European Association of Establishments for Veterinary Education

Association Européenne des Etablissements d'Enseignement Vétérinaire



VISITATION REPORT

To the FACULTY OF VETERINARY MEDICINE, UNIVERSITY OF LISBON On 09-13 October 2017

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FINAL REPORT AS ISSUED BY ECOVE ON 28 NOVEMBER 2017 Introduction

Brief history of the Establishment and of its previous ESEVT Visitations

- The Faculty of Veterinary Medicine (FMV) is one of the oldest schools of the Universidade de Lisboa (ULisboa). FMV was founded in 1830 as the Royal Military Veterinary School, and then in 1886 was established within the Institute of Agronomy and Veterinary Medicine. The latter Institute was divided in 1910 into the School of Veterinary Medicine and the Institute of Agronomy. In 1930 these two institutions joined the Technical University of Lisbon (UTL).
- In July 2013, a merger took place between UL (University of Lisbon) and UTL, to create the modern day Universidade de Lisboa (ULisboa), taking advantage of the synergies between the scientific and cultural traditions of both institutions.
- **FMV was a founder member of EAEVE** and volunteered to be evaluated on a Pilot Study as a reference example for the ESEVT system. After producing a draft SER, FMV was visited by a team of experts in November 1989 and as a result was included in the then EAEVE Approved List of European Veterinary Schools.
- FMV was not then revisited until May 2004. Then, as a result of that visitation and the recommendations of the expert visitation team, FVM were motivated to invest considerable efforts to improve the quality of Veterinary Medicine programme. These latter recommendations included:
 - The significant increase in the number of large animals observed in the clinics;
 - The achievement of the objectives established for the improvement of the facilities of the large animal clinics;
 - The significant increase of poultry and swine production training through the reorganisation of students visits to the Zootechnical Institute, industrial farms and participation in the activities of the Ambulatory Clinics;
 - The significant increase of the case load in equine clinics through the establishment of protocols with main Portuguese institutions;
 - The increase on the frequency of farms visited by the Ambulatory Clinics was greatly achieved by the establishment of fixed contracts for regular clinical assistance with several farms, and by the increase number of attended requests of emergency calls by farmers.
- The chair of the original evaluation team and the president of EAEVE re-visited FMV in October 2007 and as a result FMV was again included within the EAEVE list of approved Establishments.
- The FMV was also evaluated at a national level, by the Evaluation Council of the Foundation of Portuguese Universities in 1999; also, by the National Council for the Evaluation of Higher Education (*Conselho Nacional de Avaliação do Ensino Superior*, CNAVES) in 2004 (simultaneously with the EAEVE assessment) and in 2015 by the Agency for Assessment and Accreditation of Higher Education (*Agência de Avaliação e Acreditação do Ensino Superior*)

Within their current SER the FMV have stated that both the national and European based evaluations have proved to be important incentives for the Establishment to work towards improvements in governance, structuring and performance.

Main developments since the last Visitation

The Establishment's SER outlines a number of developments since the last visitation in 2004, the main ones being:

• The Veterinary curriculum was reviewed in 2005 and 2007 taking into account both EAEVE directives and Bologna principles. This review has led to the adoption of an integrated master's course, consisting of 11 semesters and a total of 330 ECTS

• The requirement for a dissertation as a result of the mandatory final traineeship

• Since 2012-13, the 5th year timetable has been reorganised to provide 2.5 days per week fully devoted to clinical practice

• In 2013-14, two new Equine Clinics were introduced to improve the balance between species within the core clinical training of each student

•A logbook was introduced in 2014-15 to boost students proactivity and has also had a QA benefit in increasing the assessment of the acquisition of Day One Competences for veterinary graduates

• More veterinarians and nurses were employed by the VTH: in 2006, the VTH staff included 14 veterinarians and no nurses, while by 2017 it includes 25 veterinarians (one with a European Specialisation), 12 nurses and 4 auxiliaries

• Improvement of the animal isolation facilities, including the acquisition of new equipment

•A Clinical Skills and Simulation Centre was recently opened with both home-made dog manikins as well as a purchased set of full-sized, realistic and advanced canine and feline manikins.

As well as the above improvements, the FMV has articulated a number of problems and threats which the Establishment is currently facing. These are listed in their SER but are well worth mentioning here:

• Insufficient public financial funding to support the desirable developments in teaching and research.

• Facilities: Poor quality of construction involves frequent and costly maintenance works; limited areas to keep livestock species.

• Faculty members: Absence of performance incentives for teachers and other employees; weak age-stratification.

• Insufficient promotion of FMV's image.

• Delay in the implementation of a full Quality Assurance (QA) System by the University and, consequently, by FMV.

Version and date of the ESEVT SOP which is valid for the Visitation: 2016 Uppsala SOP

1. Objectives and Organisation (see Standards 1.1 to 1.6)

1.1. Findings

1.1.1. Brief description of the Strategic Plan

Although a mission statement is not explicitly referred to in the main SER; within appendix 4, the quality policy of the establishment gives the most complete mission statement:

"Faculty of Veterinary Medicine from University of Lisbon (FVM-ULisboa) aims to be the leading organisation in the field of Veterinary Sciences in Portugal. This goal is based on continuous improvement of teaching and research, innovation, cooperation and sustainability, as well as good clinical and laboratory practices and dissemination of knowledge through a variety of educational processes"

The main objective of the establishment is to guarantee a high level of general education, grounded on scientific research and hands-on practical training, providing its graduates with skills to enable them to operate in the broad field of veterinary medicine. The main objectives are stated in article 1 of the regulation of the Integrated Master in Veterinary Medicine (IMVM, in appendix 7).

A 10-point strategic plan has been drawn up for the next 4 years. A clear SWOT-analysis is present. An action plan with time frame and indicators is also present.

1.1.2. Brief description of the Operating Plan

The useful SWOT analysis within the SER is honest in its approach to the problems that lie ahead for the FMV. The main strategic plan as laid out to cover the period from 2014-17, has been implemented to produce an Operating Plan with 37 priority actions. These actions are summarised in the SER within a clear table outlining a timeframe for the actions and indicators leading to their achievement.

The level of achievement of the planned goals listed in the 4-year action plan is reported yearly in "FMV Activities Report" which is produced by the Deans office, submitted and approved by the School Council and finally sent to the University Rectorate competent authorities.

1.1.3. Brief description of the organisation of the Establishment

The major strategic decision-making body within the FMV is the School Council (ScC) which has academic, support staff, students and external representatives. The Dean is the executive leader for both internal and external matters and is regularly elected by all the members of the ScC.

The Scientific Council (SC) is responsible for FMV's scientific policy.

The Pedagogic Council (PC) is responsible for the guidance of FMV's teaching and pedagogic policy and has both academic and student representation.

The Management Council (MC) is chaired by the Dean and includes one of the Vice-Deans, the Executive Director and the head of the Financial Division and is responsible for the administrative, financial and property management of FMV.

The School Assembly is an advisory body summoned in situations considered of major importance and complexity for the life of FMV and is composed of all the teachers, researchers and student delegates.

The Advisory Board communicates with stakeholders and is composed of senior academics, alumni, a student member and 20 external stakeholders and is the main forum by which external

stakeholders have the opportunity to intervene in the organizational structure of FMV on a collective basis.

The Advisory Board meets on the Dean's request whenever it is deemed necessary (the last meeting took place on April 21, 2017).

The departments are the operative units, and are autonomous in terms of internal organisation and development of teaching (under and post-graduate), research and services activities. Each department has its Department Council, which includes all teachers and researchers with a PhD degree.

The Centre for Interdisciplinary Research in Animal Health (CIISA) is a major research facility and is the leading veterinary research group within Portugal, with many of its members also involved in teaching.

The Veterinary Teaching Hospital (VTH) is organised in four subunits: Companion Animals, Food Animals and Horses, Diagnostic service and Pharmaceutical service.

1.1.4. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the Strategic Plan and organisation of the Establishment

The current strategic plan (2014-17) was proposed by the Dean and publicly presented to staff, students and stakeholders, before final approval by the ScC. The plan is found on the Establishment's website.

The organization of FMV is influenced by a variety of mechanisms including national legislation, the Statutes of ULisboa and FMV itself.

1.2. Comments

From being the only veterinary school until 1986, FMV has now witnessed the opening of five other veterinary courses (3 in public Universities) within Portugal.

There is a need for the FMV to improve on its profile both within the ULisboa but especially within the public arena. This "highlighting" of the achievements and reputation of FMV should be especially targeted to stakeholders such as potential applicants and veterinarians.

1.3. Suggestions for improvement None

1.4. Decision

The Establishment is compliant with Standard 1

2. Finances (see Standards 2.1 to 2.5)

2.1. Findings

2.1.1. Brief description of the global financial process of the Establishment and its autonomy

The two main sources of budget are public and private. On the public side, the Government defines annually the total budget for ULisboa and then the Rector distributes this budget between 18 constituent units (of which the FMV is one), utilising a complex formula in which several parameters are considered and are outlined in the SER. Of note, two of the most vital parameters are student numbers and a ratio for staff (both academic and support) to students. This ratio is most favourable to the faculties of medicine, dentistry and since 2016 to veterinary medicine.

The public revenues from the State Budget are all spent to cover staff salaries whilst the internally derived revenues are used to cover all expenses other than the payment of salaries

On the private side, funding comes from tuition fees paid by students, research grants, rental of spaces and services to community. No overhead on revenues from such services and research grants has to be paid to the central university, although from clinical income and research overheads 20% is allocated to the internal FMV funds with 80% allocated back to the clinics/research group.

Following on from the improvement of facilities and equipment, the main sources of FMV generated income are expected to increase during the following 3 years.

2.1.2. Brief description of the budget (expenditures, revenues, balance) of the last 3 years Clearly outlined within the SER

2.1.3. Brief description of the projected budget (expenditures, revenues, balance) of the next 3 years

Clearly outlined within the SER

2.1.4. Brief description of the planned or on-going investments

As outlined within the SER, FMV has recently made several investments utilising the funds obtained from the sale of FMV's original facilities in central Lisbon, including:

- New facilities for the equine clinical services including an isolation unit and intensive care unit
- Renewal and expansion of the VTH
- Renovation of the Lab Animal facilities

2.1.5. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the budget of the Establishment

The management structure of the FVM allows stakeholders such as teaching staff, researchers, students and stakeholders within the School Council and the Advisory Board to be both fully aware of the budget (proposed and actual) and to also have a significant input.

2.2. Comments

There is no question that mirroring the general situation in Portugal, the FVM suffered from the financial crisis of 2008. This crisis resulted in real cuts including salary reductions; however, it appears that the FMV successfully overcame the crisis by taking drastic measures.

FMV's buildings, whose quality of construction is unfortunately much lower than desirable, are already beginning to show signs of deterioration, which in some areas appears to be serious. It

is also clear that the required investment far exceeds the financial capacity provided by the scarce state budget allocated annually to the institution.

As a result, the Management Board is now having to choose between the modernization and construction of new teaching and research facilities or amending the deficiencies which clearly originated in the initial construction phase. The Management Board is attempting to transfer to the ULisboa itself the responsibility of rectifying the damage. An exhaustive survey of all necessary maintenance work is under way and the Rector has already been alerted to the need to provide FMV with the necessary financial support to implement them.

