rodents                                 | 3                  |     | 69.9           |
| Ruminants / Poultry / Rabbits / Rodents | 1                  |     | 66.9           |
| Sheep / Goats                           | 2                  |     | 586            |
| Healthy animals / Research animals      | 10                 |     | 259.15         |
| Cats                                    | 4                  |     | 39.18          |
| Dogs                                    | 2                  |     | 142.54         |
| Pigs                                    | 1                  |     | 27.61          |
| Rabbits / Dogs                          | 1                  |     | 19.82          |
| Rodents / Cats                          | 1                  |     | 30             |
| Rodents                                 | 1                  |     |                |

| TEACHING                           | 3  | 141.15  |
|------------------------------------|----|---------|
| Healthy animals                    | 2  |         |
| Rodents                            | 1  |         |
| Small ruminants / Dogs / Poultry   | 1  |         |
| Healthy animals / Research animals | 1  | 141.15  |
| Ruminant                           | 1  | 141.15  |
| Research / Teaching                | 9  | 233.1   |
| Healthy animals / Research animals | 9  | 233.1   |
| Dogs                               | 5  | 90      |
| Rabbits / Dogs                     | 1  | 20.9    |
| Sheep                              | 3  | 122.2   |
| CLINICAL                           | 44 | 1317.75 |
| Hospitalised animals               | 44 | 1317.75 |
| Dogs / Cats                        | 15 | 294.62  |
| Equines                            | 19 | 602.9   |
| Exotic pets                        | 1  | 7.43    |
| Ruminants                          | 9  | 412.8   |
| NECROPSY                           | 2  | 144     |
| Dead animals                       | 2  | 144     |
| All species                        | 2  | 144     |
| Total                              | 74 | 2817.95 |

### Description of the premises for isolated animals

An isolation area has been operational since 2019 in the compagnion animal hospital.

Although two areas are separated with respect of the Infectious Bovine Rhinotracheitis, cattle suffering from contagious diseases are, when possible, not moved into the premises.

| Species Number of rooms |                | Surfaces area (m <sup>2</sup> ) | Location      |
|-------------------------|----------------|---------------------------------|---------------|
| Compagnion animals      | 14             | 123.23                          | Building 16.2 |
| Ruminants               | 1 outside box  |                                 | Building 13   |
| Equines                 | 1 isolated box | 27.6                            | Building 13   |

### Description of the premises and equipment for clinical activities:

A more complete list of facilities is available in database <u>link</u>

| Area                             | Species          | Building | Rooms<br>Number | Surfaces<br>area (m2) | Rooms /Specialised Equipments   | Subjects                         |
|----------------------------------|------------------|----------|-----------------|-----------------------|---|----------------------------------|
| Ruminants                        | Cattle           | 13       | 25              | 691                   | Basic equipmentEchography1 anesthesia machineSurgical kits  | Medicine<br>Surgery              |
| Exotic pets<br>and wildlife      | Exotic<br>pets   | 12       | 16              | 204.10                | Basic equipment2 anesthesia machines1 dopplerPulse oximetry ; oxygen generator,<br>oxygen1 analysis laboratory2 consultations rooms1 surgery room1 Intensive care rooms and equipments  | Medicine<br>Surgery              |
| Equine<br>hospital               | Equines          | 13       | 31              | 901                   | Basic equipmentAnesthesia equipments :<br>induction/preparation1 surgical unitEchography/Endoscopy equipments2 consultations roomsHospitalizations boxesPharmacy deposit1 analysis laboratory, microscopy1 recovery boxLockersOphtalmology equipments and materialX-Ray room, pilot and interpretationrooms | Medicine<br>Surgery<br>Radiology |
| Compagnion<br>animal<br>hospital | Small<br>animals | 16.1     | 24              | 502.45                | Basic equipmentAnesthesia equipmentsEndoscopy equipments2 Groupwork rooms<br>(medecine/surgery)1 surgery room1 medecine care roomLocker rooms (men/women)Cattery long stay hospitalizationCattery ambulatory hospitalizationHospitalizations roomsAccomodation for on call students                         | Medicine<br>Surgery              |

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| Area                             | Species | Building | Rooms<br>Number | Surfaces<br>area (m2)         | Rooms /Specialised Equipments                        | Subjects            |  |
|----------------------------------|---------|----------|-----------------|-------------------------------|--|---------------------|--|
|                                  |         |          |                 |                               | Basic equipment                                      |                     |  |
|                                  |         |          |                 |                               | 2 consultations rooms                                |                     |  |
|                                  |         |          |                 |                               | 1 intensive care room                                |                     |  |
|                                  |         |          |                 |                               | 1 analysis laboratory, microscopy                    |                     |  |
| ~ .                              |         |          |                 |                               | Blood sampling and bank                              |                     |  |
| Compagnion<br>animal<br>hospital | Small   | 16.2     | 14              | 76.05                         | Recovery / monitoring equipments                     | Medicine            |  |
|                                  | animals | 10.2     | 14              |                               | Echography equipments                                | Surgery             |  |
|                                  |         |          |                 |                               | 1 students meeting room                              |                     |  |
|                                  |         |          |                 |                               | Anesthesia equipments                                |                     |  |
|                                  |         |          |                 |                               | Hospitalizations rooms                               |                     |  |
|                                  |         |          |                 |                               | Chemotherapy / preparation room                      |                     |  |
|                                  |         |          |                 | Chemotherapy / treatment room | 1  |                     |  |
|                                  |         | Small 17 | 24              | 547,6                         | Basic equipment                                      |                     |  |
|                                  |         |          |                 |                               | 4 consultations rooms and amphitheater (dermatology) |                     |  |
|                                  |         |          |                 |                               | 3 examination rooms                                  |                     |  |
|                                  |         |          |                 |                               | Anesthesia equipments                                |                     |  |
|                                  |         |          |                 |                               | Ophtalmology equipments and material                 |                     |  |
|                                  |         |          |                 |                               | Simulation material/ models / plush                  |                     |  |
|                                  |         |          |                 |                               | Diagnostic dermatology equipment                     |                     |  |
|                                  |         |          |                 |                               | 1 analysis laboratory, microscopy                    |                     |  |
| Compagnion<br>animal             | Small   |          |                 |                               | Central pharmacy                                     | Medecine<br>Surgery |  |
| hospital                         | animals | 17       |                 | 547,0                         | Nursing care room                                    | Radiology           |  |
| nospruu                          |         |          |                 |                               | Examination rooms                                    | 1100101085          |  |
|                                  |         |          |                 |                               | Workshop room (radiology, anatomy)                   |                     |  |
|                                  |         |          |                 |                               | 2 consultation rooms (surgery /                      |                     |  |
|                                  |         |          |                 |                               | reproduction)  |                     |  |
|                                  |         |          |                 |                               | Interns' room  |                     |  |
|                                  |         |          |                 |                               | CT Scanner room                                      |                     |  |
|                                  |         |          |                 |                               | Radiology room, pilot and                            |                     |  |
|                                  |         |          |                 |                               | interpretation rooms                                 |                     |  |
|                                  |         |          |                 |                               | Anesthesia and recovery room                         |                     |  |

- Diagnostic services: necropsy, laboratories and imaging service

| Area                                      | Species | Building | Rooms<br>/Number | Surfaces<br>area (m2) | Specialized Equipments       | Subject |
|---|---------|----------|------------------|-----------------------|------------------------------|---------|
|   |         |          |                  |                       | Cleaning equipments          |         |
|   |         |          |                  |                       | Cleaning stations Prowash    |         |
|   | Cattle, |          |                  |                       | kärcher                      |         |
| N   |         |          |                  |                       | Hone                         |         |
| Necropsy Dogs,<br>room Cats,<br>Horses 24 | 24      | 4 2      | 390              | Inox tables           | Diagnostic<br>pathology      |         |
|   |         |          |                  | Inox trays            |                              |         |
|   |         |          | Trolleys, chains |                       |                              |         |
|   |         |          |                  |                       | Scale (maximum weight 150kg) |         |
|   |         |          |                  |                       | Freezers                     |         |

Most of the laboratories are equipped with the basic material required to perform practical works: microscopes, centrifuges, scales, etc.

| Area                                 | Species | Building | Rooms<br>/Number | Surfaces<br>area (m2) | Specialized Equipments  | Subject                 |
|--------------------------------------|---------|----------|------------------|-----------------------|---|-------------------------|
| Histology<br>pathology<br>laboratory |         | 6.1      | 4                | 113                   | Histology pathology lab equipments  | Diagnostic<br>pathology |
| Medical<br>biology<br>laboratory     |         | 15.1     | 1                | 137                   | Analyzers (biochemistry,<br>hematology),electrophoresis,<br>virology materials,<br>immunoanalysers, coloration<br>equipments, etc<br>Anesthesia equipments<br><u>Medical biology laImanging</u><br><u>serviceboratory</u> | Diagnostic<br>pathology |

| Imaging<br>service | All | Hospitals |  | X-Ray generators (2), CT scan for<br>compagnion animals, X-Ray<br>generator (1) for equine, portable X-<br>Ray generators (2) for equine and<br>bovine | Diagnostic<br>imaging |
|--------------------|-----|-----------|--|--|-----------------------|
|--------------------|-----|-----------|--|--|-----------------------|

### Description of the premises used for the practical teaching of the FSQ & VPH

For the practical teaching of FSQ & VPH, three multi-species slaughterhouse, located less than 80 km away from the school, are used:

- *Montauban*: private; 6 400 tons carcass weight per year; multi-species.
- Pamiers: private; 4 000 tons carcass weight per year; multi-species.
- Saint Gaudens: public, 7 400 tons carcass weight per year; multi-species.

Moreover, five premises for the production, processing of animal-based food are visited:

- EURL Bareil, Alzonne: Butcher / Meat products
- Mabille, Auterive: Vacuum ready-made meal
- Central kitchen AIRBUS, Toulouse
- Gérial Jambon d'Auch, Gimont: Meat products
- Gaec des Hounts, Escanecrabe: Goat Farm / Raw Goat Milk Cheese

4.4 "Core clinical teaching facilities must be provided in a VTH with 24/7 emergency services at least for companion animals and equines, where the Establishment can unequivocally demonstrate that standard of education and clinical research are compliant with all ESEVT Standards, e.g. research-based and evidence-based clinical training supervised by academic staff trained to teach and to assess, availability for staff and students of facilities and patients for performing clinical research and relevant QA procedures.

For ruminants and pigs, on-call service must be available if emergency services do not exist for those species in a VTH.

The Establishment must ensure state-of-the-art standards of teaching clinics which remain comparable with or exceeding the best available in the private sector.

### The VTH and any hospitals, practices and facilities (including EPT) which are involved with the curriculum must meet the relevant national Practice Standards."

ENVT's ambition is to develop an attractive and effective clinical service in terms of training by investing in a state-of-the-art human and technical environment that is innovative and shared between clinical sectors.

The clinical training mainly relies on the Veterinary Teaching Hospital (VTH). Its missions are closely linked to:

- services to animal owners and veterinarians (in terms of diagnosis and clinical case management);

- the training (transfer of knowledge, skills and attitudes) of veterinary students in practical situations from the 3rd year onward;

- clinical research.

**The compagnion animal hospital** is a reference structure, led by veterinary surgeons and specialists. It operates thanks to a team of 65 people on a surface area of about 3500 m<sup>2</sup>. It is organized around andro-gynaecology, anesthesia-analgesia, surgery, behavior, dentistry, dermatology, internal medicine, feline medicine, nutrition, neurology, oncology, ophthalmology, orthopaedics, preventive medicine, emergency and intensive care services. The consultations which are offered cover all disciplines, whether first line consultations or specialized consultations.

The equine hospital benefits from recently renovated premises and new equipment for the management of medical and surgical cases (2 consultation rooms, a surgical suite with an induction area and a preparation room, 12 hospitalization boxes, one X-ray room) as well as the necessary equipment for additional examinations (endoscopy, ultrasounds, minimally invasive surgery).

The VTH includes an area dedicated to **exotics** as well as a licensed **Wildlife Care Centre**. This sector, which benefits from the pooling of the technical platforms of the institution, constitutes an attractive national reference structure for the mobility of final year students. The Wildlife Care Centre treats and releases animals into their natural habitat when their health status allows (one third of the animals admitted). The others die at the Centre or are euthanized. This activity is financed by signing agreements with state agencies, federations of hunters or establishments involved in the conservation of species. ENVT also contributes financially to this activity.

The activities of the **large animal clinic** are carried out on the campus (hospitalization of ruminants and necropsies of ruminants and poultry) and on the farms (ambulatory clinics for ruminants, pigs and poultry). The rehabilitation of this sector, which had become necessary, is underway and follows that of the necropsy room (final commissioning in 2018). A 2000 m<sup>2</sup> hospital and intervention building for ruminants is under construction (National/regional plan CPER funding 2015-2020) and will be commissioned in May 2020 (appendix Stand\_4.4\_App004).

The different hospitals use **transversal platforms** such as the clinical pathology service, the pathology service (necropsy, histopathology), the medical imaging service (enriched since 2015 by a CT scanner) and the pharmacy.

The initial design of pavilion buildings had been an impediment to efficiency, particularly in the small animal and exotic clinics. Substantial work led to the building of a 425 m<sup>2</sup> wing dedicated to emergency and critical care (ECC), with a contagious and infectious hospital sector

that complies with biosafety standards, in early 2018, as well as a cancer chemotherapy care area. This work also made it possible to establish communication between this new wing and (i) the small animal hospital sector, and (ii) between the latter and the consultation sector. The construction of the new surgical theater (CPER 2015-2020), currently underway, will allow to have 7 operating theaters, thus meeting the highest standards in this domain, but will also offer a connection between the surgery sector, the hospitals, the imaging department and the consultations department. In addition, the exotic pet clinic, which has been mixed with the wildlife clinic so far, will soon join the canine/feline clinic.

The clinical staff not only respond to the demand for services from animal owners and referring vets: they also ensure that the training of undergraduate and post-graduate students (interns, and residents) is based on state-of-the-art medical knowledge and techniques, with a particular concern for animal welfare and quality of care. Their teaching is supported by service and research activities, through referrals by veterinarians or professional bodies.

Clinical cases seen at the VTH are also a source for **scientific transfers** (valorization of original clinical cases) and **scientific production**. Indeed, ENVT's caseload–approximately 20,000 annual consultations and 55,000 medical or surgical procedures–constitutes a pipeline of spontaneous clinical cases with a high potential for biological, epidemiological and therapeutic investigations. Clinical research, which is a real challenge for the Establishment, relies mainly on clinical trials, cohort studies (retrospective or prospective) and proofs of concept. It is also an essential component of translational research carried out within the INSERM Joint Research Units which teachers and researchers from the Department of Small animal and Equine Clinical Sciences are members of.

Well integrated into food animal sectors production, the livestock and poultry clinics are very active in research and development on a variety of issues related to ruminant, pig and poultry breeding and health. They are able to quickly address professional requests.

For a detailed description of the clinical rotations (both intra and extra-murraly), see standard 3.1.

ENVT meets the national Practice Standards (see Standard 4.9).

### 4.5 The Establishment must ensure students have access to a broad range of diagnostic and therapeutic facilities, including but not limited to: diagnostic imaging, anaesthesia, clinical pathology, intensive/critical care, surgeries and treatment facilities, ambulatory services, pharmacy and necropsy facilities.

As mentioned in Standard 3, students start clinical activities in the 3<sup>rd</sup> year of the curriculum. Clinical activities are organized in clinical rotations, of at least one week, in all departments and disciplines of the VTH and during ambulatory clinics (see Table 3.1.3). During the training, students are under the supervision of academic veterinary instructors, and can have access to all relevant diagnostic and therapeutic facilities (see Table 4.3). They are also trained for their use. The handling of this equipment is carried out in compliance with biosafety rules defined in the field.

4.6 Appropriate isolation facilities must be provided to meet the need for the isolation and containment of animals with communicable diseases. Such isolation facilities must be properly constructed, ventilated, maintained and operated to provide for animal care in accordance with updated methods for prevention of spread of infectious agents. They must be adapted to all animal species commonly handled in the VTH.

#### Small animal and equine hospital – Dogs, cats

The small animal hospital is equiped with facilities dedicated to the isolation of contagious animals. This place has:

- one single way in for contagious animals that need hospitalization;

- three sanitary hatches (one for the staff, one for the animals, one for the equipment), with, for each of them, a « non contaminated » zone and a « contaminated » zone.

- three hospital areas:

- room n° 1 for dogs (with an outdoor walking area)

- room  $n^\circ\ 2$  mixed room for the one or the other species depending on needs and circumstances

- room  $n^{\circ}3$  for cats

The course of action to follow in case of hospitalization of a contagious animal is described in a specific procedure. See appendix.

#### Equine hospital

An isolation box was installed at the far end of building  $n^{\circ}13$  so that any contagious horse (or any horse likely to be contagious) can be treated without meeting other patients.

#### **Exotics**

The exotics hospital will soon be attached to the central small animal VTH (1<sup>st</sup> trimestre of 2020). Other species such as reptiles, rodents, birds likely to be contagious will be confined in cages, boxes or dedicated rooms in the new hospital area in building 16.1.

#### Ruminant hospital:

At the present time, the large animal clinic is divided in two sectors depending on the health status of the animals regarding bovine infectious rhinotracheitis (BIR). Contagious animals are isolated and dealt with in a quarantine box. Yet, the new large animal clinic (due to be operational in September 2020) will be equipped with an appropriate contagious sector. The modalities of taking charge of such animals are described in the biosecurity guidelines in annex.

### 4.7 The Establishment must have an ambulatory clinic for production animals or equivalent facilities so that students can practise field veterinary medicine and Herd Health Management under academic supervision.

Veterinary medicine and Herd Health Management are taught to students during the 3rd, 4th and 5th year teaching modules. The establishment has five 9-seater light vehicles of the minibus type for ambulatory clinics. These vehicles are managed centrally and maintained by an external service provider. An insurance with assistance covers their use in the context of the institution's missions. They can be booked online by the lecturers. The driving is entrusted to them, though a hospital assistant and sometimes a student with special authorization can also drive the minibuses. Students are fully integrated in these farm visits from the 3rd year of the training (see 3.1).

# 4.8 The transport of students, live animals, cadavers, materials from animal origin and other teaching materials must be done in agreement with national and EU standards, to ensure the safety of students and staff and to prevent the spread of infectious agents.

Transport in the context of teaching is in accordance with the following procedures:

- the transport of extramural students is carried out thanks to a fleet of 10 light vehicles (373 reservations and 7633 hours of use in 2018) supplemented by the intervention of external service providers, particularly for visits to processing plants and slaughterhouses (70 missions in 2018);

- the transport of live animals concerns the ruminant hospital mainly. The drivers (2) assigned to this service drive about 100,000 km per year. They are holders of a certificate of proficiency for the transport of live animals (CAPTAV) and the vehicles are inspected for technical approval by the Departmental Department of Public Security (DDSP);

- for, ambulatory clinics, see items 4.4 or 4.7.