2.3. Suggestions for improvement

A need to source sufficient funding to rectify the areas of concern within the structure of the FVM building and, as set out in the SER SWOT, to maintain the recruitment and retention of key academic teaching staff.

2.4. Decision of the Visitation

The Establishment is partially compliant with Standard 2 due to one minor deficiency: A need to source sufficient funding to rectify the areas of concern within the structure of the FVM building and, as set out in the SER SWOT, to maintain the recruitment and retention of key academic teaching staff.

3. Curriculum (see Standards 3.1 to 3.10)

3.1. General curriculum

3.1.1. Findings

3.1.1.1. Brief description of the educational aims and strategy in order to propose a cohesive framework and to achieve the learning outcome

All Portuguese veterinary curricula, according to Decree Law no. 74/2006 have 330 ECTS and 11 semesters (5.5 years). Within this framework there is total autonomy of the FVM to propose curriculum changes.

At the FVM there is a high level of education based on scientific research and hands-on practical training. A pyramidal structure is utilised when revising the curriculum, starting from unit of study and study coordinator.

The current curriculum was implemented in the academic year 2007-2008. Also implemented was case-based and problem-based learning.

A logbook for practical activities was implemented in 2014, with a list of competences at graduation revised in 2014 to consider the European directives, the day-one-competences elaborated by the ESEVT and the recommendations on past national and international evaluations.

3.1.1.2. Brief statement if all EU-listed subjects are taught in the core curriculum to each student (independently of the tracking system)

Analysis of the core curriculum (appendix 2) shows a clear statement of the learning outcomes. In the core curriculum, there are all the EU-listed subjects taken by every student with a total number of 254 hours for Basic subjects, 1,508 in Basic Sciences, 1,775 hours in Clinical Sciences, 446 in Animal Production, 290 hours in Food Safety and Quality and 160 for Professional Knowledge.

EPT (External Practical Training) consists of a minimal 500 hours practical stage at the end of the study programme and is organized in the following scientific areas: Production animal (preclinical), Production animal (clinical), Companion animal (clinical), Animal Health (clinical), Food Safety and Quality/Veterinary Public Health.

3.1.1.3. Brief description of how curricular overlaps, redundancies, omissions and lack of consistency, transversality and/or integration of the curriculum are identified and corrected.

Changes to the curriculum are proposed by each unit of study coordinator and revised by the Scientific and Pedagogic Coordinator. The Study coordinator of each scientific area is responsible for coherence, temporal sequence and interactions between different units of study.

The Scientific Committee also makes an evaluation of the study programme and finally, the School Council approves the curriculum. Students are represented in School Council (ScC), Pedagogic Council (PC) and Advisory Board.

The next revision is planned for 2018 following the recommendations of the National (A3ES) and international (EAEVE) visitations and the suggestions of the Advisory Board.

3.1.1.4. 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*)

The FVM offers a list of 30 electives with a schedule of a module of 1.5 weeks format in each semester of 3rd, 4th and 5th year.

Students must complete 6 electives ($6 \ge 2.5 \text{ ECTS} = 15 \text{ ECTS}$ in total), 168 hours at least. Optional courses are offered (named in SER as LLL courses) in 22 topics.

The enrolment for electives is organised by specific non-cumulative criteria.

3.1.1.5. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the curriculum

Both the Advisory Board and School Council have minuted evidence as to their involvement in the design and alteration of the curriculum.

Meetings of the Advisory board (such as 21/04/2017) demonstrated the involvement of external members from social, economic and professional sectors related to the broad professional field of veterinary medicine in the construction, the implementation and the assessment of the veterinary curriculum.

The School Council (with student representatives as full members) are the body of strategic decision, oversight of the compliance with Statutes, other applicable legal regulations, and the fulfilment of the FMV mission. In addition, it usually meets twice a year to discuss various issues, including, when necessary, aspects related to curricular matters.

The Advisory Board is the body that communicates with society and stakeholders, namely with personalities of the social, economic and professional sectors related to FMV's areas of training and research. In addition to the internal members, it includes 20 personalities of sectors of society related to FMV's fields of training and research. The Advisory Board meets on requirement of the Dean whenever it is deemed necessary, external members being invited to comment on the FMV's various areas of expertise, from teaching to services and research, and to the way its graduates are seen by employers and Society.

3.1.2. Comments

The curriculum is in full accordance with the respective EU directives. The list of learning outcomes was approved by the School Council in 2000 and revised in 2014 considering European Directives for the teaching/learning of Veterinary Medicine, ESEVT-DOC, and the recommendations resulting from national and international evaluations. In appendix 2 the learning outcomes of all units of study are clearly stated also the accordance with the day one competences of ESEVT marked. Analysis of the core curriculum (appendix 2) demonstrates an effective treatment of all day one competences.

The establishment has a clear committee structure, with student representation, to manage the curriculum, its delivery and assessment (see also chapter 8). Student representation was explicitly confirmed by the students during the visitation. Transfer of information from the student representatives to the rest of the students is also optimized by organizing short informal meetings.

It is recommended that the FVM publish a curricular map in which the developing structure of the curriculum is demonstrated throughout the 5.5-year course. This could illustrate the acquirement of the core competences and the pre-clinical & clinical competences in the early years of the curriculum.

Attention should also be drawn to the fact that, although the logbook of the students is a very useful tool in assessing basic clinical skills, veterinary medicine does not equal a set of skills checked by a logbook. It is therefore recommended to switch part of the theoretical didactic teaching to the 4th year of study and to replace it with more the practical activities in the 5th year.

3.1.3. Suggestions of improvement None

3.2. Basic Sciences

3.2.1. Findings

3.2.1.1. Brief description of the theoretical and practical education in basic sciences

The topics belonging to Basic subjects and Basic Sciences are taught within the framework of the FVM and are all according to the EU-listed subjects in Directive 2013/55/EU.

Basic subjects cover a total of 254 hours as set out in the SER. The ratio between theoretical hours and practical education is 1.5333. During the practical activities in basic sciences the students are divided into activity groups of 4-5, supervised by 2 teachers and a technician.

The teaching of Anatomy is basically made on an average of 136 sheep cadavers and 12 companion animals per year. Another 350 cadavers of companion animals are used for General Pathology, Anaesthesia and analgesia, Surgical propaedeutics, Pathology and in the clinics of Parasitic diseases, Reproduction and obstetrics. An average of 15 horse cadavers are used for Anatomical Pathology.

The cadavers and organs are stored in freezers and refrigerators and the residues are disposed of by a specialized contracted firm.

3.2.2. Comments

The number of cadavers for teaching anatomy and pathology is low compared to the number of students and the number of organs is somewhat low for the number of students learning anatomy and pathology.

The use of living animals is being reduced during the last few years, partially replaced by the use of manikins and models.

3.2.3. Suggestions of improvement

None

3.3. Clinical Sciences in companion animals (including equine and exotic pets)

3.3.1. Findings

3.3.1.1. Brief description of the theoretical, practical and clinical education in Clinical Sciences in companion animals

Clinical education in companion animals starts in first year and gradually increases year by year up to fifth year. There are several clinical exercise/practicals and seminars in companion animals prior and during the clinical rotation in fifth year.

Clinical rotation during fifth year is performed in the VTH for dogs, cats, equines and exotics and also extramurally for horses. Hands-on involvement of students in clinical procedures prior and after the start of clinical rotation is very thorough. Calculated indicators from raw data, evidenced a sufficient ratio between the number of hours in equine practice and the number of student graduating annually.

Veterinary studies at FVM comprise 5 years of intramural training (300 ECTS) followed by six months of curricular training period (30 ECTS – not less than 500 hours), including the preparation of a master thesis and its discussion. Core clinical training takes place at the 5th year (clinical rotations of companion animals) and at the 4th and 5th year (clinical rotation of horses). For companion animals the clinical rotation at 5th year, under academic staff supervision, is 8 weeks long, and for horses it is a 4-week rotation.

During the core clinical rotations and emergency service, students are divided into 6 practical classes, each one of about 25 students and, for clinical rotation of companion animals, each class is further split into five groups of about 5 students (surgery, internal medicine, diagnostic imaging, in-house patients and infectious disease isolation unit). Twelve teachers, 25 practitioners and 12 veterinary nurses are involved in students' teaching and training.

Clinical rotation of horses take place at the VTH and extramurally as part of Equine ambulatory clinics which is provided through mobile clinic and visits to the National Cavalry Police, Forest Police, Portuguese School of Equestrian Art, National Stud and from private owners. Four teachers and two practitioners are involved in teaching and training in External Practical Training.

In addition, students must accomplish six electives, that can include clinical topics or not, one in each semester of the 3rd, 4th, and 5th curricular year, chosen from a list of distributed throughout the different scientific and clinical areas.

The curricular traineeship, including the preparation of a master thesis and its discussion, can be done in the Establishment or extramurally.

3.3.1.2. Description of the core clinical exercises/practicals/seminars in companion animals prior to the start of the clinical rotations

Clinical learning is staggered and distributed from the first to the fifth year of the Degree. Students are initially trained using animal cadavers and organs, manikins and models, then in Establishment-owned animals and on privately-owned animals. The clinical skill and simulation centre, opened in 2017, allows students to perform realistic hand-on experience on canine and feline manikins as well as equine models, reducing the number of live animals to be employed.

3.3.1.3. Description of the core clinical rotations and emergency services (*both intramural VTH and ambulatory clinics*) in companion animals and the direct involvement of undergraduate students in it (*responsibilities, hands-on versus observation, report writing...*)

Students are distributed in 6 classes and each class is divided in four groups of about 6 units. Each group is assigned to the VTH or at the ambulatory clinics for horses and food animals. Practical classes are distributed on Monday and Wednesday from 8 am to 6 pm and on Thursday from 8 am to 1 pm.

The clinical rotations for companion animals carried out at the VTH are 24h/day and all year around. All these procedures are supervised by teachers, practitioners and veterinary nurses.

Clinical rotations of horses take place at the VTH, 24h/day and all year around for the students of 4th and 5th year, and extramurally as part of the Equine Ambulatory Clinics in the 5th year. Four teachers and 2 practitioners are involved in equine teaching and training. Students are involved in the clinical work on horses, performing clinical examination, administration of drugs and interpretation of laboratory results. Students are responsible for taking care of the in-patients of the hospital of the Faculty.

The mobile clinic has an annual caseload of 450 horses.

The skills acquired during the core practical/clinical activity by each student are reported on a logbook, based on "Day One Competences".

A logbook is given to the students at the beginning of the 3^{rd} semester and has to be completed with all competences achieved by the end of 10^{th} semester.

The signature of FVM teacher / practitioner attests the truthfulness of the data.

3.3.2. Comments

The ratios or indicators of teaching (theoretical/practical hours) are adequate.

It is recommended to switch part of the theoretical didactic teaching to the 4th year of study and to replace it with an increase in practical activities in the 5th year.

3.3.3. Suggestions of improvement None

3.4. Clinical Sciences in food-producing animals (including Animal Production)

3.4.1. Findings

3.4.1.1. Brief description of the theoretical, practical and clinical education in Clinical Sciences in food-producing animals

The training of students in the restraint and handling of livestock species and production systems begins in the first year. In year 2 animal behaviour and welfare are taught, followed by clinical examination and disease recognition in year 3. This is further augmented by training in medicine in year 4 before clinical rotations and, in some cases, elective teaching in 3rd, 4th, and 5th curricular year. Students may also undertake their MSc thesis in food-producing animal related areas.

3.4.1.2. Description of the core clinical exercises/practicals/seminars in food-producing animals prior to the start of the clinical rotations See above

3.4.1.3. Description of the core clinical rotations, emergency services (*both intramural VTH and ambulatory clinics*) and herd health visits in food-producing animals (*i.e. ruminants, pigs and poultry*) and the direct involvement of undergraduate students in it (*responsibilities, hands-on versus observation, report writing...*)

Ambulatory food animal rotations occur during two weeks in each of the two semesters in year 5. During these weeks students spend 2.5 days per week visiting large farms with the ambulatory clinic. Students also spend time in population medicine (herd health management). There are also optional elective courses offered in subjects including; organic animal production, animal production in tropical regions, aquaculture and honeybee health.

3.4.1.4. Brief description of the theoretical and practical education in Animal Production See above

3.4.2. Comments

The visitation team were impressed by the dedication of the animal production related teaching staff as well as the access to farms. However, it is evident that more could be done to promote animal production veterinary medicine as a career to students throughout their undergraduate training. It would be inappropriate to reduce education in an area so important to One-Health, but it is vital students are encouraged into careers in this area at every opportunity through strong role models and continual encouragement to look at animal production related careers.

3.4.3. Suggestions of improvement

None

3.5. Food Safety and Quality (FSQ)

3.5.1. Findings 3.5.1.1. Brief description of the theoretical and practical education in FSQ

Each student takes 290 curriculum hours in FSQ. Teaching starts with a 4.5 ECTS course in

hygiene and food safety in the 3rd year, consisting of lectures and laboratory classes.

There are five compulsory courses in the 5th year: Veterinary inspection I (4.5 ECTS), Veterinary inspection II (4.5 ECTS), General technology (4.5 ECTS), Technology of animal products (4.5 ECTS), Veterinary Public Health (4.5 ECTS). The students visit slaughterhouses for ruminants, pigs, poultry and rabbits, and fish ports/fish markets.

According to the Uppsala SOP annex 2, 3. List of subjects, all subjects in 3.2.4. FSQ are covered in the curriculum.

3.5.1.2. Description *(timing, group size per teacher...)* of the teaching in slaughterhouses and in premises for the production, processing, distribution/sale or consumption of food of animal origin

In the FSQ rotation weeks, the students visit the slaughterhouses on Mondays, Wednesdays and Thursdays from 8 am to 1 pm. They go in classes of 25 students, accompanied by 2 teachers; 12-13 students per teacher. Each student group goes on these slaughterhouse excursions five times. The excursions are mandatory.

For practical work/seeing practice, the students visit slaughterhouses for ruminants, pigs, poultry and rabbits, and fish ports/fish markets. In the in-house food technology laboratory, the students make their own meat and dairy products, the quality of which they assess by standard microbiological methods.

All slaughterhouses are privately run businesses, and the Establishment are dependent on good relationships to the premises. It is only the teachers from the Establishment that actively teach the students during the visits, and these are very competent and enthusiastic teachers. The students have the possibility to observe the veterinary inspectors in their work, but as these are very busy, they don't actively participate in teaching.

3.5.2. Comments

According to Table 3.1.3.1 in the SER, no students have been enrolled in the Food Safety elective units of study during the last three years. As Food Safety and Veterinary Public Health are important elements of the veterinary responsibilities for society, the Establishment could encourage students to take Food Safety as an elective.

3.5.3. Suggestions of improvement

None

3.6. Professional knowledge

3.6.1. Findings

3.6.1.1. Brief description of the theoretical and practical education in professional Knowledge

The FVM has an extended course of teaching in the area of professional knowledge:

- There are for instance 23 lectures covering veterinary legislation and certification
- As well as 12 lectures covering professional ethics and behaviour, there are three interactive seminars covering this area
- An excellent innovation are 21 seminars on communication skills where students can practice their responses to a number of scenarios often faced by veterinarians
- In a more practical approach there are then a series of both lectures and seminars on practice management and the skills/experience needed for this area
- The list of competencies was revised in 2014 in accordance with ESEVT One Day Competencies and with the recommendations from the IMVM programme of the FVM.
- Logbook also adopted in 2014, closely following the evaluation system of each US

3.6.1.2. Brief description of the organisation, selection procedures and supervision of the EPT

External practical training (EPT) is combined with the preparation of a **master thesis** and accounts for 30 credits. The EPT is carried out on the basis of a Curricular Traineeship and coordinating the procedures of the Curricular Traineeship is the responsibility of the SC through a subsidiary group the IMVM- Curriculum Traineeships Committee (IMVM-CTC).

Students can freely choose their supervisor, the scientific area, and the location in which they wish to fulfil their curricular traineeship. All the procedures and regulations are stipulated clearly in the general regulation.

The specific task of an EPT is to enhance the handling of all domestic animals, the understanding of the management of all aspects of the veterinary profession in a professional practice setting, the communication skills, the real life experience of the hands-on practical and clinical training of the veterinary work. The students engage in the daily activities at the trainee post. Traineeships are designed to allow students to practise and apply profession-oriented knowledge and competences.

On the other hand, in a Master's dissertation the student should demonstrate the ability to analyse and synthesize information and to solve problems independently at an academic level. The work is to reflect the student's critical, reflective attitude or his/her disposition towards research.

3.6.1.3. Description of the procedures (*e.g. logbooks*) used to ascertain the achievement of each core practical/clinical activity (*pre-clinical, clinical, ambulatory clinics, EPT*) and professional knowledge by each student (independently of the tracking system)

To guarantee an effective achievement of the all-important day one competences, a logbook was created, and is handed out at the beginning of the 3rd semester. This logbook includes pages for additional activities.

It must completely be filled out completely to allow final approval within the IMVM and the execution attested to by the signature of the teacher.

3.6.2. Comments None

3.6.3. Suggestions of improvement None

3.7. Decision

The Establishment is compliant in Standard 3

4. Facilities and equipment (see Standards 4.1 to 4.15)

4.1. Findings

4.1.1. Brief description of the location and organisation of the facilities used for the veterinary curriculum

The Establishment presents suitable premises for didactic and practical teaching purposes (for lecturing, practical and group work, and to house healthy, hospitalised and isolated animals, clinical activities, diagnostic services, library etc.).

No slaughterhouse or foodstuff processing units are present within the Establishment; therefore, students carry out extra-mural practical training in different slaughterhouses and foodstuff processing units which are located up to 85 km from the Faculty.

The Establishment is located in the ULisboa *Campus* of Ajuda, in the west area of Lisbon and includes nine different buildings with the VTH connected to the rest of the FMV.

The VTH has 24-hour service all year round (companion animals and equine). It accepts both first opinion and referral cases.

4.1.2. Description of the adequacy for the veterinary training of the premises for:

- -) lecturing, group work and practical work
- -) housing healthy, hospitalised and isolated animals
- -) clinical activities, diagnostic services and necropsy

-) FSQ & VPH

-) study and self-learning, catering, locker rooms, accommodation for on call students and leisure

There are 10 premises for lecturing. All lecture halls are wheelchair accessible.

For group work 10 premises are available. All rooms are equipped with internet connection, portable data demonstration and whiteboard.

The Establishment has 26 facilities for practical training.

The clinical skills centre has several animal models for student risk-free and hands-on experience of practical simulation.

There are 7 premises for healthy animals and 6 premises for hospitalized and animals in isolation; also, a hospitalization and intensive care cat ward, an equine hospitalization unit, an intensive care horse unit, a bovine hospitalization unit and a sheep, goat, calf and pig hospitalization unit.

The Infectious Diseases Isolation Unit is multispecies (dog, cat, medium and large animals) and this isolation facility is well separated from the rest of the hospital with full biohazard controls.

For clinical activities, diagnostic services and necropsy, the premises for clinical activities on companion animals include 6 consultation rooms, a dentistry consultation room, a reproduction and obstetrics consultation room, an ophthalmology consultation room, two treatment and wound dressing rooms, a biological samples collection room, and a blood bank.

Surgical service includes four surgical theatres.

For large animals, the area comprises two consultation rooms for horses and two horse riding arenas, and, for horses and food animals, one reproduction and consultation room, one operating theatre, one anesthesia and recovery room, one maternity, one biological samples collection room.

The VTH (for companion animals and equine) is open 24 hours a day all year around, accepting both primary and referral cases as well as providing an emergency service.

The Diagnostic Imaging Service performs radiographic, ultrasound and CT diagnosis for the VTH patients and also receives referrals from private practices.

This service facility includes, for companion animals, one computed tomography room, one X-ray room, one X-ray processing room, one dental radiography room, one ultrasonography room, one fluoroscopic surgery room, one endoscopy room, and one electroretinography room.

Diagnostic Imaging Service facilities for horses and food animals are one radiology room, one X-ray processing visualization room and one ultrasonography room.

Also present is one blood biochemistry laboratory for all species, and one endocrinology laboratory, one chemotherapy room and one radioisotope lab for companion animals.

For self-study and small group work, there are three rooms. In addition, the library is available for self-learning and group study. Equipment is represented by 18 desktop computers; 2 laptops; 58 connections.

Students have access to free Wi-Fi and the Eduroam (Education Roaming) wireless network.

The Establishment has a cafeteria, a canteen, an outdoor space and dormitory cooking facilities.

Vending machines for food and drinks are also available.

There are two locker rooms at the Establishment (one for male students and one for female).

The student on call accommodation consists of two dormitories and four individual rooms.

Establishment also has some facilities for leisure as well as the main campus sports facility next door.

4.1.3. Description of the adequacy for the veterinary training of the vehicles used for student's transportation, ambulatory clinic, live animals and cadaver transportation

For transporting students to extramural facilities there are 9 available vehicles. Two further vehicles are available for the transportation of live animals.

A certified company outside the Establishment provides transport for cadavers.

4.1.4. Description of the adequacy for the veterinary training of the equipment used for teaching purposes and clinical services

All classrooms and seminars have appropriate audio-visual equipment; desktop computers with internet connection, chalkboard or whiteboard and streaming equipment are additionally available.

The FMV has a Clinical Skill and Simulation Centre, where a mix of canine and feline manikins, soon to be joined by calf and equine models, give students risk-free and realistic hand on experience in practical simulation training. The aim is the eventual reduction in the use of live animals. Research-based and Evidence-based clinical training is taught upon real clinical cases of VTH or Ambulatory Clinics.

4.1.5. Description of the adequacy of the biosecurity rules in the Establishment

FMV has a full-time biosecurity technician that ensures compliance with the rules and regulations. Students and staff are aware of biosecurity guidelines both by formal instruction

as well as written information. In the beginning of each year, all students are reminded (by refresher sessions) of the rules for the management of biosecurity.

As a result, facilities, equipment and animals are safely utilised and handled.

4.1.6. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of facilities, equipment and biosecurity rules of the Establishment

Proposals for changes in facilities, equipment and biosecurity procedures are made and justified by Unit of Study, Specific and Pedagogic Coordinator of a Unit of Study, or by each Department and then submitted to the Dean's office. Ameliorations are communicated to staff and students in regular meetings of the management bodies, through e-mails and to stakeholders on the webpage.

4.2. Comments

The establishment presents suitable premises for didactic purposes.

Students have free access to library, recreation units, locker, sanitary and food services facilities.

In the library, the number of copies of up to date books for didactic teaching are somewhat insufficient for some courses.