4.9 Operational policies and procedures (including biosecurity, good laboratory practice and good clinical practice) must be taught and posted for students, staff and visitors. The Establishment must demonstrate a clear commitment for the delivery of biosafety and biosecurity, e.g. by a specific committee structure. The Establishment must have a system of QA to monitor and assure clinical, laboratory and farm services, including a regular monitoring of the feedback from students, staff and clients.

Concerning good clinical practices, a charter of good conduct during consultations is applied in the clinics and is available on the ENVT's website with restricted access (for ENVT staff only).

The writing of an internal biosecurity and biosafety manual covering all sectors of ENVT and involving a large number of contributors was undertaken in March 2019. Previously, the biosecurity subject was managed by the Hygiene and Safety committee (CHSCT). A new commission involving a wider range of members has recently been created.

This work and procedures is accessible to staff and students on a Moodle platform. Visitors are informed through communication media (posters, specific signage etc.). Moreover, An e-mail address biosecurite@envt.fr has been created to collect and process information, alerts, requests and distribute them to the services concerned, in addition to the ticketing system that already exists on the establishment (SOS info, SOS campus, SOS HSE).

#### Comments

ENVT was built in 1964 and now has ageing facilities, including hospitals, that require major renovation works (see suggestions of standard 2). In mid-2017, a Real Estate and Logistics Department (DPL) was created in order to upgrade ENVT's skills in the areas of asset management, operations and maintenance, logistics and the conduct of construction operations (see page 4 of the *organizational chart*). The reflection on the future of the institution's real estate assets was carried out with regard to the distribution of the buildings in the student residence area, the desire to rationalize land management, to create technical/thematic platforms and to limit the dispersion of activities. These reflections led to a multi-year real estate strategic plan (SPSI) aiming at developing a master plan in the medium/long term (5 to 15 years), recently approved by the MAA. Four thematic poles were identified (see appendix Stand\_4.1\_App002):

- the Education pole

o theoretical teaching / Core curriculum in zone 1

o practical teaching in zones 6 and 7.

- the Veterinary Teaching Hospital with a large animal sector and a small animal sector
- the Research pole divided into 2 zones
- the Tertiary pole in which most lecturers' offices are located at heart of ENVT.

ENVT has adapted to the higher number of students by changing the timetable schedule without any modification of the major facilities.

Regarding ambulatory activities:

- the activity is developing in the small animal sector, with the introduction of visits to dog breeding units.

- it remains important in the food animal sector in a context of a decreasing number of farms (hence increasing driving distances).

- the meat inspection teaching model is challenged by the increase in the size of classes and the increasing reluctance for slaughterhouses to accept students on a regular basis.

#### Suggestions for improvement

The forthcoming opening of new premises in both small animal and large animal sectors (mid 2020) will significantly improve user convenience.

The next State-Region Programmes (CPERs) will be crucial to carry out the complete restructuration of our campus: we are considering a complete renovation of the teaching area (amphitheatres and library) to improve the students' welfare and to build a clinical research institute bringing all small animal clinicians together.

Additionally, lecturers are more and more involved in developing digital tools (such as virtual visits of pig farms or slaughterhouses) to substitute (or to complete) conventional training partially due to biosecurity restrictions.

Finally, we are also working in strengthening biosecurity practices among the community.

### 5: Animal Resources and Teaching Material of Animal Origin



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5.1 "The number and variety of healthy and diseased animals, cadavers, and material of animal origin must be adequate for providing the practical and hands-on training (in the areas of Basic Sciences, Clinical Sciences, Pathology, Animal Production, Food Safety and Quality) and adapted to the number of students enrolled.

Evidence must be provided that these data are regularly recorded and that procedures are in place for correcting any deficiencies."

### Description of the global strategy about the use of animals and material of animal origin for the acquisition by each student of Day One Competences.

As part of the undergraduate training, competencies are divided into disciplinary or multidisciplinary teaching modules with progressivity of the acquisition of the skills starting with basic sciences during the first 2 years, propaedeutics during the 2nd year and clinical sciences from the 2nd year for farm animals, from the 3rd and 4th years for respectively small animals and horses until the deepening of a domain during the 5th year.

For **basic sciences and propaedeutics**, materials of animal origin and healthy animals are used to understand the structure, behavior, physiological and welfare needs of animals and the basis of clinical examination. In this context, the establishment promotes the use of functional exploration tools such as medical imaging; this training approach enables to reduce the number of animals used in teaching and facilitates the acquisition of concepts by making students aware of their medical applications. For example, the conventional approach to anatomy based on dissection has evolved a lot with the introduction of a variety of complementary dynamic imaging teaching modalities (ultrasonography, radiography...).

Initial training in **Food and Safety Quality** (FSQ) relies on educational visits of multi-species slaughterhouses and processing plant (see 4.3).

For **clinical training**, the acquisition of technical know-how is carried out in various successive phases during which the students who have acquired the theoretical knowledge (material, conditions of realization ...), (i) observe the technical skills performed within the hospital structure by competent staff, (ii) are trained in their implementation on animals for teaching, (iii) help to perform the actions and finally, (iv) perform the actions under the supervision of a competent staff (for a detailed description, see 3.1). A possible clinical case defect during the rotation period is compensated by presentations done by the lecturers during the periods of exchanges around the follow-up and the management of the clinical cases. Where possible, the establishment encourages alternatives to the use of animals including models and simulation tools in line with ethical protocols, especially for teaching practical skills in surgery on low fidelity models (handling of instruments, anatomical bases, sutures, local and loco-regional anesthesia).

Whatever the specie, the clinical case is the support of teaching, this learning phase having no harmful consequences for the animal itself, insofar as it does not significantly delay the care that must be provided. Necropsy, which is encouraged in pets and very frequent in farm animals has a fundamental place in the learning of pathology and the diagnostic approach. With regard to farm animals for which part of the teaching is based on population medicine, ambulatory clinics allow the progressive acquisition of clinical skills in real conditions, in the presence of healthy and sick animals in the context of spontaneous pathology.

### Description of the specific strategy in order to ensure that each student receives the relevant core clinical training before graduation.

**For pre-clinical training**, the type of animals and material of animal origin is determined by the teaching unit of the related subject/discipline in accordance with its learning objectives and the diploma reference system. This information is communicated to the students through an oral presentation of the teaching modalities. The number of animals is adjusted to the group size in order to enable each student to perform the necessary acts under the supervision of the lecturer. For practical works performed with live animals, the number of animals takes also into account the necessity to comply with animal welfare requirements.

For **compagnion animals and equines**, it was decided to base clinical training on a hospital operating partly as a general veterinary practice and partly as a referral hospital, thus offering a wide range of recruitment from very basic to referred cases. In this scheme, preventive medicine plays a very important role because it allows students to have a first contact with the animal and its owner and offers a global clinical teaching on the bases of the healthy animal clinical examination, husbandry or legislation, prevention of infectious or parasitic diseases and clinical dietetics / nutrition / dietary nutrition. The distribution between first opinion and referral cases differs between clinical activities, referral cases being dominant in specialized activities like ophthalmology. A director is in charge of the functioning of the Compagnion animal hospital. The teaching unit, in agreement with the Head of the Department of Small animal and Equine Clinical Sciences and the director of the CHUVAC, decides on the number and duration of rotations in the different clinics (carnivores, horses, exotic pets). They also determine group sizes in the different classes, hence the type and number of animals needed, in accordance with the framework defined by the Education and student life department (DEVE).

For **ruminants**, the expertise and the recognition of the lecturers is at the origin of their solicitation by veterinary practitioners for the examination of cases referred in the context of the farm audits carried out with 3rd, 4th and 5th year students (2-3 per clinical rotation) and hospitalizations (see table 5.1.3). Practitioners refer more than 95% of the cases and most of the patients that are seen in consultation at the VTH by students are hospitalized (see table 5.1.5). In this context, the establishment mobilizes numerous material resources (2 vehicles) and human resources (2 drivers) for the transport of sick animals from the farms to the ruminant hospital. ENVT resorts to a network of practitioners (extra practical training in year 4) with a list of cases to be observed and acts to be performed. Control of these activities by the academic staff is done through presentations of clinical cases by the students. The number of farms visited each week and the number of hospitalizations depend on the requests by the veterinarians who refer their cases to the lecturers. Because of the many solicitations, the number of hospitalizations is determined by the staff of the ruminant clinic (lecturers, clinicians...), the animal transport feasibility and the places available at the hospital.

For a detailed description of the clinical rotations (both intra and extra-murally), see 3.1.

### Description of the procedures developed to ensure the welfare of animals used for educational and research activities.

The procedures are based on European regulations on the use of animals for scientific and educational purposes (Directive 2010/63 / EU transcribed into French law by Decree 2013/118) Any animal intervention for research or teaching activities that are likely to cause animal pain, suffering, distress or lasting harm equivalent to or greater than the introduction of a needle must be the object of an application for authorization of animal use by the Ministry of Higher

Education and Research (MESR). The MESR relies on the opinion of the committees for the protection of animals used for scientific purposes. These committees are composed of lecturers, researchers, students and staff from the ENVs, research institutes and universities.

The activities covered by this regulation are carried out in approved user structures (4 for the establishment) by competent staffs that receive continuous training for 3 days every 6 years. The establishment has chosen to go further through the setting up of an ethical process aimed at ensuring compliance with animal ethics regulations and training of future veterinarians in animal welfare concepts and components, respect for clinical practice (management of pain, etc.), especially behaviour and specific needs (training in handling and restraining). This process also includes activities that fall outside the scope of application of the regulation, called "off law", including clinical activities and research that require approval by an ENVT committee. It is implemented by a working group composed of players in the different activities related to the use of animals and respect for animal ethics, including students, members of both committees and representatives of different categories of staff (lecturers, clinicians, nurses, zootechnicians). Through this process, the establishment also wishes to promote the reduction of the number of animals and the use of alternatives to the use of animals for initial and continuing training such as simulation, manikins, anatomy collections, plastinated pieces.

Throughout their curriculum, students not only learn about the fundamental mechanisms of pain but are also introduced to the management of pain, animal welfare, euthanasia procedures. Beyond the operational aspects, the introduction of a module entitled "Ethics, ethology and animal welfare" leads students to reflect on their societal role as guarantor of the welfare of animals in all contexts of animal use, including for scientific purposes.

### Description of how the cadavers and material of animal origin for training in anatomy and pathology are obtained, strd and destroyed.

For training in anatomy, animals from approved suppliers are prepared by the staff. The anatomical parts (equine feet) are obtained from the slaughterhouse. Formaldehyde stopped being used in 2010 and carcasses are prepared using a zinc chloride-based embalming method and stored at 4 ° C in cold rooms during the dissection period of the 1<sup>st</sup> and 2<sup>nd</sup> year students (2.5 weeks).

The practical training in pathology is mostly based on the necropsies of diseased animals that died on the farms, at the veterinary hospital (natural conditions) or that were euthanized at the hospital (adverse prognosis and ethical reasons). Some veterinarians use the services of the establishment to perform post-mortem examinations. For animals that die after hospitalization at the veterinary school or that are seen in consultation, necropsies are performed free of charge to increase the number of cases available for student training.

The genital tracts used for training in propaedeutics and semiology of cattle reproduction are provided by the slaughterhouse. The fresh tracts are kept 2-3 days in the refrigerators of the necropsy room and some parts are frozen for longer periods. At the end of the sessions, the tracts are brought back into the cold room of the necropsy room where they are stored before their evacuation by the rendering/disposal company.

All carcasses are removed by a rendering/removal company responsible for their destruction.

| Species               | 2018-2019   | 2017-2018  | 2016-2017  | Mean   |
|-----------------------|---|--|--|--|
| Cattle                | 0 carcass - 8 anatomic<br>pieces conserved                          | 0 carcass - 8 anatomic<br>pieces conserved               | 0 carcass - 8 anatomic<br>pieces conserved               | 0 carcass - 8<br>anatomic pieces<br>conserved            |
| Small ruminants       | 36 carcasses (ewes) - 25<br>anatomic pieces<br>conserved            | 36 carcasses (ewes) - 25<br>anatomic pieces<br>conserved | 36 carcasses (ewes) -<br>25 anatomic pieces<br>conserved | 36 carcasses (ewes)<br>- 25 anatomic<br>pieces conserved |
| Pigs                  | 0 carcass - 4 anatomic<br>pieces conserved                          | 0 carcass - 4 anatomic<br>pieces conserved               | 0 carcass - 4 anatomic<br>pieces conserved               | 0 carcass - 4<br>anatomic pieces<br>conserved            |
| Compagnion<br>animals | 16 carcasses (11 dogs- 5<br>cats) - 12 anatomic<br>pieces conserved | 16 carcasses (dogs) - 12<br>anatomic pieces<br>conserved | 12 carcasses (dogs) -<br>12 anatomic pieces<br>conserved | 14,6 carcasses - 12<br>anatomic pieces<br>conserved      |
| Equine                | 0 carcass - 19 anatomic<br>pieces conserved                         | 0 carcass - 19 anatomic<br>pieces conserved              | 2 carcasses - 19<br>anatomic pieces<br>conserved         | 0,6 carcass - 19<br>anatomic pieces<br>conserved         |
| Poultry & rabbits     | 75  | 75   | 75   | 75   |
| Exotic pets           | -   | -  | -  | -  |
| Others (specify)      | -   | -  | -  | -  |

Table 5.1.1. Cadavers and material of animal origin used in practical anatomical training

Table 5.1.2. Healthy live animals used for pre-clinical training (animal handling, physiology, animal production, propaedeutic, ...)

| Species           | 2018-2019 | 2017-2018 | 2016-2017 | Mean |
|-------------------|-----------|-----------|-----------|------|
| Cattle            | 389*      | 426*      | 437*      | 417  |
| Small ruminants   | 101**     | 68**      | 64**      | 77   |
| Pigs              | 0         | 0         | 0         | 0    |
| Companion animals | 34        | 41        | 41        | 38   |
| Equine            | 12        | 10        | 10        | 10   |
| Poultry & rabbits | 73        | 70        | 72        | 72   |
| Exotic pets       | 10        | 10        | 10        | 10   |
| Others : rats***  | 30        | 30        | 0         | 20   |

\*Practical works of bovine gynecology at slaughterhouse. Thirteen cows from a dairy farm are introduced into the school every year in July and put to reproduction for the practicals of physiology and semiology of the genital system that take place from September to December and after which they return in their breed.

\*\* Physiology and ceasarian training

\*\*\* rodents for physiology practicals (2016-2017)

| Species           | 2018-2019 | 2017-2018 | 2016-2017 | Mean   |
|-------------------|-----------|-----------|-----------|--------|
| Cattle            | 367       | 401       | 454       | 407    |
| Small ruminants   | 84        | 100       | 69        | 84     |
| Pigs              | -         | -         | 1         | 1      |
| Companion animals | 17 943    | 19 113    | 18 796    | 18 617 |
| Equine            | 494       | 504       | 444       | 481    |
| Poultry & rabbits | -         | -         | 495       | 495    |
| Exotic pets       | 1 305     | 1 306     | 1 402     | 1 338  |
| Others : wildlife | 1 483     | 2 008     | 1 889     | 1 793  |

Table 5.1.3. Number of patients\*\* seen intra-murally (in the VTH)

\* Included in companion animals

\*\* Each patient has to be officially recorded in the electronic patient record system of the Establishment and has to be individually examined/treated by at least 1 student under the supervision of at least 1 member of staff. Each live animal affected by one specific clinical episode is counted as 1 single patient, even if it has been examined/treated by several departments/units/clinics.

Table 5.1.4. Number of patients\*\* seen extra-murally (in the ambulatory clinics)

| Species            | 2018-2019             | 2017-2018             | 2016-2017              | Mean  |
|--------------------|-----------------------|-----------------------|------------------------|-------|
| Cattle             | 1 437                 | 1 345                 | 1 245                  | 1 342 |
| Small ruminants    | -                     | -                     | -                      | -     |
| Pigs               | 7                     | 491                   | 65                     | 188   |
| Compagnion animals | 47                    | 47                    | 0                      | 11    |
| Equine             | -                     | -                     | -                      | -     |
| Poultry & rabbits  | 75 poultry<br>batches | 68 poultry<br>batches | 152 poultry<br>batches | -     |
| Exotic pets        | -                     | -                     | -                      | -     |
| Others (specify)   |                       |                       |                        |       |

\*\* Each patient has to be officially recorded and has to be individually examined/treated by at least 1 student under the supervision of at least 1 member of staff. Each live animal affected by one specific clinical episode is counted as 1 single patient.

Cattle are seen individually for reproductive monitoring (pregnancy diagnosis, monitoring of ovarian function) that is performed on 2 200 animals in at least 4 farms regularly visited.

Table 5.1.5. Percentage (%) of first opinion patients used for clinical training (both in VTH and ambulatory clinics, i.e. tables 5.1.3 & 5.1.4)

| Species         | 2018-2019 | 2017-2018 | 2016-2017 | Mean |
|-----------------|-----------|-----------|-----------|------|
| Cattle          | 0%        | 0%        | 0%        | 0%   |
| Small ruminants | 0%        | 0%        | 0%        | 0%   |
| Pigs*           |           |           |           |      |

| Companion animals  | 90,4% | 89,8% | 89,9% | 90% |
|--------------------|-------|-------|-------|-----|
| Equine             | 69,6% | 68,6% | 75%   | 71% |
| Poultry & rabbits* |       |       |       |     |
| Exotic pets        | 97%   | 99%   | 100%  | 99% |

\* Included in exotic pets and wildlife included

| Species           | 2018-2019 | 2017-2018 | 2016-2017 | Mean |
|-------------------|-----------|-----------|-----------|------|
| Cattle            | 317       | 377       | 390       | 361  |
| Small ruminants   | 71        | 79        | 75        | 75   |
| Pigs              | 5         | 28        | 1         | 11   |
| Companion animals | 99        | 217       | 233       | 183  |
| Equine*           | 8         | 5         | 12        | 8    |
| Poultry & rabbits | 120       | 192       | 375       | 229  |
| Aquatic animals   | 0         | 0         | 0         | 0    |
| Exotic pets       | 27        | 14        | 9         | 17   |

\* service provision

Please note: "reported here: necropsies performed on groups of carcasses at ENVT even if carcasses have been collected during ambulatory clinics: mainly chickens, hens, turkeys, ducks, guinea fowl, rarely quails, pheasants; lamas, dromedaries, deer".