The purchase of books in digital format could meet the didactics needs of the students.

4.3 Suggestions for improvement

There are insufficient financial resources for maintenance of current facilities. This was especially apparent with water leakage and air conditioning. Although much has and is being done the problems are associated with the original design of the building and the Establishment will need support from the main university to fulfil these tasks.

4.4. Decision

The Establishment is partially compliant with Standard 4 due to one minor deficiency:

There are insufficient financial resources for maintenance of current facilities. This was especially apparent with water leakage and air conditioning. Although much has and is being done the problems are associated with the original design of the building and the Establishment will need support from the main university to fulfil these tasks.

5. Animal resources and teaching material of animal origin (see Standards

5.1 to 5.6)

5.1. Findings

5.1.1. Brief description of the global strategy of the Establishment about the use of animals and material of animal origin for the acquisition by each student of Day One Competences

The global strategy is based on the 3Rs: **reduce**, **refine** and **replace**. Significant reductions in the number of animals maintained by the Establishment for the sole purpose of teaching have been made in recent years.

5.1.2. Description of the adequacy for the veterinary training of the enrolled students of: -) the number and diversity of cadavers and material of animal origin used in anatomy, necropsy and FSQ;

The number and diversity of cadavers and material of animal origin used in anatomy, necropsy and FSQ is adequate to support the training of day one competences.

-) the number and diversity of healthy live animals used for pre-clinical training;

The numbers of healthy live animals used in pre-clinical training has been adequate up until now. There is no reason to suspect this will change, although the way these animals are supplied will change. The application of the 3Rs has already resulted in the numbers of dogs maintained by the Establishment being reduced and the way in which they are utilised refined.

-) the number of visits in herds/flocks/units of food-producing animals;

The access to food-producing animals in commercial farm settings was impressive, this is a major asset of the Establishment and every effort should be made to maintain it.

-) the number and diversity of patients examined/treated by each student;

Patient numbers in the VTH are more than adequate to support student learning, although the utilisation of the VTH caseload could be greatly improved (Year 5 students only work 2.5 days per week in a clinical setting).

-) the balance between species, between clinical disciplines, between first opinion and referral cases, between acute and chronic cases, between consultations and hospitalisations, between individual medicine and population medicine

The balance in these areas was considered adequate to support students' acquisition of day one skills /competencies.

5.1.3. Description of the organisation and management of the VTH and ambulatory clinics

The VTH is divided into small animal, equine and food animal hospitals. The small animal VTH is open 365 days, 24 hrs a day as is the equine referral hospital. The food animal service is provided via prearranged on-farm ambulatory work. The VTH do not provide sole care for farms but work alongside the farms' local or resident veterinary surgeons to provide enhanced veterinary care and herd health advice. Animals are occasionally transported to the VTH for hospitalisation.

5.1.4. Description of the group size for the different types of clinical training and of the hands-on involvement of students in clinical procedures in the different species

Student group sizes are variable within the VTH but rarely exceed 6 (no more than 4 in the isolation unit). The ambulatory services usually have group sizes of 7 students per staff

member; however, in clinical group discussions these numbers may increase. On some occasions students from different years $(4^{th} \text{ and } 5^{th})$ may also work together in the VTH, increasing the effective group size.

5.1.5. Description of the patient record system and how it is used to efficiently support the teaching, research, and service programmes of the Establishment

The VTH computer program (QVET) stores, validates and processes all patient records and is available to staff and students for research purposes. Students have access to this database from 3rd year onwards.

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

The Establishment should be congratulated for the 3Rs philosophy that underpins and humane use of animals in teaching and research. The Establishment has an "Ethics and Animal Welfare Commission" and a "Commission for the Revision of the Policy Use of Live Animals".

5.1.7. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the number and variety of animals and material of animal origin for pre-clinical and clinical training, and the clinical services provided by the Establishment

The numbers of animals and material of animal origin is evaluated by the leader of each US annually. Similarly, the VTH director also evaluates the caseload needed to support clinical teaching. Student feedback is also considered in making these decisions and the agreed numbers are animals are overseen by the "Commission for the revision of the policy on the use of live animals". In recent years students have been active in debating the provision of live animals in teaching and the Establishment has taken their views into consideration.

5.2. Comments

The Establishment should consider as a priority greatly improving the rudimentary clinical skills facility recently established. Funds currently utilised to provide live animals, particularly the resident cattle, may be diverted to support this. Dedicated staff learning from others and developing a clinical skills facility could develop many models themselves. Not all require the purchase of expensive bespoke manikins. Staff dedicated to developing this clinical skills facility should travel to visit other Establishments leading in this area.

Models (and possibly a virtual reality cow and horse rectal model such as the *haptic cow*) should be purchased and used to teaching rectal examinations, before students work with live animals. This will greatly enhance teaching methods and student learning while improving animal welfare. The use of resident cattle for frequent and repeated rectal examination should be re-evaluated as a matter of priority by the "Commission for the revision of the policy on the use of live animals". Having individual cattle rectally examined up to 15 times per week would no longer be considered acceptable in many other Establishments.

Case utilisation for clinical teaching in the VTH and ambulatory clinics is sub-optimal since year 5 students spend just 2.5 days a week in clinical rotation during semesters, although students from 3rd and 4th year make use of this caseload. In addition, on call 5th year students are also involved. However, consideration should be given to the following to maximise the utilisation of caseloads for teaching and to maximise students learning:

• Developing a lecture (but not practical) free 5th year when the curriculum is next revised

- Increasing year 5 student rotations through the clinical settings
- Moving from a fixed semester structure to an extended timetable in year 5 to mean students can be in the VTH and other clinical settings as many weeks of the year as possible
- The introduction of evening and weekend obligatory 'out-of-hours' clinical rotations in appropriate disciplines

The above provisions would also allow significant reductions in student groups sizes, enhancing further the student experience and acquisition of clinical skills.

The introduction of European residency programmes wherever diploma qualified staff and caseload allow (e.g. bovine health management and small animal internal medicine) would further utilise the available caseloads to enhance postgraduate education.

A registered pet scheme (staff and student pets) could be used to develop a population of animals that could be made available for non-invasive student teaching. The health and welfare of such pets could be monitored by regular health checks by students overseen by appropriate clinical staff.

The use of new technologies such as plastination in the preparation of anatomical specimens to reduce the need for fresh sheep for dissection is also a welcome development and one that should be continued.

5.3. Suggestions for improvement None

5.4. Decision

The Establishment is compliant with standard 5.

6. Learning resources (see Standards 6.1 to 6.4)

6.1 Finding

6.1.1. Brief description of the main library (facilities, equipment, staff, (e)books and (e)periodicals, software for databases)

Library staff consists of 1 librarian, 1 librarian assistant, 1 library technician – all full time, with 1 full-time professor as coordinator of the library for a 4-year period.

Library has: 150 seats, 8 reading rooms, 1 Computer room with 24 posts, 3 group study rooms, 1 multimedia cabinet and free access to periodicals

47,372 bibliographical records (print and electronic), 217 periodical titles, 4 e-books and 2 e-periodicals

6.1.2. Description of the available electronic information and e-learning courses, and their role in supporting student learning and teaching in the core curriculum

The E-learning platform "Moodle" was introduced in 2009. Teachers upload the lecture slides here to make them available to students.

Also, they have a collection of videos on YouTube, which are accessible to students via a university channel, which is secured through a password.

Eduroam and VPN are available to all students.

6.1.3. Description of the accessibility for staff and students to electronic learning resources both on and off campus

In total, FVM has also 300 PC's managed by 3 technicians. All staff and students have free Wi-Fi access

6.1.4. Description of how the procedures for access to and use of learning resources are taught to students.

Access and the use of learning resources is provided and taught to students from first year and then throughout the course. Three-hour workshops for students and short courses are provided by the University e-Learning Lab, both for students and teachers

6.1.5. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of learning resources

There is an IT-Commission in place, coordinated by the Dean and composed by 3 teachers and 3 technicians. As mentioned above, Eduroam and VPN are available to all students.

Books and periodicals are requested by teachers and researchers, the request is reviewed and the items purchased at the best price, subscriptions are renewed annually

The Database subscriptions are provided by ULisboa Rectorate

6.2. Comments

Use of E-learning is low, the tools within Moodle could be more widely utilised.

6.3. Suggestions for improvement None

6.4. Decision

The Establishment is compliant with standard 6.

7. Student admission, progression and welfare (see Standards 7.1 to 7.15) 7.1. Finding

7.1.1. Brief description of the admission procedures for standard and for full-fee students

The requirements for future students to apply for a higher education programme are threefold: firstly, completion of secondary education, secondly, approval at national exams and thirdly, an application rating equal to or higher than the minimum value set for that programme.

The FMV defines the **numerus clausus**, set at 115 students per year, the national exams that candidates must accomplish, the weighting applied to the final classification (50% for grades on secondary education and 50% to grades from national exams), the minimum grades for national exams and final result, both set at 12/20 and last but not least, the pre-requisite to access the IMVM, relating to the health status of the student.

In the meeting of April 2017, the Advisory Board suggested to include a vocational test in the admission criteria. This suggestion is put on hold due to the complexity and time-consuming nature of such an approach as well as the low effect on the final grading of the candidate under current legislation.

Apart from the 115 students allowed entrance in the IMVM programme, a supplementary amount of 13 students can be admitted via 4 different special application regimens:

- Students older than 23 years
- Programme/institution transfer students
- Holders of a pre-Bologna degree
- Other special regimens

Full fee students are not allowed by law to enlist in the programme.

The programme is very well advertised with the help of different media and public display.

7.1.2. Description of how the Establishment adapts the number of admitted students to the available educational resources and the biosecurity and welfare requirements

The admission procedures and admission criteria are established by national legislation. FMV contributes by defining among others, the number of vacancies, discussed within the SC, taking into account available educational resources (facilities and equipment, staff, healthy and diseased animals, material of animal origin etc.), biosecurity and welfare requirements and the budget estimate for the following year. This number is proposed to the Dean and the School Council for final approval.

In the period 2012-2013 the number of students was increased in order to be able to hire more human resources & ameliorate infrastructure. From 2014 onwards, the number of students was decreased in order to further increase the quality of their education.

After many years of pleading, the Ministry and the University raised the veterinary education level from U3 to U1, equivalent to that of Human Medicine, which implied a significant budget increment, starting in the State Budget for 2016.

7.1.3. Description of the progression criteria and procedures, the available remediation and supports, the rate and main causes of attrition

The criteria and procedures for progression, transition of curricular year and the enrolment in the curricular traineeship are elaborately explained in the 'Regulation of the IMVM' in

appendix 7 of the SER. It is the responsibility of the Academic Office to collect information on the students academic success.

In summary, students with 20 ECTS remaining from the previous year, are not allowed to pass to the next curricular year. Access to the curricular traineeship is only possible after successful completion of the IMVM curriculum (300 ECTS), although students with a 10 ECTS outstanding score may start if those credits do not belong to subjects in the scientific area of the curricular traineeship the student has applied for.

The follow-up and remediation of students that do not perform satisfactory is mainly the responsibility of the Pedagogic Council of FMV, supplemented with the coaching of the student's "godfather" or "godmother", an older student assigned as personal mentor. The SER gives a fairly detailed analysis of rates and causes of attrition. The annual average withdrawal rate among IMVM students was 3.2%. 95% of these cessations occurred in the 1st and 2nd year due to an individual student's decision to return to secondary school to repeat national exams in order to retry entering a Human Medicine course.