Table 5.1.7. Number of visits in herds/flocks/units for training in Animal Production and Herd Health Management

| Species            | 2018-2019 | 2017-2018 | 2016-2017 | Mean |
|--------------------|-----------|-----------|-----------|------|
| Cattle             | 81        | 62        | 42        | 62   |
| Small ruminants*   | 26        | 27        | 32        | 28   |
| Pigs               | 11        | 13        | 10        | 11   |
| Poultry            | 75        | 68        | 152       | 98   |
| Rabbits            | 0         | 0         | 0         | 0    |
| Aquatic animals    | 0         | 0         | 0         | 0    |
| Compagnion animals | 33        | 34        | 0         | 22   |

\*around 300 animals per visit

| Table 5.1.8. Number of visits in slaughterhouses and related premis | ses for training in FSO |
|---|-------------------------|
| ruble billor rumber of visits in sluughternouses und related premi  |                         |

| Species                  | 2018-2019 | 2017-2018 | 2016-2017 | Mean |
|--------------------------|-----------|-----------|-----------|------|
| Ruminant slaughterhouses | 52        | 52        | 52        | 52   |
| Pig slaughterhouses*     | -         | -         | -         |      |
| Poultry slaughterhouses  | 0         | 0         | 0         | 0    |
| Related premises **      | 18        | 18        | 18        | 18   |

\* Included in ruminant slaughterhouses: multi-species slaughterhouses

\*\* Premises for the production, processing, distribution or consumption of food of animal origin

# 5.2 In addition to the training provided in the Establishment, experience can include practical training at external sites, provided this training is organized under direct academic supervision and following the same standards as those applied in the Establishment.

Until 2018-2019, 1<sup>st</sup>-year students spent 1-2 days in Bernussou, a teaching farm, to receive training in husbandry. This center is located in Villefranche-de-Rouergue, about 150 Kms from Toulouse. It is run under the auspices of the Aveyron Chamber of Agriculture. One half day is dedicated to pig farming (feeding, reproduction, farrowing). The farm also has a dairy cattle production workshop that allows students to train for milking and dairy farming (nutrition, housing, 1/2 day). As part of this trip, visiting a farm (all species) allowed students to discover a production system.

Moreover, as mentioned in standard 4., for the practical teaching of FSQ & VPH, three multispecies slaughterhouse, located less than 80 km away from the school, are used.

### 5.3 The VTH must provide nursing care skills and instruction in nursing procedures. Under all situations students must be active participants in the workup of patients, including problem-oriented physical diagnosis and diagnostic decision making.

During their 3<sup>rd</sup> year at ENVT, undergraduate students spend one week on rotation at the VTH, focusing on small animal hygiene and nursing during consultations and hospitalization. These care are taught by the veterinary nurses of the small animal hospital. The clinical skills acquired by the students include clinical examination, animal restraint, bandaging, clinical laboratory (injections, blood sampling, urine analysis), hygiene (see 3.1).

Whatever the species, time is dedicated on a daily basis to round tables in order to allow interaction with a senior clinician. Round tables are organized in the presence of all the students and pedagogical staff. During these exchanges, different cases are discussed, with an emphasis on active contribution of the students. The senior clinician either responds to certain issues raised by the students, or discusses some of the cases with an emphasis an active contribution of the students. Additionnaly, "journal clubs" are regularly organized: one or two 5<sup>th</sup> year students prepare and present a for discussion with the other 5<sup>th</sup>-year students and the staff (interns, residents, lecturers...). For a detailed view, see 3.1.

# 5.4 Medical records must be comprehensive and maintained in an effective retrieval system (preferably an electronic patient record system) to efficiently support the teaching, research, and service programmes of the Establishment.

Two different systems are used by the establishment:

Clovis for small animals, equines, exotic pets and wildlife. This software was specifically designed for the 4 ENVs. It was adopted in 2001 and has been regularly upgraded since. 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 "home-made" system (based on Filemaker) for ruminants. This system was first installed in the late 1990s before adoption of the Clovis system. It is continuously upgraded to meet the specific needs of the ruminant clinic. It manages case and herd information, retrieval of statistical data, etc. A number is assigned for each incoming animal on Filemaker Bovine (License) with owner's and referring veterinarian's names, identification of the animal (tag number, species, breed, sex, age), chief complaint, admission and discharge dates, hospital care follow-up and exit report (outgoing animals), necropsy report, name of 5<sup>th</sup>-year students/interns/lecturer, health checks on admission (BVDV) and discharge (IBR, Tuberculosis).

Informations on the animals examined in reproduction monitoring visits are collected using Vetelevage/Vetoexpert, a suit developed by a veterianrian for SNGTV (long-life learning association for technical support to food animal veterinarians) and connected to a distant server for data importation and synchronisation in between farmer and vet interfaces.

The farm audits are recorded on the computer server of the Ruminant pedagogical unit.

For poultry and swine clinics, cases (farm visits, necropsies and telemedicine cases) are recorded on the computer server of the clinic for poultry and swine in an Excel files. Each case is given an ID number.

#### Comments

Following the final EAEVE report of 2010 and on the basis of the experts' findings and comments, the practical teaching of anatomy has been improved with the availability of fresh carcasses of small animals (dogs and cats) and horses for dissection training. The macroscopic appearance and the topography of various systems are correlated with X-ray, ultrasound, CT and remnographic images, allowing early training of students in non-pathological imaging and 3D mental reconstruction of virtual slices. Placing anatomy in a clinical context makes students aware of its medical applications and facilitates the learning of anatomical concepts. Anatomy teaching also benefits from the richness of anatomical pieces preserved at the Anatomy Museum since 1828 by processes like desiccation, plastination and immersion in formaldehyde. The museum also contains reproductions in wax, plaster, paper and resin, including Auzoux models, the most remarkable piece being an entire horse. The number of poultry used has also been increased to train students in normal topography of organs. Besides, the technical procedures used for post-mortem examinations represent a crucial step for establishing a diagnosis in poultry pathology.

The repair of the necropsy hall has made it possible for the equine clinic to propose necropsies as a service to equine veterinarians. The activity of the equine clinic has also increased with the recruitment of a specialized surgeon.

Some necropsies, mainly of pigs and poultry, are not included in the report because they are not performed on the campus but on site during ambulatory clinics.

#### Suggestions for improvement

The early involvement of veterinary students in the care of hospitalized animals could meet a demand from the students to apprehend specific behavior, physiological and welfare needs of animals and could represent a basis for clinical examination of the different species. The development of models and simulation tools (virtual farms) will also help to train students in basic preclinical procedures.

During clinical training, some rotations can be very intense, which makes it sometimes difficult for students to anticipate and prepare the cases they are expected to manage. If we aim at leading them towards autonomy in the management of cases, the organization and sequencing of clinical rotations should take in consideration the time they need to study their cases thoroughly and to benefit from this immersion as much as possible.

### 6: Learning Resources



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6.1 State-of-the-art learning resources must be adequate and available to support veterinary education, research, services and continuing education. When the study programme is provided in several tracks/languages, the learning resources must be available in all used languages. Timely access to learning resources, whether through print, electronic media or other means, must be available to students and staff and, when appropriate, to stakeholders. State-of-the-art procedures for bibliographical search and for access to databases and learning resources must be taught to undergraduate students.

#### General strategies on learning resources

The arrival of the latest generation of students has led us to adapt our teaching methods to new ways of learning. To stimulate and motivate students, teaching methods and resources must become more dynamic and interactive, while achieving the main objectives of our five-year curriculum. One major goal of the 2017-2021 Strategic Plan (*Projet d'Etablissement*) is to develop innovative training resources and methods based on ICTE (Information and Communication Technology for Education). This is why we improved our IT tools (Wi-Fi, VPN, hosting site for videos), developed the online access to the library and set up a video studio dedicated to recording "short lectures" as well as a "skills lab" where students can simulate animal handling and technical gestures related to care and treatments. Courses on the use of these new technologies have been given to staff and students.

### Description of how the procedures for access and use of learning resources are taught to staff and students

The ENVT library is both a workplace and a tool for transmitting educational resources. The first trend that is emerging is the involvement of library staff into teaching and learning activities. From 2013 to 2017, a tutorial session on information and the use of the library was included in the first year syllabus. During the 2017-2018 academic year, 1<sup>st</sup> year students were assessed on this training and the mark they got was included in their global results. Students' comments indicated that the positioning of this training was too early in their curriculum. Thus, as an alternative, a new series of tutorial sessions entitled Mercredi Bibli ("Wednesday Library") started on October 2018. It offers an "à la carte" (on demand) training sessions on scientific literature search. These sessions are supervised by the librarian for 2 hours and are opened for up to four students upon prior registration. The approach of literature search is no longer based on the level of education but on the user's needs. The training is more advanced and research-oriented with the presentation of the Zotero bibliographic referencing software, the revision of the various documentary tools of the available electronic databases, the explanation of a research approach as well as information on copyrights. Twenty tutorials are available at any time on Moodle for school users: students, lecturers or staff members (Library). Finally, the Biblio'Tech INP documentary portal is designed as an information and self-training tool, allowing its users to better understand the documentary resources in their discipline as well as improving their research practices and the use of information (INP library).

### Description of how and by who the learning provided are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

Purchases and subscriptions are made in accordance with the general guidelines set out in the charter of the INP's Joint Documentation Service, in which the ENVT library has been a member since 2010. The document charter defines the recommended criteria in terms of language, date of publication and number of copies.

The library offers a very specialised catalogue of collections with resources more particularly dedicated to the different fields of the veterinary profession. It also answers to the cultural mission fixed by the charter by offering some documents of general culture as novels. The purchase of scientific books is made on the advice of the librarians, requests made by students or lecturers and is validated by the lecturer whose mission is to supervise the library's activity. Maintaining subscriptions to major journals remains a priority.

The integration of the ENVT into the INPT SCD was mainly achieved by pooling electronic resources, allowing the school to make savings but also to significantly expand the documentation offer. The choice of electronic resources is therefore made at the SCD level, in consultation with the library managers. This pooling works both ways. ENVT contributes financially to the overall cost and in return gets the guarantee of subscriptions to leading journals in veterinary sciences that are not of direct interest to other institutions. Documentation that is not part of the pooling but which appears to be indispensable for ENVT is subject to a specific subscription.

Staff, students and researchers have access to learning resources mostly through the library catalogue and but also on other platforms. Statistical reports are made each year to assess the use of learning resources. The documentary policy is adapted according to the results.

6.2 "Staff and students must have full access on site to an academic library, which is administered by a qualified librarian, an Information Technology (IT) unit, which is managed by an IT expert, an e-learning platform, and the relevant human and physical resources necessary for development by the staff and use by the students of instructional materials.

The relevant electronic information, database and other intranet resources must be easily available for students and staff both in the Establishment's core facilities via wireless connection (Wi-Fi) and from outside the Establishment through a hosted secured connection, e.g. Virtual Private Network (VPN)."

Although dedicated to a specialized public and attended mainly by students, teachers and staff of the school, the library is open to the general public. In 2018, it welcomed 31,041 people and attendance continues to increase.

| Year | Attendance |
|------|------------|
| 2015 | 27,108     |
| 2016 | 27,582     |
| 2017 | 30,451     |
| 2018 | 31,041     |

On September 1<sup>st</sup> 2019, the library was staffed with 2.8 FTEs: the head librarian, two assistants and an IT specialist to assist the team in charge of the digital activities. In addition, the service employs 4 students in charge of welcoming library users from September to June, at a rate of 25 working hours per month.

Since September 1<sup>st</sup> 2018, a "Project Manager for Documentation and Heritage" has been designated to be the link between the activities of the library, those of the administration and the teaching staff. This lecturer is the direct supervisor of the library manager.

The library makes sure that its opening hours are adapted to the needs of its users. It proposes three different opening options according to the periods of the year, with an extension of opening hours during the examination period.

| Regular hours: 48 hours, 30 weeks in the year between September and June |            |
|--|------------|
| Monday to Thursday   | 9.00-19.00 |
| Friday   | 9.00-17.00 |

**Extended hours:** 56 hours, 9 weeks in the year corresponding to exam periods in December-January and May-June

| Monday to Thursday   | 9.00-20.00                 |  |
|--|----------------------------|--|
| Friday   | 9.00-17.00                 |  |
| Saturday   | 9.00-13.00                 |  |
| <b>Reduced hours:</b> 32, 6 weeks and a half during spring holidays and July |                            |  |
| Monday to Thursday   | 9.00-12.00 and 13.00-17.00 |  |
| Friday   | 9.00-13.00                 |  |

The library is closed during the two weeks of Christmas Holidays and in August.

The ENVT spends more than 100  $k \in each$  year for the purchase of its own or shared documentary resources. This budget has been increasing over the last few years.

The library is ideally located in the center of the school. It is easy to identify and notice because it is the tallest building with a 6-storey tower. The library covers 965 m2 (including the basement and 6 floors of storage space), offering 230 m2 used for public access with a total of 74 seats in the reading room and in three rooms for group work.

Seven computers connected and equipped with the main Office tools, a printer and around 50 electrical sockets are available.

The ENVT library uses the Archipel catalogue, common to all the libraries of the Federal University of Toulouse. In 2018, the reorganization of the IT management system of the network of libraries resulted in a new version of Archipel using a new software, Alma. ENVT users thus have access to all the printed resources available in the library network of the Toulouse area. The majority of the collections offered in Archipel are also available in the catalogue of the University Documentation System (SUDOC) which is a collective catalogue at national level. The same applies to the catalogues of the 4 ENVs, accessible from a recently set up common website (ENVs thesis). The documents available in these other catalogues may be interlibrary loaned (*called PEB, prêt entre bibliothèques*)

The school teaching and research units, which have a limited number of resources related to their specialty in their premises, may have books on deposit. These books are intended for the specific and daily use of the lecturers and research staff of these units but can also be made available for students. An indexing is in progress to list the documents of each subsidiary librairies in the central catalogue.

ENVT chose to adopt the Moodle platform a long time ago. Initially, it was only used to centralize course materials (e.g. PowerPoint or Pdf files). More and more departments have now enriched their "traditional" teaching materials with multimedia content and innovative

practices. One person in the DSI team provides support for maintenance. Moreover, one lecturer was appointed by the Dean to coordinate the development of on-line resources and e-learning.

The Wi-Fi network with 101 Wi-Fi hotspots that have been installed, is deployed in 28 buildings of the campus and covers all the study areas. This architecture is managed by the DSI Team. An access to the electronic journals and scientific data bases is available through the Wi-Fi access inside the campus and if students need access from home, they can use the VPN from their personnel Wi-Fi home connection. However, access to Moodle does not require any VPN connection. The following figures give an idea of digital access and usage: 126 courses are available on Moodle, Wi-Fi logs show between 750 and 900 accesses per day. ENVT is a member of the Eduroam federation.

# 6.3 The Establishment must provide students with unimpeded access to learning resources which include scientific and other relevant literature, internet and internal study resources, and equipment for the development of procedural skills (e.g. models). The use of these resources must be aligned with the pedagogical environment and learning outcomes within the programme and have mechanisms in place to evaluate the teaching value of innovations in learning resources.

The library has approximately 26,630 veterinary books, including 17,000 veterinary theses and a collection of 2,900 ancient books from the 16t<sup>h</sup> to the 19<sup>th</sup> centuries. The library also archives 1,173 printed journals among which 46 are still on subscription for paper versions and thousands of e-subscriptions are also currently available. On its different platforms, the library offers access to 1,371 veterinary e-books. Thanks to common subscriptions with INP, the number of available online non-veterinary documentation reaches more than 35,000 e-books and more than 10,000 e-periodicals via several databases (Pubmed, Sage, Wiley, Springer, Science direct...).

ENVT has been using simulation teaching for a long time (from the Auzoux horse and pig foot sutures to the simulation and discussion of clinical cases in practicals). The technical skills on models are taught in different teaching units (blood sampling models, horse colon and calf models manufactured by VSI, etc.). In order to better meet students' expectations, improve the efficiency of teaching and further develop these teaching methods, it was decided to gather these courses in a simulation and skills laboratory. While awaiting the planned reorganization of the teaching facilities and the various areas of the school, temporary arrangements have been made for the fall of 2019-2020, in one area of the Anatomy Museum (*Musée Paul Lucien Montané*). This simulation laboratory is a complex part of the students' learning and houses a variety of models of all domestic animal species, from low to great accuracy. The proximity of the *Paul Lucien Montané Museum* and the Simulation Laboratory gives life to the school's heritage. This association between the historical past of veterinary art and modern methods of teaching involves students investing in the appropriation of their heritage and their professional future.

### Comments

In a context of rising subscription costs, ENVT decided to share resources with other institutions in Toulouse or at a national level (ENVs) aiming at maintaining the number of scientific journals and books available and at increasing the number of e-books.

Efforts have been made to integrate the library services into teaching activities (*e.g.* support to students for their bibliographic work). Since January 2019, new tools have been made available to ENVT students to enhance their training: Rapidmooc "self-service" for video productions and "Prismes", (https://prismes.univ-toulouse.fr) a digital platform for hosting video, audio and

photographic documents. These tools will encourage the development of new ways of training such as inverted learning or project-based learning. The main objective is to make the student more active and to enable him/her to acquire skills in documentary search and information management.

The library facilities are not really user-friendly: the number of small rooms for group work is not sufficient and students cannot isolate themselves to work in a quiet environment.

#### Suggestions for improvement

ENVT is currently working on the last part of our ICTE project, which consists in developing a "learning centre" for students within the library itself. It is planned to give more priority to the purchase of electronic works than to printed books, whose loans are decreasing every year.

Moreover, development of self-learning will continue: from January 2020, a new staff will be in charge of the development of digital resources in close interactions with the lecturers. The MIRIS capture solution (that is already deployed in amphitheatre Leclainche and soon in building 7.2) allows directly inserting videos sessions in Moodle courses through a plug-in and to easily creating Moocs.

The Simulation Skills, that are already fully integrated in the curriculum (nursing, anatomy, radiology, surgery, obstetrics ...), will benefit from a new dedicated space from Januray 2020. Some rooms will have open access over wide timetable for self-learning and review of skills under supervision. They will be used for the assessment of day-one skills.

### 7: Student Admission, Progression and Welfare



### Ecole Nationale Vétérinaire de Toulouse

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7.1 "The Establishment must consistently apply pre-defined and published regulations covering all phases of the student "life cycle", e.g. student admission, progression and certification.

In relation to enrolment, the Establishment must provide accurate and complete information regarding all aspects of the educational programme in all advertisings for prospective national and international students.

Formal cooperations with other Establishments must also be clearly advertised.

The Establishment's website must mention the ESEVT Establishment's status and its last Self Evaluation Report and Visitation Report must be easily available for the public.''

Enrolment into a French veterinary school (ENV) is possible after passing a competitive national entrance exam called Concours after two (or three) years of study after Baccalaureat (high school diploma). Most students passed a Scientific Baccalaureat (main topics are mathematics, biology, physics and chemistry, French and a foreign languages). The entrance exam for ENV is national, open to all the students with the necessary prerequisites, regardless of their social or geographical origin; in addition, the selection process is neither regional nor specific for one ENV.

Additional admissions are available for students from a foreign country where there is no veterinary school and who wish to follow the full curriculum. This is called "admission sur titre" and takes into account the student's academic background. Applicants must possess a diploma justifying the successful completion of the first two years of university studies after Baccalaureat or equivalent. At the end of their studies, these students are awarded a veterinary degree but are not allowed to practice veterinary medicine in France as this is possible only for nationals of one of the States covered by the Agreement on the European Economic Area. They must also take an exam organized annually by the Ministry of Agriculture and Food (MAA).

Information on the veterinary curriculum is available on a dedicated website of the MAA (<u>Admission</u>). The ENVT curriculum is available on its website (<u>Curriculum</u>). Moreover, ENVT regularly organizes Open Days. In addition, each year, management staff, lecturers and students participate in job fairs dedicated to high school and classes préparatoires students all over France (26 participations in the academic year 2018-2019). Finally, a dedicated page on ENVT website describes the registration procedures and guidelines for admissions. (<u>Admission\_guidelines</u>) and a specific guide presenting the useful informations for new students is available on the website (<u>Student\_guide</u>).

International students wishing to follow part of their curriculum at ENVT (within the framework of an Erasmus programme for example) are informed via a dedicated page on the ENVT website (Foreign\_students). Once their individual learning agreements have been drawn up and their application approved, the future students are sent all the necessary information from the International affairs office to prepare their arrival as smoothly as possible (accommodation, courses of French as a Foreign Language...) (see Foreign\_student\_arrival). The IVSA student association manages a "buddy program" and each incoming student is paired with an ENVT student who will provide a helping hand. Upon arrival at ENVT, foreign students attend the welcome day as all the French students and then benefit from a specific follow-up by the International affairs office and the DEVE (explanation of the timetable, invitation to interact as soon as a problem or question arises, a bi-annual assessment to collect their feedback before their departure).

7.2 The number of students admitted must be consistent with the resources available at the Establishment for staff, buildings, equipment, healthy and diseased animals, and materials of animal origin.

The number of students admitted to each ENV is set each year by the MAA (see 7.3)

| Type of students  | 2018-2019 | 2017-2018 | 2016-2017 |
|-------------------|-----------|-----------|-----------|
| Standard students | 160       | 137       | 137       |
| Full fee students | 0         | 0         | 0         |
| Total             | 160       | 137       | 137       |

| Table 7.2.2 Number of vetering  | ry undergraduate student   | s registered at the Establishment |
|---------------------------------|----------------------------|-----------------------------------|
| Table 7.2.2. Number of vetering | if y undergraduate student | s registered at the Establishment |

| Type of students | 2018-2019 | 2017-2018 | 2016-2017 | Mean |
|------------------|-----------|-----------|-----------|------|
| First year       | 167       | 141       | 142       | 150  |
| Second year      | 141       | 140       | 144       | 142  |
| Third year       | 140       | 142       | 133       | 138  |
| Fourth year      | 142       | 131       | 146       | 140  |
| Fifth year       | 131       | 150       | 110       | 130  |
| Total            | 721       | 704       | 675       | 700  |

Table 7.2.3. Number of veterinary students graduating annually

| Type of students  | 2018-2019 | 2017-2018 | 2016-2017 |
|-------------------|-----------|-----------|-----------|
| Standard students | 130       | 125       | 135       |
| Full fee students | 0         | 0         | 0         |
| Total             | 130       | 125       | 135       |

Table 7.2.4. Average duration of veterinary studies

| Duration         | Percentage (%) |  |  |
|------------------|----------------|--|--|
| +0 year*         | 95.00          |  |  |
| +1 year          | 3.60           |  |  |
| +2 years         | 1.40           |  |  |
| +3 years or more | 0.00           |  |  |

\* the total duration of studies corresponds to the minimum number of years in the program

| Table 7.2.5. Number | of postgraduate | students registered | at the Establishment |
|---------------------|-----------------|---------------------|----------------------|
|                     | 1 0             | $\mathcal{O}$       |                      |

| Programmes               | 2018-2019 | 2017-2018 | 2016-2017 | Mean |
|--------------------------|-----------|-----------|-----------|------|
| Interns                  | 22        | 17        | 18        | 19.0 |
| Residents                | 19        | 15        | 11        | 15.0 |
| PhD students             | 32        | 27        | 25        | 28.0 |
| Others (Diplôme d'école) | 21        | 11        | 12        | 14.7 |

7.3 "The selection and progression criteria must be clearly defined, consistent, and defensible, be free of discrimination or bias, and take into account of the fact that students are admitted with a view to their entry to the veterinary profession in due course.

The Establishment must regularly review and reflect on the selection processes to ensure they are appropriate for students to complete the programme successfully. If the selection processes are decided by another authority, the latter must regularly receive feedback from the Establishment.

Adequate training (including periodic refresher training) must be provided for those involved in the selection process to ensure applicants are evaluated fairly and consistently."

The entrance examination is organised by the MAA. A student's admission to one of the four ENVs is based on his/her admission ranking and his/her choice of school that he/she was asked to do before the exam.

The school does not have its own admission committee. It participates in the boards of examiners for the final examination (final decision on whether or not to accept students once all the tests have been completed and the marks awarded) and some staffs are members of the oral selection tests (concours B, C and D).

In 2018, a total of 620 students were enrolled in the four ENVs: ENVA, Vetagrosup, Oniris and ENVT. The number of students admitted per concours (admission competitive examination) is set annually by the <u>MAA</u> (117 students admitted per year per ENV until 2013, 137 from 2013 to 2017 and 159 since 2018). An applicant cannot apply more than twice, whatever the type of admission examination.

Six paths are offered to enter one of the ENVs in France (see www.concours-agro-veto.net):

- Concours A is open to students after two years of *Classes Préparatoires* BCPST in a secondary school (a 2-year intensive undergraduate course in basic sciences: plant, animal and cell biology, chemistry, physics, earth sciences, computer science, foreign language). In 2018, students who passed this concours represented 73.2% of those admitted to ENVs. The BCPST syllabus is available at <u>BCPST syllabus</u>.

The concours ATB is open to students in the "technology and biology" *Classes Préparatoires* who have a technological sciences and laboratory technology Baccalauréat (STL biochemistry or bioengineering speciality) or an agricultural and life sciences and technologies Baccalauréat (STAV). The program is the same as for Concours A plus biochemistry and biology techniques and geography. In 2018, students who passed this concours represented 1.5% of admitted students to ENVs.

- Concours B is open to university students enrolled in a Bachelor's degree in fields related to life sciences. The examinations cover animal, plant cellular and molecular biology, genetics, chemistry, mathematics and a foreign language. In 2018, students who passed this exam represented 8.9% of admitted students to ENVs.

- Concours C aims to recruit students with the following university degrees: a DUT (a 2-year university technology degree) with a major in Biological Engineering/Applied Biology or a BTS or BTSA (a 2-year advanced technician's degree). In 2018, students who passed this exam accounted for 14.8% of students admitted to ENVs.

- Concours D is open to holders of a State diploma of doctor in medicine, doctor in pharmacy, doctor in dental surgery or a national diploma with a focus on biology which qualifies the students for a Master's degree. In addition to evidence of eligibility based on an activity and

motivation report, candidates are selected after an interview. In 2018, students who passed this exam represented 0.8% of those admitted to ENVs.

- Concours E is opento 1rst-year students at ENS Cachan ou Lyon but they can only apply for Vetagrosup (3) and ENVA (3). In 2018, students who passed this exam represented 0.8% of those admitted to a ENVs.

Admission to an ENV is the result of a long training and a selective admission process. The diversity of entrance examinations allows students from a variety of socio-professional classes, including underprivileged classes, to take part in one of the examinations. For each concours, in the event of failure, the student has the opportunity to study in another institution (e. g. Schools of engineers in agronomy) or to continue his/her university studies in order to obtain a master's degree.

| Number applying to |               | Number admitted<br>(per ENV) |                    |  |
|--------------------|---------------|------------------------------|--------------------|--|
| Year               | admission (1) | Standard<br>intake           | Foreign<br>student |  |
| 2018               | 2 907         | 159                          | 0                  |  |
| 2017               | 2 828         | 137                          | 1                  |  |
| 2016               | 2 742         | 137                          | 1                  |  |
| 2015               | 2 623         | 137                          | 2                  |  |

#### Intake of veterinary students in the past five years:

(1) Total number of candidates for the ENVs

# 7.4 There must be clear policies and procedures on how applicants with disabilities or illnesses are considered and, if appropriate, accommodated in the programme, taking into account the requirement that all students must be capable of meeting the ESEVT Day One Competences by the time they graduate.

On one hand, in accordance with French regulations, adjustments to the admission exams can be scheduled. On the other hand, a disabled student accessing the ENVT is identified when he/she completes the registration form. The DEVE welcomes him/her and informs the Inter-University Service for Preventive Medicine and Health Promotion (SIMPPS). The SIMPSS physician may suggest recommendations that are communicated to the head of each module in order to adapt the curriculum and teaching methods.

The article 43 of the <u>academic regulation</u> provides that a student with serious health or personal problems may request an adjustment of his/her curriculum that is compatible with the general organisation of studies at ENVT. He/she may also be allowed a cancelling of the semester or year in progress. In both cases, the student's request must be notified in advance by the SIMPPS. In the case of a curriculum adjustment, a teaching contract, taking into account the recommendations of the SIMPPS, is drawn up between the student and ENVT. The resumption of schooling under normal conditions requires a favourable assessment by the SIMPPS doctor.

7.5 "The basis for decisions on progression (including academic progression and professional fitness to practise) must be explicit and readily available to the students. The Establishment must provide evidence that it has mechanisms in place to identify and provide remediation and appropriate support (including termination) for students who are not performing adequately.

The Establishment must have mechanisms in place to monitor attrition and progression and be able to respond and amend admission selection criteria (if permitted by national or university law) and student support if required. "

The procedures for progression in the curriculum are defined in the academic regulations. When registering, each student certifies that he/she has read it. Conditions for transition from one year to the next are detailed in Standard 8.

#### **Remediation:**

In accordance with article 33 of the study regulations, situations of students who do not perform adequately are discussed during the Teachers' Councils. Solutions are proposed (e.g. assigning a tutor/mentor) and are mentioned in the contract signed between the student and the DEVE.

#### Description of the rate and main causes of attrition

No attrition was observed during the period 2016-2019.

### Description of how (procedures) and by who (description of the committee structure) the admission procedures, the admission criteria, the number of admitted students

ENVT is not in charge of the admission criteria (see 7.1). The number of students admitted by competitive exam is set annually by the MAA according to its own factors and criteria. Nevertheless, the Deans of the four ENVs are able to propose changes during the meetings organized with the Department for Higher Education and Research (DGER) of the MAA (*Conseil des Directeurs des ENV – CDENV*).

## 7.6 "Mechanisms for the exclusion of students from the programme for any reason must be explicit.

## Establishment policies for managing appeals against decisions, including admissions, academic and progression decisions and exclusion, must be transparent and publicly available. "

After validation and publication of the examination results, a mark may only be modified upon justified request by the head of the module in question to the head of the Education and student life department (Art 28 of the academic regulation).

At the end of a re-take examination, any student may refer the matter to the CEVE through the Dean or the head of the Education and student life department. The CEVE meets in the presence of the head of the teaching module in question. Its conclusions are presented to the following Academic Council, which takes a decision and informs the student accordingly.

#### Exclusions:

In accordance with the <u>Decree No. 2014-297</u> of 5th March 2014 implementing the Article L812-5 of the *Code Rural et de la Pêche Maritime*, a student who, by his/her actions or words, commits serious misconduct is referred by decision of the Dean, to the disciplinary committee of the ENVT's Board of Directors.

The sanctions that may result, including exclusion (temporary or permanent), are defined in Article 45 of the academic regulation. The decision of the disciplinary board is displayed inside the institution. Exclusion may also be decided on the basis of insufficient academic performance: when a student fails one or more modules and has to triple one semester (Article 29 of the academic regulations), he/she might be excluded. The final decision is taken by the Board of Directors of the ENVs.

#### Description of the appeal processes

An amicable appeal to the exclusion decision can be introduced to the mediator for agricultural education as well as a hierarchical appeal to the Minister of Agriculture and Food or an administrative appeal to the competent court, within two months of notification of the decision.

7.7 "Provisions must be made by the Establishment to support the physical, emotional and welfare needs of students. This includes, but is not limited to, learning support and counselling services, career advice, and fair and transparent mechanisms for dealing with student illness, impairment and disability during the programme. This shall include provision of reasonable adjustments for disabled students, consistent with all relevant equality and/or human rights legislation.

### There must be effective mechanisms for resolution of student grievances (e.g. interpersonal conflict or harassment). "

Students benefit from services easing their everyday life: a dedicated and pleasant veterinary campus (green campus, focusing on sustainable development), with a catering service and a student residence on site.

On full-time staff of the DEVE is devoted to students' physical and emotional welfare (<u>Student\_welfare</u>). He is in charge of the instruction of the application for social grants (<u>Social\_grants</u>) as well as all the interactions with the students' association (<u>Amicale</u>). This dynamic association, with no less than 38 student clubs including sports, cultural and musical clubs), allows students to combine their studies with a rich social and sporting life.

In addition to the student representation in several councils (Board of Directors, CEVE, Scientific council...), a permanent dialogue is engaged with the representatives of *Amicale*. Annually, the Dean signs a convention that defines the operating rules of the facilities which are managed by students under the responsibility of the Amicale (<u>Convention</u>).

#### Description of the mechanisms for resolution of student grievances

The mechanisms depend on the matter of the student grievances: in case of training (or learning) subject, direct interactions with module heads, CEVE discussion and systematic assessment of the training by the students are useful (see standard 8). If the grievance concerns student life in the campus, it can be solved by the way of the monthly meeting organized between Amicale board and the Dean staff or by direct solicitations.

#### 7.8 Mechanisms must be in place by which students can convey their needs and wants to the Establishment. The Establishment must provide students with a mechanism, anonymously if they wish, to offer suggestions, comments and complaints regarding compliance of the Establishment with national and international legislation and the ESEVT standards.

#### See 7.7

Once a month, each student can appoint to share a lunch with the Dean at the Campus restaurant. He/she directly discuss with the Dean without submitting previously any topic nor question that he/she would like to discuss.

#### Comments

The very high selection prior to entry into ENVs explains the low attrition rate. Students have good intellectual abilities and are highly motivated. However, they often have little knowledge of professional realities when they enter the ENVs, which can lead to disappointment and discomfort during their studies.

Moreover, the first 2-year preparation period before entering an ENV is not under the school's supervision (nor the same supervising Ministry) and the veterinary lecturers have little influence over the programme which is taught. When entering an ENV, students expect to be brought into contact with animals very quickly. Getting their attention can be a challenge for lecturers of basics sciences. For this reason, significant efforts have been made to create transversality between early-stage teaching and clinical disciplines.

Finally, due to a lack of veterinarians in France, particularly in rural areas, the number of students has risen sharply (+35%) since 2012. This situation has led to curriculum adaptations and is very challenging in terms of supervision, particularly in the Veterinary Teaching Hospital.

#### Suggestions for improvement

At a national level, it is necessary to provide more precise information to the future candidates before the French veterinary school entrance and to encourage them to discover the realities of this profession before embarking on these studies. Additionally, wishing to diversify student profiles both geographically and socially, it was decided to open a <u>new recruitment channel</u> from September 2021 directly after the baccalaureate. These students will follow a preparatory year (A0) in the ENV before following the current 5-year curriculum.

For ENVT, we plan to improve the information of students on the careers through the organization of annual thematic forums involving professionals as well as through the promotion of a mentoring system (on demand) involving lecturers and *alumni*. This action is particularly important for little-known or undervalued careers (research, industry, veterinary public health, etc.). Moreover, we are working to improve the feedback on changes made in training contents following the students' suggestions.

SER 2020 – Student Assessment

### 8: Student Assessment



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#### 8.1 The Establishment must ensure that there is a clearly identified structure within the Establishment showing lines of responsibility for the assessment strategy to ensure coherence of the overall assessment regime and to allow the demonstration of progressive development across the programme towards entry-level competence.

The ENVT's policy on student assessment is defined in the *règlement des études* (academic regulation) from year A1 to year A5 in the chapter entitled: *Titre troisième: Contrôle des connaissances. Validation des enseignements*. Student's knowledge and skills are assessed and validated throughout the ten semesters of initial training. Examinations are carried out at the end of each semester.

The assessment methods are varied, combining continuous assessment, mid-term examinations, and final examinations, or a final examination alone. Examinations can be written or oral. However, due to the large number of students per class, oral examinations can only be organised if the general schedule of the academic year permits them. Oral examinations are public and the jury for an oral examination consists of at least two lecturers.

For each teaching module, two examination sessions are organized:

- the regular session during the teaching semester of the module;

- the re-take session for students who failed the regular session, or were absent during that session. All the tests are grouped together at the end of the academic year for the modules of the two semesters of the current year. The examination procedures for a given teaching module may differ from those of the regular session.

The examination sessions are organized by the department of Education and student life (*Direction de l'Enseignement et de la Vie Étudiante - DEVE*). The supervision of the students, the collection of the papers and the control of their number are the responsibility of the academic staff.

A student who is absent for one or more examinations at an exam session will receive a score of 0 to this or these examinations. If the absence is justified on medical grounds, after a review of the case by the DEVE and, if necessary, after consultation with the Inter-University Service of Preventive Medicine and Health Promotion (SIMPPS), an exceptional session will be organized for this student so that he/she can benefit from two examination sessions per year (regular session and re-take session).

The number of ECTS credits allocated to each compulsory teaching module and course shall be proposed by the CEVE, is subject to the advice of the Academic council and approved by the Dean. It is made public at the beginning of the academic year. The sum of the ECTS credits for the compulsory teaching modules is equal to 30 ECTS credits/semester. A student validates a semester when he/she validates all the compulsory modules and EPTs for that semester. This semester and the corresponding 30 ECTS credits are definitively acquired.

For the calculation of a student's overall average grade, the final mark obtained in each module is weighted by a coefficient equal to the number of ECTS credits allocated to that module.

The10 semesters of initial training are equivalent to 300 ECTS credits. The entire veterinary curriculum, including *classes préparatoires (120 ECTS)*, is equivalent to 420 ECTS credits. ECTS credits obtained with the validation of an optional course taken at ENVT or in another academic institution, are not cumulative for the initial veterinary training course. They are included in the student's diploma supplement.

8.2 "The assessment tasks and grading criteria for each unit of study in the programme must be published, applied consistently, clearly identified and available to students in a timely manner well in advance of the assessment. Requirements to pass must be explicit.

The Establishment must properly document the results of assessment and provide to the students timely feedback on their assessments.

Mechanisms for students to appeal against assessment outcomes must be explicit."

For each module, the assessment procedures and criteria are available at the beginning of the academic year in the course description guides (*Fiches pédagogiques*), which are module-specific (Syllabus). The sheets are available on the website and are up-dated every year.

For each semester, the Dean validates the results of the examinations after decisions by the Academic council. The results are communicated to the students by the DEVE at the end of the deliberations. No grade may be communicated to the students, in writing or orally, before the Academic council's final decision. After validation, lecturers in charge of a module can communicate the details of the marks to students. The final marks awarded to students are recorded on an annual basis and are archived by the DEVE.

## Description of the procedures for awarding grades, including explicit requirements for barrier assessment.

Within each module, the respective coefficients for testing the theoretical knowledge or any other forms of teaching are determined by the lecturers. Where a module is multidisciplinary, each of the disciplines is subject to assessment, with a sub-coefficient determined by the academic team. The final exam takes place during the same session, with a single final mark which is the average mark of all the disciplines of the module. The teaching staff sends the final grade of the module to the DEVE.