The average time needed to complete the programme is 6.8 years. The main cause is students lengthening the curricular traineeship from 6 to 12 months.

7.1.4. Brief description of the services available for students

The Academic Office manages the administration of each student.

The Pedagogic Council provides a forum for listening and counselling, mainly focussed on vocational skills, difficulties in dealing with the pressure and expectations of exams seasons, perception of injustice with exam results and coaching for low-performing students. The PC actively arranges for meeting any student identified by teachers, veterinary surgeons, administrative employees, e.g. due to successive disapprovals, very low marks, demotivation, etc.

Due to the informal and friendly learning and working environment at FMV, students readily come to the PC asking for counselling, e.g. due to their insufficient study progress or exam marks below expectations. Sometimes, they send an email requesting a meeting, other times they knock on the office door of any of the five PC teachers and share their situation and concerns with them.

The Curricular Traineeships Committee takes care of the mentoring and tutoring of students. It appoints an internal/external supervisor in case the student does not find one him/herself. The Mobility Office advices students concerning study abroad opportunities and student's exchange programmes.

The ULisboa Health Centre, including the Office of Psychological Support (GAP) provides assistance in case of illness, psychological problems, impairment and disability.

The Student Union organizes Careers opportunities guidance and several other clubs and organisations

7.1.5. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the admission procedures, the admission criteria, the number of admitted students and the services to students

The admission criteria and procedures are managed by national legislation (cfr. 7.1.2). FMV is involved in defining the number of vacancies, national exams, weighting results, taking into account available educational resources (facilities and equipment, staff, healthy and diseased animals, material of animal origin, etc.), biosecurity and welfare requirements and the budget estimate for the following year.

7.2. Comments

The selection criteria for admission to the programme are consistent with the mission of the Establishment.

The programme is very well advertised with the help of different media and public display. The organization of an 'open week', in which future students can come to the faculty and experience first-hand some of the activities performed in the FMV and VTH, was strongly appreciated by the visitation team.

The PC is responsible for working out the academic calendar, disclosed in July on the faculty website, in each year's folder on the electronic learning platform Moodle and posted in a notice board next to the Academic Office. The yearly tuition fee is about \notin 1000.

The website of the establishment mentions the current ESEVT status, the SER and the visitation reports (<u>http://www.fmv.ulisboa.pt/en/about-us/quality-assurance</u>)

Mechanisms for students with serious episodes of disease or impairments are in place (parttime enrolment & suspension of academic activity without losing academic facilities). The Establishment defines the prerequisites for applicants with disabilities or illnesses. Students with chronic diseases or minor impairments can turn to ULisboa Health Centre, located either in the Ajuda Campus on the premises of CEDAR (the unit with the mission of promoting Health and Sport within ULisboa) or at the main campus downtown. Furthermore, psychological counselling is provided by the Office of Psychological Support (GAP) also at CEDAR. Although occupational health service is present, it is possible that not all students, in times of personal crisis, find their way to it. It would be useful to establish a notification point/hotline/registration centre at the faculty in order to report possible psychological problems of students.

Progression criteria are explicit and readily available to the students. The Establishment has mechanisms in place to identify and provide remediation and appropriate support (including termination) for students who are not performing adequately. Attrition and progression is closely monitored by the PC and Academic Office.

Exclusion and appeal procedures are described in article 11 of the "Knowledge and competency assessment regulation and admission to final exam of the 1st and 2nd Cycles of Studies of FMV"

The Establishment puts a lot of effort into the construction of the programme in order to meet all the ESEVT Day One Competences in all common domestic species.

7.3. Suggestions for improvement None

7.4. Decision

The Establishment is compliant with standard 7.

8. Student assessment (see Standards 8.1 to 8.9)

8.1. Findings

8.1.1. Brief description of the student's assessment strategy of the Establishment

Theory is exclusively assessed in final examinations, subject to national legislation. Three examination periods are established. The Normal and Appeal period occur at the end of each semester. The Special period takes place during the first two weeks of September. In the Appeal and Special period examinations a maximum of 20 ECTS can be taken. Final year students can take up a total of 30 credits.

Students are strongly involved in the elaboration of the examination calendar. In fact, it is the students who propose the calendar to the teachers of US and finally PC.

A well balanced variety of types of questions is used in the assessment procedures. Theoretical knowledge is evaluated through written exams varying from true or false questions, multiple choice questions, short answer questions and open-ended questions with answers with limited writing space or open-ended questions of whom the answers can comprise a 1 or 2 page essay. This variety of questioning is meant to test simple knowledge but also insight. Students' writing skills are also assessed in this manner.

Practical assessment and assessment of pre-clinical & clinical skills is done in practical classes, clinical rotations in the VTH and ambulatory clinics, partly by permanent evaluation, by daily assessment of practical skills, attestation in the student's logbook and by a practical final exam. The assessment criteria and procedures are transparently announced well in advance via the FMV website, the electronic learning platform and Ad Valvas at the Academic Office.

Calculation of the examination mark (coefficients and weighting) is presented to students in the first theoretical class of each US and is stated in the course description of each US on the E-learning platform "Moodle".

The minimum approval grade for written and oral examinations is 10 on a scale of 0 to 20. Only students that attended 80% of the practical and theoretical practical courses are admitted to final exam. Additional assessment elements such as reports essays and/or descriptions of clinical cases have a minimum weight of 20% on the final mark.

8.1.2. Description of the assessment methodology to ensure that every graduate has achieved the minimum level of competence, as prescribed in the ESEVT Day One Competences

In order to achieve ESEVT Day One Competences, the curriculum has a top-down design. The clinical units of study have clearly listed the required pre-clinical competences which in turn have led to the core competences students have to acquire in the first two years of the curriculum.

The logbook of the student is the core assessment tool of ESEVT-DOC.

It is the responsibility of the study coordinators of the animal health and clinical scientific areas to monitor the syllabi and evaluation methods. The competency assessment strategy is adapted to the teaching learning methods.

The One Health concept comprises scientific areas of animal health, animal production and food safety. In order to develop and assess specific competences in the One Health concept, a teaching-learning model was established, resulting from the cooperation of several departments. It is evaluated and upgraded annually by the study coordinators. As several/multiple units of study are involved, student assessment makes use of different types of evaluation methods ranging from individual oral practical exams in laboratories over final written theoretical or practical exams to individual or group assessment, writing reports, short communication presentations and bibliographic research and finally computer based assessment.

With respect to the assessment of DOC regarding Basic Sciences, the study coordinator for Basic Sciences monitors the various syllabi and evaluation methods. Because of the nature of the teaching, primarily lectures, laboratory and non-clinical work, assessment methods are written theoretical exams and individual oral practical exams in laboratories and dissection rooms. In some US evaluation is done fully or partially by e-learning. Also, reflection on scientific papers and written reports are used.

8.1.3. Description of the processes for providing to students a feedback post-assessment and a guidance for requested improvement

Processes for post-assessment feedback and guidance for improvement are in place and are the responsibility of the Regent of the US.

Students have the right to consult their written examinations. At this occasion, the Regent of the US will give the student guidance for improvement. This can be done by advising extra clinical training at the VTH or the ambulatory clinic in the evenings weekends and holidays or prescribing/providing supervised self-learning. If a student disagrees with the given grade, a procedure for appeal is in place. He/she can file a complaint to the PC president who will analyse the complaint together with the coordinator of studies. Both must make a decision within 10 days.

If a student fails more than three times for a US, he/she can request a special jury to repeat the exam. A student can find his rights of appeal in the "Knowledge and Competency Assessment Regulation and Admission to final exams of the 1st and 2nd cycles of studies of FMV" which is the general education and examination code, that is available on FMV's website.

A students' ombudsman is present at university level. The Student Ombudsman's role is to consider the students' complaints regarding pedagogical and administrative issues, as well as on other aspects of their academic life, and to communicate to the University competent bodies the recommendations or adjustments required to prevent and solve any detected situation. Its activities are carried out in close collaboration with the Pedagogic Council of

each Faculty, the Social Services and the Student Unions, under the terms set forth in the University regulation

8.1.4. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the student's assessment strategy

The overall student assessment strategy is a result of a joint effort of each US teaching staff, the Study Coordinator at departmental level and finally PC and SC with the final responsibility at the PC.

The PC monitors student assessment at the end of each semester by analysing indicators of US, collected by the Academic Office, such as approval and failure rates, average grades of theoretical and practical exams etc. Deviant indicators are discussed with the SPC of the respective US. One teacher and one student, both members of PC and a student delegate of the US are involved in monitoring the implementation and efficacy of remedial measures, in the following year.

8.2. Comments

It is the responsibility of the PC to ensure a fair and rigorous student assessment system of knowledge and competences. The SPC of each US and the Study Coordinator of each scientific area monitor and update syllabi and pedagogic methods, ensuring that all ESEVT-DOC are achieved.

Assessment procedures and criteria are made available to students. Assessment periods are communicated in time and with the cooperation of the students.

Passing requirements are explicit (i.c. 8.1.1). Procedures for appeal are clearly communicated and well known by students.

Assessment outcomes are reviewed and analysed at the end of each semester and remedial measures are taken (in collaboration with students) and evaluated the next year.

By using a wide variety of assessment methods, the faculty aims to cover the full range of professional knowledge and required skills and competences in the learning outcomes of their students.

Feedback on past assessment is available (and is largely used and appreciated by the students).

Considering the effort the faculty has made in the top-down design of the curriculum and the integration of the One Health competences, the assessment strategy allows to certify student learning objectives both at the level of the US and the totality of the programme.

At several occasions throughout the SER, the use of a variety of assessment methods and examination types are emphasized. The ESEVT-DOC are covered in one or more US. A student logbook is used 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.

The large amount of time exclusively reserved for examinations (4.5 months) is considered highly favourable. It gives the opportunity to carry out practical individual exams. These are considered to be the best way of assessing the acquisition of preclinical and clinical skills.

Although student's assessment during clinical activities is performed intensively, the assessment of the students by the junior staff could be taken more into account.

8.3. **Suggestions for improvement** None

8.4. Decision

The Establishment is compliant with standard 8

9. Academic and support staff (see Standards 9.1 to 9.6)

9.1. Findings

The recruitment process for teachers is dependent on teachers' retirement, introduction of new subjects or the necessity to promote interaction with other US. A proposal for a new teacher is made to the SC of the FVM and the new contract proposed based on a report referring to the reasoning behind the need to appoint a new teacher. The opinion of the students is ascertained to help identify specific pedagogic training needs of the new teacher. For the first five years the Teacher is assisted and supported by the Scientific and Pedagogic

Coordinator of the Unit of Study in the preparation of teaching/learning material.

The career progression of teachers is defined according a specific legislation of the ULisboa based on evaluation criteria for each component of teachers' work, rules for setting performance etc.

Support staff are recruited according to needs and financial availability.

The PC promotes inquires to the students about the functioning of the study programme and on the pedagogic performance of teachers. Results are analysed by the PC and SC, then by the Dean.

9.1.1. Brief description of the global strategy in order to ensure that all requested competences for the veterinary programme are covered for both academic and support and that they are properly qualified and prepared for their roles

List of competencies that graduates in Veterinary Medicine at the FVM attain, follow the European guidelines.