A student has validated a module when she/he obtains a final grade in that module equal to or greater than 10/20. This module and the corresponding ECTS credits are definitively acquired. Students who haven't obtained this grade have failed the module. They must take all the tests scheduled for the re-take session.

#### Case of multidisciplinary modules:

For the regular examination session, a student who has obtained an overall average score of less than 10/20, must only take the tests of the discipline or disciplines for which he had an average grade less than 10/20. However, an average of 5/20 or less for each of the disciplines in the module is eliminatory, it cannot be compensated by the marks obtained in the other disciplines of the module. The student must then sit for the re-take session tests for this discipline even when the overall average of the module is greater than or equal to 10.

Since the examination sessions are independent, the marks obtained in the regular session are not retained for the re-take session. Marks obtained in examination sessions in one year cannot be retained for examination sessions in a subsequent year. If necessary, derogations may be granted by the DEVE after decision of the Academic council.

At the end of an academic year:

- a student who has validated all the modules of the two semesters of year n (A1, A2, A3), can go in year n+1 (A2, A3, A4). Otherwise, the student is considered to have failed;

- a student who failed only one of the two semesters of the year n, repeats this semester during the following academic year to validate the modules he failed and can follow the courses of the other semester of the year n+1;

- a student who failed the two semesters of year n, repeats them during the following academic year to validate the modules not acquired.

Each semester can only be repeated once.

By way of derogation, a student who failed one or more modules after the re-take session, for a total of less than 8 ECTS credits, will be allowed in year n+1. During the year n+1, this student is allowed to attend the examination sessions of the modules of year n which he/she failed, even if he/she was not able to attend the lessons of these modules. These modules will have to be definitively passed to be allowed in year n+2 (A3 or A4). If failed in the following academic year, the student repeats the semester or year corresponding to the modules that were not validated.

For the special case of the A2 compulsory Extra-Practical Training (EPT), the regular validation session takes place during the A3 year. The non-validation of the EPT during this session does not prevent to be accepted in A4 year. However, a student who failed A2 for one or more other A2 modules at the end of the re-take session, for a total of less than 8 ECTS credits, must validate his EPT before the start of the academic year in order to determine whether he is accepted in A3 or whether he must repeat the second semester or the full A2 year if necessary.

To obtain the DEFV and be accepted in A5 year, a student must have validated all the compulsory modules and EPTs of the eight semesters of the initial core training (S5, S6, S7, S8, S9, S10, S11, S12).

Students who have chosen the field of research can complete their A4 year at university and then attend the last two semesters of a Master's degree course. The validation of semesters S11 and S12 is given by the university and validated by ENVT. The year A5 can only be repeated once.

A student who wants to discuss his/her results in a specific module with a lecturer should first contact the DEVE and then the lecturer. A report is then written by the lecturer, using the appropriate form that will be sent to the DEVE. After validation and publication of the examination results, a mark may only be modified on duly signed and justified request from the head of the module to the DEVE.

#### Description of the appeal processes against assessment outcomes

The CEVE may be contacted by the students' representatives to report if he/she considers there is a gap between the teaching objectives or the methods of assessing the knowledge for a module and their achievement. The CEVE shall collect the information and forward its opinion to the Dean after consulting the head of the module.

Following re-take examination, any student may, in the event of a dispute, refer the matter to the CEVE via the Dean or the DEVE within five working days of the publication of the results. The CEVE meets in the presence of the head of the module and presents its conclusions to the following Academic council, which makes a decision and informs the student.

8.3 The Establishment must have a process in place to review assessment outcomes, to change assessment strategies and to ensure the accuracy of the procedures when required. Programme learning outcomes covering the full range of professional knowledge, skills, competences and attributes must form the basis form assessment design and underpin decision on progression.

Evaluation of the outcomes and of the assessment strategies are supported within several internal bodies (Academic council, CEVE, Board of Directors...)

See 1.1 and 3.1 and annex Stand\_1.2\_App003and annex Stand\_3.3\_App004)

The learning objectives aim to provide all students with a broad knowledge and basic skills in veterinary medicine for all major domestic species. The curriculum allows them to acquire more advanced skills in a specific field (5<sup>th</sup> year). Several evaluation mechanisms are implemented to verify the achievement of expected results. A combined system of continuous evaluation and final examinations allows formative and certicative assessment. Throughout training, each teaching module is evaluated this way.

During the two clinical years of the curriculum (A4 and A5), student performance is consistently assessed during clinical rotations, focusing on technical skills, knowledge transfers and clinical reasoning. The clinical rotation system allows close contact between small groups of students and academic staff, so that each student's progress can be monitored.

# 8.4 "Assessment strategies must allow the Establishment to certify student achievement of learning objectives at the level of the programme and individual units of study. The Establishment must ensure that the programmes are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach."

Students are encouraged to think rather than passively receive information from the teacher. In many disciplines and more particularly clinical disciplines, self-study and case-study sessions are offered from the second year to the final year. Students work on individual and group projects, undertake research in the library, prepare coursework assignments and presentations, and prepare for examinations. In the VTH, students need to prepare the next day cases (or the cases of hospitalized animals for which they are responsible), either based on the complaint which is indicated on the appointment list or on the reports of the previous visit in case of a revisit. Each student must prepare and defend a veterinary thesis based on an extensive literature review or a research project.

Student representatives are members of the CEVE and the Board of Directors and therefore participate in discussions on curriculum and examinations. Finally, each French professional organization has a "junior" branch (AFVAC, AVEF, SNGTV), sending representatives in the boards of directors of national organizations. Each junior organization sets up annual student lectures and a national conference with its counterparts from the other ENVs.

For a more detailed description, see 3.1 (direct involvement of undergraduate students in the core clinical rotations), 5.1 and 8.3.

8.5 Methods of formative and summative assessment must be valid and reliable and comprise a variety of approaches. Direct assessment of clinical skills and Day One Competences (some of which may be on simulated patients), must form a significant component of the overall process of assessment. It must also include the quality control of the student logbooks in order to ensure that all clinical procedures, practical and hands-on training planned in the study programme have been fully completed by each individual student.

Self-assessment is provided in 12 teaching modules in years 1 to 4, based on clinical cases, quizzes, on-line tests, etc... Videos of clinical gestures and technical procedures and recorded videos of lectures are available at any time and from anywhere on a high storage capacity platform (<u>Prismes</u>).

The learning of practical skills is partly done on models. Students can practice various veterinary techniques such as animal handling, radiography, laboratory techniques, blood sampling, catheter placement, fluid therapy, transrectal palpation on cow, etc... Initially, these

activities were carried out in different locations, but since January 2020, they have been housed in the Clinical Skills Lab.

The students' clinical competences are assessed all troughout the clinical rotations, from both a formative and summative point of view (see 8.4). The modalities vary according to the discipline.

During extramural studies, students have a case book in which they record all the clinical procedures they have attended or performed as well as all the clinical cases they have followed or in which they have been involved.

#### Comments

The development of a Moodle platform is allowing the progressive implementation of formative evaluations with personalized feedback to students. This same approach is used in the clinical skill labs. Moreover, during clinical rotations, the limited size of the groups and the joint presence of students from different years (each of them having a specific role) favour the progressive autonomy of the students, under the supervision of a clinician.

The implementation of a systematic evaluation system for teaching modules as well as student representation in the bodies (CEVE, CA) has enabled teaching to evolve (elimination of redundancies, introduction of transversal approaches, etc.) in a way of continuous improvement.

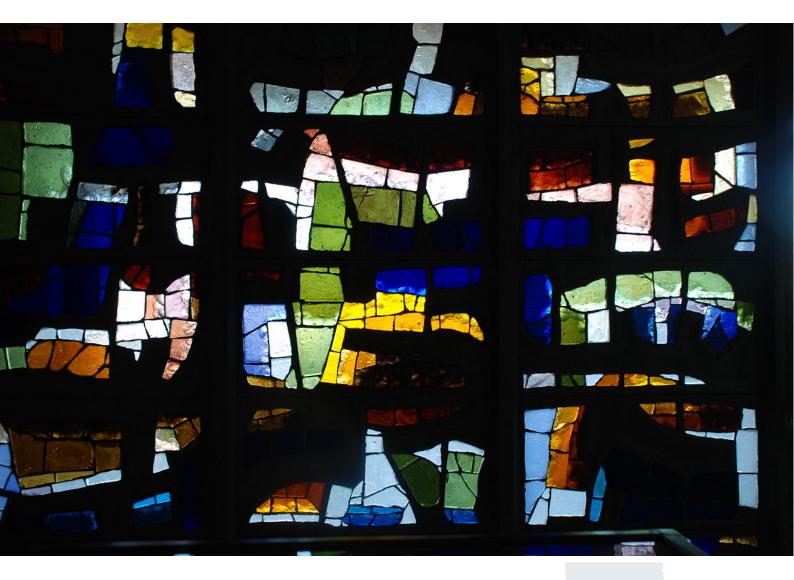
#### **Suggestions:**

Two areas for improvement can be identified:

- a better communication of learning objectives to the students as well as better information on the modifications made in the teaching, following the remarks made by the students for example. If these elements appear in the teaching sheets, they are not always known by the students;

- a better individual monitoring of skills acquisition (both through the clinical skills centre and the clinical rotations): the development of an IT tool shared between the 4 ENVs is under construction and will be connected to the Moodle platform and the new VTH software (Sirius).

## 9: Academic and Support Staff



9.1 The Establishment must ensure that all staff are appropriately qualified and prepared for their roles, in agreement with national and EU regulations and must apply fair and transparent processes for the recruitment and development of staff.

A formal training (including good teaching and evaluation practices, learning and elearning resources, biosecurity and QA procedures) must be in place for all staff involved with teaching.

Most academic staff (calculated as FTE) involved in veterinary training must be veterinarians. It is expected that more than 2/3 of the instruction that the students receive, as determined by student teaching hours, is delivered by qualified veterinarians

The recruitment schedule has been formalized in accordance with an annual "standard sequence" which describes the steps from notification of the order sent by the Ministry of Agriculture and Food (MAA) to the response of ENVT. The consultative (Academic council - CE, Scientific committee - CS, Steering committee- CODIR) or decision-making bodies (Executive committee) are involved in the process in order to guarantee the transparency and legal soundness of arbitrations.

Recruitment management is the object of a procedure called "job expertise" initiated during the spring and concomitant with the MAA's recruitment campaigns. This procedure allows the activity centres of the ENVT (teaching departments, support services, hospitals, research units) to identify their needs and communicate them to ENVT's management. The decisions depend on three main criteria:

- consistency of the request with the ENVT's strategy for the accomplishment of its missions;
- development of the ENVT's activities through the recruitment of new competences;
- coordination of recruitment between permanent and temporary staff.

The decisions taken by the Executive committee (BURDIR) are communicated with these elements of motivation to the members of the Steering committee (CODIR). In addition to the job-expertise procedure, the strategic interview and budget dialogue between MAA (DGER) and ENVT that take place during the fall (see standard 2) complete the inventory of needs, particularly in terms of temporay staff remunerated from the ENVT's budget.

#### *Lecturers (see appendix Stand\_9.1\_App001)*

Processing of requests for the recruitment of lecturers is carried out jointly by the teaching departments and the heads of research units. The head of Education and student life department (DEVE) and the head of the Scientific affairs (DS) ensure consistence in the definition of the job profile between the teaching and the research spheres. The CE, CS and the Technical committee (CT) are consulted about the lecturer positions proposed for the recruitment. Their opinions are submitted to the vote of the Board of Directors.

The eligibility of internal candidacies from associate professors (APs) for professorships is the object of a review by the lecturers' evaluation committee, during which the 6 member full professors (2 per teaching department) rank the applicants depending on the quality of their professional activity in the fields of teaching and research. The opinions and ranking of this committee inform the management of the establishment, who then decides on the requests for professor profiles that will be submitted to the vote of the Board of Directors.

The resulting cascade of positions makes it possible to meet requests for the opening of associate professor and contractual assistant lecturer (AERC) positions, particularly those requested by teaching departments and research units.

Each newly recruited associate professor is strongly encouraged to follow a 4-week (full-time) national pedagogical training programme organised by the MAA. Current associate professors that did not have the opportunity to follow this programme in the past are also given the opportunity to do so. This 4-week programme includes: basic teaching methods to undergraduate students and definition of learning objectives (week 1), assessment (week 2), advanced learning methods (week 3), and personal project defence (week 4). So far, 11ENVT APs and professors have benefited from this programme (see <u>lecturer training programme</u> and the article of the last session). It is unique in France and provides new teachers with strong basic theory of teaching as well as with state-of-the-art teaching techniques using new technologies (e-learning, active methods resorting to electronic polling devices, *etc.*). In addition, the University of Toulouse organizes short pedagogy training programmes each year to which the lecturers of all member institutions are invited.

Regarding keeping qualifications of all teaching staff update national and international congresses are proposed, as well as meetings of European or American colleges for specialists. Besides, since most staff in charge of teaching are lecturers, their research activities guarantee that their knowledge is maintained at the cutting edge of their field.

Finally, lecturers have to write an <u>activity report</u> every 4 years. This report must include their teaching and research activities. It also lists publications and participation in seminars and congresses. In the case of associate-professors, this report is subject to peer review at local level by the lecturers' evaluation committee. This is an opportunity for peers to identify potential training needs for associate-professors. In the case of APs and Professors, the National Commission of MAA Lecturers (CNECA) reviews all lecturers' files (every 4 years or in case of promotion request) and can provide feedback to the interested parties.

9.2 The total number, qualifications and skills of all staff involved with the programme, including teaching staff, 'adjunct' staff, technical, administrative and support staff, must be sufficient and appropriate to deliver the educational programme and fulfil the Establishment's mission.

A procedure must be in place to assess if the staff involved with teaching display competence and effective teaching skills in all relevant aspects of the curriculum that they teach, regardless of whether they are full or part time, residents, interns or other postgraduate students, adjuncts or off-campus contracted teachers.

| Type of contract                          | 2018   | 2017   | 2016   | Mean   |
|---|--------|--------|--------|--------|
| Permanent (FTE)                           | 85.53  | 85.23  | 79.9   | 83.55  |
| Temporary:                                | 26.7   | 25.24  | 25.56  | 25.83  |
| Interns (FTE)                             |        |        |        |        |
| <b>Residents</b> (FTE)                    | 5.33   | 5.17   | 7.16   | 5.89   |
| PhD students (FTE)                        |        |        |        |        |
| Practitioners (FTE)                       | 1.70   | 1.77   | 1.58   | 1.68   |
| Others (AH, IR contractuels<br>CDD) (FTE) | 19.67  | 18.3   | 16.82  | 18.26  |
| Total (FTE)                               | 112.23 | 110.47 | 105.46 | 109.39 |

| Type of contract       | 2018 | 2017 | 2016 | Mean |
|------------------------|------|------|------|------|
| Permanent (FTE)        | 74   | 75   | 75   | 75   |
| <b>Temporary (FTE)</b> | 26   | 25   | 25   | 25   |

Table 9.2.2. Percentage (%) of veterinarians in academic staff

Table 9.2.3. Support staff of the veterinary programme

| Type of contract | 2018   | 2017   | 2016   | Mean   |
|------------------|--------|--------|--------|--------|
| Permanent (FTE)  | 101.09 | 108.39 | 102.61 | 104.03 |
| Temporary (FTE)  | 37.27  | 30.94  | 27.10  | 31.77  |
| Total            | 138.36 | 139.33 | 129.71 | 135.80 |

| Table 9.2.4. | Research | staff of the | Establishment |
|--------------|----------|--------------|---------------|
|--------------|----------|--------------|---------------|

| Type of contract       | 2018  | 2017  | 2016  | Mean  |
|------------------------|-------|-------|-------|-------|
| Permanent (FTE)        | 30.91 | 25.38 | 23.66 | 26.65 |
| <b>Temporary (FTE)</b> | 12.13 | 11.00 | 8.98  | 10.70 |
| Total                  | 43.04 | 36.38 | 32.64 | 37.35 |

In addition to the previous section, academic and support staff are recruited by mutation or by competitive examination. Open positions are first discussed during the annual strategic interview with the DGER, then must receive approval from the MAA.

#### Lecturers:

Recruitment is governed by national regulations that define the conditions for eligibility to compete, the tests for the competitive examination, and the composition of the jury. Any change in this regulatory framework is discussed within the National Council of Higher Education and Agricultural, Agronomy and Veterinary Research (CNESERAV). There are two recruitment sessions per year, and the profile of the position is made public on the MAA's website.

An associate-professor candidate must hold a PhD doctorate and/or a specialist diploma from one of the European or American Veterinary Colleges. A professor candidate must hold an accreditation to supervise research (national diploma delivered on average 4-6 years after PhD defence). The recruitment tests for both associate professors and professors consists in the presentation of the candidate to the jury (professional background, previous teaching activities, previous research works, and pedagogic and research projects) and in a public presentation of a lesson after 24 hours of preparation. The lesson's theme is determined by the jury and is related to the discipline concerned by the recruitment. The candidate with the highest score is the one who is recruited.

The jury for the recruitment of an associate professor is composed of associate professors, professors, and/or researchers holding a PhD, members and non-members of ENVT's staff. The jury for the recruitment of a professor is composed of professors and/or researchers holding the accreditation to supervise research, members and non-members of ENVT's staff. In both recruitments, only someone from outside the establishment may chair the jury. The jury is proposed by the teaching unit and must be approved by the Academic council and the CNECA

subgroup. The jury is officially appointed by the MAA, who also organizes the competitive examination.

Once recruited, an associate professor performs her/his duty (teaching, research and services) for a 1-year trial period. During this period (and up to 24 months), the new lecturer is accompanied in his/her new position by a group of 3 tutor lecturers in order to ensure that his/her integration occurs in the best possible conditions. At the end of this period, the new lecturer is expected to write an activity report evaluated by his/her peers from his/her CNECA subgroup, by an internal committee, and by the Dean. The composition of the internal committee (6 teachers from the establishment) is decided and approved by the Academic council. The CNECA subgroup, the internal committee, and the Dean must all approve the tenure.

Finally, an interview between the Dean and lecturers is also organized before transmission of their quadrennial report to the CNECA subgroup and/or before any request for promotion.

<u>Temporary lecturers and staff members</u> supplement the teaching team. Their number and distribution is determined depending on identified needs (curriculum, clinical activities, *etc.*), the "position ceiling threshold" (*i.e.* the maximum number of members who can be recruited), and the available resources (clinical incomes, research contracts, *etc.*). The distribution of the recruitments of temporary lecturers is decided each year by the Executive committee (BURDIR), based on a proposal from the training/support unit and after a technical advice of the Human resources department. They are recruited on the basis of a job description and an individual interview to ensure that they have the appropriate qualifications.

To apply for one of ENVT's *<u>Residency programmes</u>*, candidates must have:

- the right to study in the EU;

- a post-graduate experience (rotating intern and/or specialized intern) (highly recommended);

- a twelve-month experience as a qualified veterinarian (preferable).

Available positions are advertised (on a national and international scale via veterinary schools' websites). After being interviewed, residents are recruited on 3-year contracts, usually starting on 1<sup>st</sup> September. Combined residency and PhD positions are encouraged.

<u>Contractual staff members</u>, payed on the school's budget, are recruited after a recruitment interview.

The whole support staff is subject to an <u>annual professional interview</u> by their direct supervisor, whose goal is to determine the objectives for the coming year in relation to the objectives of the previous year, and to identify needs in terms of continuing education. A dedicated national committee (called "Commission Administrative Paritaire") insures the career growth and professional development of support civil servant.

As for the opportunities for academic staff to work outside ENVT, they are allowed within a strict regulatory framework.

9.3 "Staff must be given opportunities to develop and extend their teaching and assessment knowledge and must be encouraged to improve their skills. Opportunities for didactic and pedagogic training and specialisation must be available. The Establishment must clearly define any systems of reward for teaching excellence in operation.

Academic positions must offer the security and benefits necessary to maintain stability, continuity, and competence of the academic staff. Academic staff must have a balanced workload of teaching, research and service depending on their role; and must have reasonable opportunities and resources for participation in scholarly activities."

see 9.2

As mentioned above, different categories of staff exist at ENVT:

- civil servants whose status is regulated by the rules of civil service; most of them are permanent staff;

- open-ended contractual staff members, payed on the school's budget

- Temporary staff members

A government decree states that the activity of a lecturer must be equally balanced between research (50%) and teaching (50%, including services). An equivalence grid of teaching activities translates the described activities into hourly volume. Working time arrangements are made for lecturers wishing to prepare for an academic competitive examination (European or American college) or a tenure or promotion competition. The mobility of teaching and non-teaching staff is possible through ERASMUS programmes for example or through sabbatical periods.

Engagement letters are also formalized for academic staff assigned to a specific mission for the institution and reviewed by the management staff in the perspective of the strategic plan.

9.4 "The Establishment must provide evidence that it utilises a well-defined, comprehensive and publicised programme for the professional growth and development of academic and support staff, including formal appraisal and informal mentoring procedures.

Staff must have the opportunity to contribute to the Establishment's direction and decision-making processes.

Promotion criteria for academic and support staff must be clear and explicit. Promotions for teaching staff must recognise excellence in, and (if permitted by the national or university law) place equal emphasis on all aspects of teaching (including clinical teaching), research, service and other scholarly activities."

see Standard 1 and Standard 9.2

Support modalities for the professional training of staff are reminded in Ministerial Memorandum <u>SG/SRH/SDDPRS/2019-554</u> of 23 July 2019. Other regulatory measures (annual professional interview with the supervisor, promotion campaign, working time adjustment are subject to similar investigation procedures with prior information to the CODIR, possible decision by the BURDIR if necessary. The ENVT's staff are informed collectively or by name of the response mechanisms and deadlines to be respected during the year depending on whether or not they are directly concerned.

Social dialogue is also enriched by the many opportunities of institutional (bodies) or informal (general assembly) exchanges between the staff, its elected representatives and the ENVT's management. Moreover, the Human resources department interacts with three major stakeholders in the conduct of ENVT's HR policy:

- the inspector in charge of staff and structure support (IGAPS) who ensures the regional coordination of the department's HR policy and examines career advancement opportunities;

- the preventive medicine and occupational health doctor with whom the Human resources department ensures the medical follow-up of ENVT agents;

- the social worker of the Regional Direction of Agriculture, Food and Forest (DRAAF) who maintains a monthly presence in the establishment and offers support solutions for agents in difficulty.

The quality of these interactions is important to ensure the efficiency and professionalism of the service.

## 9.5 A system for assessment of teaching staff must be in operation and must include student participation. Results must be available to those undertaking external reviews and commented upon in reports.

See standard 3.4

ENVT implemented a system of evaluation of teaching by the students a few years ago as part of the institution's continuous improvement approach. It aims at providing indicators for the Quality Management System (QMS) mapping process « Teaching » (see appendix Stand\_1.4\_App005).

For each teaching module, the students are thus asked about:

- Necessary prerequisites;
- General organization of the teaching module (schedule, duration, documentation...);

-Adequation between pedagogical objectives and teaching modalities (explicitation and achievement of these objectives);

- Assessment modalities;
- Working time dedicated to the teaching module;

Regarding the first 4 points, evaluation is quantitative (appreciation scale) and qualitative (open comments).

The results of these evaluations are then transfered to the heads of the teaching modules for analysis (with the teaching team) in order to take the necessary improvement steps. The information thus collected and the methodology used provide useful material to the teachers to challenge their teaching and make it evolve in content and form. The results are also communicated to the heads of teaching departments, to the head of the Education and student life and to the Dean.

The comprehensive methodology of the assessment is defined in the "<u>Teaching evaluation</u> <u>procedure</u>" ». The evaluation of teaching by the students is a now a fully-integrated tool for continuous improvement of the school. It contributes to the evolution of teaching and pedagogical practices. The way to assess is in constant evolution (thanks to the feedbacks) and was recently revised.

#### Comments

The management of ENVT's human resources has been significantly transformed since the signature of a control document on July 18, 2016. This document, in accordance with article 222 of decree n°2012-1246 dated 7 novembre 2012 on public budgetary and accounting management, defines the exchange and control modalities of ENVT's transactions by the regional budgetary assessor (CBR). See standard 2

The implementation of *a priori* examinations of certain administrative and budgetary acts, now subject to the approval of the CBR, urged the establishment to review its organization and notably the control exercised by the HR Department over recruitments by the different services/structures of ENVT. In addition to this new control at local level, ministerial

supervision in HR matters has been reinforced. The Ministry now exercises permanent overseeing of the use of positions in the school.

The HR organization of several activity centres (support services, applied training platforms, animal holding areas, clinics) also requires a rationalization and homogenization effort (team management).

The Ministry, like the CBR, receives the different management reports (management records and planning documents regarding staff management and position allowances (DPGEPCP). The school is expected to produce this document every three months to guarantee compliance and coherence with HR resources attributed to the establishment.

Additionnaly, ENVT faces challenges to recruit specific competencies (both for lecturers and technical or administrative staff). As an example, the equine sector, now well-endowed in material terms, remains in a personnel deficit despite the opening of positions. Intensive recruitment efforts are currently being carried out in order to re-build a competent clinical team and expose students to a sufficient number of cases, in accordance with the ESEVT requirements.

#### **Suggestions for improvement**

It is now essential to develop a prospective vision of competences, and design a detailed map of positions and identify « orphan » or missing resources in ENVT in order to build a multiyear HR strategy. Improving mutualization of competences, in particular in disciplines which do not require full-time positions, is a necessity.

In the future, HR management will be confronted with several difficulties: demographics (raising of the retirement age) and shortage of candidates in certain sectors of employment (clinical disciplines, IT specialists...). The articulation of recruitments between permanent and contractual staff is going to be a major stake for the establishment, all the more than recruiting contractual agents under private law at the VTH is now a possibility (since the introduction on August 6, 2019 of the law on transformation of the civil service). Another challenge is the balance of the lecturers' time work between their activities (teaching, continuing education and research): a finer steering at the level of the establishment is desirable.

Finally, internal communication should be improved: E-mail messaging remains the main communication tool among the personnel of the establishment for collective or individual information. Because this communication mode is mainly top-down, the school intends, in early 2020, to deploy a new intranet and a « ticketing » tool similar to the already-existing SOS Info, SOS Campus, and SOS H&S services. The goal is to modernize internal communication modalities in order to keep track of exchanges and to bring a better service to the community, notably in terms of reactivity and personalized support.

# 10: Research Programmes, continuing and postgraduate education



## 10.1 The Establishment must demonstrate significant and broad research activities of staff that integrate with and strengthen the veterinary degree programme through research-based teaching.

Research at ENVT is divided into two main axes: an agro-veterinary axis for which INRA (National Institute for Agronomic Research) is the main institutional partner and a bio-medical axis, with Inserm (French National Institute for Health and Medical Research) as a major institutional partner. The laboratories are organized in six joint research units (UMR), a joint service unit (UMS) and a joint technological unit (UMT) supported by a technical institute, the Livestock Institute (Idele). These eight labelled joint units include 56 lecturers. Research units are composed of one to several research teams (the latter being the most common set-up) and each team is made up of full-time researchers (mainly from INRA), lecturers and engineers and technical staff both from ENVT and INRA (see appendix Stand\_10.1\_App001 for a detailed description of the units or <u>Research</u>).

Our research strategy aims to develop management strategies for animal health. The research activities are broad and are divided into three thematic axes aiming:

- to understand the chemical and biological stressors;
- to understand the interaction between stressor, microbiote and host;
- to detect and manage diseases, and to appraise their societal impact

The excellence and the relevance of our research activities over the last five years are attested by: *i*) national and international recognition reflected by ENVT's place in international rankings (Shanghai veterinary sciences in 2019: rank 62,  $1^{st}$  ENV) and national rankings (MAA); *ii*) the great implication of lecturers as experts in several national and international regulatory bodies; *iii*) the scientific production of 94 original rank A publications by the accredited units annually (1.6 articles per lecturer yearly) completed by 61 transfer articles annually (1.0 article per lecturer from an accredited unit yearly); *iv*) 22 PhDs defended yearly, supervised by lecturers contributing from the accredited units and *v*) a diversified public and private funding (Table 10.1.1).

The specificity of the veterinary training is that it is based not only on a thorough knowledge of basic sciences, but also on strong clinical skills; ENVT's research activity is carried out in synergy with these educational missions. One of the key priorities of ENVT is therefore to develop an efficient meshing between research and veterinary training by promoting reciprocal support between these two areas. This intense interaction between teaching, services and research enhances the visibility of ENVT and makes it more attractive for the recruitment of lecturers. Indeed, research activities represent a significant contribution to training both for undergraduate and postgraduate students:

- by reinforcing the interest in cognitive sciences to compare and evaluate the approaches in medicine and research (e.g. the hypothetico-deductive approach, importance of doubt, evidence-based medicine, innovation...);

- clinical practice benefit from the insights arising from the latest innovative research and from the advanced scientific equipment used in the laboratories. Conversely, clinical practice is useful to research as it facilitates the detection of emerging diseases and provides operational input for controlling infectious diseases;

- the scientific environment enables veterinary students to be initiated to experimental research, thus promoting a more rigorous approach, including quality assurance and safety aspects. Such evidence-based studies can be the subject of experimental veterinary theses.

Over the last five years, the scientific facilitation group for the promotion of research (GASPAR) has taken a variety of measures to integrate and strengthen the veterinary degree programme through research-based teaching:

(1) An annual event in the form of a thematic scientific Day with external speakers and presentation of activities of the ENVT's research units, open to students and to all the scientific staff (Theme of the symposium in 2019: "*From health data to advanced medical research*", 97 participants).

(1) A scientific event named "thesis market" has been organized twice since 2019. The first one gathered more than eighty students. Lecturers proposed research projects which could serve as a basis for students to write their experimental thesis.

(2) To facilitate reciprocal exchanges between PhD students and residents, seminars (6 to 8 yearly; 60 minutes per seminar) have been organized since 2017 to allow students to meet and present their research results, including clinical research or case series. These seminars are open to students in initial training;

(3) Two seminars are held yearly in order to welcome new PhD students and residents allow them to meet and present their results or project on a "180 seconds" format.

*Table 10.1.1. List of the 10 major funded research programmes in the Establishment\* which were ongoing during the last full academic year prior the Visitation (2018-2019)\*\** 

| Scientific topics   | grant/year<br>(€) | Duration<br>(Years) |
|---|-------------------|---------------------|
| Pet neonatalogy and nutrition   | 203 873           | 6                   |
| Avian biosecurity chair   | 400 000           | 3                   |
| Impact of metabolism on the avarian effects of Bisphenol S  | 170 666           | 3                   |
| Bood prion detection  | 101 118           | 4                   |
| NIAID - Centers of excellence for influenza research and surveillance   | 65 596            | 4                   |
| Epidemiological Tracking of Avian Influenza   | 86 337            | 3                   |
| Fumonisins toxicity   | 50 600            | 5                   |
| Metabolome of two major wheat fungal contaminants: identification of new toxic metabolites                          | 50 128            | 5                   |
| Periodontitis Adipose Stromal Cell Therapy: Host-Microbiome<br>Homeostasis Reset for Deep Periodontium Regeneration | 60 644            | 4                   |
| Exploring permeability of species barrier   | 44 362            | 5                   |

\*\*: The listed agreements are only those managed financially by the ENVT (and not by the research institutes involved in the joint units).

The complete list of of ongoing research projects is provided on appendix Stand\_10.1\_App002.

**10.2** All students must be trained in scientific method and research techniques relevant to evidence-based veterinary medicine and must have opportunities to participate in research programmes.

See 3.1 and 6.1

Students perform a critical analysis of technical and scientific information (online tutorials: 5 h, with an online exam) in the A2, just before their « research project » Extra-Practical Training. Their skills in bibliographic search are applied in several modules during their second year (S7):

(1) Ecotoxicity, for the search of legal and administrative documents.

(2) Molecular biology: analysis and presentation of a scientific paper

(3) English/toxicology module: analysis of a scientific paper and written or short oral scientific presentation in English.

A two-day professional forum describing various areas of activities offered by the veterinary training is organized for the students during the first year (A1). Part of the forum is devoted to research, involving a researcher working within the institution. This includes a one-hour presentation followed by a discussion with the students.

Undergraduate students in second-year have opportunities to participate to research programmes through an Extra-Practical Training (EPT) of a minimum duration of 6 weeks (this period can be extended to 12 weeks). This EPT consists in carrying out a research project on a specific theme defined for that purpose or in taking part to an on-going research project of a team research. This research project is evaluated through a report, including a bibliographic search, and an oral presentation.

Several scientific events (see above) are organized by the scientific working groups (including veterinary students) to promote real exchange between the lecturers (or researchers) and the students and give the latters the opportunity to participate to supervised research projects. Thus, over the last three years, 84% of ENVT students' veterinary theses (mandatory to graduate as a DVM) were based on experimental research projects or clinical surveys (see .

Furthermore, during the 4<sup>th</sup> year (A4), detailed information regarding Master's degrees available at Toulouse University is delivered to students interested in pursuing a career in the field of research, in particular if they wish to enter a PhD programme. These students can benefit from special arrangements and a personalized organization of their studies to facilitate their scientific training. Between 3 and 7% of students pursue their studies through a research Master's degree (one of the possible options in the 5<sup>th</sup> year of the curriculum) and a PhD. Seven ENVT students are currently enrolled in Master courses in the context of their fifth year (A5).

# 10.3 The Establishment must provide advanced postgraduate degree programmes, e.g. PhD, internships, residencies and continuing education programmes that complement and strengthen the veterinary degree programme and are relevant to the needs of the profession and society.

ENVT provides post-graduate training for students wishing to continue their studies at the end of their initial training, with a view to possible specialization. In this register, ENVT offers:

- three **internship programmes in clinical sciences** (<u>Internships</u>) corresponding to one year of further training in clinical sciences for pets, equines or ruminants;

- **School Clinical Diplomas**, called "Diplômes d'Ecole" (DE), each corresponding to a oneyear training in a specific disciplinary field, which may also be open to continuing training (<u>School clin dipl</u>);

- **Specialization courses** (European College Residency or French Specialized Diplomas in Veterinary Studies - DESV).

SER 2020 – Research Programmes, continuing and postgraduate education

| Training   | 2018-<br>2019 | 2017-<br>2018 | 2016-<br>2017 | Mean  |
|--|---------------|---------------|---------------|-------|
| Interns:   |               |               |               |       |
| Compagnion animals   | 16            | 15            | 16            | 15,67 |
| Equines  | 3             | 1             | 0             | 1,33  |
| Ruminants  | 3             | 1             | 2             | 2,00  |
| Total  | 22            | 17            | 18            | 19,00 |
| Clinical School Diplomas   |               |               |               |       |
| Internal Medicine  | 4             | 4             | 4             | 4,0   |
| Clinical pathology   | 3             | 2             | 2             | 2,3   |
| Ophtalmology   | 4             | 1             | 3             | 4,0   |
| Diagnostic Imaging   | 2             | 2             | 2             | 2,0   |
| Dermatology  | 1             | 0             | 1             | 1,0   |
| Emergency and Critical Care  | 3             | -             | -             | 3,0   |
| Equine medicine  | 1             | -             | -             |       |
| Zoological medicine, Wildlife population and health  | 2             | 1             | -             | 1,5   |
| Zoological medicine, exotic pets   | 1             | 1             | -             | 1,0   |
| Total  | 21            | 11            | 12            | 14,6  |
| Residents:   |               |               |               |       |
| EBVS disciplines (specify)   |               |               |               |       |
| European College of Animal Reproduction (ECAR)   | 0             | 2             | 0             | 0,67  |
| European College of Bovine Health Management (ECBHM)                                       | 1             | 1             | 2             | 1,33  |
| European College of Porcine Health Management (ECPHM)                                      | 1             | 1             | 1             | 1,00  |
| European College of Poultry Veterinary Science (ECPVS)                                     | 1             | 1             | 1             | 1,00  |
| European College of Veterinary Anaesthesia and Analgesia (ECVAA)                           | 1             | 1             | 1             | 1,00  |
| European College of Veterinary Clinical Pathology (ECVCP)                                  | 2             | 2             | 1             | 1,67  |
| European College of Veterinary Comparative Nutrition (ECVCN)                               | 1             | 0             | 0             | 0,33  |
| European College of Veterinary Dermatology (ECVD)  | 3             | 2             | 1             | 2,00  |
| European College of Veterinary Emergency and Critical Care (ECVECC)                        | 1             | 1             | 0             | 0,67  |
| European College of Veterinary Internal Medicine - Companion Animals (ECVIM-CA)            | 2             | 1             | 1             | 1,33  |
| European College of Veterinary Neurology (ECVN)  | 1             | 1             | 0             | 0,67  |
| European College of Veterinary Pathology (ECVP)  | 0             | 0             | 1             | 0,33  |
| European College of Veterinary Public Health (ECVPH) - subspecialty<br>Population Medicine | 1             | 0             | 0             | 0,33  |
| European College of Veterinary Public Health (ECVPH) subspecialty of Food Science          | 1             | 0             | 0             | 0,33  |
| European College of Veterinary Pharmacology and Toxicology (ECVPT)                         | 1             | 1             | 0             | 0,67  |
| European College of Veterinary Surgeons (ECVS)   | 1             | 0             | 1             | 0,67  |
| European College of Veterinary Surgeons (ECVS Large animals)                               | 0             | 1             | 1             | 0,67  |
| European College of Zoological Medicine (ECZM) - Small Mammals                             | 1             | 0             | 0             | 0,33  |
| Total  | 19            | 15            | 11            | 15    |

Table 10.3.1. Number of students registered at postgraduate clinical training

| <b>Others (non-EBVS programmes = French specialization)</b> |   |   |   |      |
|---|---|---|---|------|
| DESV Ophtalmology   | 2 | 2 | 1 | 1,67 |
| DESV Veterinary Pathology                                   | 1 | 0 | 1 | 0,67 |
| DESV Laboratory animals sciences and medicine               | 1 | 1 | 4 | 2,00 |
| Total   | 4 | 3 | 6 | 4,33 |

#### **Internships in animal clinics**

The three rotatory internships of the 4 French ENVs are coordinated and are subject to joint recruitment by competition (with French or foreign applications) and a joint diploma; the aim of which is to provide general practitioner skills in pets, equidae or ruminants. This postgraduate additional training is governed by decrees of the Ministry of Agriculture.