Criteria that underlie the call for career progression are represented by:

a) Higher number of internal candidates with a curriculum of high merit

b) Lower number of Full and/or Associate professors in the scientific area

c) Longest period without opening calls in the area.

The progression categories for teachers are: Auxiliary, Associate and Full Professor.

Systems of performance assessment and career progression are published in the official government Journal. Performance of teachers and support staff is assessed by evaluation systems, linked to remuneration progression. In 2011 government has decided to suspend all wage augmentation due to the financial crisis.

FMV has a long tradition of QA procedures on teaching quality since 1991. Quality assurance procedure are applied to identify didactic problems and promote continuous improvement.

9.1.2. Description of the adequacy of the number of academic and support staff in the different departments/units with the number of students to be taught

In the next three academic years, the FVM will attempt to increase the amount of staff members and decrease the number of students to improve training quality of students.

A system to train Interns and Residents will be implemented in order to attract more referral cases, so contributing to improving on the quality of training.

Total number of Full-Time Equivalent (FTE) of academic staff in the veterinary programme (academic year 2016/17), including Permanent, Temporary, Interns, Residents, PhD Students and VTH Veterinarians, is 97.7. The FTE of Permanent staff (including teachers, researchers and technicians with PhD) is 67. The ratio between n° FTE academic staff involved in veterinary training and n° undergraduate students is 0.134.

Actually, the number of European Board of Veterinary Specialisation (EBVS) Diplomates among teachers at VTH is six: one Diplomate in Pathology, one in Internal Medicine of Small Animals, one in Surgery of large animals and three in Bovine Health Management. There is also one Fellow of the American Academy in Dentistry.

FTE of support staff in the veterinary programme is 82 (year 2016/17).

9.1.3. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the strategy for allocating, recruiting, promoting, supporting and assessing academic and support staff

The appointment of teaching staff is performed by international recruitment calls with the aim to contract individuals with PhD degree in the requested area, a good CV and, whenever possible, with Veterinary Specialist diplomas.

The recruitment process is due to teachers' retirement, introduction of new subjects or necessity to promote interaction with other US and is discussed above.

New teachers follow a 5-year tract to gradually integrate them in the teaching-learning environment, supervised by a Study Coordinator and the SPC of the US, through evaluation

(also by students), attending theoretical classes, proposing pedagogic courses (offered by ULisboa), guiding and correcting any deficiencies and assistance in the preparation of teaching-learning materials and questions for written exams. The opinion of the students will help to identify specific pedagogic training needs of the new teacher.

At the end of 5th working year, the new teacher must write an activity report that is evaluated by the SC, after which the teacher training period is considered to be completed. If the evaluation is adequate, the teacher is offered either an undefined period contract or, if expected levels of performance have not been reached, the contract is not renewed.

The pedagogic quality of teaching is promoted by the PC and assured by pedagogic courses organized by the ULisboa and by other Universities.

Teachers are encouraged by Pedagogic Council to assist to different courses in a perspective of their continuous education.

VTH veterinarians attend training seminars, designed to improve their techniques of communication with students and, on a voluntary basis, may also attend training courses offered by ULisboa to expand their teaching abilities.

9.2. Comments

All staff are qualified and prepared for their roles in agreement with the national and EU regulations. The Establishment and ULisboa provide formal training for academic staff in good teaching and evaluation practices, learning and e-learning resources, biosecurity and QA procedures.

Promotion criteria for academic and support staff are clear and explicit. Promotions for teaching staff are regulated.

The ratio between n° FTE academic staff involved in veterinary training and n° undergraduate students is 0.134, very close to minimal values.

9.3. Suggestions for improvement

The pedagogical training of new teachers must be mandatory by attending the ULisboa courses.

9.4. Decision

The Establishment is partially compliant with Standard 9 due to one minor deficiency:

The pedagogical training of new teachers must be mandatory by attending the ULisboa courses.

10. Research programmes, continuing and postgraduate education (see Standards 10.1 to 10.4)

10.1. Findings

10.1.1. Brief description of how the research activities of the Establishment and the implication of most academic staff in it contribute to research-based undergraduate veterinary education

The main objective of the FMV is to utilise the significant and broad research activities as the basis for research-based teaching. An interdepartmental research centre, Centre for Interdisciplinary Research in Animal Health (CIISA) provides such research expertise. It was established in 1992, 25 years ago with a goal to develop and coordinate research activities conducted at the FMV.

PhD entitled CIISA members are mainly FMV teachers and researchers. Nowadays CIISA is divided in two major research groups, the first on animal health and veterinary medicine, the second one on animal science and food safety.

Students engage in research at different levels: from laboratory visits to their curricular traineeship by preparing for their master thesis traineeship, some launched and funded by CIISA, others funded by ongoing research projects.

Students are made aware of the importance of research and lifelong learning at different levels. Teachers involve their research projects into their daily teaching. CIISA researchers and VTH veterinarians collaborate in seminars or practical classes. Students of the second year have in their US 'complementary activities'. There are 3rd and 4th year visits to research labs in small groups where they meet the researchers and the research activities of CIISA. In the 3rd, 4th and 5th year, and during their curricular traineeship in the 6th year, students have the opportunity to perform research activities and discuss clinical cases or produce posters or oral communications in national and international veterinary congresses.

In addition to the teacher's initiatives, students themselves organize training activities such as seminars, workshops, an annual veterinary medical conference and even an international meeting like FAUNA.

10.1.2. Description of how the postgraduate clinical trainings of the Establishment contribute positively to undergraduate veterinary education and how potential conflicts in relation to case management between post- and undergraduate students are avoided

The activities in the Veterinary Teaching Hospital are based on student's collaborative learning between higher-level students who tutor the lower level students and between PhD students, veterinarians and students, which lead to deeper understanding and learning for all involved groups. The caseload for clinical cases, both primary cases and referral cases, is adequate, and there is a good collaborative atmosphere between postgraduates and undergraduates with regard to teaching.

10.1.3. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of research, continuing and postgraduate education programmes organised by the Establishment

As mentioned above, students are encouraged to develop scientific interests and skills throughout the course. Research programmes are developed following suggestions from stakeholders and by external requests. The number of PhD students has shown a small decrease recently due to a decreased number of available scholarships. FMV collaborates within ULisboa on other master- and PhD-programmes.

Through the Continuing Education Commission the FMV runs a series of LLL-courses developed by suggestions from various stakeholders and by external requests, available both for the students and postgraduates. The Commission also organizes an annual offer of courses and stimulates employees to bring up new courses – 5 courses with 137 participants

in 2016-2017.

The FMV does not have any formal programme for residents or interns for the time being, but is actively planning for the introduction of such a training programme in the VTH. The EBVS specialists in the FVM are: 1 full professor, 1 associate professor, 3 auxiliary professors, 1 veterinary surgeon and 1 Fellow of American Veterinary Dentistry.

10.2. Comments

The visitation team recognizes the strategic role of CIISA.

The Establishment is encouraged to establish EBVS residency programmes in order to train their future personnel. As a start, programmes could be established as joint programmes with other schools certified to train EBVS residencies. Training of new residencies is also a prerequisite for diplomates for renewal of their certification in many European Colleges.

10.3. Suggestions for improvement None

10.4. Decision

11. Outcome Assessment and Quality Assurance (see Standards 11.1 to 11.10) **11.1. Findings**

11.1.1. Description of the global strategy of the Establishment for outcome assessment and Quality Assurance (QA), in order to demonstrate that the Establishment:

-) has a culture of QA and continued enhancement of quality;

-) operates *ad hoc*, cyclical, sustainable and transparent outcome assessment, QA and quality enhancement mechanisms;

-) collect, analyse and use relevant information from internal and external sources for the effective management of their programmes and activities (*teaching*, *research*, *services*);

-) informs regularly staff, students and stakeholders and involves them in the QA processes;

-) closes the loop of the QA Plan-Do-Check-Act (PDCA) cycle;

-) is compliant with ESG Standards.

The FVM has a long tradition in QA. Enquiries aimed at students concerning the functioning of the units of study and the pedagogic performance of the teachers has been undertaken since 1991. As such, students are regularly surveyed about the US, the study programme and the pedagogic performance of teachers. The results are taken in consideration within the teachers' performance evaluation system (see 9.1.1). A decrease in student participation has been noticed since the questionnaires had to be filled in online.

The PC and the SC provide the system of QA. The SC of the Integrated Master in Veterinary Medicine (IMVM) confirms that the objectives are met and ensures the quality of teaching, the acquisition of skills and the academic success.

The responsible body for the coordination and management of the Integrated System of Quality Management of the FMV (ISQM) is the Council for the Quality Assurance (CQA). This Council is chaired by the Dean and comprises SC and PC presidents, the president of the

clinics, the executive director and the students' union president. The regulation of the ISQM was drawn up taking into account guidelines of ENQA, the evaluation report of the Portuguese Higher Education system and guidelines from EAEVE.

Both the SC and PC collect all the necessary information. Then both councils, plus the scientific committee of the integrated Masters, analyse the data. The academic office collects information on students' academic success. These results are then analysed by the PC.

The three aforementioned bodies promote enquiries about the functioning of the programme, the units of study and the pedagogic performance of teachers. These are key documents for the quality control. Issues raised in this way are then actively discussed in meetings of these three bodies.

Before the merger in 2013, a formal system of quality assessment was established by the Technical University in 2011 and approved by the faculty in 2012.

After the merger of both the University of Lisbon and the Technical University of Lisbon into the ULisboa, the review of the quality assessment systems has yet to be completed. The new system of quality assessment procedures and regulations will be ready at the end of 2017. Once the new QA system is in place, the system currently used at the FVM, will integrate in a coherent and functional way with that of the ULisboa.

While awaiting the new quality assessment procedures and regulations, the faculty continues to conduct its routine quality control procedures.

CIISA (research department of FMV) was evaluated 3 times by the external FCT and awarded each time with the rate of 'very good'. Internal QA is performed by the 'coordination team' which monitors all projects funded by CIISA. The results of these evaluations are considered by the governing bodies of FMV in order to increase the amount and quality of research activity what will support higher quality teaching and community provision of services.

11.1.2. Brief description of the specific QA processes for each ESEVT Standards

The FVM has a clear mission statement, the objectives are explicit.

The responsibilities at various levels within the FMV are divided amongst several bodies that are adequately integrated, with one distinct overall body of strategic decision making, the ScC.

QA in relation to teaching and assessment is in place. The curriculum is revised at regular intervals, and is carefully monitored to ensure all ESEVT-DOC being targeted to form a coherently built programme leading towards a final product: a graduate capable of functioning in a qualitative manner within all fields of the veterinary profession.

Students as internal stakeholders are involved in the policy and assessment of the curriculum. Predefined and published regulations are consistently applied during all phases of the student's life cycle. The gradual integration of new teachers, the assessment by means of

student inquiries and the recommendations on pedagogic courses, are proof of QA in recruitment and development of staff.

Although major cutbacks of National funding have occurred, due to the 2008 financial crisis, the FMV has succeeded to actually increase funding to invest in new infrastructure and human resources, largely due to the sale of their original premises in the city of Lisbon.

Several bodies collect information for the effective management of programmes and activities. The FMV's programmes and activities are communicated through various channels ranging from the press to participation in, or organisation of, events, as well as publication on the FMV website. Programmes are monitored and reviewed on a regular basis.