The objectives of these rotatory internships are multiple and, for example for pets, are detailed in: <u>internships</u>. At the end of this 12-month course, the intern must be able to assume full responsibility for the management of clinical cases presented in consultation with in all sectors of activity. The training objectives are detailed for each discipline, taking into account the expected knowledge, interpersonal skills and know-how for each of these specialities. During this training, interns are supervised and guided by lecturers, hospital practitioners and hospital assistants/residents. Through a total immersion in clinical practice, this year should make it possible to develop theoretical and practical clinical knowledge but also their autonomy and their ability to supervise and work in a team.

The intern during the year must supervise graduate students for clinical and complementary exams. He can be helped by the clinic's nursing staff (ASV). The interaction of the intern with the students takes place daily. It is often a preferred interface for A3, A4 and A5 clinical rotations. It allows the articulation of the different levels of study and facilitates communication and knowledge transfer. The different missions according to levels are established and adapted to the different clinical situations by the supervisors.

#### **Clinical school diplomas**

Students in clinical school diplomas, or "specialized internships", are not present in all disciplines in domestic carnivorous clinics, so they are present in medical imaging, dermatology, ophthalmology, intensive care emergencies and internal medicine. Specialized internship implies a 1-year training programme to deepen and strengthen knowledge in a specific clinical area. These positions are accessible after having successfully completed an undergraduate degree in veterinary medicine (DVM). Specialized interns (DE students) may be involved in clinical supervision of students and participate in research projects depending on the discipline. The expectations of these DE students are different from those of interns. The missions entrusted to them are different from the internal one and are established by the managers of each department. The DE, by its prolonged immersion within the same department, also serves as a guide for interns and students to enable them to carry out specialized examinations and carry out the specific tasks that are required and that may vary from one discipline to another.

#### **Specialisation courses**

Lasting 3 years after an internship, the European Residency Programmes are managed by the various European colleges under the aegis of the European Board of Veterinary Specialisation (<u>http://www.ebvs.org</u>). The development of an accredited residency programme in an institution is dependent on the existence of a management team comprising one or more

specialists ("diplomates") from the European College of the specialty. At the ENVT, clinical research professors are strongly encouraged to prepare and obtain the title of European specialist and to develop an accredited residency programme.

Residents participate in the training of students at all levels within the ENVT's hospitals. A significant effort has been made over the past five years to enable ENVT scientific executives (lecturers, hospital practitioners or hospital assistants) to follow an outsourced residency program, in one of the other ENVs or abroad. In the long run, these individuals became specialists, will be able to run residency programmes, and thus broaden the offer of specialization within the ENVT.

There are 18 EBVS certified training programmes running at the ENVT (see details in Table 10.3.1) and another two are under preparation (European College of Laboratory Animal Medicine Reproduction ECLAM and European College of Veterinary Ophthalmologists ECVO). The two upcoming specializations are already included in post-graduate education program at the ENVT with a diploma of specialist for the respective disciplines recognized by the French government (DESV). Residency programmes become better recognized in France, therefore more and more veterinarians wish to obtain EBVS diploma. Only during the last three years 45 veterinarians participated the residency programmes at our establishment and the following 49 residencies are already scheduled for the following three years.

Each EBVS college requires a research project during the residency program in order to obtain the final diploma. Therefore, all residents at the ENVT conduct research activities parallel to education and clinical activities. For example, in order to be allowed to attend to the final exam (to become diplomate), following research activities are required by ECAR (European College of Animal Reproduction): a resident must follow a basic research program in a laboratory analyzing clinical material; must make at least two presentations to international conferences (devoted to animal reproduction); must have published at least two articles (in a branch of animal reproduction) in a peer-reviewed journal of international repute; must attend to scientific meetings. Firstly, the research programmes are usually defined by the resident and her/his supervisor. A developed project is then submitted to the internal ethical committee and the head of the Scientific affairs. Once both evaluations are assured, the resident may start the project.

#### PhD

The research teams of the ENVT contribute to the organization of 8 Master courses. The management of the GIMAT and Interrisk masters (organized with Kasetsart University, Bangkok, Thailand) is carried out by ENVT lecturers from UMR IHAP, in collaboration with the CIRAD teams. The research teams from our ENV hosted in average 28 PhD students per year (including 7 Veterinary students from our establishment, Table 10.3.2) and are related to two major doctoral schools (EDs):

- Sciences for Ecology, Veterinary, Agronomy and Bioengineering (SEVAB). ENVT contributed to its creation and a ENVT lecturer will be associate director of SEVAB for the next five-year plan;

- Biology, Health, Biotechnologies (BSB).

For undergraduate and postgraduate students, two summer schools were organized in the Establishment, a French German summer school, "Tackling drug resistance by reducing the use of drugs against bacteria, fungi and parasites" in July 2017 (21 participants) and an Entomology Summer Course in August 2019 (16 participants).

| Degrees | 2018-2019 | 2017-2018 | 2016-2017 | Mean |
|---------|-----------|-----------|-----------|------|
| PhD     | 32        | 27        | 25        | 28   |
| Total   | 32        | 27        | 25        | 28   |

Table 10.3.2. Number of students registered at postgraduate research training

#### **Others post-graduate programmes**

The other postgraduate programmes in the ENVT, not related to either clinical or research work (veterinary legislation and expertise, laboratory animal science, legislation of veterinary medicinal product (distance learning courses), use and protection of laboratory animals, normal and anormal embryology of laboratory animals...) are also opened to continuing education (see below)). Few postgraduate students are registered.

Table 10.3.3. Number of students registered at other postgraduate programmes in the Establishment but not related to either clinical or research work (including any external/distance learning courses)

Not relevant

#### **Continuing Education:**

In terms of continuing education (CE), ENVT's offer is available directly on the website (<u>CE\_catalogue</u>). It is mainly targeted at veterinary practitioners, industry executives or researchers, and includes diploma courses (Certificates of Advanced Veterinary Studies (CEAV), national diplomas organised with the other 3 veterinary schools; school diplomas (DE for *Diplôme d'Ecole*); or Inter-ENVs Diplomas (DIE)) and qualifying training. In some areas, ENVT's expertise is at the service of the scientific community at large. Thus, in the field of laboratory animal health and medicine, the training courses offered by the ENVT, some of which are regulatory, are widely open to non-veterinarians and in particular to doctoral students from the site's Doctoral Schools, at preferential rates.

ENVT is registered as a CE organization in the Occitanie Region, and is thus allowed to offer teaching courses intended for all audiences.

Article R812-55 of *Code Rural et de la Pêche Maritime* authorises ENVs to create additional courses to the initial training course, leading to the award of school diplomas (DE). The pedagogical engineering of the ENVT EDs is the responsibility of each pedagogical manager, who describes the pedagogical objectives of the training, the skills targeted, the participants, the programme and the evaluation methods. DEs in continuing education last between 1 and 5 weeks. Each new ED must obtain a favourable opinion from the CEVE, the CS, the Board of Directors and the Council of the Deans of ENVs (CDENV).

It should be noted that in the context of veterinary continuing education, training leading to a DE entitles the holder to a greater number of continuing education credits awarded by the "Ordre des vétérinaires". The ENVT offers a rich and varied range of DEs that contribute not only to the reputation of the institution, but also to the financial balance of the continuing education activity. Three of these DEs were created more than thirty years ago and their numbers are still stable, generating waiting lists of about three years. These are the former "Certificates of Graduate Studies" (CES for Certificat d'études supérieures: osteo-articular traumatology and animal orthopaedics, animal haematology and clinical biochemistry,

veterinary ophthalmology). Training related to animal experimentation (for which the training is regulatory), represents 20% of the turnover. In terms of recognition, the diploma "Use and protection of laboratory animals" is accredited by the European Federation of European Animal Science Associations (FELASA), with an audit every 4 years to maintain accreditation.

The DEs in Management and Veterinary Expertise, created in 2006 and 2008 respectively, were pioneering courses and are still the only diploma courses in their field. A new School Diploma « Population bovine Medicine» is offered from 2019-2020 to give to practitioners the possibility to develop skills in herd health.

ENVT obtained, at the end of November 2017, its DataDock® referencing and thus demonstrated that it met the quality requirements dictated by law (Decree No 2015-790 of 30 June 2015). DataDock referencing allows the main public funders (*Opca, Fongecif, Régions, Pôle emploi, Agefip, État*) to provide applicants with financial support for training.

Based on the elements provided for this referencing, the working group in charge of CE is working to improve our practices with 3 key actions:

- the standardization of training management documents (agreements, convocations, certificates, programmes, etc.);

- the improvement of the continuous training section of the website;

- the display of the CVs of internal and external trainers.

2017 was also the year in which accreditation with the French Veterinary Continuing Education Council (CFCV) expired, allowing veterinarians who follow our training courses to benefit from continuing training credits and thus to justify their lifelong training as required by the *Code Rural et de la Pêche Maritime* and the Veterinary French Code of Ethics. Following the application submitted, the ENVT obtained in January 2018 the renewal of its accreditation for three years.

| Table  | 10.3.4. | Number | of | attendees | to | continuing | education | courses | provided | by | the |
|--------|---------|--------|----|-----------|----|------------|-----------|---------|----------|----|-----|
| Establ | ishment |        |    |           |    |            |           |         |          |    |     |

| Courses  | 2018 -<br>2019 | 2017 -<br>2018 | 2016 -<br>2017 | Mean |
|--|----------------|----------------|----------------|------|
| Acupuncture  | 10             | 10             | 13             | 11   |
| Practical and legal aspects of canine behavior assessment  | 0              | 12             | 12             | 8    |
| Autopsy, sampling, analyses and interpretation on young cattle                                   | 0              | 0              | 0              | 0    |
| Autopsy, sampling, histology of the laboratory animal  | 0              | 7              | 0              | 2    |
| Bases on dairy cattle feeding  | 18             | 0              | 0              | 6    |
| Physiological bases of reproduction, applications to pregnancy diagnosis in ewes with ultrasound | 0              | 0              | 11             | 4    |
| CEAV of Internal Medicine  | 94             | 94             | 84             | 91   |
| CEAV of laboratory animal science and medicine   | 2              | 6              | 5              | 4    |
| Animal osteoarticular traumatology and orthopaedics  | 24             | 24             | 24             | 24   |
| Animal hematology and clinical biochemistry  | 40             | 34             | 33             | 36   |
| Veterinary ophthalmology   | 25             | 26             | 27             | 26   |
| Laboratory animal surgery  | 8              | 9              | 21             | 13   |

| Theoretical and practical introduction to dog and cat cytology | 19  | 16  | 17  | 17  |
|--|-----|-----|-----|-----|
| Veterinary Management  | 17  | 15  | 6   | 13  |
| Dairy cow nutrition and feeding                                | 36  | 29  | 34  | 33  |
| Use and protection of laboratory animals (designer level)      | 51  | 60  | 41  | 51  |
| Use and protection of laboratory animals (Applier level)       | 23  | 16  | 14  | 18  |
| Dissection of heads of carnivores                              | 4   | 0   | 0   | 1   |
| Veterinary drug legislation                                    | 0   | 0   | 5   | 2   |
| Echography of the cow genital tract                            | 6   | 0   | 7   | 4   |
| Ovarian ultrasound   | 8   | 0   | 0   | 3   |
| Bovine visceral ultrasound                                     | 2   | 0   | 2   | 1,3 |
| Cattle Health Economics: A Practical Approach                  | 0   | 0   | 8   | 3   |
| Law and Veterinary Expertise                                   | 13  | 18  | 18  | 16  |
| Training of ethics committee members                           | 18  | 13  | 9   | 13  |
| Training prior to obtaining health accreditation               | 35  | 0   | 28  | 21  |
| Initiation to treatment of fractures with screwed plates       | 0   | 0   | 15  | 5   |
| Toulouse Cattle Day  | 0   | 0   | 64  | 21  |
| Dressings and bandages in practice                             |     |     | 12  | 12  |
| Sheep production and pathology                                 | 12  | 0   | 2   | 5   |
| Use of Ultrasound in Dairy Farming                             | 0   | 0   | 3   | 1   |
| ECVPT Workshop on Pharmacokinetics                             | -   | -   | 16  | 16  |
| Population pharmacokinetics                                    | 8   | 0   | 0   | 3   |
| Surgery initiation on animal model                             | 7   | 0   | 0   | 2   |
| Economics Animal health (Master Gimat)                         | 2   | 0   | 0   | 1   |
| Laboratory Animal Sciences' Day (sorting procedures)           | 54  | 0   | 0   | 18  |
| Neuroanatomy of the Laboratory Animal                          | 4   | 0   | 0   | 1   |
| Total  | 538 | 389 | 531 | 486 |

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10.4 The Establishment must have a system of QA to evaluate how research activities provide opportunities for student training and staff promotion, and how research approaches, methods and results are integrated into the veterinary teaching programmes.

Research activities are administratively supervised by a scientific affairs department (DS) comprising a delegate chosen among the academic or research senior staff, assisted by an administrative delegate (half-time) and a person in charge of industrial valorisation and partnership since 2017. A scientific council (CS) comprises 7 electives representatives from staff, one from PhD students and 11 external members appointed by the MAA (see Annex Stand\_1.2\_App003). The Scientific Committee implements the scientific policy in accordance with the broad lines of the Establishment. For that, the CS is supported by the scientific facilitation group established for the promotion of Research (GASPAR), set up in 2015 at the initiative of the CS (see Annex Stand\_1.2\_App003). The missions of GASPAR include information, initiation of proposals and coordination. Eight meetings a year at least are scheduled. The CS has taken several tools to monitor the research activities and to promote its diffusion:

1. Specific indicators of research activities are measured regularly, some of which are established by the MAA, and are measured annually.

2. As described below, several scientific events (a thematic scientific Day, a scientific event entitled "thesis market", seminars for residents and PhD, seminars / year of welcome of PhD and residents) are organized by the Scientific Committee assisted by a group of volunteers including 4 veterinary students. The seminars for residents and PhD is organized by the head of the Veterinary Teaching Hospital.

Information on these scientific events is provided by the CS by mail and by posters to the students and the relevant staff. These scientific animations were assessed and revised through an attendance sheet and a personal evaluation sheet. The assessment of the actions allows us to adapt the actions. For example, a scientific event "Thesis market" has been initiated at the request of the veterinary students: thus, over the last three years, 84 % of ENVT student's veterinary thesis (mandatory to graduate as a DVM) were based on experimental research projects or surveys, which is a good indicator of the integration of research into the veterinary programmes.

3. Financial support to research activity: The allocation for research given by the of the MAA (depending on the number lecturer in labelled research unit and for 40 % on performance indicators defined by the DGER) was used in part to support financially 3 to 4 research projects per year in response to a specific call (BQR: Bonus quality Research), mainly dedicated to young lecturers or residents (about 30 000 €year). These projects are evaluated by the members of the CS.

#### Comments

Scientific activities are a strength of our Establishment and are carried out in synergy with educational missions to provide students robust methods of reasoning they will need. Almost all lecturers carry out their research in labelled research units. The possibilities offered to train veterinary students for research are a very good opportunity. But only few postgraduate students (5 %) want to go into research because of the great veterinary surgeon's vocation and because of the length of the veterinary studies. An important challenge of ENVT is therefore to develop an efficient meshing between research and veterinary training in order to attract young people into careers in research. The recent actions described above pursue this objective.

Continuing education is also considered as one of the ENVT's strengths. The courses offered are attended by many veterinarians, mostly practitioners, who often have to wait for more than 3 years before being able to enrol in some training. This is perceived as a source of prestige, acknowledging the expertise of the ENVT's lecturers in certain professional fields; it is also a source of income for the school.

#### Suggestions for improvement

To enhance the integration between veterinary training and *research*, ENVT management team plan to:

- propose an optional research training programme for undergraduate students. This programme will include short research internships in joint research units;

- improve the communication for undergraduate and postgraduate students on aims and ambitions of veterinary research;

- strengthen attractiveness of veterinary students for career paths in research;
- promote the involvement of researchers in veterinary training.

Moreover, one of the main short/mid terms objectives is the structuration of clinical research. We are planning the creation of a clinical research unit in small animals (based on the Neocare team activity) and of a clinical investigating Centre related to VTH which would develop research projects shared by the 4 ENVs.

Regarding *continuing education*, one of the objectives of the ENVT's strategic plan is to make continuing training more effective by adapting the technical platforms for an original and innovative continuing training offer, coordinated with (and complementary to) the offer provided by other structures (public and private). Also, as part of the enhanced cooperation desired by the 4 ENVs in 2019, a working group led by the ENVT's head of Continuing Education, bringing together the CE managers of the 4 ENVs, is being set up. After having carried out an inventory of the training courses offered by each ENV, proposals will be made to pool or improve the visibility of the specificity of the offer per school, starting with the creation of a common catalogue of continuing training.



## List of ESEVT Indicators



|       |  | Establishment<br>values | Median<br>values <sup>1</sup> | Minimal<br>values <sup>3</sup> | <b>Balance</b> <sup>3</sup> |
|-------|--|-------------------------|-------------------------------|--------------------------------|-----------------------------|
| 11    | $n^\circ$ of FTE academic staff involved in veterinary training / $n^\circ$ of undergraduate students                      | 0,184                   | 0,16                          | 0,13                           | 0,058                       |
| I2    | n° of FTE veterinarians involved in veterinary training / n° of students graduating annually                               | 0,803                   | 0,87                          | 0,59                           | 0,213                       |
| 13    | $n^\circ$ of FTE support staff involved in veterinary training / $n^\circ$ of students graduating annually                 | 1,444                   | 0,94                          | 0,57                           | 0,877                       |
| I4    | n° of hours of practical (non-clinical) training   | 1234                    | 905,67                        | 595                            | 639,000                     |
| 15    | n° of hours of clinical training*  | 1642                    | 932,92                        | 670                            | 972,000                     |
| I6    | n° of hours of FSQ & VPH training  | 316,417                 | 287                           | 174,40                         | 142,017                     |
| 17    | n° of hours of extra-mural practical training in FSQ & VPH   | 37,333                  | 68,00                         | 28,80                          | 8,533                       |
| 18    | $n^\circ$ of companion animal patients seen intra-murally / $n^\circ$ of students graduating annually                      | 143,210                 | 70,48                         | 42,01                          | 101,201                     |
| 19    | $n^\circ$ of ruminant and pig patients seen intra-murally / $n^\circ$ of students graduating annually                      | 3,782                   | 2,69                          | 0,46                           | 3,318                       |
| I10   | $n^\circ$ of equine patients seen intra-murally / $n^\circ$ of students graduating annually                                | 3,697                   | 5,05                          | 1,30                           | 2,399                       |
| I11   | $n^\circ$ of rabbit, rodent, bird and exotic seen intra-murally / $n^\circ$ of students graduating annually                | 24,085                  | 3,35                          | 1,55                           | 22,540                      |
| I12   | $n^\circ$ of companion animal patients seen extra-murally / $n^\circ$ of students graduating annually                      | 0,241                   | 6,80                          | 0,22                           | 0,018                       |
| I13   | $n^{\circ}$ of individual ruminants and pig patients seen extra-<br>murally / $n^{\circ}$ of students graduating annually  | 11,769                  | 15,95                         | 6,29                           | 5,474                       |
| I14   | n° of equine patients seen extra-murally / n° of students graduating annually  | 0,000                   | 2,11                          | 0,60                           | -0,595                      |
| I15   | n° of visits to ruminant and pig herds / n° of students graduating annually  | 0,779                   | 1,33                          | 0,55                           | 0,232                       |
| I16   | n° of visits of poultry and farmed rabbit units / n° of students graduating annually                                       | 0,756                   | 0,12                          | 0,04                           | 0,712                       |
| I17   | n° of companion animal necropsies / n° of students graduating annually   | 1,408                   | 2,07                          | 1,40                           | 0,008                       |
| I18   | n° of ruminant and pig necropsies / n° of students graduating annually   | 3,444                   | 2,32                          | 0,97                           | 2,473                       |
| I19   | n° of equine necropsies / n° of students graduating annually   | 0,064                   | 0,30                          | 0,09                           | -0,029                      |
| I20   | n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually                                  | 1,762                   | 2,05                          | 0,69                           | 1,069                       |
| I21** | $n^{\circ}$ of FTE specialised veterinarians involved in veterinary training / $n^{\circ}$ of students graduating annually | 0,341                   | 0,20                          | 0,06                           | 0,278                       |
| I22** | $n^{\circ}$ of PhD graduating annually / $n^{\circ}$ of students graduating annually                                       | 0,215                   | 0,15                          | 0,09                           | 0,127                       |

1 Median values defined by data from Establishments with Approval status in April 2016

2 Recommended minimal values calculated as the 20th percentile of data from Establishments with Approval status in April 2016

3 A negative balance indicates that the Indicator is below the recommended minimal value

\*: 1000 hours for 3rd and 4th years and an average of 642 hours for the 6 clinical tracks in the 5th year

\*\* Indicators used only for statistical purpose

#### **Comments:**

Except I14 and I19, all the ENVT's calculated indicators are above the minimal values.

I14: during the core curriculum (Y1 to Y4), ENVT does not provide ambulatory activities for equines. However, students can see extra-murally cases during their EPT. Moreover, students who chose the equine track during their 5th year are hosted 8 weeks in two specialized private clinics (hospital and ambulatory activity).

I19: the low number of equine necropsies is due the low total demand for necropsies in this sector. There are two reasons for this:

- the rendering costs for this species are borne by the owners which limit the demand for necropsies.

- the requests mainly concern insured horses

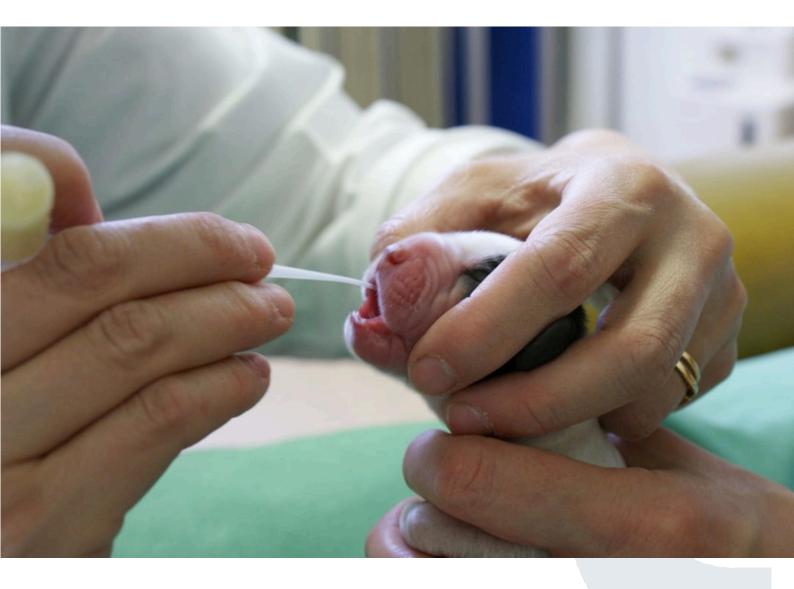
#### **Suggestions for improvement:**

I14: The improvement of the academic supervision for EPT should provide the evidence of the number of equine patients seen extra-murrally

I19: a dedicated platform has been set up for equine necropsies and information to owners was launched. Additionally, the strengthening of the equine staff should make the necropsy platform more visible and attractive in the next years.

SER 2020 – Glossary

Glossary



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| Acronyme | French   | Signification  |
|----------|--|--|
| AEAENVT  | Anciens Eleves et Amis de l'ENVT   | ENVT Alumni association  |
| AERC     | Assistant d'Enseignement et de Recherche<br>Contractuel  | Contractual teaching and research assistant                                    |
| AFVAC    | Association Française des Vétérinaires pour<br>Animaux de Compagnie                              | French association of compagnion animals veterinarians                         |
| Agefiph  | Association de Gestion du Fonds pour<br>l'Insertion Professionnelle des Personnes<br>Handicapées | French association for the the employment of disabled persons                  |
| AH       | Assistant Hospitalier  | Hospital assistant (DVM hospital staff)  |
| ASV      | Auxiliaire Spécialisée Vétérinaire   | Nursing staff  |
| AVEF     | Association des Vétérinaires Equins Français   | French association of equine veterinarians                                     |
| BCPST    | Biologie, Chimie, Physique , Sciences de la<br>Terre   | Biology, chemistry, physics, earth sciences                                    |
| BTS      | Brevet de Technicien Supérieur   | University technology degree   |
| BTSA     | Brevet de Technicien Supérieur Agricole  | Agricultural university degree   |
| BURDIR   | Bureau de Direction  | Executive committee  |
| BVDV     | Virus de la Bovine Viral Diarrhea  | Bovine viral diarrhea disease  |
| CA       | Conseil d'Administration   | Board of Directors   |
| CBR      | Contrômeur Budgétaire Régional   | Regional budget assessor   |
| CDENV    | Conseil des Directeurs des Ecoles Nationales<br>Vétérinaires                                     | Council of the Deans of French national Veterinary<br>Schools                  |
| CE       | Conseil des Enseignants  | Academic Council   |
| CEAV     | Certificat d'Etudes Approfondies Vétérnaires   | Certificate of Advanced Veterinary Studies                                     |
| CES      | Certificat d'Etudes Spécialisées   | Certificate of Graduate Studies  |
| CEVE     | Conseil de l'Enseignement et de la Vie<br>Etudiante  | Education and student life Council   |
| CFCV     | Conseil de la Formation Continue Vétérinaire   | French Veterinary Continuing Education Council                                 |
| CHSCT    | Comité Hygiène, Sécurité et des Conditions de Travail  | Hygiene and Safety committee   |
| CHUVAC   | Centre Hospitalier Universitaire Vétérinaire<br>pour Animaux                                     | Compagnion animals veterinary teaching hospital                                |
| CNECA    | Commission Nationale des Enseignants-<br>Chercheur de l'Agriculture                              | National Commission of Lecturers of French Ministry<br>of Agriculture and Food |
| CNOV     | Conseil National de l'Ordre des Vétérinaires   | French Vetererinarian statutory body   |
| CODIR    | Comité de Direction  | Steering committee   |
| COFOR    | Comité de la Formation   | Training committee   |
| CoMUE    | Communauté d'Universités et d'Etablissements   | Midi-Pyrénées Community of Universities and Establishments                     |
| COP      | Contrat d'Objectifs et de Performance  | Contract of objectives and performance   |
| COSI     | Commission des Systèmes d'Information  | Information systems commission   |
| CS       | Conseil Scientifique   | Scientific council   |
| DE       | Diplôme d'Ecole  | School Diplomas  |
| DEFV     | Diplôme d'Etudes Fondamentales Vétérinaires  | Diploma of fundamental studies in veterinary medicine                          |
| DEVE     | Direction de l'Enseignement et de la Vie<br>Etudiante  | Department of education and student life                                       |
| DFA      | Direction des Affaires Financières   | Department of Financial Affairs  |
| DGER     | Direction Générale de l'Enseignement de le<br>Recherche  | Direction générale de l'enseignement et de la Recherche                        |
| DIE      | Diplôme Inter-Ecoles   | Inter-School Diplomas  |

| DSI      | Direction des Systèmes d'Information                                   | IT department  |
|----------|--|--|
| DUT      | Diplôme Universitaire Technologique                                    | University degree in technology  |
| EAEVE    | -  | European Association of Establishments for Veterinary<br>Education                                     |
| EBVS     | -  | European Board of Veterinary Specialisation  |
| EC       | Enseignant-Chercheur   | Lecturer   |
| ECAR     | -  | European College of Animal Reproduction  |
| ECBHM    | -  | European College of Bovine Health Management   |
| ECCVT    | -  | European Coordination Committee on Veterinary<br>Training  |
| ECLAM    | -  | European College of Laboratory Animal Medicine   |
| ECOVE    | -  | European Committee of Veterinary Education   |
| ECPHM    | -  | European College of Porcine Health Management  |
| ECPVS    | -  | European College of Poultry Veterinary Science   |
| ECTS     | -  | European credit transfer system  |
| ECVAA    | -  | European College of Veterinary Anaesthesia and   |
| ECVCN    |  | Analgesia  |
|          | -  | European College of Veterinary Comparative Nutrition   |
| ECVCP    | -  | European College of Veterinary Clinical Pathology  |
| ECVD     | -  | European College of Veterinary Dermatology   |
| ECVDI    | -  | European College of Veterinary Diagnostic ImagingEuropean College of Veterinary Emergency and Critical |
| ECVECC   | -  | Care   |
| ECVIM-CA | -  | European College of Veterinary Internal Medicine -<br>Companion Animals                                |
| ECVN     | -  | European College of Veterinary Neurology   |
| ECVO     | -  | European College of Veterinary Ophthalmologists  |
| ECVP     | -  | European College of Veterinary Pathology   |
| ECVPH    | -  | European College of Veterinary Public Health   |
| ECVPT    | -  | European College of Veterinary Pharmacology and Toxicology   |
| ECVS     | -  | European College of Veterinary Surgeons  |
| ECZM     | -  | European College of Zoological Medicine  |
| ENV      | Ecole Nationale Vétérinaire  | National veterinary school   |
| ENVA     | Ecole Nationale Vétérinaire d'Alfort                                   | National Veterinary School of Alfort   |
| ENVT     | Ecole Nationale Vétérinaire de Toulouse                                | National Veterinary School of Toulouse   |
| EP-SPV   | Elevage et Produits – Santé Publique<br>Vétérinaire                    | Department of Husbandry, Animal Products and Veterinary Public Health                                  |
| EPT      | -  | External Practical Trainings   |
| ESEVT    | -  | European System of Evaluation of Veterinary Training   |
| EVPC     | Collège européen de rparasitologie                                     | European Veterinary Parasitology College   |
| FELASA   | -  | Federation for Laboratory Animal Science Associations  |
| Fongecif | Fonds de Gestion des Congés Individuels de<br>Formation                | National public fund for continuing education  |
| FSQ      | -  | Food safety and quality  |
| FTE      | -  | Full-time equivalent   |
| FVE      | -  | Federation of Veterinarians of Europe  |
| GASPAR   | Groupe d'Animation Scientifique et de la<br>Prospective à la Recherche | Scientific facilitation group for the promotion of Research  |

| GLP        | -  | Good Laboratory Practices                                      |  |
|------------|--|--|--|
| HCERES     | Haut Conseil de l'évaluation de la recherche et de l'enseignement supérieur              | High council for evaluation of research and higher education   |  |
| HR         | -  | Human ressources   |  |
| IAVFF      | Institut Agronomique, Vétérinaire et Forestier de France                                 | French Veterinary and Forest Institute                         |  |
| IBR        | -  | Infectious bovine rhinotracheitis                              |  |
| ICTE       | -  | Information and Communication Technology for Education         |  |
| IHAP       | Interactions Hôtes-Pathogènes  | Host-Pathogen Interaction                                      |  |
| INPT       | Institut National Polytechnique de Toulouse  | National Polytechnic Institute of Toulouse                     |  |
| INRA       | Institut National de la Recherche Agronomique  | National Institute of Agronomic Research                       |  |
| IT         | -  | Information Technology   |  |
| IVSA       | -  | International Veterinary Students Association                  |  |
| LabHPEC    | Laboratoire d'HistoPathologie Expérimentale et Comparée                                  | Experimental and Comparative Histopathology<br>Laboratory      |  |
| MAA        | Ministère de l'Agriculture et de l'Alimentation  | French Ministry of Agriculture and Food                        |  |
| MC         | Maître de Conférences  | Assistant professor  |  |
| MESR       | Minsitère de l'Enseignement Supérieur et de la Recherche                                 | Ministry of Higher Education and Research                      |  |
| OIE        | Office International des Epizooties  | World Organisation for Animal Health                           |  |
| Opca       | Organisme paritaire collecteur agréé   | Approved organization to collect continuous education fund     |  |
| OSCE       | -  | Objective Structured Clinical Examination                      |  |
| PH         | Praticien Hospitalier  | Hospital practitioner (DMV hospital staff)                     |  |
| PhD        | Doctorat d'université  | Philosophiæ doctor   |  |
| PR         | Professeur   | Full Professor   |  |
| QA         | -  | Quality Assurance  |  |
| QEES       | Qualité des Etablissements d'Enseignement<br>Supérieur - Midi-Pyrénées                   | Quality of Higher Education Establishments - Midi-<br>Pyrénées |  |
| QUALITEVET | Association française de promotion de la demarche qualité dans la profession vétérinaire | French associaiton for veterinary quality                      |  |
| SBF        | Sciences Biologiques et Fonctionnelles   | Department of Biological and Functional Sciences               |  |
| SCACSL     | Sciences Cliniques des Animaux de<br>Compagnie de Sport et de Loisirs                    | Department of Small Animal Clinical Sciences                   |  |
| SCD        | Service Commun de Documentation  | Common Documentation Service                                   |  |
| SIMPPS     | Service Interuniversitaire de Médecine<br>Préventive et de Promotion de la Santé         | Service of Preventive Medicine and Health Promotion            |  |
| SMQ        | Système de Management de la Qualité  | Quality Manangement System                                     |  |
| SNGTV      | Société Nationale des Groupements<br>Techniques Vétérinaires                             | National organization of animal production veterinary          |  |
| SNVEL      | Syndicat National des Vétérinaires d'Exercice<br>Libéral                                 | National Union of Veterinary Practicioners                     |  |
| SOFAQ      | Société Française d'Assurance Qualité  | French Quality Assurance Organization                          |  |
| SOP        | -  | Standard operating procedure                                   |  |
| STAV       | Sciences et Technologies de l'Agronomie et du<br>Vivant                                  | Science and Agricultural and Life Technology series            |  |
| STL        | Sciences et Technologies de Laboratoire  | Laboratory Technology series                                   |  |
| SUDOC      | Système Universitaire de DOCumentation   | University Documentation System                                |  |
| TD         | Travaux Dirigés  | Desk-based work  |  |
| UE         | Union Européenne   | European Union   |  |

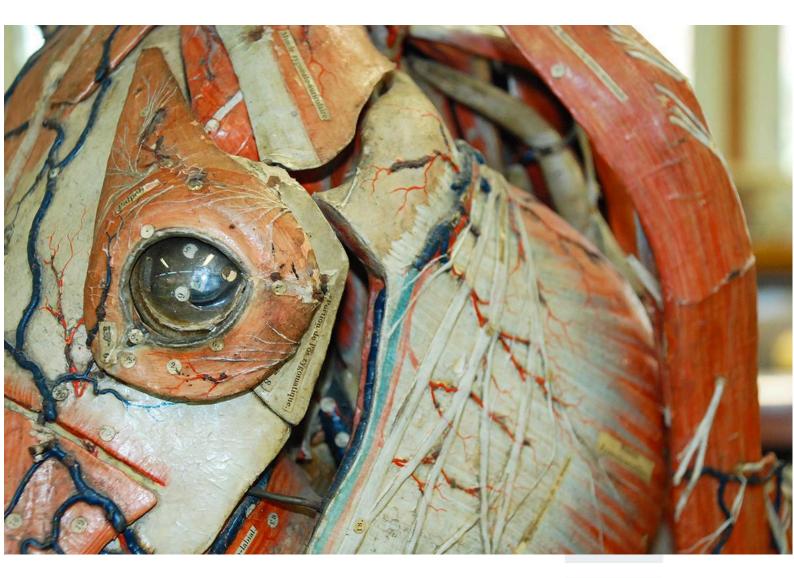
| UFTMIP | Université Fédérale Toulouse – Midi-Pyrénées            | University of Toulouse                                      |  |
|--------|---|---|--|
| UMR    | Unité Mixte de Recherche                                | Joint research unit   |  |
| UPAL   | Utilisation et Protection de l'Animal de<br>Laboratoire | Training in the Use and Protection of Laboratory<br>Animals |  |
| VPH    | -   | Veterinary Public health                                    |  |
| VPN    | -   | Virtual Private Network                                     |  |
| VTH    | -   | Veterinary Teaching Hospital                                |  |



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## List of appendices



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| Standard        | Code              | Appendices  |
|-----------------|-------------------|---|
| 1.1             | Stand_1.1_App001  | New veterinary competency framework presentation        |
| 1.2             | Stand_1.2_App002  | Organization chart of the establishment                 |
| 1.2             | Stand_1.2_App003  | Organization boards, councils and committees            |
| 1.3             | Stand_1.3_App004  | Strenghts, weaknesses, opportunities and treats analyse |
| 1.4             | Stand_1.4_App005  | ENVT process mapping                                    |
| 1.5             | Stand_1.5_App006  | New students description                                |
| 2.1             | Stand 2.1_App001  | ENVT budget architecture                                |
| 3.1             | Stand_3.1_App001  | French veterinary Curriculum                            |
| 3.1             | Stand_3.1_App002  | ENVT curriculum   |
| 3.1             | Stand_3.1_App003  | A3-A4 clinical teaching planning                        |
| 3.3             | Stand_3.3_App004  | Diagram organization of the training                    |
| 3.4             | Stand_3.4_App005  | Example of teaching assessment by the students          |
| 3.5             | Stand_3.5_App006  | ENVT'S EPT Description                                  |
| Sugg standard 3 | Stand_3.5_App007  | Schema CompetVet projet                                 |
| 4.1             | Stand_4.1_App001  | Location of ENVT  |
| 4.1             | Stand_4.1_App002  | ENVT Maps   |
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| 4.4             | Stand_4.4_App004  | Future cattle clinic                                    |
| 9.1             | Stand_9.1_App001  | Current academic staff                                  |
| 10.1            | Stand_10.1_App001 | Description of the units or research                    |
| 10.1            | Stand_10.1_App002 | List of the major funded research programmes            |