External QA is accounted for by national (A3ES, FCT) and international (EAEVE) agencies for assessment and accreditation of higher education.

11.1.3. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the QA strategy of the Establishment

The QA strategy of the Establishment is discussed and decided by the CQA, in which are present the main FMV bodies (see 10.1.1.). QA strategy is in tune with the strategic plan of FMV, being its most important form of auto control, and it is implemented, assessed and revised by the CQA in conjunction with management bodies. QA strategy is communicated through the internal network and FMV website.

11.2. Comments

On site, the core people involved in QA demonstrated the integrated QA-system in which the quality manual, the quality plan, processes & procedures, documents, items to assess, deadlines and responsibilities were closely monitored. A clear PDCA-structure in the QA processes was present.

The main QA rules and plans are available on the website: <u>http://www.fmv.ulisboa.pt/en/about-us/quality-assurance</u>

11.3. Suggestions for improvement None

11.4. Decision

The Establishment is compliant with standard 11

12. ESEVT Indicators

12.1. Factual information

	Raw data from the last 3 full academic years	2016-17	2015-16	2014-15	Mean
1	n° of FTE academic staff involved in veterinary training	97.67	93.94	88.77	93.46
					699.0
2	n° of undergraduate students	686	709	702	0
3	n° of FTE veterinarians involved in veterinary training	93.93	94.68	94.37	94.33
4	n° of students graduating annually	106	113	70	96.33
5	n° of FTE support staff involved in veterinary training	75	73	68	72.0
					1,112
6	n° of hours of practical (non-clinical) training	1,112.6	1,112.6	1,112.6	.6
7	n° of hours of clinical training	672.8	672.8	672.8	672.8
8	n° of hours of FSQ & VPH training	348	348	348	348.0
9	n° of hours of extra-mural practical training in FSQ & VPH	45	45	45	45.0
					14,36
10	n° of companion animal patients seen intra-murally	15,446	14,613	13,041	6.7
11	n° of ruminant and pig patients seen intra-murally	1	3	5	3.0
12	n° of equine patients seen intra-murally	386	346	259	330.3
13	n° of rabbit, rodent, bird and exotic patients seen intra-murally	172	227	174	191.0
14	n° of companion animal patients seen extramurally	0	0	0	0
					4,693
15	n° of individual ruminants and pig patients seen extramurally	5,194	5,082	3,803	.0
16	n° of equine patients seen extramurally	67	65	68	66.7
17	n° of visits to ruminant and pig herds	76	72	75	74.3
18	n° of visits of poultry and farmed rabbit units	15	14	14	14.3
19	n° of companion animal necropsies	412	380	365	385.7
20	n° of ruminant and pig necropsies	109	120	120	116.3
21	n° of equine necropsies	30	14	6	16.7
22	n° of rabbit, rodent, bird and exotic pet necropsies	186	240	218	214.7
	n° of FTE specialised veterinarians involved in veterinary				
23	training	7	5	4	5.3
24	n° of PhD graduating annually	19	11	5	11.7

		FMV- ULisboa	Median	Minimal	Balance
	Calculated Indicators from raw data	values	values	values	
I1	n° FTE academic staff involved in veterinary training / n° undergraduate students	0.134	0.16	0.13	0.008
I2	n° FTE veterinarians involved in veterinary training / n° students graduating annually	0.979	0.87	0.59	0.389
13	n° FTE support staff involved in veterinary training / n° students graduating annually	0.747	0.94	0.57	0.181
I4	n° hours of practical (non-clinical) training	1,112.55	905.67	595.0	517.6
I5	n° hours of clinical training	672.8	932.9	670.0	2.8
I6	n° hours of FSQ & VPH training	348.0	287.0	174.4	173.6
I7	n° hours of extra-mural practical training in FSQ & VPH	45.0	68.0	28.8	16.200
I8	n° companion animal patients seen intra-murally / n° students graduating annually	149.1	70.5	42.0	107.1
I9	n° ruminant and pig patients seen intra-murally / n° students graduating annually	0.031	2.69	0.46	-0,432
I10	n° equine patients seen intra-murally / n° students graduating annually	3.43	5.05	1.30	2.13
I11	n° rabbit, rodent, bird and exotic seen intra-murally / n° students graduating annually	1.98	3.35	1.55	0.44
I12	n° companion animal patients seen extra-murally / n° students graduating annually	0.00	6.80	0.22	-0.22
I13	n° individual ruminants and pig patients seen extra-murally / n° students graduating annually	48.72	15.95	6.29	42.42
I14	n° equine patients seen extra-murally / n° students graduating annually	0.692	2.11	0.60	0.097
I15	n° visits to ruminant and pig herds / n° students graduating annually	0.772	1.33	0.55	0.224
I16	n° visits of poultry and farmed rabbit units / n° students graduating annually	0.149	0.12	0.04	0.104
I17	n° companion animal necropsies / n° students graduating annually	4.003	2.07	1.40	2.603
I18	n° ruminant and pig necropsies / n° students graduating annually	1.208	2.32	0.97	0.237
I19	n° equine necropsies / n° students graduating annually	0.173	0.30	0.09	0.080
I20	n° rabbit, rodent, bird and exotic pet necropsies / n° students graduating annually	2.218	2.05	0.69	1.525

I21	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	0.055	0.20	0.06	-0.008
122	n° of PhD graduating annually / n° of students graduating annually	0.121	0.15	0.09	0.033

13. ESEVT Rubrics (summary of the Decision of the Establishment for each ESEVT Standard, i.e. compliance (C), partial compliance (PC) (Minor Deficiency) or non-compliance (NC) (Major Deficiency))

		DC	NG
Standard 1: Objectives and Organisation	С	PC	NC
1.1. The Establishment must have as its main objective to provide, in agreement with the EU Directives and ESG	*		
recommendations, adequate, ethical, research-based, evidence-based 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.	'		
1.2. The Establishment must develop and follow its mission statement which must embrace all the ESEVT standards.	*		
1.3. 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.			
1.4. 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.			
1.5. The organisational structure must allow input not only from staff and students but also from external stakeholders.	*		
1.6. 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 timeframe and indicators for its implementation.			
Standard 2: Finances			
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.			
2.2. The finance report must include both expenditures and revenues and must separate personnel costs, operating costs,	*		
maintenance costs and equipment.			
2.3. Resources allocation must be regularly reviewed to ensure that available resources meet the requirements.	*		
2.4. 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. Clinics must be run as efficiently as	Ŷ		
possible.			
2.5. The Establishment must have sufficient autonomy in order to use the resources to implement its strategic plan and	*		
to meet the ESEVT Standards.	<u> </u>		
Standard 3: Curriculum	<u> </u>		
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.	<u> </u>		
3.2. The learning outcomes for the programme must be explicitly articulated to form a cohesive framework.	*		
3.3. Programme learning outcomes must be communicated to staff and students and:	*		
-) underpin and ensure the effective alignment of all content, teaching, learning and assessment activities of the			
degree programme;			
-) form the basis for explicit statements of the objectives and learning outcomes of individual units of study;			
-) be regularly reviewed, managed and updated to ensure they remain relevant, adequate and are effectively			
achieved.			
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,			
-) review the curriculum at least every seven years by involving staff, students and stakeholders,			
-) identify and meet training needs for all types of staff, maintaining and enhancing their competence for the on-			
going curriculum development.			
3.5. The curriculum must include the subjects (input) listed in Annex V 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, Animal Production, Food Safety			
and Quality, and Professional Knowledge.			
3.6. External Practical Training (EPT) are training activities organised outside the Establishment, the student being	*		
under the direct supervision of a non academic 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, herds			
visits, practical training in FSQ).			
3.7. Since the veterinary degree is a professional qualification with Day One Competences, EPT must complement and	*		
strengthen the academic education by enhancing for the student the handling of all common domestic animals, the			
understanding of the economics and management of animal units and veterinary practices, the communication			
skills for all aspects of veterinary work, the hands-on practical and clinical training, the real-life experience, and			
the employability of the prospective graduate.	<u> </u>		
3.8. The EPT providers must have an agreement with the Establishment and the student (in order to fix 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.			
3.9. There must be a member of the academic staff responsible for the overall supervision of the EPT, including liaison	*		
with EPT providers.			
3.10. 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 or anonymously about			
issues occurring during EPT.	'		

Standard 4: Facilities and equipment			
4.1. All aspects of the physical facilities must provide an environment conducive to learning.	*		
4.2. The veterinary Establishment must have a clear strategy and programme for maintaining and upgrading its buildings and equipment.		*	
4.3. 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.	*		
 4.4. Students must have ready access to adequate and sufficient study, self-learning, recreation, locker, sanitary and food services facilities. 	*		
 4.5. Offices, teaching preparation and research laboratories must be sufficient for the needs of the academic and support staff. 	*		
4.6. Facilities must comply with all relevant legislation including health, safety, biosecurity and EU animal welfare and care standards.	*		
 4.7. 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 purpose -) promote best husbandry, welfare and management practices -) ensure relevant biosecurity and bio-containment 			
 -) be designed to enhance learning. 4.8. 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 the best available in the private sector.			
4.9. The VTH and any hospitals, practices and facilities (including EPT) which are involved with the curriculum must meet the relevant national Practice Standards.	*		
4.10. All core teaching sites must provide dedicated learning spaces including adequate internet access.	*		
4.11. The Establishment must ensure students have access to a broad range of diagnostic and therapeutic facilities, including but not limited to: pharmacy, diagnostic imaging, anaesthesia, clinical pathology, intensive/critical care, surgeries and treatment facilities, ambulatory services and necropsy facilities.	*		
4.12. Operational policies and procedures (including biosecurity, good laboratory practice and good clinical practice) must be taught and posted for students, staff and visitors.	*		
4.13. 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 types commonly handled in the VTH.	*		
4.14. 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.	*		
4.15. 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.	*		
Standard 5: Animal resources and teaching material of animal origin			
5.1. The number and variety of healthy and diseased animals, cadavers, and material of animal origin must be adequate for providing the practical training (in the area of Basic Sciences, Clinical Sciences, Pathology, Animal Production, Food Safety and Quality) and adapted to the number of students enrolled.	*		
5.2. It is essential that a diverse and sufficient number of surgical and medical cases in all common domestic animals and exotic pets be available for the students' clinical educational experience and hands-on training.	*		
5.3. In addition to the training provided in the Establishment, experience can include practical training at external sites, provided this training is organised under direct academic supervision and at the same standards as those applied in the Establishment.	*		
5.4. The VTH must provide nursing care skills and instruction in nursing procedures.	*		
5.5. Under all situations students must be active participants in the workup of patients, including physical diagnosis and diagnostic problem oriented decision making.	*		
5.6. 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.	*		
Standard 6: Learning resources			
6.1. State-of-the-art learning resources must be available to support veterinary education, research, services and continuing education. 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.	*		
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.	*		
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.	*		

6.4. 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 via Virtual Private Network (VPN).	*	
Standard 7: Student admission, progression and welfare		
7.1. The selection criteria for admission to the programme must be consistent with the mission of the Establishment. 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.	*	
7.2. In relation to enrolment, the Establishment must provide accurate information in all advertisements regarding the educational programme by providing clear and current information for prospective students. Further, printed catalogue and electronic information must state the purpose and goals of the programme, provide admission requirements, criteria and procedures, state degree requirements, present Establishment descriptions, clearly state information on tuition and fees along with procedures for withdrawal, give necessary information for financial aid programmes, and provide an accurate academic calendar.	*	
7.3. 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.	*	
7.4. The selection and progression criteria must be clearly defined, consistent, and defensible, be free of discrimination or bias, and take account of the fact that students are admitted with a view to their entry to the veterinary profession in due course.	*	
7.5. The Establishment must regularly review and reflect on the selection processes to ensure they are appropriate for students to complete the programme successfully, including consideration of their potential to meet all the ESEVT Day One Competences in all common domestic species (see Annex 2).	*	
7.6. Adequate training (including periodic refresher training) must be provided for those involved in the selection process to ensure applicants are evaluated fairly and consistently.	*	
7.7. There must be clear policies and procedures on how applicants with disabilities or illnesses will be 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.	*	
7.8. 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.	*	
7.9. 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.	*	
7.10. Mechanisms for the exclusion of students from the programme for any reason must be explicit.	*	
7.11. Establishment policies for managing appeals against decisions, including admissions, academic and progression decisions and exclusion, must be transparent and publicly available.	*	
7.12. 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, careers advice, and fair and transparent mechanisms for dealing with student illness, impairment and disability during the programme. This shall include provision of reasonable accommodations/adjustments for disabled students, consistent with all relevant equality and/or human rights legislation.	*	
7.13. There must be effective mechanisms for resolution of student grievances (e.g. interpersonal conflict or harassment).	*	
7.14. Mechanisms must be in place by which students can convey their needs and wants to the Establishment.	*	
7.15. The Establishment must provide students with a mechanism, anonymously if they wish, to offer suggestions, comments and complaints regarding compliance of the Establishment with the ESEVT standards. Standard 8: Student assessment	*	
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.	*	
8.2. The assessment tasks and grading criteria for each unit of study in the programme must be clearly identified and available to students in a timely manner well in advance of the assessment.	*	
8.3. Requirements to pass must be explicit.	*	
8.4. Mechanisms for students to appeal against assessment outcomes must be explicit.	*	
8.5. The Establishment must have a process in place to review assessment outcomes and to change assessment strategies when required.	*	
8.6. Programme learning outcomes covering the full range of professional knowledge, skills, competences and attributes must form the basis for assessment design and underpin decisions on progression.	*	
8.7. Students must receive timely feedback on their assessments.	*	
8.8. Assessment strategies must allow the Establishment to certify student achievement of learning objectives at the level of the programme and individual units of study.	*	
8.9. 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 students 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.	*	
 Standard 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 the national and EU regulations. A formal training (including good teaching and evaluation practices, learning and e-learning resources, biosecurity and QA procedures) must be in place for all staff involved with teaching. Most FTE academic staff involved in veterinary training must be veterinarians. It is expected that greater than 2/3 of the instruction that the students receive, as determined by student teaching hours, is delivered by qualified 	*	

veterinarians. 0.2. The total number, qualifications and skills of all staff involved with the programme, including teaching staff,	*	\vdash
'adjunct' staff, technical, administrative and support staff, must be sufficient and appropriate to deliver the	~~	
educational programme and fulfil the Establishment's mission.		
.3. Staff who participate in teaching must have received the relevant training and qualifications and must 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.		
0.4. Academic positions must offer the security and benefits necessary to maintain stability, continuity, and competence	*	
of the academic staff. Academic staff should have a balanced workload of teaching, research and service depending		
on their role; and should have reasonable opportunity and resources for participation in scholarly activities. 0.5. 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.		
0.6. 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.		
tandard 10: Research programmes, continuing and postgraduate education		
0.1. The Establishment must demonstrate significant and broad research activities of staff that integrate with and	*	
strengthen the veterinary degree programme through research-based teaching.		
0.2. All students must be trained in scientific method and research techniques relevant to evidence-based veterinary	*	
medicine.		
0.3. All students must have opportunities to participate in research programmes.	*	
0.4. 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	Ŷ	
relevant to the needs of the profession and society.		
Standard 11: Outcome Assessment and Quality Assurance		
11.1. The Establishment must have a policy for quality assurance that is made public and forms part of their strategic	*	
management. Internal stakeholders must develop and implement this policy through appropriate structures and	••	
processes, while involving external stakeholders.		
1.2. The Establishment must have processes for the design and approval of their programmes. The programmes must	*	
be 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 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.		
1.3. 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.		
1.4. The Establishment must consistently apply pre-defined and published regulations covering all phases of the	*	
student "life cycle", e.g. student admission, progression, recognition and certification.		
1.5. The Establishment must assure themselves of the competence of their teachers. They must apply fair and	*	
transparent processes for the recruitment and development of staff.		
1.6. The Establishment must have appropriate funding for learning and teaching activities and ensure that adequate and	*	
readily accessible learning resources and student support are provided.		
1.7. The Establishment must ensure that they collect, analyse and use relevant information for the effective	*	
management of their programmes and other activities.		└───┤
1.8. The Establishment must publish information about their activities, including programmes, which is clear, accurate,	*	
objective, up-to date and readily accessible.		
1.9. The Establishment must monitor and periodically review their programmes to ensure that they achieve the objectives set for them and respond to the needs of students and society. These reviews must lead to continuous	*	
improvement of the programme. Any action planned or taken as a result must be communicated to all those concerned.		
	*	├──┼
1.10. The Establishment must undergo external quality assurance in line with the ESG on a cyclical basis.		1

Executive Summary

The Faculty of Veterinary Medicine in Lisbon (FMV), Portugal is one of the oldest schools of the Universidade de Lisboa (ULisboa). It was founded in 1830 as the Royal Military Veterinary School, then established within the Institute of Agronomy and Veterinary Medicine before joining the Technical University of Lisbon and finally, in 2013, the modern day Universidade de Lisboa (ULisboa).

FMV was a founder member of EAEVE and was first visited by a team of experts in November 1989 and then not revisited until May 2004. As a result of that visitation and the recommendations of the expert visitation team, FVM were motivated to invest considerable efforts to improve the quality of Veterinary Medicine programme. The chair of the original evaluation team and the president of EAEVE re-visited FMV in October 2007, and as a result FMV was again included within the EAEVE list of approved Establishments.

It is noteworthy that the FMV was also evaluated at a national level, by the Evaluation Council of the Foundation of Portuguese Universities in 1999; also, by the National Council for the Evaluation of Higher Education (*Conselho Nacional de Avaliação do Ensino Superior*, CNAVES) in 2004 (simultaneously with the EAAVE assessment) and in 2015 by the Agency for Assessment and Accreditation of Higher Education (*Agência de Avaliação e Acreditação do Ensino Superior*).

The SER was provided on time and written in full agreement with the Uppsala SOP; It was a well written document with detailed appendices. An unusually long list of questions was sent to the Establishment prior to the visitation and the Establishment should be congratulated for their swift and very comprehensive replies to these questions.

The Visitation was very well organised and the Liaison Officer and Dean worked well together to develop the schedule of the Visitation, to search for the requested information and to organise all the relevant meetings and visits outside the main faculty buildings.

The Visitation Team has identified several areas worthy of praise (i.e. Commendations):

- Staff are very dedicated to teaching. Many of the staff are also involved in projects within the Centre for Interdisciplinary Research in Animal Health (CIISA) which is a major research facility and have the leading veterinary research groups within Portugal. This becomes very apparent with the definite bias towards a research driven curriculum
- Staff and students are without doubt proud of their "school" and its achievements which results in a friendly atmosphere and relaxed attitude between teachers and students. With an effective representation of the student body on the main decision-making committees of the Establishment, this also results in an obvious student stakeholder influence
- The mandatory master thesis at the end of the programme has resulted in groups of theses of a high standard; many of them written in English and resulting in publications within international journals
- There were spacious facilities for teaching which proved more than adequate

- The case load in companion animals, including equines, was high and very well utilised for clinical teaching; access to production animal facilities was also good
- The quality assurance system was long standing and effective. It was especially clear in ascertaining the integration and influence of QA in each of the 11 Standards of the ESEVT SOP
- The interdisciplinary research activities linked to both undergraduate research projects and successful PhD programmes

Several comments are listed above within the Visitation Report, but some examples are:

- The further development of the clinical skill facility including investment in new manikins and models will give the Establishment an opportunity to consider the continuing use of resident animals
- Start planning to renew the curriculum, as already mentioned in the SER, especially in designing a clear curriculum map that will give teachers an insight into what is taught throughout the whole programme
- To develop a programme where more time in the final years is spent in the clinics, and less time is used for didactic training
- Develop a residency programme to take advantage of the increasing number of boarded clinicians in the Establishment.

Several items of partial compliance have been identified (i.e. Minor Deficiencies):

- Partial compliance with standard 2.1 because of a potential shortage of funding for firstly recruiting and then keeping academic staff, as well as for building new or renovating existing buildings
- Partial compliance with standard 4.2 because of insufficient financial resources for maintenance of current facilities. This was especially apparent with water leakage and air conditioning. Although much has and is being done the problems are associated with the original design of the building and the Establishment will need support from the main university to fulfil these tasks
- Partial compliance with standard 9.3 because although the staff are dedicated to teaching, they should have been formally trained within pedagogical issues. Courses are available at the university, but they should be mandatory.

No items of non compliance have been identified (i.e. Major Deficiency)

Glossary

(Please use the same terminology and abbreviations as in the ESEVT SOP when possible)

EAEVE: European Association of Establishments for Veterinary Education EBVS: European Board of Veterinary Specialisation ECOVE: European Committee on Veterinary Education EPT: External Practical Training ESEVT: European System of Evaluation of Veterinary Training ESG: Standards and Guidelines for Quality Assurance in the European Higher Education Area FSQ: Food Safety and Quality FTE: Full-Time Equivalent IT: Information Technology QA: Quality Assurance SER: Self Evaluation Report SOP: Standard Operating Procedure VPH: Veterinary Public Health VTH: Veterinary Teaching Hospital

Standardised terminology

Accreditation: status of an Establishment that is considered by ECOVE as compliant with the ESEVT Standards normally for a 7 years period starting at the date of the last (full) Visitation;

Establishment: the official and legal unit that organise the veterinary degree as a whole, either a university, faculty, school, department, institute;

Ambulatory clinic: clinical training done extra-murally and fully supervised by academic trained teachers;

Establishment's Head: the person who officially chairs the above described Establishment, i.e. Rector, Dean, Director, Head of Department, President, Principal...;

External Practical Training: clinical and practical training done extra-murally and fully supervised by non academic staff (e.g. practitioners);

Major Deficiency: a deficiency that significantly affects the quality of education and the Establishment's compliance with the ESEVT Standards;

Minor Deficiency: a deficiency that does not significantly affect the quality of education or the Establishment's compliance with the ESEVT Standards;

Visitation: a full visitation organised on-site in agreement with the ESEVT SOP in order to evaluate if the veterinary degree provided by the visited Establishment is compliant with all ESEVT Standards; any chronological reference to 'the Visitation' means the first day of the full on-site visitation;

Visitation Report: a document prepared by the Visitation Team, corrected for factual errors and finally issued by ECOVE; it contains, for each ESEVT Standard, findings, comments, suggestions and identified deficiencies.

Decision of ECOVE

The Committee concluded that no Major Deficiencies had been found.

The 'Faculty of Veterinary Medicine, University of Lisbon' is therefore classified as holding the status of: **ACCREDITATION**.